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Universal Mobile Telecommunications System (UMTS);
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5G;
Mobile Equipment (ME) conformance test specification;
Universal Subscriber Identity Module Application Toolkit (USAT) conformance test specification
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Contents

Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

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2 presented to TSG for approval;

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y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.

z the third digit is incremented when editorial only changes have been incorporated in the document.

In the present document, modal verbs have the following meanings:

shall indicates a mandatory requirement to do something

shall not indicates an interdiction (prohibition) to do something

The constructions "shall" and "shall not" are confined to the context of normative provisions, and do not appear in Technical Reports.

The constructions "must" and "must not" are not used as substitutes for "shall" and "shall not". Their use is avoided insofar as possible, and they are not used in a normative context except in a direct citation from an external, referenced, non-3GPP document, or so as to maintain continuity of style when extending or modifying the provisions of such a referenced document.

should indicates a recommendation to do something

should not indicates a recommendation not to do something

may indicates permission to do something

need not indicates permission not to do something

The construction "may not" is ambiguous and is not used in normative elements. The unambiguous constructions "might not" or "shall not" are used instead, depending upon the meaning intended.

can indicates that something is possible

cannot indicates that something is impossible

The constructions "can" and "cannot" are not substitutes for "may" and "need not".

will indicates that something is certain or expected to happen as a result of action taken by an agency the behaviour of which is outside the scope of the present document

will not indicates that something is certain or expected not to happen as a result of action taken by an agency the behaviour of which is outside the scope of the present document

might indicates a likelihood that something will happen as a result of action taken by some agency the behaviour of which is outside the scope of the present document

might not indicates a likelihood that something will not happen as a result of action taken by some agency the behaviour of which is outside the scope of the present document

In addition:

is (or any other verb in the indicative mood) indicates a statement of fact

is not (or any other negative verb in the indicative mood) indicates a statement of fact

The constructions "is" and "is not" do not indicate requirements.

1 Scope

The present document describes the technical characteristics and methods of test for testing the USIM Application Toolkit implemented in Mobile Equipments (ME) or Mobile Station (MS) within the 3GPP digital cellular telecommunications system, in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [19] and ETSI ETS 300 406 [20].

The present document is valid for ME implemented according to 3GPP Release 99, or Release 4, or any later Release.

The present document covers the minimum characteristics considered necessary in order to provide sufficient performance for mobile equipment and to prevent interference to other services or to other users, and to the PLMNs.

It does not necessarily include all the characteristics which may be required by a user or subscriber, nor does it necessarily represent the optimum performance achievable.

The present document is part of the 3GPP-series of technical specifications. The present document neither replaces any of the other 3GPP technical specifications or 3GPP related ETSs or ENs, nor is it created to provide full understanding of (or parts of) the UMTS. The present document lists the requirements, and provides the methods of test for testing the USIM Application Toolkit implemented in a ME for conformance to the 3GPP standard.

For a full description of the system, reference should be made to all the 3GPP technical specifications or 3GPP related ETSIs, ETSs or ENs. Clause 2 provides a complete list of the 3GPP technical specifications, 3GPP related ETSI's ETSs, ENs, and ETRs, on which this conformance test specifications is based.

If there is a difference between this present conformance document, and any other 3GPP technical specification or 3GPP related ETSI, ETS, EN, or 3GPP TS, then the other 3GPP technical specification or 3GPP related ETSI ETS, EN or 3GPP TS shall prevail.

Within the context of this document, the term "terminal" used in ETSI TS 102 384 [26] refers to the Mobile Equipment (ME).

Within the context of this document, the term "UICC" used in ETSI TS 102 384 [26] refers to the USIM card.

Within the context of this document, the term "NAA" used in ETSI TS 102 384 [26] refers to the USIM application.

For the avoidance of doubt, references to clauses of ETSI TS 102 384 [26] or ETSI TS 102 221 [13] include all the clauses of that clause, unless specifically mentioned.

The target test specification ETSI TS 102 384 [26] contains material that is outside of the scope of 3GPP requirements and the present document indicates which parts are in the scope and which are not.

A 3GPP ME may support functionality that is not required by 3GPP, but the requirements to do so are outside of the scope of 3GPP. Thus the present document does not contain tests or references to ETSI TS 102 384 [26] tests for features which are out of scope of 3GPP.

In the present document, unless explicitly stated otherwise, for Rel-13 onwards the term E-UTRAN implicitly refers to the E-UTRAN in WB-S1 mode. E-UTRAN in NB-S1 mode is always explicitly referred to as NB-IoT.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the relevant Release*.
- References to 3GPP Technical Specifications and Technical Reports throughout the present document shall be interpreted according to the Release shown in the formal reference in this clause, based upon the Release of the implementation under test.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 22.001: "Principles of circuit telecommunication services supported by a Public Land Mobile Network (PLMN)".

[3] 3GPP TS 22.003: "Circuit Teleservices supported by a Public Land Mobile Network (PLMN)".

[4] 3GPP TS 22.004: "General on supplementary services".

[5] ETSI TS 101 220: "ETSI numbering system for telecommunication application providers"

[6] 3GPP TS 21.904: "UE capability requirements"

[7] 3GPP TS 23.038: "Alphabets and language-specific information".

[8] 3GPP TS 23.040: "Technical realization of the Short Message Service (SMS)".

[9] 3GPP TS 23.041: "Technical realization of Cell Broadcast Service (CBS)".

[10] 3GPP TS 24.008: "Mobile radio interface layer 3 specification; Core network protocols; Stage 3".

[11] 3GPP TS 24.011: "Point-to-Point (PP) Short Message Service (SMS) Support on mobile radio interface".

[12] 3GPP TS 34.108: "Common test environments for User Equipment (UE) conformance testing".

[13] If the device under test is a

- R99 ME: ETSI TS 102 221 v3.18.0: "UICC-Terminal interface; Physical and logical characteristics",
- Rel-4 ME: ETSI TS 102 221 v4.16.0: "UICC-Terminal interface; Physical and logical characteristics",
- Rel-5 ME: ETSI TS 102 221 v5.10.0: "UICC-Terminal interface; Physical and logical characteristics",
- Rel-6 ME: ETSI TS 102 221 v6.15.0: "UICC-Terminal interface; Physical and logical characteristics",
- Rel-7 ME: ETSI TS 102 221 v7.17.0: "UICC-Terminal interface; Physical and logical characteristics",
- Rel-8 ME: ETSI TS 102 221 v8.5.0: "UICC-Terminal interface; Physical and logical characteristics",
- Rel-9 ME: ETSI TS 102 221 v9.2.0: "UICC-Terminal interface; Physical and logical characteristics"",

- Rel-10 ME: ETSI TS 102 221 v10.0.0: "UICC-Terminal interface; Physical and logical characteristics",
- Rel-11 ME: ETSI TS 102 221 v11.1.0: "UICC-Terminal interface; Physical and logical characteristics",
- Rel-12 ME: ETSI TS 102 221 v12.1.0: "UICC-Terminal interface; Physical and logical characteristics".
- Rel-13 ME: ETSI TS 102 221 v13.1.0: "UICC-Terminal interface; Physical and logical characteristics".
- Rel-14 ME: ETSI TS 102 221 v14.1.0: "UICC-Terminal interface; Physical and logical characteristics".
- Rel-15 ME: ETSI TS 102 221 v15.2.0: "UICC-Terminal interface; Physical and logical characteristics".
- Rel-16 ME: ETSI TS 102 221 v15.2.0: "UICC-Terminal interface; Physical and logical characteristics".
- Rel-17 ME: ETSI TS 102 221 v17.4.0: "UICC-Terminal interface; Physical and logical characteristics".

[14] 3GPP TS 31.102: "Characteristics of the USIM application".

[15] 3GPP TS 31.111: "USIM Application Toolkit (USAT)"

[16] Void

[17a] ISO/IEC 10646-1: "Information technology - Universal Multiple Octet Coded Character Set (UCS) - Part 1: Architecture and Basic Multilingual Plane".

[17b] ISO/IEC 10646-2: "Information technology - Universal Multiple Octet Coded Character Set (UCS) - Part 2: Supplementary Planes".

[18] 3GPP TS 27.007: "AT command set for User Equipment (UE)".

[19] ISO/IEC 9646-7 (1995): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".

[20] ETSI ETS 300 406 (1995): "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".

[21] 3GPP TS 31.121: "UICC-terminal interface; USIM application test specification"

[22] 3GPP TS 22.101: "Service Aspects; Service principles"

[23] 3GPP TS 51.010-1: "Mobile Station (MS) conformance specification; Part 1: Conformance specification"

[24] Void.

[25] TIA/IS-820-A: "Removable User Identity Module (R-UIM) for TIA/EIA Spread Spectrum System".

[26] ETSI TS 102 384: "Smart cards; UICC-Terminal interface; Card Application Toolkit (CAT) conformance specification".

[27] 3GPP TS 34.123-3: "User Equipment (UE) conformance specification; Part 3: Abstract test suites (ATSs)".

[28] 3GPP TS 31.115: "Secured packet structure for (U)SIM Toolkit applications".

[29] 3GPP TS 23.122: "Non-Access Stratum functions related to Mobile Station (MS) in idle mode".

[30] 3GPP TS 23.107: "Quality of Service (QoS) concept and architecture".

[31] 3GPP TS 23.203: "Policy and charging control architecture".

[32] 3GPP TS 24.301: "Technical Specification Group Core Network and Terminals; Non-Access-Stratum (NAS) protocol for Evolved Packet Systems (EPS): Stage 3".

[33] 3GPP TS 36.508: "Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Packet Core (EPC); Common test environments for User Equipment (UE) conformance testing".

[34] 3GPP TS 36.523-2 " Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Packet Core (EPC); User Equipment (UE) conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification"

[35] 3GPP TS 31.103: "Characteristics of the IP Multimedia Services Identity Module (ISIM) application".

[36] 3GPP TS 34.229-1: "Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); User Equipment (UE) conformance specification; Part 1: Protocol conformance specification".

[37] 3GPP TS 24.341: "Support of SMS over IP networks".

[38] 3GPP TS 24.229: "IP multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3".

[39] 3GPP TS 38.508-1: "5GS; User Equipment (UE) conformance specification; Part 1: Common test environment".

[40] 3GPP TS 36.300: "Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Overall description; Stage 2".

[40] 3GPP TS 24.501: "Non-Access-Stratum (NAS) protocol for 5G System (5GS); Stage 3".

[41] 3GPP TS 23.501: "System Architecture for the 5G System; Stage 2".

[42] 3GPP TS 23.503: "Policy and charging control framework for the 5G System (5GS); Stage 2".

[43] 3GPP TS 24.526: "User Equipment (UE) policies for 5G System (5GS); Stage 3".

[44] 3GPP TS 23.003: "Numbering, addressing and identification".

[45] 3GPP TS 33.203: "3G security;Access security for IP-based services".

[46] 3GPP TS 58.509: "5GS; Special conformance testing functions for User Equipment (UE)".

3 Definitions and abbreviations

3.1 Mobile station definition and configurations

The mobile station definition and configurations specified in TS 34.108 [12] and TS 36.508 [33] shall apply, unless otherwise specified in the present clause.

3.2 Applicability

3.2.1 Applicability of the present document

The present specification applies to a terminal equipment that supports the USIM Application Toolkit optional feature.

3.2.2 Applicability of the individual tests

Table A.1 lists the optional features for which the supplier of the implementation states the support.

3.2.3 Applicability to terminal equipment

The applicability to terminal equipment specified in TS 34.108 [12], TS 36.508 [33] and TS 38.508-1 [39] shall apply, unless otherwise specified in the present clause.

NOTE: For RedCap UEs, test cases applicable to 5G NR UEs and RedCap specific test cases (if any) are applicable.

Within the context of this document, the term "USS" refers to the "UMTS System Simulator" when accessing a UTRAN, to the "System Simulator" when accessing a GERAN, the term "E-USS" refers to the "Evolved Universal System Simulator" when accessing an E-UTRAN in WB-S1 mode, the term "NB-SS" refers to the "NB System Simulator" when accessing an E-UTRAN in NB-S1 mode, the term "NG-SS" refers to the "Next Generation System Simulator" when accessing an NG-RAN and the term "SAT-NG-SS" refers to the "Satellite Next Generation System Simulator" when accessing a SAT-NG-SS.

See table B.1.

3.2.4 Definitions

For the purposes of the present document, the terms and definitions given in TS 34.108 [12] and TS 31.121 [21] apply.

3.2.4.1 Format of the table of optional features

Option: The optional feature supported or not by the implementation.

Support Answer notation: The support columns shall be filled in by the supplier of the implementation. The following common notations, defined in ISO/IEC 9646-7 [19], are used for the support column in the tables below.

Y or y	supported by the implementation
N or n	not supported by the implementation
N/A, n/a or -	no answer required (allowed only if the status is N/A, directly or after evaluation of a conditional status)

Mnemonic column: The Mnemonic column contains mnemonic identifiers for each item.

3.2.4.2 Format of the applicability table

The applicability of every test in table B.1 is formally expressed by the use of Boolean expression defined in the following clause.

The columns in table B.1 have the following meaning:

- In the "Item" column a local entry number for the requirement in the table is given.
- In the "Description" column a short non-exhaustive description of the requirement is found.
- The "Release" column gives the Release applicable and onwards, for the item in the "Description" column
- The "Test Sequence(s)" column gives a reference to the test sequence number(s) detailed in the present document and required to validate the implementation of the corresponding item in the "Description" column.
- For a given Release, the corresponding "Rel X ME" column lists the tests required for a Mobile Station to be declared compliant to this Release.
- The "Support" column is blank in the proforma, and shall be completed by the manufacturer in respect of each particular requirement to indicate the choices, which have been made in the implementation.
- The "Network Dependency" column indicates if a test depends on specific network access technology or requires network connection, but the status may not have an impact on references to ETSI TS 102 384 [26].
- The "Terminal Profile" column gives a reference to the corresponding Terminal Profile bit(s) that is/are related to the toolkit feature(s) of the respective test(s).

- The "Additional test case execution parameter" column shall be used in conjunction with the entry in the "Rel-xx ME" column. The column indicates if the test is affected by additional test case execution parameters.

3.2.4.3 Status and notations

"Release X ME" columns show the status of the entries as follows:

The following notations, defined in ISO/IEC 9646-7 [19], are used for the status column:

M	mandatory - the capability is required to be supported.
O	optional - the capability may be supported or not.
N/A	not applicable - in the given context, it is impossible to use the capability.
X	prohibited (excluded) - there is a requirement not to use this capability in the given context.
O.i	qualified optional - for mutually exclusive or selectable options from a set. "i" is an integer which identifies an unique group of related optional items and the logic of their selection which is defined immediately following the table.
Ci	conditional - the requirement on the capability ("M", "O", "X" or "N/A") depends on the support of other optional or conditional items. "i" is an integer identifying an unique conditional status expression which is defined immediately following the table. For nested conditional expressions, the syntax "IF ... THEN (IF ... THEN ... ELSE...) ELSE ..." shall be used to avoid ambiguities.

The "Additional test case execution parameter" column shows the status of the entries as follows:

TCEPi	Test Case Execution Parameter –defines additional parameters which have to be taken into account when executing affected test case(s). "i" is an integer identifying an unique parameter which is defined immediately following the table.
A	applicable - the test is applicable according to the corresponding entry in the "Rxx ME" column
R(x)	redundant – the test has to be considered as redundant when the corresponding E-UTRAN/EPC related test "x" of the present document has been validated and successfully executed. In that case the requirement may be verified by means of the E-UTRAN/EPC functionality only.
AERi	Additional test case Execution Recommendation – with respect to the above listed definitions of ("A") and ("R") the test is applicable ("A") or redundant ("R") depending on the support of other optional or conditional items. "i" is an integer identifying a unique conditional status expression which is defined immediately following the table. For nested conditional expressions, the syntax "IF ... THEN (IF ... THEN ... ELSE...) ELSE ..." shall be used to avoid ambiguities.

References to items: For each possible item answer (answer in the support column) there exists a unique reference, used, for example, in the conditional expressions. It is defined as the table identifier, followed by a solidus character "/", followed by the item number in the table. If there is more than one support column in a table, the columns shall be discriminated by letters (a, b, etc.), respectively.

EXAMPLE: A.1/4 is the reference to the answer of item 4 in table A.1.

3.3 Table of optional features

Support of USIM Application Toolkit is optional for Mobile Equipment. However, if an ME states conformance with a specific 3GPP release, it is mandatory for the ME to support all functions of that release, as stated in table B.1, with the exception of the functions:

- "Alpha identifier in REFRESH command supported by terminal";
- "Event Language Selection";
- "Proactive UICC: PROVIDE LOCAL INFORMATION (language)"; and
- "Proactive UICC: LANGUAGE NOTIFICATION".

In accordance to 3GPP TS 36.300 [40], clause 4.10, additional exceptions apply for NB-IoT only MEs.
As a number of E-UTRA protocol functions supported by Rel-8 MEs are not required for NB-IoT, the related USIM Application Toolkit functions may not be supported by NB-IoT only MEs.

Note: NB-IoT only MEs are MEs that only support NB-IoT and no other radio access technology.

The support of letter classes, which specify mainly ME hardware dependent features, is optional for the ME and may supplement the USIM Application Toolkit functionality described in the present document. If an ME states conformance to a letter class, it is mandatory to support all functions within the respective letter class.

The supplier of the implementation shall state the support of possible options in table A.1.

Table A.1: Options

Item	Option	Status	Support	Mnemonic
1	Capability Configuration parameter	M		O_Cap_Conf
2	Sustained text	C002		O_sust_text
3	UCS2 coding scheme for Entry	O		O_Ucs2_Entry
4	Extended Text String	C002		O_Ext_Str
5	Help information	O		O_Help
6	Icons	O		O_Icons
7	Class A: Dual Slot	O		O_Dual_Slot
8	Detachable reader	O		O_Detach_Rdr
9	Class B: RUN AT	O		O_Run_At
10	Class C: LAUNCH BROWSER	O		O_LB
11	Class D: Soft keys	O		O_Soft_key
12	Class E: B.I.P related to CSD	O		O_BIP_CSD
13	Screen sizing parameters	O		O_Scr_Siz
14	Screen Resizing	O		O_Scr_Resiz
15	UCS2 coding scheme for Display	O		O_Ucs2_Disp
16	Mobile supporting GPRS	O		O_GPRS
17	Mobile supporting UDP	O		O_UDP
18	Mobile supporting TCP	O		O_TCP
19	Redial in Set Up Call	O		O_Redial
20	Mobile decision to respond with "No response from user" in finite time	O		O_D_NoResp
21	Class E: B.I.P related to GPRS	O		O_BIP_GPRS
22	Mobile supporting Called Party Subaddress	O		O_CP_Subaddr
23	Immediate response	O		O_Imm_Resp
24	Variable Timeout	O		O_Duration
25	void			
26	Class F: B.I.P related to local bearer	O		O_BIP_Local
27	BlueTooth Support	O		O_BT
28	IrDA Support	O		O_IrDA
29	RS232 Support	O		O_RS232
30	USB Support	O		O_USB
31	WML Browser Support	O		O_WML

Item	Option	Status	Support	Mnemonic
32	XHTML Browser Support	O		O_XHTML
33	HTML Browser Support	O		O_HTML
34	CHTML Browser Support	O		O_CHTML
35	Class G: Battery Data	O		O_Batt
36	Class H: Multimedia Call Support	O		O_Xmedia_Call
37	Class I: Frame support	O		O_Frames
38	Class J: Multimedia Messaging Support	O		O_MMS
39	ME requesting for user confirmation before sending the Envelope Call Control command	O		O_UC_Before_EnvCC
40	ME requesting for user confirmation after sending the Envelope Call Control command	O		O_UC_After_EnvCC
41	UCS2 in Cyrillic	O		O_UCS2_Cyrillic
42	UCS2 in Chinese	O		O_UCS2_Chinese
43	UCS2 in Katakana	O		O_UCS2_Katakana
44	Mobile supporting Barred Dialling Numbers	O		O_BDN
45	Mobile supporting Fixed dialling numbers	O		O_FDN
46	Mobile supporting "+CIMI" in combination with Run AT Command	O		O_+CIMI
47	Mobile supporting "+CGMI" in combination with Run AT Command	O		O_+CGMI
48	Mobile supporting Open Channel (GPRS) not containing a Network Access Name TLV when no default Access Point Name is set in the terminal configuration	O		O_Open_Channel_GPRS_without_Default APN
49	Preferred buffer size supported by the terminal for Open Channel command is greater than 0 byte and less than 65535 bytes	O		O_BUFFER_SIZE
50	Text attributes – Alignment left	O		O_TAT_AL
51	Text attributes – Alignment center	O		O_TAT_AC
52	Text attributes – Alignment right	O		O_TAT_AR
53	Text attributes – Font size normal	O		O_TAT_FSN
54	Text attributes – Font size large	O		O_TAT_FSL
55	Text attributes – Font size small	O		O_TAT_FSS
56	Text attributes – Style normal	O		O_TAT_SN
57	Text attributes – Style bold	O		O_TAT_SB
58	Text attributes – Style italic	O		O_TAT_SI
59	Text attributes – Style underlined	O		O_TAT_SU
60	Text attributes – Style strikethrough	O		O_TAT_SS
61	Text attributes – Style text foreground colour	O		O_TAT_STFC
62	Text attributes – Style text background colour	O		O_TAT_STFB
63	Terminal supports Long ForwardToNumber	O		O_longFTN
64	Mobile supporting GERAN	O		O_GERAN
65	Support of global phonebook	C001		O_Global_PB
66	HSDPA Support	O		O_HSDPA
67	UTRAN PS with extended parameters Support	O		O_UTRAN_PS_Ext_Param
68	Terminal executes User confirmation phase before sending PDP context activation request	O		O_User_Confirm_Before_PDP_Context_Request
69	ME supports Call Hold Supplementary Service	O		O_Serv_SS_HOLD
70	Class E: B.I.P. related to I-WLAN	O		O_I-WLAN

Item	Option	Status	Support	Mnemonic
71	Class K: Terminal Applications support	O		O_Terminal_Applications
72	Class E: Terminal supports TCP, UICC in Server Mode	O		O_TCP_UICC_ServerMode
73	Class E: Terminal supports TCP, Terminal in Server Mode	O		O_TCP_Terminal_ServerMode
74	Class E: Terminal supports UDP, Terminal in Server Mode	O		O_UDP_Terminal_ServerMode
75	Void			
76	Void			
77	Void			
78	Terminal supports at least one supplementary service.	O		O_AddInfo_SS
79	Terminal supports "Call Forwarding Unconditional"	O		O_Serv_SS_CFU
80	Terminal supports "Calling Line Identification Restriction"	O		O_Serv_SS_CLIR
81	Class N: Terminal supports "Geographical location discovery"	O		O_Geo_Location_Discovery
82	Terminal supports melody and theme tones	O		O_M_T_Tones
83	Terminal supports Toolkit-initiated GBA	O		O_Toolkit_GBA
84	Terminal supports display capability	C002		O_No_Type_ND
85	Terminal supports keypad	C002		O_No_Type_NK
86	Terminal supports audio alerting	C002		O_No_Type_NA
87	Terminal supports speech call	C002		O_No_Type_NS
88	Terminal supports multiple languages	C002		O_No_Type_NL
89	Class P:USSD Data Download and application mode	O		O_USSD_Data_DL
90	Terminal displays icons as defined in record 1 of EF(IMG) for Display Text command	O		O_Icon_Rec1_Disp_Text
91	Terminal displays icons as defined in record 2 of EF(IMG) for Display Text command	O		O_Icon_Rec2_Disp_Text
92	Terminal displays icons as defined in record 5 of EF(IMG) for Display Text command	O		O_Icon_Rec5_Disp_Text
93	Terminal displays icons as defined in record 1 of EF(IMG) for Get Inkey command	O		O_Icon_Rec1_Get_Inkey
94	Terminal displays icons as defined in record 2 of EF(IMG) for Get Inkey command	O		O_Icon_Rec2_Get_Inkey
95	Terminal displays icons as defined in record 5 of EF(IMG) for Get Inkey command	O		O_Icon_Rec5_Get_Inkey
96	Terminal displays icons as defined in record 1 of EF(IMG) for Get Input command	O		O_Icon_Rec1_Get_Input
97	Terminal displays icons as defined in record 2 of EF(IMG) for Get Input command	O		O_Icon_Rec2_Get_Input
98	Terminal displays icons as defined in record 5 of EF(IMG) for Get Input command	O		O_Icon_Rec5_Get_Input
99	Terminal displays icons as defined in record 1 of EF(IMG) for Play Tone command	O		O_Icon_Rec1_Play_Tone
100	Terminal displays icons as defined in record 2 of EF(IMG) for Play Tone command	O		O_Icon_Rec2_Play_Tone

Item	Option	Status	Support	Mnemonic
101	Terminal displays icons as defined in record 5 of EF(IMG) for Play Tone command	O		O_Icon_Rec5_Play_Tone
102	Terminal displays icons as defined in record 1 of EF(IMG) for Set Up Menu command	O		O_Icon_Rec1_Set_Up_Menu
103	Terminal displays icons as defined in record 2 of EF(IMG) for Set Up Menu command	O		O_Icon_Rec2_Set_Up_Menu
104	Terminal displays icons as defined in record 5 of EF(IMG) for Set Up Menu command	O		O_Icon_Rec5_Set_Up_Menu
105	Terminal displays icons as defined in record 1 of EF(IMG) for Select Item command	O		O_Icon_Rec1_Select_Item
106	Terminal displays icons as defined in record 2 of EF(IMG) for Select Item command	O		O_Icon_Rec2_Select_Item
107	Terminal displays icons as defined in record 5 of EF(IMG) for Select Item command	O		O_Icon_Rec5_Select_Item
108	Terminal displays icons as defined in record 1 of EF(IMG) for Send Short Message command	O		O_Icon_Rec1_Send_SM
109	Terminal displays icons as defined in record 2 of EF(IMG) for Send Short Message command	O		O_Icon_Rec2_Send_SM
110	Terminal displays icons as defined in record 5 of EF(IMG) for Send Short Message command	O		O_Icon_Rec5_Send_SM
111	Terminal displays icons as defined in record 1 of EF(IMG) for Send SS command	O		O_Icon_Rec1_Send_SS
112	Terminal displays icons as defined in record 2 of EF(IMG) for Send SS command	O		O_Icon_Rec2_Send_SS
113	Terminal displays icons as defined in record 5 of EF(IMG) for Send SS command	O		O_Icon_Rec5_Send_SS
114	Terminal displays icons as defined in record 1 of EF(IMG) for Send USSD command	O		O_Icon_Rec1_Send_USSD
115	Terminal displays icons as defined in record 2 of EF(IMG) for Send USSD command	O		O_Icon_Rec2_Send_USSD
116	Terminal displays icons as defined in record 5 of EF(IMG) for Send USSD command	O		O_Icon_Rec5_Send_USSD
117	Terminal displays icons as defined in record 1 of EF(IMG) for Set Up Call command	O		O_Icon_Rec1_Set_Up_Call
118	Terminal displays icons as defined in record 2 of EF(IMG) for Set Up Call command	O		O_Icon_Rec2_Set_Up_Call
119	Terminal displays icons as defined in record 5 of EF(IMG) for Set Up Call command	O		O_Icon_Rec5_Set_Up_Call
120	Terminal displays icons as defined in record 1 of EF(IMG) for Set Up Idle Mode Text command	O		O_Icon_Rec1_Set_Up_Idle_Mode_Text
121	Terminal displays icons as defined in record 2 of EF(IMG) for Set Up Idle Mode Text command	O		O_Icon_Rec2_Set_Up_Idle_Mode_Text
122	Terminal displays icons as defined in record 5 of EF(IMG) for Set Up Idle Mode Text command	O		O_Icon_Rec5_Set_Up_Idle_Mode_Text

Item	Option	Status	Support	Mnemonic
123	Terminal displays icons as defined in record 1 of EF(IMG) for Run AT Command	O		O_Icon_Rec1_Run_AT_Cmd
124	Terminal displays icons as defined in record 2 of EF(IMG) for Run AT Command	O		O_Icon_Rec2_Run_AT_Cmd
125	Terminal displays icons as defined in record 5 of EF(IMG) for Run AT Command	O		O_Icon_Rec5_Run_AT_Cmd
126	Terminal displays icons as defined in record 1 of EF(IMG) for Send DTMF command	O		O_Icon_Rec1_Send_DTMF
127	Terminal displays icons as defined in record 2 of EF(IMG) for Send DTMF command	O		O_Icon_Rec2_Send_DTMF
128	Terminal displays icons as defined in record 5 of EF(IMG) for Send DTMF command	O		O_Icon_Rec5_Send_DTMF
129	Terminal displays icons as defined in record 1 of EF(IMG) for Launch Browser command	O		O_Icon_Rec1_Launch_Browser
130	Terminal displays icons as defined in record 2 of EF(IMG) for Launch Browser command	O		O_Icon_Rec2_Launch_Browser
131	Terminal displays icons as defined in record 5 of EF(IMG) for Launch Browser command	O		O_Icon_Rec5_Launch_Browser
132	Class E: Terminal does support eFDD	O		pc_BIP_eFDD
133	Class E: Terminal does support eTDD	O		pc_BIP_eTDD
134	Terminal supports UTRAN	O		O_UTRAN
135	Terminal supports E-UTRAN but neither UTRAN nor GERAN	C003		O_EUTRAN_NO_UTRAN_NO_GERAN
136	CLASS Q: Terminal supports Event CSG Cell Selection	O		O_Event_CSG_Cell_Selection
137	CLASS Q: Terminal supports CSG Cell Discovery	O		O_CSG_Cell_Discovery
138	Terminal supports selection of default item in Select Item	O		O_Select_Item_Default_Item
139	Terminal supports eFDD	O		pc_eFDD
140	Terminal supports eTDD	O		pc_eTDD
141	Terminal supports SM-over-IP-receiver	O		pc_SM-over-IP-receiver
142	Terminal supports MO SMS over IMS	O		pc_MO_SM-over-IMS
143	Class K: Terminal supports Direct Communication Channel	O		O_Direct_Com_Channel
144	Terminal supports Communication Control for IMS	O		O_CC_IMS
145	Class S: Terminal supports CAT over modem interface	O		O_CAT_Modem_Interface
146	Class E and T: Event Incoming IMS Data	O		O_Event_Incoming_IMS_Data
147	Class E and T: Event IMS Registration	O		O_Event_IMS_Registration
148	Class E and T: UICC Access to IMS support	O		O_UICC_ACCESS_IMS
149	Terminal supports SMS Cell Broadcast Data Download	O		O_SMS-CB_Data_Download
150	Terminal supports IMS	O		O_IMS
151	Terminal operating in PS mode	O		O_PS_OPMODE
152	Terminal supports Short Message Service (SMS) MT over SGs	O		O_SMS_SGs_MT

Item	Option	Status	Support	Mnemonic
153	Terminal supports Short Message Service (SMS) MO over SGs	O		O_SMS_SGs_MO
154	Terminal sends RP-ACK for '62XX' and '63XX' for SMS-PP download	C004		O_RP-ACK_for_SMS-PP_error
155	Terminal supports browser with multiple sessions/tabs	O		O_Browser_tabs
156	Terminal supports Short Message Service (SMS) MT over CS	O		pc_SMS_CS_MT
157	Terminal supports Short Message Service (SMS) MO over CS	O		pc_SMS_CS_MO
158	Terminal supports Short Message Service (SMS) MT over PS	O		pc_SMS_PS_MT
159	Terminal supports Short Message Service (SMS) MO over PS	O		pc_SMS_PS_MO
160	Terminal rejects Launch Browser with Default URL	C005		O_Rej_Launch_Browser_withDefURL
161	Terminal supports Event Language Selection	O		O_Lang_Select
162	Terminal supports Provide Local Information (Language)	O		O_Provide_Local_LS
163	Terminal supports Language Notification	O		O_Lang_Notif
164	Terminal supports Alpha Identifier in REFRESH command	O		O_Refresh_AlphaIdentifier
165	ProSe usage information reporting	O		O_ProSE
166	Event: WLAN Access status	O		O_WLAN_Access_Status
167	Class E: WLAN bearer support	O		O_WLAN_Bearer
168	Terminal supports to a I-WLAN or a WLAN	O		O_I-WLAN_OR_WLAN
169	Terminal supports Media Type "Voice" for SET UP CALL and Call Control by USIM	O		O_Media_Type_Voice
170	Terminal supports Media Type "Video" for SET UP CALL and Call Control by USIM	O		O_Media_Type_Video
171	Terminal supports sending location status and access technology that is already available	C006		O_LS_and_ATC_events
172	Terminal performs USIM deactivation during 3G Session Reset REFRESH	O		O_USIM_Deact_during_Refresh
173	Terminal does support NB-IoT	O		pc_NB
174	Terminal supports EMM-REGISTERED with PDN	O		pc_AttachWithPDN
175	Void	O		
176	Void	O		
177	Class E: Terminal does support NB-IoT	O		pc_BIP_NB
178	Support for multiple PDN connections	O		pc_Multiple_PDN
179	Support for SM-over-IP without MSISDN	O		O_SM-over-IP_without_MSISDN
180	Class ae: Originate voice call with URI	O		O_Voice_Call_with_URI
181	Terminal does support deactivation of the UICC in PSM.	O		O_PSM_DEAC_UICC
182	Terminal does support the UICC suspension mechanism in PSM.	O		O_PSM_SUSPEND_UICC
183	Terminal does support the UICC suspension mechanism during extended DRX	O		O_eDRX_SUSPEND_UICC
184	Terminal supports 3GPP PS data off	O		O_PS_Data_Off
185	Terminal supports Date-Time and Time zone	O		O_DateTime_Time_zone

Item	Option	Status	Support	Mnemonic
186	Terminal supports NB-IoT only	O		O_NB-IoT_only
187	Terminal supports NG-RAN	O		pc_NG_RAN
188	Class E: Terminal does support NG-RAN	O		pc_BIP_NG_RAN
189	Class V: support of PROVIDE LOCAL INFORMATION, H(e)NB IP address	O		O_PLI_HeNB_IP_Address
190	Class W: support of PROVIDE LOCAL INFORMATION, H(e)NB surrounding macrocells	O		O_PLI_HeNB_Sur_Macrocells
191	Terminal supports SUPI as Network Access Identifier	O		O_SUPI_NAI
192	Terminal supports Non-IP Data Delivery	O		O_NIDD
193	Terminal supports browser termination	O		O_Browser_Termination
194	Terminal supports IMS over UTRAN	O		O_IMS_UTRAN
195	Terminal supports a method to set the DN-Specific Identity	O		O_Set_DN_Specific_ID
196	Terminal supports CAG feature	O		pc_CAG
197	Support of NR NTN access	O		pc_nonTerrestrialNetwork_r17
198	Terminal supports sending CAG selection status that is already available.	C007		O_CAG_immediate_events
199	Support of steering of roaming connected mode control information	O		pc_SORCMCI
200	Class AH: Terminal supports Slices Status Change event	O		O_Slice_Status_change_Event
C001	If terminal is implemented according to Rel-6 or later then M, else O			
C002	If feature is implemented according to Rel-8 or later then O, else M. It is possible to implement the related features according to Rel-8 or later even if the generic toolkit implementation is according to a release earlier then Rel-8.			
C003	If terminal is implemented according to Rel-8 or later AND ((A.1/139 OR A.1/140) AND (NOT A.1/64) AND (NOT A.1/134)) THEN M ELSE N/A			
C004	If feature is implemented according to Rel-11 or later then M, else N/A			
C005	If feature is implemented according to Rel-12 or later then O, else N/A			
C006	If feature is implemented according to Rel-13 or later then M, else O			
C007	If feature is implemented according to Rel-18 or later then M, else O			
NOTE:	Items 161, 162, 163 and 164 were made optional as a consequence of the approval of CR 0429 against TS 31.111 and CR 0419 against TS 31.124			

3.4 Applicability table

NOTE: It is possible that the applicability of some tests indicated in table B.1 does not match with the value in the Release column, due to late definition of the test sequences. Tests should be performed without considering the Release column, but only based on the conditions indicated for each release.

Table B.1: Applicability of tests

Test	Test sequence	Description	from Rel.	up to Rel. (see note 2)	Applicability	Terminal Profile	Network Dependency	Support	Additional test case execution parameter
27.22.1		PROFILE DOWNLOAD							
	1	PROFILE DOWNLOAD	R99		M	E.1/1	No		
27.22.2		Contents of the TERMINAL PROFILE command							
	1	Contents of the TERMINAL PROFILE command	R99		M	E.1/1	No		
27.22.3		Servicing of Proactive UICC Commands							
	1	Servicing of Proactive UICC Commands	R99		M		No		
27.22.4.1		DISPLAY TEXT							
	1.1	Unpacked	R99		C177	E.1/17 AND E.1/110	No		
	1.2	Screen busy	R99		C177	E.1/17 AND E.1/110	No		
	1.3	high priority	R99		C177	E.1/17 AND E.1/110	No		
	1.4	Packed	R99		C177	E.1/17 AND E.1/110	No		
	1.5	clear after delay	R99		C177	E.1/17 AND E.1/110	No		
	1.6	long text up to 160 bytes	R99		C177	E.1/17 AND E.1/110	No		
	1.7	Backwards move in USIM session	R99		C177 AND C178	E.1/17 AND E.1/110 AND E.1/111	No		
	1.8	Session terminated by user	R99		C177 AND C178	E.1/17 AND E.1/110 AND E.1/111	No		
	1.9	Command not understood by ME	R99		C177	E.1/17 AND E.1/110	No		
	2.1	no response from user	R99		C120 AND C177 AND C178	E.1/17 AND E.1/110 AND E.1/111	No		
	3.1	Extension Text	R99		C177	E.1/17 AND E.1/16 AND	No		

					E.1/110			
4.1, 4.2	sustained text	R99		C177	E.1/17 AND E.1/65 AND E.1/110	No		
4.3	sustained text	R99		C177 AND C178	E.1/17 AND E.1/65 AND E.1/110 AND E.1/111	No		
4.4	sustained text	R99	Rel-7	C177 AND C180	E.1/17 AND E.1/65 AND E.1/110	USS or SS only		
		Rel-8		C177 AND C180 AND C183	E.1/17 AND E.1/65 AND E.1/110	USS or SS only		
5.1, 5.3	Icons – basic icon	R99		C108 AND C177	E.1/17 AND E.1/110	No		
5.2	Icons – colour icon	R99		C171 AND C177	E.1/17 AND E.1/110	No		
6.1	UCS2 display in Cyrillic	R99		C118 AND C177	E.1/17 AND E.1/15 AND E.1/110	No		
7.1	Variable Timeout	Rel-4		C126 AND C177 AND C178	E.1/17 AND E.1/137 AND E.1/110 AND E.1/111	No		
8.1	Text attribute – left alignment	Rel-5		C153 AND C177	E.1/17 AND E.1/124 AND E.1/217 AND E.1/110	No		
8.2	Text attribute – center alignment	Rel-5		C154 AND C177	E.1/17 AND E.1/124 AND E.1/218 AND E.1/110	No		
8.3	Text attribute – right alignment	Rel-5		C155 AND C177	E.1/17 AND E.1/124 AND E.1/219 AND E.1/110	No		
8.4	Text attribute – large font size	Rel-5		C157 AND C156 AND C177	E.1/17 AND E.1/124 AND E.1/221 AND	No		

					E.1/220 AND E.1/110			
8.5	Text attribute – small font size	Rel-5		C158 AND C156 AND C177	E.1/17 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	No		
8.6	Text attribute – bold on	Rel-5		C160 AND C159 AND C177	E.1/17 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110	No		
8.7	Text attribute – italic on	Rel-5		C161 AND C159 AND C177	E.1/17 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110	No		
8.8	Text attribute – underlined on	Rel-5		C162 AND C159 AND C177	E.1/17 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	No		
8.9	Text attribute – strikethrough on	Rel-5		C163 AND C159 AND C177	E.1/17 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110	No		
8.10	Text attribute – foreground and background colours	Rel-5		C164 AND C165 AND C177	E.1/17 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110	No		
9.1	UCS2 display in Chinese	R99	Rel-4		E.1/17 AND E.1/15 AND E.1/110	No		
		Rel-5		C143 AND C177	E.1/17 AND E.1/15 AND E.1/110	No		

	10.1	UCS2 display in Katakana	R99	Rel-4		E.1/17 AND E.1/15 AND E.1/110	No		
			Rel-5		C145 AND C177	E.1/17 AND E.1/15 AND E.1/110	No		
27.22.4.2		GET INKEY							
	1.1	prompt unpacked	R99		C177 AND C178	E.1/18 AND E.1/110 AND E.1/111	No		
	1.2	prompt packed	R99		C177 AND C178	E.1/18 AND E.1/110 AND E.1/111	No		
	1.3	Backwards move in UICC session	R99		C177 AND C178	E.1/18 AND E.1/110 AND E.1/111	No		
	1.4	Session terminated by user	R99		C177 AND C178	E.1/18 AND E.1/110 AND E.1/111	No		
	1.5	SMS alphabet	R99		C177 AND C178	E.1/18 AND E.1/110 AND E.1/111	No		
	1.6	Long text up to 160 bytes	R99		C177 AND C178	E.1/18 AND E.1/110 AND E.1/111	No		
	2.1	no response from user	R99		C120 AND C177 AND C178	E.1/18 AND E.1/110 AND E.1/111	No		
	3.1	UCS2 display in Cyrillic	R99		C118 AND C177 AND C178	E.1/18 AND E.1/15 AND E.1/110 AND E.1/111	No		
	3.2	UCS2 display, Long text up to 70 chars in Cyrillic	R99		C118 AND C177 AND C178	E.1/18 AND E.1/15 AND E.1/110 AND E.1/111	No		
	4.1	UCS2 entry in Cyrillic	R99		C105 AND C177 AND C178	E.1/18 AND E.1/14 AND E.1/110 AND E.1/111	No		

5.1	"Yes/No" response	R99		C177 AND C178	E.1/18 AND E.1/60 AND E.1/110 AND E.1/111	No		
6.1, 6.2	Icons – basic icon	R99		C108 AND C177 AND C178	E.1/18 AND E.1/110 AND E.1/111	No		
6.3, 6.4	Icons – colour icon	R99		C171 AND C177 AND C178	E.1/18 AND E.1/110 AND E.1/111	No		
7.1	Help information	R99		C107 AND C177 AND C178	E.1/18 AND E.1/110 AND E.1/111	No		
8.1	Variable Timeout	Rel-4		C126 AND C177 AND C178	E.1/18 AND E.1/140 AND E.1/110 AND E.1/111	No		
9.1	Text attribute – left alignment	Rel-5		C153 AND C177 AND C178	E.1/18 AND E.1/124 AND E.1/217 AND E.1/110 AND E.1/111	No		
9.2	Text attribute – center alignment	Rel-5		C154 AND C177 AND C178	E.1/18 AND E.1/124 AND E.1/218 AND E.1/110 AND E.1/111	No		
9.3	Text attribute – right alignment	Rel-5		C155 AND C177 AND C178	E.1/18 AND E.1/124 AND E.1/219 AND E.1/110 AND E.1/111	No		
9.4	Text attribute – large font size	Rel-5		C157 AND C156 AND C177 AND C178	E.1/18 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110 AND E.1/111	No		

9.5	Text attribute – small font size	Rel-5		C158 AND C156 AND C177 AND C178	E.1/18 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110 AND E.1/111	No		
9.6	Text attribute – bold on	Rel-5		C160 AND C159 AND C177 AND C178	E.1/18 AND E.1/124 E.1/221 AND E.1/220 AND E.1/110 AND E.1/111	No		
9.7	Text attribute – italic on	Rel-5		C161 AND C159 AND C177 AND C178	E.1/18 AND E.1/124 E.1/225 AND E.1/227 AND E.1/110 AND E.1/111	No		
9.8	Text attribute – underlined on	Rel-5		C162 AND C159 AND C177 AND C178	E.1/18 AND E.1/124 E.1/225 AND E.1/228 AND E.1/110 AND E.1/111	No		
9.9	Text attribute – strikethough on	Rel-5		C163 AND C159 AND C177 AND C178	E.1/18 AND E.1/124 E.1/225 AND E.1/229 AND E.1/110 AND E.1/111	No		
9.10	Text attribute – foreground and background colours	Rel-5		C164 AND C165 AND C177 AND C178	E.1/18 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110 AND E.1/111	No		
10.1	UCS2 display in Chinese	R99	Rel-4		E.1/18 AND E.1/15 AND E.1/110 AND	No		

					E.1/111			
		Rel-5		C143 AND C177 AND C178	E.1/18 AND E.1/15 AND E.1/110 AND E.1/111	No		
10.2	UCS2 display in Chinese, Long text up to 70 chars	R99	Rel-4		E.1/18 AND E.1/15 AND E.1/110 AND E.1/111	No		
		Rel-5		C143 AND C177 AND C178	E.1/18 AND E.1/15 AND E.1/110 AND E.1/111	No		
11.1	UCS2 entry in Chinese	R99	Rel-4		E.1/18 AND E.1/14 AND E.1/110 AND E.1/111	No		
		Rel-5		C142 AND C177 AND C178	E.1/18 AND E.1/14 AND E.1/110 AND E.1/111	No		
12.1	UCS2 display in Katakana	R99	Rel-4		E.1/18 AND E.1/15 AND E.1/110 AND E.1/111	No		
		Rel-5		C145 AND C177 AND C178	E.1/18 AND E.1/15 AND E.1/110 AND E.1/111	No		
12.2	UCS2 display in Katakana, Long text up to 70 chars	R99	Rel-4		E.1/18 AND E.1/15 AND E.1/110 AND E.1/111	No		
		Rel-5		C145 AND C177 AND C178	E.1/18 AND E.1/15 AND E.1/110 AND E.1/111	No		
13.1	UCS2 entry in Katakana	R99	Rel-4		E.1/18 AND E.1/14 AND	No		

						E.1/110 AND E.1/111			
			Rel-5		C144 AND C177 AND C178	E.1/18 AND E.1/14 AND E.1/110 AND E.1/111	No		
27.22.4.3		GET INPUT							
	1.1	input unpacked	R99		C177 AND C178	E.1/19 AND E.1/110 AND E.1/111	No		
	1.2	input packed	R99		C177 AND C178	E.1/19 AND E.1/110 AND E.1/111	No		
	1.1	digits only	R99		C177 AND C178	E.1/19 AND E.1/110 AND E.1/111	No		
	1.3	SMS alphabet	R99		C177 AND C178	E.1/19 AND E.1/110 AND E.1/111	No		
	1.4	hidden input	R99		C177 AND C178	E.1/19 AND E.1/110 AND E.1/111	No		
	1.5	min / max acceptable length	R99		C177 AND C178	E.1/19 AND E.1/110 AND E.1/111	No		
	1.6	Backwards move in UICC session	R99		C177 AND C178	E.1/19 AND E.1/110 AND E.1/111	No		
	1.7	Session terminated by user	R99		C177 AND C178	E.1/19 AND E.1/110 AND E.1/111	No		
	1.8	Prompt text up to 160 bytes	R99		C177 AND C178	E.1/19 AND E.1/110 AND E.1/111	No		
	1.9	SMS default alphabet, ME to echo text, packing not required	R99		C177 AND C178	E.1/19 AND E.1/110 AND E.1/111	No		
	1.10	Null length for the text string	R99		C177 AND C178	E.1/19 AND E.1/110 AND E.1/111	No		
	2.1	no response from user	R99		C120 AND C177 AND	E.1/19 AND	No		

				C178	E.1/110 AND E.1/111			
3.1, 3.2	UCS2 display in Cyrillic	R99		C118 AND C177 AND C178	E.1/19 AND E.1/15 AND E.1/110 AND E.1/111	No		
4.1, 4.2	UCS2 entry in Cyrillic	R99		C105 AND C177 AND C178	E.1/19 AND E.1/14 AND E.1/110 AND E.1/111	No		
5.1, 5.2	default text for the input	R99		C177 AND C178	E.1/19 AND E.1/110 AND E.1/111	No		
6.1, 6.2	Icons – basic icon	R99		C108 AND C177 AND C178	E.1/19 AND E.1/110 AND E.1/111	No		
6.3, 6.4	Icons – colour icon	R99		C171 AND C177 AND C178	E.1/19 AND E.1/110 AND E.1/111	No		
7.1	help information	R99		C107 AND C177 AND C178	E.1/19 AND E.1/110 AND E.1/111	No		
8.1	Text attribute– left alignment	Rel-5			E.1/19 AND E.1/124 AND E.1/217 AND E.1/110 AND E.1/111	No		
8.2	Text attribute – center alignment	Rel-5			E.1/19 AND E.1/124 AND E.1/218 AND E.1/110 AND E.1/111	No		
8.3	Text attribute – right alignment	Rel-5			E.1/19 AND E.1/124 AND E.1/219 AND E.1/110 AND E.1/111	No		
8.4	Text attribute – large font size	Rel-5			E.1/19 AND E.1/124 AND	No		

					E.1/221 AND E.1/220 AND E.1/110 AND E.1/111			
8.5	Text attribute – small font size	Rel-5			E.1/19 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110 AND E.1/111	No		
8.6	Text attribute – bold on	Rel-5			E.1/19 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110 AND E.1/111	No		
8.7	Text attribute – italic on	Rel-5			E.1/19 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110 AND E.1/111	No		
8.8	Text attribute – underlined on	Rel-5			E.1/19 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110 AND E.1/111	No		
8.9	Text attribute – strikethrough on	Rel-5			E.1/19 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110 AND E.1/111	No		
8.10	Text attribute – foreground and background colours	Rel-5			E.1/19 AND E.1/124 AND E.1/230 AND	No		

						E.1/231 AND E.1/110 AND E.1/111			
	9.1, 9.2	UCS2 display in Chinese	R99	Rel-4		E.1/19 AND E.1/15 AND E.1/110 AND E.1/111	No		
			Rel-5		C143 AND C177 AND C178	E.1/19 AND E.1/15 AND E.1/110 AND E.1/111	No		
	10.1, 10.2	UCS2 entry in Chinese	R99	Rel-4		E.1/19 AND E.1/14 AND E.1/110 AND E.1/111	No		
			Rel-5		C142 AND C177 AND C178	E.1/19 AND E.1/14 AND E.1/110 AND E.1/111	No		
	11.1, 11.2	UCS2 display in Katakana	R99	Rel-4		E.1/19 AND E.1/15 AND E.1/110 AND E.1/111	No		
			Rel-5		C145 AND C177 AND C178	E.1/19 AND E.1/15 AND E.1/110 AND E.1/111	No		
	12.1, 12.2	UCS2 entry in Katakana	R99	Rel-4		E.1/19 AND E.1/14 AND E.1/110 AND E.1/111	No		
			Rel-5		C144 AND C177 AND C178	E.1/19 AND E.1/14 AND E.1/110 AND E.1/111	No		
27.22.4.4		**MORE TIME**							
	1.1	MORE TIME	R99		M	E.1/20	No		
27.22.4.5		**PLAY TONE**							
	1.1	play all tones, display alpha, user termination, superimpose	R99	Rel-7	C178 AND C179 AND C180	E.1/21 AND E.1/110 AND	USS or SS only		TCEP001

						E.1/111			
			Rel-8		C178 AND C179 AND C180 AND C183	E.1/21 AND E.1/110 AND E.1/111	USS or SS only		TCEP001
	2.1	UCS2 display in Cyrillic	R99		C118 AND C179	E.1/21 AND E.1/15 AND E.1/110	No		TCEP001
	3.1, 3.2	Icons – basic icon	R99		C108 AND C179	E.1/21 AND E.1/110	No		TCEP001
	3.3, 3.4	Icons – colour icon	R99		C171 AND C179	E.1/21 AND E.1/110	No		TCEP001
	4.1	Text attribute – left alignment	Rel-5			E.1/21 AND E.1/124 AND E.1/217 AND E.1/110	No		TCEP001
	4.2	Text attribute – center alignment	Rel-5			E.1/21 AND E.1/124 AND E.1/218 AND E.1/110	No		TCEP001
	4.3	Text attribute – right alignment	Rel-5			E.1/21 AND E.1/124 AND E.1/219 AND E.1/110	No		TCEP001
	4.4	Text attribute – large font size	Rel-5			E.1/21 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110	No		TCEP001
	4.5	Text attribute – small font size	Rel-5			E.1/21 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	No		TCEP001
	4.6	Text attribute – bold on	Rel-5			E.1/21 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110	No		TCEP001
	4.7	Text attribute – italic on	Rel-5			E.1/21 AND	No		TCEP001

						E.1/124 AND E.1/225 AND E.1/227 AND E.1/110			
	4.8	Text attribute – underlined on	Rel-5			E.1/21 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	No		TCEP001
	4.9	Text attribute – strikethrough on	Rel-5			E.1/21 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110	No		TCEP001
	4.10	Text attribute– foreground and background colours	Rel-5			E.1/21 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110	No		TCEP001
	5.1	UCS2 display in Chinese	R99	Rel-4		E.1/21 AND E.1/15 AND E.1/110	No		TCEP001
			Rel-5			E.1/21 AND E.1/15 AND E.1/110	No		TCEP001
	6.1	UCS2 display in Katakana	R99	Rel-4		E.1/21 AND E.1/15 AND E.1/110	No		TCEP001
			Rel-5			E.1/21 AND E.1/15 AND E.1/110	No		TCEP001
27.22.4.6		**POLL INTERVAL**							
	1.1	duration	R99		M	E.1/22	No		
27.22.4.7		**REFRESH**							
	1.1	USIM initialization, enabling FDN mode	R99	Rel-7	C146 AND C177 AND C178 AND C180	E.1/24 AND E.1/110 AND E.1/111	USS or SS only		
			Rel-8		C146 AND C177 AND C178 AND C180 AND C183	E.1/24 AND E.1/110 AND E.1/111	USS or SS only		

1.2	file change notification of FDN file	R99	Rel-7	C146 AND C177 AND C178 AND C180	E.1/24 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C146 AND C177 AND C178 AND C180 AND C183	E.1/24 AND E.1/110 AND E.1/111	USS or SS only		
1.3	USIM initialization and file change notification of ADN	R99	Rel-5	C168 AND C177 AND C178	E.1/24 AND E.1/110 AND E.1/111	No		
		Rel-6		C177 AND C178	E.1/24 AND E.1/110 AND E.1/111	No		
1.4	USIM initialization and full file change notification, enabling FDN mode	R99	Rel-7	C146 AND C177 AND C178 AND C180	E.1/24 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C146 AND C177 AND C178 AND C180 AND C183	E.1/24 AND E.1/110 AND E.1/111	USS or SS only		
1.5	UICC reset	R99			E.1/24	No		
1.6	USIM Initialization after SMS-PP data download	R99	Rel-7	C146 AND C177 AND C178 AND C180	E.1/24 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C146 AND C177 AND C178 AND C180 AND C183	E.1/24 AND E.1/110 AND E.1/111	USS or SS only		
1.7	USIM Application Reset	R99	Rel-5		E.1/24 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-6	Rel-7	C146 AND C177 AND C178 AND C180	E.1/24 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C146 AND C177 AND C178 AND C180 AND C183	E.1/24 AND E.1/110 AND E.1/111	USS or SS only		
2.1	UICC Reset for IMSI Changing procedure	R99	Rel-7		E.1/24	USS or SS only		
		Rel-8		M	E.1/24	USS or SS only		
2.2	USIM Application Reset for IMSI Changing procedure	R99	Rel-5		E.1/24	USS or SS only		
		Rel-6		M	E.1/24	USS or SS only		
2.3	3G Session Reset for IMSI Changing procedure	R99	Rel-7		E.1/24	USS or SS only		
		Rel-8		M	E.1/24	USS or SS only		

2.4	reject 3G Session Reset for IMSI Changing procedure during CScall	R99	Rel-5		E.1/24 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-6	Rel-7	C177 AND C178 AND C180	E.1/24 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C177 AND C178 AND C180 AND C183	E.1/24 AND E.1/110 AND E.1/111	USS or SS only		
2.5	reject UICC Reset for IMSI Changing procedure during CS call	R99	Rel-7		E.1/24 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C177 AND C178 AND C180 AND C183	E.1/24 AND E.1/110 AND E.1/111	USS or SS only		
2.6	UICC Reset for IMSI Changing procedure during active PDP context	R99	Rel-7		E.1/24	USS or SS only		
		Rel-8		C215	E.1/24	USS or SS only		
2.7	3G Session Reset for IMSI Change procedure during active PDP context	R99	Rel-7		E.1/24	USS or SS only		
		Rel-8		C215	E.1/24	USS or SS only		
3.1	Steering of roaming, UTRAN	Rel-7	Rel-7	M	E.1/24 AND E.1/236	USS only		
		Rel-8		C184	E.1/24 AND E.1/236	USS only		
3.2	Steering of roaming, InterRAT	Rel-7	Rel-7	C167	E.1/24 AND E.1/236	USS and SS		
		Rel-8		C167 AND C184	E.1/24 AND E.1/236	USS and SS		
3.3	Steering of roaming, E-UTRAN	Rel-8	Rel-12	C190	E.1/24 AND E.1/135 AND E.1/236	E-USS or NB-SS (see note 1)		
		Rel-13		C222	E.1/24 AND E.1/135 AND E.1/236	E-USS or NB-SS (see note 1)		
3.4	Steering of roaming, NG-RAN	Rel-16		C231	E.1/24 AND E.1/236	NG-SS only		
3.5	Steering of roaming, CMCI criterion 'DNN'	Rel-17		C239	E1.285	NG-SS only		
3.6	Steering of roaming, CMCI criterion 'S-NSSAI SST and SD'	Rel-17		C239	E1.285	NG-SS only		
3.7	Steering of roaming, CMCI criterions 'DNN' and 'S-NSSAI SST and SD' and 'match all'	Rel-17		C239	E1.285	NG-SS only		

	4.1	Refresh with AID, E-UTRAN or UTRAN	Rel-7	Rel-7	C203	E.1/24	E-USS only or USS		
			Rel-8		C202 OR C203	E.1/24	E-USS only or USS		
	5.1	UICC Reset for IMSI Changing procedure, E-UTRAN	Rel-8		C190	E.1/24	E-USS or NB-SS (see note 1)		
	5.2	3G Session Reset for IMSI Changing procedure, E-UTRAN	Rel-8		C190	E.1/24	E-USS or NB-SS (see note 1)		
	6.1	REFRESH, UICC Reset for IMSI Changing procedure, NG-RAN	Rel-16		C231	E.1/24 OR (E.1/24 AND E.1/256)	NG-SS only		
	6.2	REFRESH, 3G Session Reset for IMSI Changing procedure, NG-RAN	Rel-16		C231	E.1/24 OR (E.1/24 AND E.1/256)	NG-SS only		
	6.3	REFRESH, USIM Application Reset for IMSI Changing procedure, NG-RAN	Rel-16		C231	E.1/24 OR (E.1/24 AND E.1/256)	NG-SS only		
	6.4	REFRESH, reject 3G Session Reset for IMSI Changing procedure during mobile originated call, NG-RAN	Rel-16		C231	E.1/24 OR (E.1/24 AND E.1/256)	NG-SS only		
	7.1	REFRESH, UICC Reset for SUPI_NAI Changing procedure, NG-RAN	Rel-16		C231 AND C233	E.1/24	NG-SS only		
	7.2	REFRESH, 3G Session Reset for SUPI_NAI Changing procedure, NG-RAN	Rel-16		C231 AND C233	E.1/24	NG-SS only		
	7.3	REFRESH, USIM Application Reset for SUPI_NAI Changing procedure, NG-RAN	Rel-16		C231 AND C233	E.1/24	NG-SS only		
	7.4	REFRESH, reject 3G Session Reset for SUPI_NAI Changing procedure during mobile originated call, NG-RAN	Rel-16		C231 AND C233	E.1/24	NG-SS only		
	8.1	REFRESH, USIM File Change Notification for Generic Bootstrapping Procedure Request, NG-RAN	Rel-15		C238	E.1/24 OR E.1/173	NG-SS only		
27.22.4.8		**SET UP MENU**							
	1.1	Set up, menu selection, replace and remove menu	R99		C177 AND C178	E.1/30 AND E.1/4 AND E.1/110 AND E.1/111	No		
	1.2	Large menu	R99		C177 AND C178	E.1/30 AND E.1/4 AND E.1/110 AND E.1/111	No		
	2.1	help information	R99		C107 AND C177 AND C178	E.1/30 AND E.1/4 AND	No		

					E.1/110 AND E.1/111			
3.1	next action indicator	R99		C177 AND C178	E.1/30 AND E.1/110 AND E.1/111	No		
4.1, 4.2	Icons	R99		C172 AND C177 AND C178	E.1/30 AND E.1/110 AND E.1/111	No		
5.1	soft key access	R99		C112 AND C177 AND C178	E.1/30 AND E.1/74 AND E.1/110 AND E.1/111	No		
6.1	Text attribute – left alignment	Rel-5		C153 AND C177 AND C178	E.1/30 AND E.1/124 AND E.1/217 AND E.1/110 AND E.1/111	No		
6.2	Text attribute – center alignment	Rel-5		C154 AND C177 AND C178	E.1/30 AND E.1/124 AND E.1/218 AND E.1/110 AND E.1/111	No		
6.3	Text attribute – right alignment	Rel-5		C155 AND C177 AND C178	E.1/30 AND E.1/124 AND E.1/219 AND E.1/110 AND E.1/111	No		
6.4	Text attribute – large font size	Rel-5		C157 AND C156 AND C177 AND C178	E.1/30 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110 AND E.1/111	No		
6.5	Text attribute – small font size	Rel-5		C158 AND C156 AND C177 AND C178	E.1/30 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110 AND	No		

					E.1/111			
6.6	Text attribute – bold on	Rel-5		C160 AND C159 AND C177 AND C178	E.1/30 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110 AND E.1/111	No		
6.7	Text attribute – italic on	Rel-5		C161 AND C159 AND C177 AND C178	E.1/30 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110 AND E.1/111	No		
6.8	Text attribute – underlined on	Rel-5		C162 AND C159 AND C177 AND C178	E.1/30 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110 AND E.1/111	No		
6.9	Text attribute – strikethrough on	Rel-5		C163 AND C159 AND C177 AND C178	E.1/30 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110 AND E.1/111	No		
6.10	Text attribute – foreground and background colours	Rel-5		C164 AND C165 AND C177 AND C178	E.1/30 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110 AND E.1/111	No		
7.1	UCS2 display in Cyrillic	R99	Rel-4		E.1/39 AND E.1/15 AND E.1/110 AND E.1/111	No		
		Rel-5		C118 AND C177 AND C178	E.1/39 AND E.1/15 AND	No		

						E.1/110 AND E.1/111			
	8.1	UCS2 display in Chinese	R99	Rel-4		E.1/39 AND E.1/15 AND E.1/110 AND E.1/111	No		
			Rel-5		C143 AND C177 AND C178	E.1/39 AND E.1/15 AND E.1/110 AND E.1/111	No		
	9.1	UCS2 display in Katakana	R99	Rel-4		E.1/39 AND E.1/15 AND E.1/110 AND E.1/111	No		
			Rel-5		C145 AND C177 AND C178	E.1/39 AND E.1/15 AND E.1/110 AND E.1/111	No		
27.22.4.9		**SELECT ITEM**							
	1.1	Mandatory features	R99		C177 AND C178	E.1/25 AND E.1/110 AND E.1/111	No		
	1.2, 1.3, 1.5,1.6	Large menu	R99		C177 AND C178	E.1/25 AND E.1/110 AND E.1/111	No		
	1.4	Backwards move	R99		C177 AND C178	E.1/25 AND E.1/110 AND E.1/111	No		
	1.5	user termination	R99		C177 AND C178	E.1/25 AND E.1/110 AND E.1/111	No		
	2.1	next action indicator	R99		C177 AND C178	E.1/25 AND E.1/110 AND E.1/111	No		
	3.1	default selected item	R99		C177 AND C178 AND C194	E.1/25 AND E.1/110 AND E.1/111	No		
	4.1	help information	R99		C107 AND C177 AND C178	E.1/25 AND E.1/110 AND E.1/111	No		

5.1, 5.2	Icons	R99		C172 AND C177 AND C178	E.1/25 AND E.1/110 AND E.1/111	No		
6.1, 6.2	Presentation style	R99		C177 AND C178	E.1/25 AND E.1/110 AND E.1/111	No		
7.1	Soft keys	R99		C112 AND C177 AND C178	E.1/25 AND E.1/73 AND E.1/110 AND E.1/111	No		
8.1	No Response from user	R99		C120 AND C177 AND C178	E.1/25 AND E.1/110 AND E.1/111	No		
9.1	Text attribute – left alignment	Rel-5		C153 AND C177 AND C178	E.1/25 AND E.1/124 AND E.1/217 AND E.1/110 AND E.1/111	No		
9.2	Text attribute – center alignment	Rel-5		C154 AND C177 AND C178	E.1/25 AND E.1/124 AND E.1/218 AND E.1/110 AND E.1/111	No		
9.3	Text attribute – right alignment	Rel-5		C155 AND C177 AND C178	E.1/25 AND E.1/124 AND E.1/219 AND E.1/110 AND E.1/111	No		
9.4	Text attribute – large font size	Rel-5		C157 AND C156 AND C177 AND C178	E.1/25 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110 AND E.1/111	No		
9.5	Text attribute – small font size	Rel-5		C158 AND C156 AND C177 AND C178	E.1/25 AND E.1/124 AND E.1/222 AND E.1/220 AND	No		

					E.1/110 AND E.1/111			
9.6	Text attribute – bold on	Rel-5		C160 AND C159 AND C177 AND C178	E.1/25 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110 AND E.1/111	No		
9.7	Text attribute – italic on	Rel-5		C161 AND C159 AND C177 AND C178	E.1/25 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110 AND E.1/111	No		
9.8	Text attribute – underline on	Rel-5		C162 AND C159 AND C177 AND C178	E.1/25 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110 AND E.1/111	No		
9.9	Text attribute – strikethrough on	Rel-5		C163 AND C159 AND C177 AND C178	E.1/25 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110 AND E.1/111	No		
9.10	Text attribute – foreground and background colours	Rel-5		C164 AND C165 AND C177 AND C178	E.1/25 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110 AND E.1/111	No		
10.1, 10.2, 10.3	UCS2 display in Cyrillic	R99	Rel-4		E.1/39 AND E.1/15 AND E.1/110 AND E.1/111	No		
		Rel-5		C118 AND C177 AND C178	E.1/39 AND	No		

						E.1/15 AND E.1/110 AND E.1/111			
	11.1	UCS2 display in Chinese	R99	Rel-4		E.1/25 AND E.1/15 AND E.1/110 AND E.1/111	No		
			Rel-5		C143 AND C177 AND C178	E.1/25 AND E.1/15 AND E.1/110 AND E.1/111	No		
	12.1, 12.2, 12.3	UCS2 display in Katakana	R99	Rel-4		E.1/25 AND E.1/15 AND E.1/110 AND E.1/111	No		
			Rel-5		C145 AND C177 AND C178	E.1/25 AND E.1/15 AND E.1/110 AND E.1/111	No		
27.22.4.10		**SEND SMS**							
	1.9	Send Short Message over CS/PS, UTRAN/GERAN	R99	Rel-7	C209	E.1/26 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C210	E.1/26 AND E.1/110	USS or SS only		TCEP001
	2.1	UCS2 SMS in Cyrillic	R99	Rel-6	C118	E.1/26 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-7		NA	E.1/26 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
	3.1, 3.2	Icons – basic icon	R99	Rel-6	C108	E.1/26 AND E.1/110	USS or SS only		TCEP001
			Rel-7		NA	E.1/26 AND E.1/110	USS or SS only		TCEP001
	4.1	Text attribute– left alignment	Rel-5	Rel-6	C153	E.1/26 AND E.1/124 AND E.1/217 AND E.1/110	USS or SS only		TCEP001
			Rel-7		NA	E.1/26 AND E.1/124 AND	USS or SS only		TCEP001

					E.1/217 AND E.1/110			
4.2	Text attribute – center alignment	Rel-5	Rel-6	C154	E.1/26 AND E.1/124 AND E.1/218 AND E.1/110	USS or SS only		TCEP001
		Rel-7		NA	E.1/26 AND E.1/124 AND E.1/218 AND E.1/110	USS or SS only		TCEP001
4.3	Text attribute – right alignment	Rel-5	Rel-6	C155	E.1/26 AND E.1/124 AND E.1/219 AND E.1/110	USS or SS only		TCEP001
		Rel-7		NA	E.1/26 AND E.1/124 AND E.1/219 AND E.1/110	USS or SS only		TCEP001
4.4	Text attribute – large font size	Rel-5	Rel-6	C157 AND C156	E.1/26 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
		Rel-7		NA	E.1/26 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
4.5	Text attribute – small font size	Rel-5		C158 AND C156	E.1/26 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
		Rel-5	Rel-6	NA	E.1/26 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	USS or SS only		TCEP001

4.6	Text attribute – bold on	Rel-7		C160 AND C159	E.1/26 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110	USS or SS only		TCEP001
		Rel-5		NA	E.1/26 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110	USS or SS only		TCEP001
4.8	Text attribute – underline on	Rel-5	Rel-6	C162 AND C159	E.1/26 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	USS or SS only		TCEP001
		Rel-7		NA	E.1/26 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	USS or SS only		TCEP001
4.9	Text attribute– strikethrough on	Rel-5	Rel-6	C163 AND C159	E.1/26 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110	USS or SS only		TCEP001
		Rel-7		NA	E.1/26 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110	USS or SS only		TCEP001
4.10	Text attribute – foreground and background colours	Rel-5	Rel-6	C164 AND C165	E.1/26 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110	USS or SS only		TCEP001
		Rel-7		NA	E.1/26 AND E.1/124 AND	USS or SS only		TCEP001

						E.1/230 AND E.1/231 AND E.1/110			
	5.1	UCS2 display in Chinese	R99	Rel-4		E.1/26 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-5	Rel-6	C143	E.1/26 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-7		NA	E.1/26 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
	6.1	UCS2 display in Katakana	R99	Rel-4		E.1/26 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-5	Rel-6	C145	E.1/26 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-7		NA	E.1/26 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
	7.1	SMS-over-IP, E-UTRAN	Rel-8		C196	E.1/26 AND E.1/110	E-USS only		TCEP001
	7.2	SMS-over-IP, UTRAN	Rel-7		C197	E.1/26 AND E.1/110	USS or SS only		TCEP001
	8.1	Send Short Message over SGs, E-UTRAN	Rel-8	Rel-12	C206	E.1/26 AND E.1/110	E-USS or NB-SS (see note 1)		TCEP001
			Rel-13		C220	E.1/26 AND E.1/110	E-USS or NB-SS (see note 1)		TCEP001
27.22.4.11		**SEND SS**							
	1.1	call forward unconditional, all bearers, successful	R99	Rel-7	C166 AND C174 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C166 AND C174 AND C183 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
	1.2	call forward unconditional, all bearers, Return Error	R99	Rel-8	C174 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C174 AND C183 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
	1.3	call forward unconditional, all bearers, Reject	R99	Rel-7	C174 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C174 AND C183 AND	E.1/27 AND	USS or SS only		TCEP001

				C204	E.1/110			
1.4	call forward unconditional, all bearers, successful, SS request size limit	R99	Rel-7	C166 AND C174 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C166 AND C174 AND C183 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
1.5	interrogate CLIR status, successful, alpha identifier limits	R99	Rel-7	C175 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C175 AND C183 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
1.6	call forward unconditional, all bearers, successful, null data alpha identifier	R99	Rel-7	C166 AND C174 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C166 AND C174 AND C183 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
2.1, 2.3	call forward unconditional, all bearers, successful, basic icon support	R99	Rel-7	C108 AND C174 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C108 AND C174 AND C183 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
2.2	call forward unconditional, all bearers, successful, colour icon support	R99	Rel-7	C171 AND C174 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C171 AND C174 AND C183 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
2.4	call forward unconditional, all bearers, successful, basic icon non self-explanatory, no alpha identifier presented	R99	Rel-7	C185 AND C174 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C185 AND C174 AND C183 AND C204	E.1/27 AND E.1/110	USS or SS only		TCEP001
3.1	UCS2 display in Cyrillic	R99	Rel-7	C118 AND C174 AND C204	E.1/27 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C118 AND C174 AND C183 AND C204	E.1/27 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
4.1	Text attribute – left alignment	Rel-5	Rel-7	C153 AND C166 AND C174 AND C204	E.1/27 AND E.1/124 AND E.1/217 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C153 AND C166 AND C174 AND C183 AND C204	E.1/27 AND E.1/124 AND E.1/217 AND E.1/110	USS or SS only		TCEP001
4.2	Text attribute – center alignment	Rel-5	Rel-7	C154 AND C166 AND	E.1/27 AND	USS or SS only		TCEP001

				C174 AND C204	E.1/124 AND E.1/218 AND E.1/110			
		Rel-8		C154 AND C166 AND C174 AND C183 AND C204	E.1/27 AND E.1/124 AND E.1/218 AND E.1/110	USS or SS only		TCEP001
4.3	Text attribute – right alignment	Rel-5	Rel-7	C155 AND C166 AND C174 AND C204	E.1/27 AND E.1/124 AND E.1/219 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C155 AND C166 AND C174 AND C183 AND C204	E.1/27 AND E.1/124 AND E.1/219 AND E.1/110	USS or SS only		TCEP001
4.4	Text attribute – large font size	Rel-5	Rel-7	C157 AND C156 AND C166 AND C174 AND C204	E.1/27 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C157 AND C156 AND C166 AND C174 AND C183 AND C204	E.1/27 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
4.5	Text attribute – small font size	Rel-5	Rel-7	C158 AND C156 AND C166 AND C174 AND C204	E.1/27 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C158 AND C156 AND C166 AND C174 AND C183 AND C204	E.1/27 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
4.6	Text attribute – bold on	Rel-5	Rel-7	C160 AND C159 AND C166 AND C174 AND C204	E.1/27 AND E.1/124 AND E.1/225 AND	USS or SS only		TCEP001

					E.1/226 AND E.1/110			
		Rel-8		C160 AND C159 AND C166 AND C174 AND C183 AND C204	E.1/27 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110	USS or SS only		TCEP001
4.7	Text attribute – italic on	Rel-5	Rel-7	C161 AND C159 AND C166 AND C174 AND C204	E.1/27 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C161 AND C159 AND C166 AND C174 AND C183 AND C204	E.1/27 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110	USS or SS only		TCEP001
4.8	Text attribute – underline on	Rel-5	Rel-7	C162 AND C159 AND C166 AND C174 AND C204	E.1/27 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C162 AND C159 AND C166 AND C174 AND C183 AND C204	E.1/27 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	USS or SS only		TCEP001
4.9	Text attribute – strikethrough on	Rel-5	Rel-7	C163 AND C159 AND C166 AND C174 AND C204	E.1/27 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C163 AND C159 AND C166 AND C174 AND C183 AND C204	E.1/27 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110	USS or SS only		TCEP001
4.10	Text attribute – foreground and background colours	Rel-5	Rel-7	C164 AND C165 AND	E.1/27 AND	USS or SS only		TCEP001

					C166 AND C174 AND C204	E.1/124 AND E.1/230 AND E.1/231 AND E.1/110			
			Rel-8		C164 AND C165 AND C166 AND C174 AND C183 AND C204	E.1/27 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110	USS or SS only		TCEP001
	5.1	UCS2 display in Chinese	R99	Rel-4		E.1/27 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-5	Rel-7	C143 AND C166 AND C174 AND C204	E.1/27 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C143 AND C166 AND C174 AND C183 AND C204	E.1/27 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
	6.1	UCS2 display in Katakana	R99	Rel-4		E.1/27 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-5	Rel-7	C145 AND C166 AND C174 AND C204	E.1/27 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C145 AND C166 AND C174 AND C183 AND C204	E.1/27 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
27.22.4.12		**SEND USSD**							
	1.1	7-bit data, successful	R99	Rel-7	C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C183 AND C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
	1.2	8-bit data, successful	R99	Rel-7	C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C183 AND C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
	1.3	UCS2 data, successful	R99	Rel-7	C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C183 AND C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
	1.4	7-bit data, unsuccessful	R99	Rel-7	C204	E.1/28 AND E.1/110	USS or SS only		TCEP001

		Rel-8		C183 AND C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
1.5	7-bit data, unsuccessful	R99	Rel-7	C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C183 AND C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
1.6	256 octets, 7-bit data, successful, long alpha identifier	R99	Rel-7	C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C183 AND C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
1.7	7-bit data, successful, no alpha identifier	R99	Rel-7	C204	E.1/28 AND E.1/110	USS or SS only		
		Rel-8		C183 AND C204	E.1/28 AND E.1/110	USS or SS only		
1.8	7-bit data, successful, null length alpha identifier	R99	Rel-7	C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C183 AND C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
2.1, 2.3	Icons – basic icon	R99	Rel-7	C108 AND C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C108 AND C183 AND C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
2.2	Icons – colour icon	R99	Rel-7	C186 AND C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C186 AND C183 AND C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
2.4	7-bit data, basic icon non self-explanatory, no alpha identifier presented	R99	Rel-7	C187 AND C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C187 AND C183 AND C204	E.1/28 AND E.1/110	USS or SS only		TCEP001
3.1	UCS2 in Cyrillic	R99	Rel-7	C118 AND C204	E.1/28 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C118 AND C183 AND C204	E.1/28 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
4.1	Text attribute – left alignment	Rel-5	Rel-7	C153 AND C204	E.1/28 AND E.1/124 AND E.1/217 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C153 AND C183 AND C204	E.1/28 AND E.1/124 AND E.1/217 AND	USS or SS only		TCEP001

					E.1/110			
4.2	Text attribute – center alignment	Rel-5	Rel-7	C154 AND C204	E.1/28 AND E.1/124 AND E.1/218 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C154 AND C183 AND C204	E.1/28 AND E.1/124 AND E.1/218 AND E.1/110	USS or SS only		TCEP001
4.3	Text attribute – right alignment	Rel-5	Rel-7	C155 AND C204	E.1/28 AND E.1/124 AND E.1/219 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C155 AND C183 AND C204	E.1/28 AND E.1/124 AND E.1/219 AND E.1/110	USS or SS only		TCEP001
4.4	Text attribute – large font size	Rel-5	Rel-7	C157 AND C156 AND C204	E.1/28 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C157 AND C156 AND C183 AND C204	E.1/28 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
4.5	Text attribute – small font size	Rel-5	Rel-7	C158 AND C156 AND C204	E.1/28 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C158 AND C156 AND C183 AND C204	E.1/28 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
4.6	Text attribute – bold on	Rel-5	Rel-7	C160 AND C159 AND C204	E.1/28 AND	USS or SS only		TCEP001

					E.1/124 AND E.1/225 AND E.1/226 AND E.1/110			
		Rel-8		C160 AND C159 AND C183 AND C204	E.1/28 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110	USS or SS only		TCEP001
4.7	Text attribute – italic on	Rel-5	Rel-7	C161 AND C159 AND C204	E.1/28 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C161 AND C159 AND C183 AND C204	E.1/28 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110	USS or SS only		TCEP001
4.8	Text attribute – underline on	Rel-5	Rel-7	C162 AND C159 AND C204	E.1/28 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C162 AND C159 AND C183 AND C204	E.1/28 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	USS or SS only		TCEP001
4.9	Text attribute – strikethrough on	Rel-5	Rel-7	C163 AND C159 AND C204	E.1/28 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C163 AND C159 AND C183 AND C204	E.1/28 AND E.1/124 AND E.1/225 AND	USS or SS only		TCEP001

						E.1/229 AND E.1/110			
	4.10	Text attribute – foreground and background colours	Rel-5	Rel-7	C164 AND C165 AND C204	E.1/28 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C164 AND C165 AND C183 AND C204	E.1/28 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110	USS or SS only		TCEP001
	5.1	UCS2 in Chinese	R99	Rel-4		E.1/28 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-5	Rel-7	C143 AND C204	E.1/28 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C143 AND C183 AND C204	E.1/28 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
	6.1	UCS2 in Katakana	R99	Rel-4		E.1/28 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-5	Rel-7	C145 AND C204	E.1/28 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C145 AND C183 AND C204	E.1/28 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
27.22.4.13		**SET UP CALL**							
	1.1	Call confirmed by the user and connected	R99	Rel-7	C177 AND C178 AND C180	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
			Rel-8		C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
	1.2	call rejected by the user	R99	Rel-7	C177 AND C178 AND C180	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		

		Rel-8		C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
1.4	putting all other calls on hold, ME busy	R99	Rel-7	C170 AND C177 AND C178 AND C180	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C170 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
1.5	disconnecting all other calls, ME busy	R99	Rel-7	C177 AND C178 AND C180	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
1.6	only if not currently busy on another call, ME busy	R99	Rel-7	C177 AND C178 AND C180	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
1.7	putting all other calls on hold, call hold is not allowed	R99	Rel-7	C170 AND C177 AND C178 AND C180	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C170 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
1.8	Capability configuration	R99	Rel-7	C101 AND C177 AND C178 AND C180	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C101 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
1.9	long dialling number string	R99	Rel-7	C177 AND C178 AND C180	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
1.10	long first alpha identifier	R99	Rel-7	C177 AND C178 AND C180	E.1/29 AND	USS or SS only		

					E.1/110 AND E.1/111			
		Rel-8		C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
1.11	Called party subaddress	R99	Rel-7	C124 AND C177 AND C178 AND C180	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C124 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
1.12	maximum duration for the redial mechanism	R99	Rel-7	C119 AND C177 AND C178 AND C180	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C119 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
2.1	second alpha identifier	R99	Rel-7	C177 AND C178 AND C180	E.1/29 AND E.1/63 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/63 AND E.1/110 AND E.1/111	USS or SS only		
3.1,3.2, 3.4	Icons – basic icon	R99	Rel-7	C108 AND C177 AND C178 AND C180	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C108 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
3.3	Icons – colour icon	R99	Rel-7	C171 AND C177 AND C178 AND C180	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C171 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/110 AND E.1/111	USS or SS only		
4.1	Text attribute – left alignment	Rel-5	Rel-7	C153 AND C177 AND C178 AND C180	E.1/29 AND E.1/124 AND E.1/217 AND	USS or SS only		

					E.1/110 AND E.1/111			
		Rel-8		C153 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/124 AND E.1/217 AND E.1/110 AND E.1/111	USS or SS only		
4.2	Text attribute – center alignment	Rel-5	Rel-7	C154 AND C177 AND C178 AND C180	E.1/29 AND E.1/124 AND E.1/218 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C154 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/124 AND E.1/218 AND E.1/110 AND E.1/111	USS or SS only		
4.3	Text attribute – right alignment	Rel-5	Rel-7	C155 AND C177 AND C178 AND C180	E.1/29 AND E.1/124 AND E.1/219 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C155 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/124 AND E.1/219 AND E.1/110 AND E.1/111	USS or SS only		
4.4	Text attribute – large font size	Rel-5	Rel-7	C157 AND C156 AND C177 AND C178 AND C180	E.1/29 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C157 AND C156 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/124 AND E.1/221 AND E.1/220 AND	USS or SS only		

					E.1/110 AND E.1/111			
4.5	Text attribute – small font size	Rel-5	Rel-7	C158 AND C156 AND C177 AND C178 AND C180	E.1/29 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C158 AND C156 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110 AND E.1/111	USS or SS only		
4.6	Text attribute – bold on	Rel-5	Rel-7	C160 AND C159 AND C177 AND C178 AND C180	E.1/29 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C160 AND C159 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110 AND E.1/111	USS or SS only		
4.7	Text attribute – italic on	Rel-5	Rel-7	C161 AND C159 AND C177 AND C178 AND C180	E.1/29 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C161 AND C159 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110 AND	USS or SS only		

					E.1/111			
4.8	Text attribute – underline on	Rel-5	Rel-7	C162 AND C159 AND C177 AND C178 AND C180	E.1/29 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C162 AND C159 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110 AND E.1/111	USS or SS only		
4.9	Text attribute – strikethrough on	Rel-5	Rel-7	C163 AND C159 AND C177 AND C178 AND C180	E.1/29 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C163 AND C159 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110 AND E.1/111	USS or SS only		
4.10	Text attribute – foreground and background colours	Rel-5	Rel-7	C164 AND C165 AND C177 AND C178 AND C180	E.1/29 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C164 AND C165 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110 AND E.1/111	USS or SS only		

	5.1, 5.2	UCS2 Display in Cyrillic	R99	Rel-4		E.1/29 AND E.1/15 AND E.1/110 AND E.1/111	USS or SS only		
			Rel-5	Rel-7	C118 AND C177 AND C178 AND C180	E.1/29 AND E.1/15 AND E.1/110 AND E.1/111	USS or SS only		
			Rel-8		C118 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/15 AND E.1/110 AND E.1/111	USS or SS only		
	6.1, 6.2	UCS2 display in Chinese	R99	Rel-4		E.1/29 AND E.1/15 AND E.1/110 AND E.1/111	USS or SS only		
			Rel-5	Rel-7	C143 AND C177 AND C178 AND C180	E.1/29 AND E.1/15 AND E.1/110 AND E.1/111	USS or SS only		
			Rel-8		C143 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/15 AND E.1/110 AND E.1/111	USS or SS only		
	7.1, 7.2	UCS2 display in Katakana	R99	Rel-4		E.1/29 AND E.1/15 AND E.1/110 AND E.1/111	USS or SS only		
			Rel-5	Rel-7	C145 AND C177 AND C178 AND C180	E.1/29 AND E.1/15 AND E.1/110 AND E.1/111	USS or SS only		
			Rel-8		C145 AND C177 AND C178 AND C180 AND C183	E.1/29 AND E.1/15 AND E.1/110 AND E.1/111	USS or SS only		
27.22.4.14		**POLLING OFF**							
	1.1	POLLING OFF	R99		C180	E.1/23	USS or SS only		
			R99	Rel-7	C180	E.1/23	USS or SS only		

			Rel-8	Rel-11	C180 AND C183	E.1/23	USS or SS only		
			Rel-12		C183	E.1/23	USS or SS only		
	1.2	POLLING OFF, E-UTRAN	Rel-8	Rel-12	C190	E.1/23	E-USS or NB-SS (see note 1)		
			Rel-12		C222	E.1/23	E-USS or NB-SS (see note 1)		
	1.3	POLLING OFF, NG-RAN	Rel-15		C231	E.1/23	NG-SS only		
27.22.4.15		**PROVIDE LOCAL INFORMATION**							
	1.1	location information	R99		M	E.1/31	USS only		AER003
	1.2	IMEI	R99		M	E.1/31	No		
	1.3	network measurement results and BCCH channel list	R99		C167	E.1/32 AND E.1/67	SS only		
	1.4	Date, time and time zone	R99		M	E.1/59	No		
	1.5	language setting	R99		C217	E.1/68	No		
	1.6	Timing advance	R99		C167	E.1/69	SS only		
	1.7	Access Technology	Rel-4	Rel-5		E.1/72	USS only		AER004
			Rel-6	Rel-7	M	E.1/72	USS only		AER004
			Rel-8		C184	E.1/72	USS only		AER004
	1.9	IMEISV	Rel-6		M	E.1/143	No		
	1.10	Network Search Mode	Rel-6	Rel-8		E.1/144	E-USS, USS or SS		
			Rel-9		M	E.1/144	E-USS, USS or SS		
	1.11	Charge State of the Battery	Rel-6		C139	E.1/170	No		
	1.12	Intra-frequency UTRAN measurements	Rel-6	Rel-7	M	E.1/183	USS only		
			Rel-8		C184	E.1/183	USS only		
	1.13	Inter-frequency UTRAN measurements	Rel-6	Rel-7	M	E.1/183	USS only		
			Rel-8		M	E.1/183	USS only		
	1.14	Access Technology, E-UTRAN	Rel-8	Rel-12	C190	E.1/72	E-USS or NB-SS (see note 1)		
			Rel-13		C222	E.1/72	E-USS or NB-SS (see note 1)		
	1.15	E-UTRAN Intra-Frequency Measurements	Rel-8		C190	E.1/183	E-USS only		
	1.16	E-UTRAN Intrer-Frequency Measurements	Rel-8		C190	E.1/183	E-USS only		
	1.17	E-UTRAN Local Info (MCC, MNC, TAC & E-UTRAN Cell ID)	Rel-8	Rel-12	C190	E.1/31 AND E.1/135	E-USS or NB-SS (see note 1)		
			Rel-13		C222	E.1/31 AND E.1/135	E-USS or NB-SS (see note 1)		
	1.18	Discovery of surrounding CSG cells	Rel-9		C195	E.1/242	E-USS only		
	1.22	NG-RAN Local Info (MCC, MNC, TAC & NG-RAN Cell ID)	Rel-15		C231	E.1/31	NG-SS only		
	1.23	Access Technology, NG-RAN	Rel-15		C231	E.1/72	NG-SS only		
	1.24	Slices Information	Rel-16		C231	E.1/284	NG-SS only		

	1.25	Slices Information, no served Slice	Rel-16		C231	E.1/284	NG-SS only		
	1.26	Slices Information, several served Slices	Rel-16		C231	E.1/284	NG-SS only		
	1.26A	Slices Information, several served Slices, allowed slices with same mapping information	Rel-18		C231	E.1/284	NG-SS only		
	1.26B	Slices Information, several served Slices, allowed slices with different mapping information	Rel-18		C231	E.1/284	NG-SS only		
	1.27	NG-RAN Timing advance	Rel-16		C231	E.1/305	NG-SS only		
	1.28	PROVIDE LOCAL INFORMATION, NG-RAN Intra-Frequency Measurements	Rel-16		C231	E.1/305	NG-SS only		
	1.29	PROVIDE LOCAL INFORMATION, NG-RAN Inter-Frequency Measurements	Rel-16		C231	E.1/305	NG-SS only		
	1.30	PROVIDE LOCAL INFORMATION, CAG information list	Rel-17		C235	E.1/287	NG-SS only		
	1.31	PROVIDE LOCAL INFORMATION, PrimaryTiming advance in Satellite NG-RAN	Rel-17		C236	E.1/305	SAT-NG-SS only		
	1.32	PROVIDE LOCAL INFORMATION, Access Technology, Satellite NG-RAN	Rel-17		C236	E.1/72	SAT-NG-SS only		
	1.33	PROVIDE LOCAL INFORMATION, Rejected slice(s) information) - without S-NSSAI mapping	Rel-18		C231	E.1/289	NG-SS only		
	1.34	PROVIDE LOCAL INFORMATION, Rejected slice(s) information) - with S-NSSAI mapping	Rel-18		C231	E.1/289	NG-SS only		
27.22.4.16		**SET UP EVENT LIST**							
	1.1	Set up call connected event	R99	Rel-7	C180	E.1/33 AND E.1/35	USS or SS only		
			Rel-8		C180 AND C183	E.1/33 AND E.1/35	USS or SS only		
	1.2	Replace by new event list	R99	Rel-7	C180	E.1/33 AND E.1/35 AND E.1/36	USS or SS only		
			Rel-8		C180 AND C183	E.1/33 AND E.1/35 AND E.1/36	USS or SS only		
	1.3	Remove event	R99	Rel-7	C180	E.1/33 AND E.1/35	USS or SS only		
			Rel-8		C180 AND C183	E.1/33 AND E.1/35	USS or SS only		
	1.4	Remove Event on ME Power Cycle	R99	Rel-7	C180	E.1/33 AND E.1/35	USS or SS only		
			Rel-8		C180 AND C183	E.1/33 AND E.1/35	USS or SS only		
27.22.4.17		**PERFORM CARD APDU**							
	1.1	Additional card inserted, Select MF and Get Response	R99		C109	E.1/51	No		
	1.2	Additional card inserted, Select DF GSM, Select EF PLMN, Update Binary, Read Binary on EF PLMN	R99		C109	E.1/51	No		

	1.3	Additional card inserted, card powered off	R99		C109	E.1/51	No		
	1.4	No card inserted, card powered off	R99		C109	E.1/51	No		
	1.5	Invalid card reader identifier	R99		C109	E.1/51	No		
	2.1	Detachable reader	R99		C116	E.1/51	No		
27.22.4.18		**POWER OFF CARD**							
	1.1	Additional card inserted	R99		C109	E.1/50	No		
	1.2	No card inserted	R99		C109	E.1/50	No		
	2.1	Detachable reader	R99		C116	E.1/50	No		
27.22.4.19		**POWER ON CARD**							
	1.1	Additional card inserted	R99		C109	E.1/49	No		
	1.2	No ATR	R99		C109	E.1/49	No		
	1.3	No card inserted	R99		C109	E.1/49	No		
	2.1	Detachable reader	R99		C116	E.1/49	No		
27.22.4.20		**GET READER STATUS**							
	1.1	Additional card inserted, card powered	R99		C109	E.1/52	No		
	1.2	Additional card inserted, card not powered	R99		C109	E.1/52	No		
	1.3	Additional card inserted, card not present	R99		C109	E.1/52	No		
	2.1	Detachable reader	R99		C116	E.1/52	No		
27.22.4.21.1		**TIMER MANAGEMENT**							
	1.1	Start timer 1 several times, get the current value of the timer and deactivate the timer successfully	R99		M	E.1/57 AND E.1/58	No		
	1.2	Start timer 2 several times, get the current value of the timer and deactivate the timer successfully	R99		M	E.1/57 AND E.1/58	No		
	1.3	Start timer 8 several times, get the current value of the timer and deactivate the timer successfully	R99		M	E.1/57 AND E.1/58	No		
	1.4	Try to get the current value of a timer which is not started: action in contradiction with the current timer state	R99		M	E.1/57 AND E.1/58	No		
	1.5	Try to deactivate a timer which is not started: action in contradiction with the current timer state	R99		M	E.1/57 AND E.1/58	No		
	1.6	Start 8 timers successfully	R99		M	E.1/57 AND E.1/58	No		
27.22.4.21.2		**ENVELOPE TIMER EXPIRATION**							
	2.1	Pending proactive UICC command	R99		M	E.1/6 AND E.1/57	No		

	2.2	USIM application toolkit busy	R99		M	E.1/6 AND E.1/57 AND E.1/20	No		
27.22.4.22		**SET UP IDLE MODE TEXT**							
	1.1	Display idle mode text	R99		C177	E.1/61 AND E.1/33 AND E.1/39 AND E.1/110	USS only		
	1.2	Replace idle mode text	R99		C177	E.1/61 AND E.1/33 AND E.1/39 AND E.1/110	USS only		
	1.3	Remove idle mode test	R99		C177	E.1/61 AND E.1/33 AND E.1/39 AND E.1/110	USS only		
	1.4	Competing information on ME display	R99	Rel-7	C177 AND C179 AND C180	E.1/61 AND E.1/33 AND E.1/39 AND E.1/110	USS or SS only		
			Rel-8		C177 AND C179 AND C180 AND C183	E.1/61 AND E.1/33 AND E.1/39 AND E.1/110	USS or SS only		
	1.5	ME powered cycled	R99		C177	E.1/61 AND E.1/33 AND E.1/39 AND E.1/110	USS only		
	1.6	Refresh with USIM initialization	R99		C177	E.1/61 AND E.1/24 AND E.1/33 AND E.1/39 AND E.1/110	USS only		
	1.7	Large text string	R99		C177	E.1/61 AND E.1/33 AND E.1/39 AND E.1/110	USS only		
	2.1, 2.2	Icons – basic icon	R99		C108 AND C177	E.1/61 AND E.1/39 AND E.1/110	USS only		

2.3	Icons – colour icon	R99		C171 AND C177	E.1/61 AND E.1/39 AND E.1/110	USS only		
2.4	Icon is not self-explanatory, empty text string	R99		C188 AND C177	E.1/61 AND E.1/39 AND E.1/110	USS only		
3.1	UCS2 display in Cyrillic	R99		C118 AND C177	E.1/61 AND E.1/15 AND E.1/39 AND E.1/110	USS only		
4.1	Text attribute – left alignment	Rel-5		C153 AND C177	E.1/61 AND E.1/33 AND E.1/39 AND E.1/124 AND E.1/217 AND E.1/110	USS only		
4.2	Text attribute – center alignment	Rel-5		C154 AND C177	E.1/61 AND E.1/33 AND E.1/39 AND E.1/124 AND E.1/218 AND E.1/110	USS only		
4.3	Text attribute – right alignment	Rel-5		C155 AND C177	E.1/61 AND E.1/33 AND E.1/39 AND E.1/124 AND E.1/219 AND E.1/110	USS only		
4.4	Text attribute – large font size	Rel-5		C157 AND C156 AND C177	E.1/61 AND E.1/33 AND E.1/39 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110	USS only		

4.5	Text attribute – small font size	Rel-5		C158 AND C156 AND C177	E.1/61 AND E.1/33 AND E.1/39 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	USS only		
4.6	Text attribute – bold on	Rel-5		C160 AND C159 AND C177	E.1/61 AND E.1/33 AND E.1/39 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110	USS only		
4.7	Text attribute – italic on	Rel-5		C161 AND C159 AND C177	E.1/61 AND E.1/33 AND E.1/39 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110	USS only		
4.8	Text attribute – underline on	Rel-5		C162 AND C159 AND C177	E.1/61 AND E.1/33 AND E.1/39 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	USS only		
4.9	Text attribute – strikethrough on	Rel-5		C163 AND C159 AND C177	E.1/61 AND E.1/33 AND E.1/39 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110	USS only		
4.10	Text attribute – foreground and background colours	Rel-5		C164 AND C165 AND C177	E.1/61 AND	USS only		

						E.1/33 AND E.1/39 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110			
	5.1	UCS2 display in Chinese	R99	Rel-4		E.1/61 AND E.1/15 AND E.1/39 AND E.1/110	USS only		
			Rel-5		C143 AND C177	E.1/61 AND E.1/15 AND E.1/39 AND E.1/110	USS only		
	6.1	UCS2 display in Katakana	R99	Rel-4		E.1/61 AND E.1/15 AND E.1/39 AND E.1/110	USS only		
			Rel-5		C145 AND C177	E.1/61 AND E.1/15 AND E.1/39 AND E.1/110	USS only		
27.22.4.23		**RUN AT COMMAND**							
	1.1	No alpha Identifier	R99		C110	E.1/62	No		
	1.2	null data alpha identifier presented	R99		C110	E.1/62	No		
	1.3	alpha identifier presented	R99		C110 AND C177	E.1/62 AND E.1/110	No		
	2.1, 2.3	Icons – basic icon	R99		C114 AND C177	E.1/62 AND E.1/110	No		
	2.2, 2.4,	Icons – colour icon	R99		C173 AND C177	E.1/62 AND E.1/110	No		
	2.5	basic icon non self-explanatory, no alpha identifier presented	R99		C189 AND C177	E.1/62 AND E.1/110	No		
	3.1	Text attribute – left alignment	Rel-5		C110 AND C153 AND C177	E.1/62 AND E.1/124 AND E.1/217 AND E.1/110	No		
	3.2	Text attribute – center alignment	Rel-5		C110 AND C154 AND C177	E.1/62 AND E.1/124 AND E.1/218 AND E.1/110	No		
	3.3	Text attribute – right alignment	Rel-5		C110 AND C155 AND C177	E.1/62 AND E.1/124 AND E.1/219 AND	No		

					E.1/110			
3.4	Text attribute – large font size	Rel-5		C110 AND C157 AND C156 AND C177	E.1/62 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110	No		
3.5	Text attribute – small font size	Rel-5		C110 AND C158 AND C156 AND C177	E.1/62 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	No		
3.6	Text attribute – bold on	Rel-5		C110 AND C160 AND C159 AND C177	E.1/62 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110	No		
3.7	Text attribute – italic on	Rel-5		C110 AND C161 AND C159 AND C177	E.1/62 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110	No		
3.8	Text attribute – underline on	Rel-5		C110 AND C162 AND C159 AND C177	E.1/62 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	No		
3.9	Text attribute – strikethrough on	Rel-5		C110 AND C163 AND C159 AND C177	E.1/62 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110	No		
3.10	Text attribute – foreground and background colours	Rel-5		C110 AND C164 AND C165 AND C177	E.1/62 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110	No		
4.1	UCS2 Display in Cyrillic	R99	Rel-4		E.1/62 AND E.1/15 AND E.1/110	No		
		Rel-5		C149 AND C177	E.1/62 AND E.1/15 AND E.1/110	No		
5.1	UCS2 display in Chinese	R99	Rel-4		E.1/62 AND E.1/15 AND E.1/110	No		
		Rel-5		C150 AND C177	E.1/62 AND E.1/15 AND E.1/110	No		
6.1	UCS2 display in Katakana	R99	Rel-4		E.1/62 AND E.1/15 AND E.1/110	No		
		Rel-5		C151 AND C177	E.1/62 AND E.1/15 AND E.1/110	No		

	TBD	Frames	Rel-6			E.1/62 AND E.1/177 AND E.1/178 AND E.1/110	TBD		
27.22.4.24		**SEND DTMF**							
	1.1	Normal	R99	Rel-7	C180	E.1/66	USS or SS only		
			Rel-8		C180 AND C183	E.1/66	USS or SS only		
	1.2, 1.3	alpha identifier	R99	Rel-7	C180	E.1/66 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C180 AND C183	E.1/66 AND E.1/110	USS or SS only		TCEP001
	1.4	Mobile is not in a speech call	R99	Rel-7	C180	E.1/66	USS or SS only		
			Rel-8		C180 AND C183	E.1/66	USS or SS only		
	2.1, 2.3	Icons – basic icon	R99	Rel-7	C108 AND C180	E.1/66 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C108 AND C180 AND C183	E.1/66 AND E.1/110	USS or SS only		TCEP001
	2.2	Icons – colour icon	R99	Rel-7	C171 AND C180	E.1/66 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C171 AND C180 AND C183	E.1/66 AND E.1/110	USS or SS only		TCEP001
	3.1	UCS2 display in Cyrillic	R99	Rel-7	C118 AND C180	E.1/66 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C118 AND C180 AND C183	E.1/66 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
	4.1	Text attribute – left alignment	Rel-5	Rel-7	C153 AND C180	E.1/66 AND E.1/124 AND E.1/217 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C153 AND C180 AND C183	E.1/66 AND E.1/124 AND E.1/217 AND E.1/110	USS or SS only		TCEP001
	4.2	Text attribute – center alignment	Rel-5	Rel-7	C154 AND C180	E.1/66 AND E.1/124 AND E.1/218 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C154 AND C180 AND C183	E.1/66 AND E.1/124 AND E.1/218 AND E.1/110	USS or SS only		TCEP001
	4.3	Text attribute – right alignment	Rel-5	Rel-7	C155 AND C180	E.1/66 AND E.1/124 AND E.1/219 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C155 AND C180 AND C183	E.1/66 AND E.1/124 AND E.1/219 AND E.1/110	USS or SS only		TCEP001
	4.4	Text attribute – large font size	Rel-5	Rel-7	C157 AND C156 AND C180	E.1/66 AND E.1/124 AND	USS or SS only		TCEP001

					E.1/221 AND E.1/220 AND E.1/110			
		Rel-8		C157 AND C156 AND C180 AND C183	E.1/66 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
4.5	Text attribute – small font size	Rel-5	Rel-7	C158 AND C156 AND C180	E.1/66 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C158 AND C156 AND C180 AND C183	E.1/66 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
4.6	Text attribute – bold on	Rel-5	Rel-7	C160 AND C159 AND C180	E.1/66 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C160 AND C159 AND C180 AND C183	E.1/66 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110	USS or SS only		TCEP001
4.7	Text attribute – italic on	Rel-5	Rel-7	C161 AND C159 AND C180	E.1/66 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C161 AND C159 AND C180 AND C183	E.1/66 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110	USS or SS only		TCEP001
4.8	Text attribute – underline on	Rel-5	Rel-7	C162 AND C159 AND C180	E.1/66 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C162 AND C159 AND C180 AND C183	E.1/66 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	USS or SS only		TCEP001

	4.9	Text attribute – strikethrough on	Rel-5	Rel-7	C163 AND C159 AND C180	E.1/66 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C163 AND C159 AND C180 AND C183	E.1/66 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110	USS or SS only		TCEP001
	4.10	Text attribute – foreground and background colours	Rel-5	Rel-7	C164 AND C165 AND C180	E.1/66 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C164 AND C165 AND C180 AND C183	E.1/66 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110	USS or SS only		TCEP001
	5.1	UCS2 display in Chinese	R99	Rel-4		E.1/66 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-5	Rel-7	C143 AND C180	E.1/66 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C143 AND C180 AND C183	E.1/66 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
	6.1	UCS2 display in Katakana	R99	Rel-4		E.1/66 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-5	Rel-7	C145 AND C180	E.1/66 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C145 AND C180 AND C183	E.1/66 AND E.1/15 AND E.1/110	USS or SS only		TCEP001
27.22.4.25		**LANGUAGE NOTIFICATION**							
	1.1	Specific language notification	R99		C181 AND C218	E.1/70	No		
	1.2	Non specific language notification	R99		C181 AND C218	E.1/70	No		
27.22.4.26		**LAUNCH BROWSER**							
	1.1	No session already launched: Connect to the default URL	R99		C111 AND C177 AND C178 AND C213	E.1/71 AND E.1/110 AND E.1/111	USS only		
	1.2	connect to the specified URL, alpha identifier length=0	R99		C111 AND C177 AND C178	E.1/71 AND E.1/110 AND E.1/111	USS only		
	1.3	Browser identity, no alpha identifier	R99		C111 AND C177 AND C178	E.1/71 AND E.1/110 AND E.1/111	USS only		

1.4	one bearer specified and gateway/proxy identity	R99		C122 AND C177 AND C178	E.1/71 AND E.1/98 AND E.1/110 AND E.1/111	USS only		
1.6	ME does not support Launch Browser with Default URL	R99		C111 AND C177 AND C178 AND C214	E.1/71 AND E.1/110 AND E.1/111	USS only		
2.1, 2.2, 2.3	Interaction with current session	R99		C111 AND C177 AND C178	E.1/71 AND E.1/110 AND E.1/111	USS only		
3.1	UCS2 display in Cyrillic	R99		C111 AND C118 AND C177 AND C178	E.1/71 AND E.1/15 AND E.1/110 AND E.1/111	USS only		
4.1, 4.2	Icons – basic icon	R99		C115 AND C177 AND C178	E.1/71 AND E.1/110 AND E.1/111	USS only		
5.1	Text attribute – left alignment	Rel-5		C111 AND C153 AND C177 AND C178	E.1/71 AND E.1/124 AND E.1/217 AND E.1/110 AND E.1/111	USS only		
5.2	Text attribute – center alignment	Rel-5		C111 AND C154 AND C177 AND C178	E.1/71 AND E.1/124 AND E.1/218 AND E.1/110 AND E.1/111	USS only		
5.3	Text attribute – right alignment	Rel-5		C111 AND C155 AND C177 AND C178	E.1/71 AND E.1/124 AND E.1/219 AND E.1/110 AND E.1/111	USS only		
5.4	Text attribute – large font size	Rel-5		C111 AND C157 AND C156 AND C177 AND C178	E.1/71 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110 AND E.1/111	USS only		

5.5	Text attribute – small font size	Rel-5		C111 AND C158 AND C156 AND C177 AND C178	E.1/71 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110 AND E.1/111	USS only		
5.6	Text attribute – bold on	Rel-5		C111 AND C160 AND C159 AND C177 AND C178	E.1/71 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110 AND E.1/111	USS only		
5.7	Text attribute – italic on	Rel-5		C111 AND C161 AND C159 AND C177 AND C178	E.1/71 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110 AND E.1/111	USS only		
5.8	Text attribute – underline on	Rel-5		C111 AND C162 AND C159 AND C177 AND C178	E.1/71 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110 AND E.1/111	USS only		
5.9	Text attribute – strikethrough on	Rel-5		C111 AND C163 AND C159 AND C177 AND C178	E.1/71 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110 AND E.1/111	USS only		
5.10	Text attribute – foreground and background colours	Rel-5		C111 AND C164 AND C165 AND C177 AND C178	E.1/71 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110 AND E.1/111	USS only		
6.1	UCS2 display in Chinese	R99	Rel-4		E.1/71 AND	USS only		

						E.1/15 AND E.1/110 AND E.1/111			
			Rel-5		C111 AND C143 AND C177 AND C178	E.1/71 AND E.1/15 AND E.1/110 AND E.1/111	USS only		
	7.1	UCS2 display in Katakana	R99	Rel-4		E.1/71 AND E.1/15 AND E.1/110 AND E.1/111	USS only		
			Rel-5		C111 AND C145 AND C177 AND C178	E.1/71 AND E.1/15 AND E.1/110 AND E.1/111	USS only		
	8.1	only NG-RAN bearer specified and gateway proxy identity	Rel-16		C111 AND C231	E.1/71 AND E.1/98 AND E.1/110 AND E.1/111	NG-SS only		
	8.2	Trigger LAUNCH BROWSER by CALL CONTROL	Rel-16		C111 AND C231	E.1/71 AND E.1/110 AND E.1/111	NG-SS only		
	8.3	Trigger LAUNCH BROWSER by MT Call event	Rel-16		C111 AND C231	E.1/71 AND E.1/110 AND E.1/111	NG-SS only		
	8.4	Trigger LAUNCH BROWSER during mobile originated call	Rel-16		C111 AND C231	E.1/71 AND E.1/110 AND E.1/111	NG-SS only		
	8.5	Trigger LAUNCH BROWSER during mobile terminated call	Rel-16		C111 AND C231	E.1/71 AND E.1/110 AND E.1/111	NG-SS only		
27.22.4.27		**OPEN CHANNEL**							
	2.2	immediate link establishment GPRS, no alpha identifier, with network access name	R99	Rel-7	C121	E.1/89 AND E.1/98	USS or SS only		AER006
			Rel-8		C121 AND C183	E.1/89 AND E.1/98	USS or SS only		AER006
	2.3	immediate link establishment, GPRS, with alpha identifier	R99	Rel-7	C121	E.1/89 AND E.1/98 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002, AER005

		Rel-8		C121 AND C183	E.1/89 AND E.1/98 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002, AER005
2.4	immediate link establishment, GPRS, with null alpha identifier	R99	Rel-7	C121	E.1/89 AND E.1/98	USS or SS only		TCEP001
		Rel-8		C121 AND C183	E.1/89 AND E.1/98	USS or SS only		TCEP001
2.5	immediate link establishment, GPRS, command performed with modifications (buffer size)	R99	Rel-7	C152	E.1/89 AND E.1/98	USS or SS only		
		Rel-8		C152 AND C183	E.1/89 AND E.1/98	USS or SS only		
2.7	immediate link establishment, GPRS, open command with alpha identifier, User did not accept the proactive command	R99	Rel-7	C169 AND C177	E.1/89 AND E.1/98 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002, AER007
		Rel-8		C169 AND C183 AND C177	E.1/89 AND E.1/98 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002, AER007
2.9	OPEN CHANNEL, immediate link establishment, no alpha identifier, with network access name	R99	Rel-8		E.1/89 AND E.1/98 AND E.1/129 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-9		C191 AND C183	E.1/89 AND E.1/98 AND E.1/129 AND E.1/110 AND E.1/111	USS or SS only		
2.10	Multi OPEN CHANNEL, one in TCP Server mode and one in TCP Client mode.	Rel-7	Rel-8		E.1/89 AND E.1/98 AND E.1/129 AND E.1/131	USS or SS only		
		Rel-9		C192 AND C183	E.1/89 AND E.1/98 AND E.1/129 AND E.1/131	USS or SS only		
3.1		R99	Rel-7	C191	E.1/89 AND	USS or SS only		TCEP001

	OPEN CHANNEL, Default Bearer, GPRS, with null alpha identifier)				E.1/98 AND C129			
		Rel-8		C191 AND C183	E.1/89 AND E.1/98 AND C129	USS or SS only		TCEP001
5.1	Text attribute – left alignment	Rel-5	Rel-7	C121 AND C153	E.1/89 AND E.1/98 AND E.1/124 AND E.1/217 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
		Rel-8		C121 AND C153 AND C183	E.1/89 AND E.1/98 AND E.1/124 AND E.1/217 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
5.2	Text attribute – center alignment	Rel-5	Rel-7	C121 AND C154	E.1/89 AND E.1/98 AND E.1/124 AND E.1/218 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
		Rel-8		C121 AND C154 AND C183	E.1/89 AND E.1/98 AND E.1/124 AND E.1/218 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
5.3	Text attribute – right alignment	Rel-5	Rel-7	C121 AND C155	E.1/89 AND E.1/98 AND E.1/124 AND E.1/219 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
		Rel-8		C121 AND C155 AND C183	E.1/89 AND E.1/98 AND	USS or SS only		TCEP001, TCEP002

					E.1/124 AND E.1/219 AND E.1/110 AND E.1/111			
5.4	Text attribute – large font size	Rel-5	Rel-7	C121 AND C157 AND C156	E.1/89 AND E.1/98 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
		Rel-8		C121 AND C157 AND C156 AND C183	E.1/89 AND E.1/98 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
5.5	Text attribute – small font size	Rel-5	Rel-7	C121 AND C158 AND C156	E.1/89 AND E.1/98 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
		Rel-8		C121 AND C158 AND C156 AND C183	E.1/89 AND E.1/98 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
5.6	Text attribute – bold on	Rel-5	Rel-7	C121 AND C160 AND C159	E.1/89 AND E.1/98 AND E.1/124 AND E.1/225 AND	USS or SS only		TCEP001, TCEP002

					E.1/226 AND E.1/110 AND E.1/111			
		Rel-8		C121 AND C160 AND C159 AND C183	E.1/89 AND E.1/98 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
5.7	Text attribute – italic on	Rel-5	Rel-7	C121 AND C161 AND C159	E.1/89 AND E.1/98 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
		Rel-8		C121 AND C161 AND C159 AND C183	E.1/89 AND E.1/98 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
5.8	Text attribute – underline on	Rel-5	Rel-7	C121 AND C162 AND C159	E.1/89 AND E.1/98 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
		Rel-8		C121 AND C162 AND C159 AND C183	E.1/89 AND E.1/98 AND E.1/124 AND E.1/225 AND E.1/228 AND	USS or SS only		TCEP001, TCEP002

					E.1/110 AND E.1/111			
5.9	Text attribute – strikethrough on	Rel-5	Rel-7	C121 AND C163 AND C159	E.1/89 AND E.1/98 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
		Rel-8		C121 AND C163 AND C159 AND C183	E.1/89 AND E.1/98 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
5.10	Text attribute – foreground and background colours	Rel-5	Rel-7	C121 AND C164 AND C165	E.1/89 AND E.1/98 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
		Rel-8		C121 AND C164 AND C165 AND C183	E.1/89 AND E.1/98 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110 AND E.1/111	USS or SS only		TCEP001, TCEP002
6.1	Immediate link establishment, E-UTRAN, bearer type '02'	Rel-8	Rel-12	C182	E.1/89 AND E.1/135	E-USS or NB-SS (see note 1)		
		Rel-13		C224	E.1/89 AND E.1/135	E-USS or NB-SS (see note 1)		
6.2	Immediate link establishment, E-UTRAN, bearer type '0B'	Rel-8		C182	E.1/89 AND E.1/135	E-USS only		
6.3	Immediate link establishment, E-UTRAN,	Rel-8	Rel-12	C182	E.1/89 AND	E-USS or NB-SS		TCEP001,

	bearer type '02', with Network Access Name, with alpha identifier				E.1/110 AND E.1/111 AND E.1/135	(see note 1)		TCEP002
		Rel-13		C224	E.1/89 AND E.1/110 AND E.1/111 AND E.1/135	E-USS or NB-SS (see note 1)		TCEP001, TCEP002
6.4	Immediate link establishment, E-UTRAN, bearer type '03', with alpha identifier, user did not accept the proactive command	Rel-8		C182 AND C177	E.1/89 AND E.1/110 AND E.1/111 AND E.1/135	E-USS or NB-SS (see note 1)		
6.5	Immediate link establishment, E-UTRAN, bearer type '03', default EPS bearer	Rel-8		C182	E.1/89 AND E.1/135	E-USS or NB-SS (see note 1)		
6.6	OPEN CHANNEL, BIP is not a 3GPP PS data off exempt service	Rel-14		C228	E.1/2 AND E.1/89 AND E.1/135	E-USS		
6.7	OPEN CHANNEL, BIP is a 3GPP PS data off exempt service	Rel-14		C228	E.1/2 AND E.1/89 AND E.1/135	E-USS		
6.8	OPEN CHANNEL, Maximum number of open channel requests	Rel-14			E.1/89 AND E.1/135	E-USS or NB-SS(see note 1)		
7.1	OPEN CHANNEL for IMS, IARI list stored on the USIM	Rel-10		C207	E.1/33 AND E.1/89 AND E.1/247 AND E.1/249	USS or E-USS		
8.1	OPEN CHANNEL, immediate link establishment, NG-RAN, bearer type '03' – Default PDU Session	Rel-15		C232	E.1/89 AND E.1/281	NG-SS only		
8.2	OPEN CHANNEL, immediate link establishment, NG-RAN, bearer type '0C'	Rel-15		C232	E.1/89 AND E.1/281	NG-SS only		
8.3	OPEN CHANNEL, NG-RAN, bearer type '0C', after receiving policy update for URSP from network	Rel-15		C232	E.1/89 AND E.1/281	NG-SS only		
8.4	OPEN CHANNEL, NG-RAN, bearer type '0C', PDU Session is already available for the same DNN	Rel-15		C232	E.1/89 AND E.1/281	NG-SS only		
8.5	OPEN CHANNEL, immediate link establishment, NG-RAN, bearer type '02' – Default PDU Session	Rel-15		C232	E.1/89 AND E.1/281	NG-SS only		
8.6	OPEN CHANNEL, immediate link establishment, NG-RAN, bearer type '0B' – Default PDU Session	Rel-15		C232	E.1/89 AND E.1/281	NG-SS only		
9.1	OPEN CHANNEL, immediate link establishment, Satellite NG-RAN, bearer type '03' – Default PDU Session	Rel-17		C236	E.1/89	SAT-NG-SS only		

	9.2	OPEN CHANNEL, immediate link establishment, Satellite NG-RAN, bearer type '0C'	Rel-17		C236	E.1/89	SAT-NG-SS only		
	9.3	OPEN CHANNEL, Satellite NG-RAN, bearer type '0C', after receiving policy update for URSP from network	Rel-17		C236	E.1/89	SAT-NG-SS only		
	9.4	OPEN CHANNEL, Satellite NG-RAN, bearer type '0C', PDU Session is already available for the same DNN	Rel-17		C236	E.1/89	SAT-NG-SS only		
	9.5	OPEN CHANNEL, immediate link establishment, Satellite NG-RAN, bearer type '02'	Rel-17		C236	E.1/89	SAT-NG-SS only		
	9.6	OPEN CHANNEL, immediate link establishment, Satellite NG-RAN, bearer type '0B'	Rel-17		C236	E.1/89	SAT-NG-SS only		
27.22.4.28		CLOSE CHANNEL							
	1.1	successful	R99	Rel-7	C121	E.1/89 AND E.1/90	USS or SS only		
			Rel-8		C121 AND C183	E.1/89 AND E.1/90	USS or SS only		
	1.2	with an invalid channel identifier	R99	Rel-7	C121	E.1/89 AND E.1/90	USS or SS only		
			Rel-8		C121 AND C183	E.1/89 AND E.1/90	USS or SS only		
	1.3	on an already closed channel	R99	Rel-7	C121	E.1/90	USS or SS only		
			Rel-8		C121 AND C183	E.1/90	USS or SS only		
	2.1	Text attribute – left alignment	Rel-5	Rel-7	C121 AND C153	E.1/89 AND E.1/90 AND E.1/124 AND E.1/217 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C121 AND C153 AND C183	E.1/89 AND E.1/90 AND E.1/124 AND E.1/217 AND E.1/110	USS or SS only		TCEP001
	2.2	Text attribute – center alignment	Rel-5	Rel-7	C121 AND C154	E.1/89 AND E.1/90 AND E.1/124 AND E.1/218 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C121 AND C154 AND C183	E.1/89 AND E.1/90 AND E.1/124 AND	USS or SS only		TCEP001

					E.1/218 AND E.1/110			
2.3	Text attribute – right alignment	Rel-5	Rel-7	C121 AND C155	E.1/89 AND E.1/90 AND E.1/124 AND E.1/219 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C155 AND C183	E.1/89 AND E.1/90 AND E.1/124 AND E.1/219 AND E.1/110	USS or SS only		TCEP001
2.4	Text attribute – large font size	Rel-5	Rel-7	C121 AND C157 AND C156	E.1/89 AND E.1/90 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C157 AND C156 AND C183	E.1/89 AND E.1/90 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
2.5	Text attribute – small font size	Rel-5	Rel-7	C121 AND C158 AND C156	E.1/89 AND E.1/90 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C158 AND C156 AND C183	E.1/89 AND E.1/90 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
2.6	Text attribute – bold on	Rel-5	Rel-7	C121 AND C160 AND C159	E.1/89 AND	USS or SS only		TCEP001

					E.1/90 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110			
		Rel-8		C121 AND C160 AND C159 AND C183	E.1/89 AND E.1/90 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110	USS or SS only		TCEP001
2.7	Text attribute – italic on	Rel-5	Rel-7	C121 AND C161 AND C159	E.1/89 AND E.1/90 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C161 AND C159 AND C183	E.1/89 AND E.1/90 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110	USS or SS only		TCEP001
2.8	Text attribute – underline on	Rel-5	Rel-7	C121 AND C162 AND C159	E.1/89 AND E.1/90 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C162 AND C159 AND C183	E.1/89 AND E.1/90 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	USS or SS only		TCEP001
2.9	Text attribute – strikethrough on	Rel-5	Rel-7	C121 AND C163 AND C159	E.1/89 AND E.1/90 AND	USS or SS only		TCEP001

						E.1/124 AND E.1/225 AND E.1/229 AND E.1/110			
			Rel-8		C121 AND C163 AND C159 AND C183	E.1/89 AND E.1/90 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110	USS or SS only		TCEP001
	2.10	Text attribute – foreground and background colours	Rel-5	Rel-7	C121 AND C164 AND C165	E.1/89 AND E.1/90 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C121 AND C164 AND C165 AND C183	E.1/89 AND E.1/90 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110	USS or SS only		TCEP001
	3.1	Default EPS bearer, successful	Rel-8	Rel-12	C182	E.1/89 AND E.1/90	E-USS or NB-SS (see note 1)		
			Rel-13		C224	E.1/89 AND E.1/90	E-USS or NB-SS (see note 1)		
	3.2	EPS bearer with APN different from default APN, successful	Rel-8	Rel-12	C182	E.1/89 AND E.1/90	E-USS or NB-SS (see note 1)		TCEP001, TCEP002
			Rel-13		C224	E.1/89 AND E.1/90	E-USS or NB-SS (see note 1)		TCEP001, TCEP002
	3.3	CLOSE CHANNEL, Command qualifier set to 1	Rel-8		C230	E.1/89 AND E.1/90	E-USS or NB-SS (see note 1)		
	4.1	CLOSE CHANNEL, NG-RAN, bearer type '03' – Default PDU Session, successful.	Rel-15		C232	E.1/89 AND E.1/281	NG-SS only		
	4.2	CLOSE CHANNEL, NG-RAN, bearer type '0C', successful.	Rel-15		C232	E.1/89 AND E.1/281	NG-SS only		
27.22.4.29		**RECEIVE DATA**							

	1.1	already opened channel	R99	Rel-7	C121	E.1/89 AND E.1/91 AND E.1/92	USS or SS only		AER008
			Rel-8		C121 AND C183	E.1/89 AND E.1/91 AND E.1/92	USS or SS only		AER008
	1.2	Already opened channel – E-UTRAN, APN different from default	Rel-8		C182	E.1/89 AND E.1/91 AND E.1/92	E-USS or NB-SS (see note 1)		
	1.3	the length of receive data exceeding the buffer size.	Rel-15		C232	E.1/89 AND E.1/281	NG-SS only		
	1.4	receiving 65535 Bytes of data.	Rel-16		C232	E.1/89 AND E.1/281	NG-SS only		
	1.5	send refresh after receiving data.	Rel-16		C232	E.1/89 AND E.1/281	NG-SS only		
	1.7	2 consecutive RECEIVE DATA	Rel-16		C232	E.1/89 AND E.1/281	NG-SS only		
	2.1	Text attribute – left alignment	Rel-5	Rel-7	C121 AND C153	E.1/89 AND E.1/91 AND E.1/92 AND E.1/124 AND E.1/217 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C121 AND C153 AND C183	E.1/89 AND E.1/91 AND E.1/92 AND E.1/124 AND E.1/217 AND E.1/110	USS or SS only		TCEP001
	2.2	Text attribute – center alignment	Rel-5	Rel-7	C121 AND C154	E.1/89 AND E.1/91 AND E.1/124 AND E.1/218 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C121 AND C154 AND C183	E.1/89 AND E.1/91 AND E.1/124 AND E.1/218 AND E.1/110	USS or SS only		TCEP001

2.3	Text attribute – right alignment	Rel-5	Rel-7	C121 AND C155	E.1/89 AND E.1/91 AND E.1/124 AND E.1/219 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C155 AND C183	E.1/89 AND E.1/91 AND E.1/124 AND E.1/219 AND E.1/110	USS or SS only		TCEP001
2.4	Text attribute – large font size	Rel-5	Rel-7	C121 AND C157 AND C156	E.1/89 AND E.1/91 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C157 AND C156 AND C183	E.1/89 AND E.1/91 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
2.5	Text attribute – small font size	Rel-5	Rel-7	C121 AND C158 AND C156	E.1/89 AND E.1/91 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C158 AND C156 AND C183	E.1/89 AND E.1/91 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
2.6	Text attribute – bold on	Rel-5	Rel-7	C121 AND C160 AND C159	E.1/89 AND E.1/91 AND E.1/124 AND	USS or SS only		TCEP001

					E.1/225 AND E.1/226 AND E.1/110			
		Rel-8		C121 AND C160 AND C159 AND C183	E.1/89 AND E.1/91 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110	USS or SS only		TCEP001
2.7	Text attribute – italic on	Rel-5	Rel-7	C121 AND C161 AND C159	E.1/89 AND E.1/91 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C161 AND C159 AND C183	E.1/89 AND E.1/91 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110	USS or SS only		TCEP001
2.8	Text attribute – underline on	Rel-5	Rel-7	C121 AND C162 AND C159	E.1/89 AND E.1/91 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C162 AND C159 AND C183	E.1/89 AND E.1/91 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	USS or SS only		TCEP001
2.9	Text attribute – strikethrough on	Rel-5	Rel-7	C121 AND C163 AND C159	E.1/89 AND E.1/91 AND E.1/124 AND E.1/225 AND	USS or SS only		TCEP001

						E.1/229 AND E.1/110			
			Rel-8		C121 AND C163 AND C159 AND C183	E.1/89 AND E.1/91 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110	USS or SS only		TCEP001
	2.10	Text attribute– foreground and background colours	Rel-5	Rel-7	C121 AND C164 AND C165	E.1/89 AND E.1/91 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C121 AND C164 AND C165 AND C183	E.1/89 AND E.1/91 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110	USS or SS only		TCEP001
27.22.4.30		**SEND DATA**							
	1.1	immediate mode	R99	Rel-7	C121	E.1/89 AND E.1/92	USS or SS only		
			Rel-8		C121 AND C183	E.1/89 AND E.1/92	USS or SS only		
	1.2	Store mode	R99	Rel-7	C121	E.1/89 AND E.1/92	USS or SS only		
			Rel-8		C121 AND C183	E.1/89 AND E.1/92	USS or SS only		
	1.3	Store mode, Tx buffer fully used	R99	Rel-7	C121	E.1/89 AND E.1/92	USS or SS only		
			Rel-8		C121 AND C183	E.1/89 AND E.1/92	USS or SS only		
	1.4	2 consecutive SEND DATA Store mode	R99	Rel-7	C121	E.1/89 AND E.1/92	USS or SS only		
			Rel-8		C121 AND C183	E.1/89 AND E.1/92	USS or SS only		
	1.5	immediate mode with a bad channel identifier	R99	Rel-7	C121	E.1/89 AND E.1/92	USS or SS only		
			Rel-8		C121 AND C183	E.1/89 AND E.1/92	USS or SS only		

2.1	Text attribute– left alignment	Rel-5	Rel-7	C121 AND C153	E.1/89 AND E.1/92 AND E.1/124 AND E.1/217 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C153 AND C183	E.1/89 AND E.1/92 AND E.1/124 AND E.1/217 AND E.1/110	USS or SS only		TCEP001
2.2	Text attribute – center alignment	Rel-5	Rel-7	C121 AND C154	E.1/89 AND E.1/92 AND E.1/124 AND E.1/218 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C154 AND C183	E.1/89 AND E.1/92 AND E.1/124 AND E.1/218 AND E.1/110	USS or SS only		TCEP001
2.3	Text attribute – right alignment	Rel-5	Rel-7	C121 AND C155	E.1/89 AND E.1/92 AND E.1/124 AND E.1/219 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C155 AND C183	E.1/89 AND E.1/92 AND E.1/124 AND E.1/219 AND E.1/110	USS or SS only		TCEP001
2.4	Text attribute – large font size	Rel-5	Rel-7	C121 AND C157 AND C156	E.1/89 AND E.1/92 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C157 AND C156 AND	E.1/89 AND	USS or SS only		TCEP001

				C183	E.1/92 AND E.1/124 AND E.1/221 AND E.1/220 AND E.1/110			
2.5	Text attribute – small font size	Rel-5	Rel-7	C121 AND C158 AND C156	E.1/89 AND E.1/92 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C158 AND C156 AND C183	E.1/89 AND E.1/92 AND E.1/124 AND E.1/222 AND E.1/220 AND E.1/110	USS or SS only		TCEP001
2.6	Text attribute – bold on	Rel-5	Rel-7	C121 AND C160 AND C159	E.1/89 AND E.1/92 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C160 AND C159 AND C183	E.1/89 AND E.1/92 AND E.1/124 AND E.1/225 AND E.1/226 AND E.1/110	USS or SS only		TCEP001
2.7	Text attribute – italic on	Rel-5	Rel-7	C121 AND C161 AND C159	E.1/89 AND E.1/92 AND E.1/124 AND E.1/225 AND E.1/227 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C161 AND C159 AND C183	E.1/89 AND E.1/92 AND	USS or SS only		TCEP001

					E.1/124 AND E.1/225 AND E.1/227 AND E.1/110			
2.8	Text attribute – underline on	Rel-5	Rel-7	C121 AND C162 AND C159	E.1/89 AND E.1/92 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C162 AND C159 AND C183	E.1/89 AND E.1/92 AND E.1/124 AND E.1/225 AND E.1/228 AND E.1/110	USS or SS only		TCEP001
2.9	Text attribute – strikethrough on	Rel-5	Rel-7	C121 AND C163 AND C159	E.1/89 AND E.1/92 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C163 AND C159 AND C183	E.1/89 AND E.1/92 AND E.1/124 AND E.1/225 AND E.1/229 AND E.1/110	USS or SS only		TCEP001
2.10	Text attribute– foreground and background colours	Rel-5	Rel-7	C121 AND C164 AND C165	E.1/89 AND E.1/92 AND E.1/124 AND E.1/230 AND E.1/231 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C121 AND C164 AND C165 AND C183	E.1/89 AND E.1/92 AND E.1/124 AND	USS or SS only		TCEP001

						E.1/230 AND E.1/231 AND E.1/110			
	3.1	Immediate mode – E-UTRAN, Default EPS bearer	Rel-8	Rel-12	C182	E.1/89 AND E.1/92	E-USS or NB-SS (see note 1)		
			Rel-13		C223	E.1/89 AND E.1/92	E-USS or NB-SS (see note 1)		
	3.2	Store mode – E-UTRAN, APN different from default APN	Rel-8	Rel-12	C182	E.1/89 AND E.1/92	E-USS or NB-SS (see note 1)		
			Rel-13		C224	E.1/89 AND E.1/92	E-USS or NB-SS (see note 1)		
	4.1	NG-RAN, bearer type '03' – Default PDU Session, immediate mode	Rel-16		C232	E.1/89 AND E.1/281	NG-SS only		
	4.2	SEND DATA, NG-RAN, bearer type '0C', Store mode	Rel-16		C232	E.1/89 AND E.1/281	NG-SS only		
	4.3	SEND DATA, NG-RAN, RECEIVE DATA suspended during the process of SEND DATA	Rel-16		C232	E.1/89 AND E.1/281	NG-SS only		
27.22.4.31		**GET CHANNEL STATUS**							
	1.1	without any BIP channel opened	R99	Rel-7	C121	E.1/93	USS or SS only		
			Rel-8		C121 AND C183	E.1/93	USS or SS only		
	1.2	with a BIP channel currently opened	R99	Rel-7	C121	E.1/89 AND E.1/93	USS or SS only		
			Rel-8		C121 AND C183	E.1/89 AND E.1/93	USS or SS only		
	1.3	after a link dropped	R99	Rel-7	C121	E.1/89 AND E.1/93	USS or SS only		
			Rel-8		C121 AND C183	E.1/89 AND E.1/93	USS or SS only		
	1.4	EPS bearer with APN different from default APN	Rel-8	Rel-12	C182	E.1/89 AND E.1/93	E-USS or NB-SS (see note 1)		
			Rel-13		C224	E.1/89 AND E.1/93	E-USS or NB-SS (see note 1)		
	1.5	EPS bearer with APN different from default APN, after a link dropped	Rel-8	Rel-12	C182	E.1/89 AND E.1/93	E-USS or NB-SS (see note 1)		
			Rel-13		C224	E.1/89 AND E.1/93	E-USS or NB-SS (see note 1)		
	1.6	after a link dropped during receiving data	Rel-15		C232	E.1/89 AND E.1/281	NG-SS only		

27.22.5		**DATA DOWNLOAD TO UICC**							
27.22.5.1		**SMS-PP DATA DOWNLOAD**							
	1.9	SMS-PP Data Download over CS, UTRAN/GERAN	R99	Rel-7	C211	E.1/2	USS or SS		TCEP001
			Rel-8		C212	E.1/2	USS or SS		TCEP001
27.22.5.2		**CELL BROADCAST DATA DOWNLOAD**							
	1.1	Cell Broadcast(GSM) - ME does not display message	R99		C201	E.1/3	SS only		
	1.3	Cell Broadcast(GSM) - ME displays message	R99		C201 AND C177	E.1/3 AND E.1/110	SS only		
	1.4	Cell Broadcast (UTRAN) - ME does not display message	Rel-5			E.1/3	USS only		
	1.5	Cell Broadcast (UTRAN) - More time	Rel-5			E.1/3 AND E.1/20	USS only		
	1.6	Cell Broadcast(UTRAN) - ME displays message	Rel-5			E.1/3	USS only		
	1.7	Cell Broadcast(GSM) - More time (UDH)	R99		C201	E.1/3 AND E.1/20	SS only		
27.22.5.3		**SMS-PP DATA DOWNLOAD over IMS**							
	3.1	SMS-PP Data Download over IMS, E-UTRAN	Rel-8		C198	E.1/2	E-USS only		TCEP001
	3.2	SMS-PP Data Download over IMS, UTRAN	Rel-7		C199	E.1/2	USS only		TCEP001
27.22.5.4		**SMS-PP DATA DOWNLOAD over SGs in E-UTRAN**							
	4.1	SMS-PP Data Download over SGs, E-UTRAN	Rel-8		C205	E.1/2	E-USS or NB-SS (see note 1)		TCEP001
27.22.6		**CALL CONTROL BY USIM**							
	1.1, 1.2, 1.4, 1.6, 1.8 to 1.14	Procedure for MO calls (Cell identity in envelope call control)	R99	Rel-7	C180	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 AND E.1/64	USS or SS only		
			Rel-8		C180 AND C183	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 AND E.1/64	USS or SS only		
	1.3A, 1.5A, 1.7A	Procedure for MO calls (Cell identity in envelope call control)	R99	Rel-7	C140 AND C177 AND C178 AND C180	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 AND	USS or SS only		

					E.1/64 AND E.1/110 AND E.1/111			
		Rel-8		C140 AND C177 AND C178 AND C180 AND C183	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 AND E.1/64 AND E.1/110 AND E.1/111	USS or SS only		
1.3B, 1.7B	Procedure for MO calls (Cell identity in envelope call control)	R99	Rel-7	C141 AND C177 AND C178 AND C180	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 AND E.1/64 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C141 AND C177 AND C178 AND C180 AND C183	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 AND E.1/64 AND E.1/110 AND E.1/111	USS or SS only		
1.5B	Procedure for MO calls (Cell identity in envelope call control)	R99	Rel-7	C141 AND C180	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 AND E.1/64	USS or SS only		
		Rel-8		C141 AND C180 AND C183	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND	USS or SS only		

					E.1/13 AND E.1/29 AND E.1/64			
2.1, 2.2, 2.3, 2.4	Procedure for SS (Cell identity in envelope call control)	R99	Rel-7	C174	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	USS or SS only		
		Rel-8		C174 AND C183	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	USS or SS only		
3.1, 3.2, 3.3, 3.4, 3.5	Interaction with FDN (Cell identity in envelope call control)	R99	Rel-7	C146 AND C180	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	USS or SS only		
		Rel-8		C146 AND C180 AND C183	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	USS or SS only		
4.1	BDN service enabled	R99	Rel-7	C147 AND C177 AND C178 AND C180	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/110 AND E.1/111	USS or SS only		
		Rel-8		C147 AND C177 AND C178 AND C180 AND C183	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/110 AND E.1/111	USS or SS only		
		R99		C147 AND	E.1/7 AND	USS or		

4.2A	BDN service enabled, interaction with emergency call codes, R99 only			C180	E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	SS only		
		Rel-4			E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	USS or SS only		
4.2B	BDN service enabled, interaction with emergency call codes, Rel-4+	Rel-4	Rel-7	C147 AND C180	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 ND E.1/64	USS or SS only		
		Rel-8		C147 AND C180 AND C183	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 ND E.1/64	USS or SS only		
4.3	FDN and BDN enabled, set up a call in EFFDN, Allowed with modifications	R99	Rel-7	C146 AND C147 AND C177 AND C180	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/110	USS or SS only		
		Rel-8		C146 AND C147 AND C177 AND C180 AND C183	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/110	USS or SS only		
5.1	BDN service enabled, ME not supporting BDN	R99	Rel-4		E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	USS or SS only		
		Rel-5	Rel-7	C176 AND C180	E.1/7 AND E.1/8 AND E.1/10 AND	USS or SS only		

						E.1/11 AND E.1/13 AND E.1/64			
			Rel-8		C176 AND C180 AND C183	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	USS or SS only		
27.22.7		**EVENT DOWNLOAD**							
27.22.7.1		**MT Call event**							
	1.1	MT call event	R99	Rel-7	C180	E.1/34 AND E.1/33	USS or SS only		
			Rel-8		C180 AND C183	E.1/34 AND E.1/33	USS or SS only		
27.22.7.2		**Call Connected event**							
27.22.7.2.1		**Call Connected event (MT and MO call)**							
	1.1	call connected event	R99	Rel-7	C180	E.1/35 AND E.1/33	USS or SS only		
			Rel-8		C180 AND C183	E.1/35 AND E.1/33	USS or SS only		
	1.2	call connected event (simultaneous call MT-MO)	Rel-12		C180 AND C183		USS or SS only		
	1.3	call connected event (simultaneous call MO-MO)	Rel-12		C180 AND C183		USS or SS only		
	1.4	call connected event (simultaneous call MO-MT)	Rel-12		C180 AND C183		USS or SS only		
27.22.7.2.2		**Call Connected event (ME supporting SET UP CALL)**							
	2.1	ME supporting SET UP CALL	R99	Rel-7	C177 AND C178 AND C180	E.1/35 AND E.1/29 AND E.1/33 AND E.1/110 AND E.1/111	USS or SS only		
			Rel-8		C177 AND C178 AND C180 AND C183	E.1/35 AND E.1/29 AND E.1/33 AND E.1/110 AND E.1/111	USS or SS only		
27.22.7.3		**Call Disconnected event**							
27.22.7.3.1		**Call Disconnected event**							
	1.1	call disconnected event	R99	Rel-7	C180	E.1/36 AND E.1/33	USS or SS only		
			Rel-8		C180 AND C183	E.1/36 AND E.1/33	USS or SS only		

27.22.7.4		**Location Status event**							
27.22.7.4.1		**Location Status event (normal)**							
	1.1	location status event	R99	Rel-7	M	E.1/37 AND E.1/33	USS or SS only		AER002
			Rel-8		C183	E.1/37 AND E.1/33	USS or SS only		AER002
	1.2	location status event, E-UTRAN	Rel-8	Rel-12	C190	E.1/37 AND E.1/33 AND E.1/135	E-USS or NB-SS (see note 1)		
			Rel-13		C222	E.1/37 AND E.1/33 AND E.1/135	E-USS or NB-SS (see note 1)		
	1.3	location status event, NG-RAN	Rel-15		C231	E.1/37 AND E.1/33	NG-SS only		
27.22.7.5		**User Activity event**							
27.22.7.5.1		**User Activity event (normal)**							
	1.1	user activity event	R99		C178	E.1/38 AND E.1/33 AND E.1/111	No		
27.22.7.6		**Idle Screen Available event**							
27.22.7.6.1		**Idle Screen Available event (normal)**							
	1.1	idle screen available event	R99		C177 AND C178	E.1/39 AND E.1/33 AND E.1/110 AND E.1/111	USS		
27.22.7.7		**Card Reader Status event**							
27.22.7.7.1		**Card Reader Status event (normal)**							
	1.1	Card reader status normal	R99		C109	E.1/40 AND E.1/33	No		
27.22.7.7.2		**Card Reader Status event (detachable card reader)**							
	2.1	Detachable card reader	R99		C116	E.1/40 AND E.1/33	No		
27.22.7.8		**Language selection event**							
27.22.7.8.1		**Language selection (normal)**							
	1.1	Language selection event	R99		C177 AND C178 AND C181 AND C216	E.1/41 AND E.1/33 AND E.1/110 AND E.1/111	No		
27.22.7.9		**Browser termination event**							
27.22.7.9.1		**Browser termination (normal)**							
	1.1	Browser termination event	R99		C193 AND C177 AND C178	E.1/42 AND E.1/33 AND	USS		

						E.1/110 AND E.1/111			
27.22.7.10		**Data Available event**							
	1.1	Data available	R99	Rel-8	C121	E.1/43 AND E.1/89 AND E.1/92 AND E.1/33	USS or SS only		
			Rel-9		C121 AND C183	E.1/43 AND E.1/89 AND E.1/92 AND E.1/33	USS or SS only		
	1.2	Data available, E-UTRAN	Rel-8	Rel-12		E.1/43 AND E.1/89 AND E.1/92 AND E.1/33	E-USS or NB-SS (see note 1)		
			Rel-13		C223	E.1/43 AND E.1/89 AND E.1/92 AND E.1/33	E-USS or NB-SS (see note 1)		
	1.3	Data available, PSM by SUSPEND UICC for E-UTRAN	Rel-8	Rel-13		E.1/43 AND E.1/89 AND E.1/92 AND E.1/33	E-USS or NB-SS (see note 1)		TCEP003
			Rel-14		C225	E.1/43 AND E.1/89 AND E.1/92 AND E.1/33	E-USS or NB-SS (see note 1)		TCEP003
	1.4	Data available, PSM for E-UTRAN	Rel-8	Rel-13		E.1/43 AND E.1/89 AND E.1/92 AND E.1/33	E-USS or NB-SS (see note 1)		TCEP003
			Rel-14		C226	E.1/43 AND E.1/89 AND E.1/92 AND E.1/33	E-USS or NB-SS (see note 1)		TCEP003
	1.5	Data available, eDRX by SUSPEND UICC for E-UTRAN	Rel-8	Rel-13		E.1/43 AND E.1/89 AND E.1/92 AND E.1/33	E-USS or NB-SS (see note 1)		TCEP004

			Rel-14		C227	E.1/43 AND E.1/89 AND E.1/92 AND E.1/33	E-USS or NB-SS (see note 1)		TCEP004
27.22.7.11		**Channel status event**							
	1.1	Channel Status on a link dropped	R99	Rel-7	C121	E.1/44 AND E.1/89 AND E.1/33	USS or SS only		
			Rel-8		C121 AND C183	E.1/44 AND E.1/89 AND E.1/33	USS or SS only		
	1.2	Channel Status on a link dropped, E-UTRAN	Rel-8	Rel-12		E.1/44 AND E.1/89 AND E.1/33	E-USS or NB-SS (see note 1)		
			Rel-13		C223	E.1/44 AND E.1/89 AND E.1/33	E-USS or NB-SS (see note 1)		
27.22.7.12		**Access Technology change event**							
	1.1	Single access technology	Rel-8		C184 AND C190	E.1/45 AND E.1/33	USS and E-USS		
	1.3	Single access technology – WB-S1(Cat M1)/NB-S1	Rel-13		C167 AND C222	E.1/45 AND E.1/33	SS and E-USS/NB-SS		
	1.4	Single access technology, NG-RAN	Rel-15		C231	E.1/45 AND E.1/33	NG-SS only		
27.22.7.15		**Network search mode change event**							
	1.1	Network search mode change	Rel-6	Rel-8		E.1/48 AND E.1/33	No		
			Rel-9		M	E.1/48 AND E.1/33	No		
27.22.7.17		**Network Rejection Event**							
	1.1	Network Rejection, ATTACH REJECT	Rel-8		C190	E.1/33 AND E.1/197	E-USS or NB-SS (see note 1)		
	1.2	Network Rejection, TRACKING AREA UPDATE REJECT	Rel-8		C190	E.1/33 AND E.1/197	E-USS or NB-SS (see note 1)		
	1.3	Network Rejection, REGISTRATION REJECT-Initial Registration	Rel-15		C231	E.1/33 AND E.1/197	NG-SS only		
	1.4	Network Rejection, REGISTRATION REJECT-Mobility Registration updating	Rel-15		C231	E.1/33 AND E.1/197	NG-SS only		
27.22.7.18		**CSG Cell Selection event**							
	1.1	CSG cell Selection event	Rel-9		C200	E.1/201	E-USS only		
27.22.7.19		**IMS registration event**							
		(Refer to 27.22.4.27.7 AND	Rel-10			-	-		

		27.22.7.20)							
27.22.7.20		**Incoming IMS data event**							
	1.1	Incoming IMS data, IMS Registration and Data available event, IARI list stored on the ISIM	Rel-10		C208	E.1/33 AND E.1/43 AND E.1/89 AND E.1/91 AND E.1/246 AND E.1.247 AND E.1/249	USS or E-USS		
27.22.7.21		**Data Connection Status Change event**							
	1.1	EVENT DOWNLOAD – Data Connection Status Change event, E-UTRAN, Deactivate PDN	Rel-14		C229	E.1/275	E-USS or NB-SS		
	1.2	EVENT DOWNLOAD – Data Connection Status Change event, NG-RAN, Deactivate PDU	Rel-17		C232	E.1/275	NG-SS		
27.22.7.22		**EVENT DOWNLOAD – CAG Cell Selection**							
	1.1	EVENT DOWNLOAD – CAG Cell Selection	Rel-17		C235	E.1/287	NG-SS only		
27.22.7.23		**EVENT DOWNLOAD – Slice Status Change event**							
	1.1	EVENT DOWNLOAD – Slice status change event - no mapping case	Rel-18		C240	E.1/288	NG-SS only		
	1.2	(EVENT DOWNLOAD – Slices Status Change event) - with mapping (same)	Rel-18		C240	E.1/288	NG-SS only		
	1.3	(EVENT DOWNLOAD – Slices Status Change event) - with mapping (different)	Rel-18		C240	E.1/288	NG-SS only		
27.22.8		**MO SMS Control by USIM**							
	1.1	With proactive command, Allowed, no modification	R99	Rel-7	M	E.1/12 AND E.1/26 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C183	E.1/12 AND E.1/26 AND E.1/110	USS or SS only		TCEP001
	1.2	With user SMS, Allowed, no modification	R99	Rel-7	M	E.1/12	USS or SS only		
			Rel-8		C183	E.1/12	USS or SS only		
	1.3	With proactive command, Not allowed	R99	Rel-7	M	E.1/12 AND E.1/26 AND E.1/110	USS or SS only		TCEP001
			Rel-8		C183	E.1/12 AND E.1/26 AND E.1/110	USS or SS only		TCEP001
	1.4	With user SMS, Not allowed	R99	Rel-7	M	E.1/12	USS or SS only		
			Rel-8		C183	E.1/12	USS or		

						SS only		
1.5	With proactive command, Allowed, with modifications	R99	Rel-7	M	E.1/12 AND E.1/26 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C183	E.1/12 AND E.1/26 AND E.1/110	USS or SS only		TCEP001
1.6	With user SMS, Allowed, with modifications	R99	Rel-7	M	E.1/12	USS or SS only		
		Rel-8		C183	E.1/12	USS or SS only		
1.7	With Proactive command, the USIM responds with '90 00', Allowed, no modification	R99	Rel-7	M	E.1/12 AND E.1/26 AND E.1/110	USS or SS only		TCEP001
		Rel-8		C183	E.1/12 AND E.1/26 AND E.1/110	USS or SS only		TCEP001
1.8	Send Short Message attempt by user, the USIM responds with '90 00', Allowed, no modification	R99	Rel-7	M	E.1/12	USS or SS only		
		Rel-8		C183	E.1/12	USS or SS only		
1.10	MO SM CONTROL BY USIM over SG in E-UTRAN, with Proactive command, Allowed, no modification	Rel-8	Rel-12		E.1/12 AND E.1/26 AND E.1/110	E-USS or NB-SS (see note 1)		TCEP001
		Rel-13		C220	E.1/12 AND E.1/26 AND E.1/110	E-USS or NB-SS (see note 1)		TCEP001
1.11	MO SM CONTROL BY USIM over SG in E-UTRAN, with user SMS, Allowed, no modification	Rel-8	Rel-12		E.1/12	E-USS or NB-SS (see note 1)		
		Rel-13		C220	E.1/12	E-USS or NB-SS (see note 1)		
1.12	MO SM CONTROL BY USIM over SG in E-UTRAN, with Proactive command, Not allowed	Rel-8	Rel-12		E.1/12 AND E.1/26 AND E.1/110	E-USS or NB-SS (see note 1)		TCEP001
		Rel-13		C220	E.1/12 AND E.1/26 AND E.1/110	E-USS or NB-SS (see note 1)		TCEP001
1.13	MO SM CONTROL BY USIM over SG in E-UTRAN, with user SMS, Not allowed	Rel-8	Rel-12		E.1/12	E-USS or NB-SS (see note 1)		
		Rel-13		C220	E.1/12	E-USS or NB-SS (see note 1)		
1.14	MO SM CONTROL BY USIM over SG in E-UTRAN, with	Rel-8	Rel-12		E.1/12 AND	E-USS or NB-SS		TCEP001

		Proactive command, Allowed with modifications'				E.1/26 AND E.1/110	(see note 1)		
			Rel-13		C220	E.1/12 AND E.1/26 AND E.1/110	E-USS or NB-SS (see note 1)		TCEP001
	1.15	MO SM CONTROL BY USIM over SG in E-UTRAN, with user SMS, Allowed with modifications	Rel-8	Rel-12		E.1/12	E-USS or NB-SS (see note 1)		
			Rel-13		C220	E.1/12	E-USS or NB-SS (see note 1)		
	1.16	MO SM CONTROL BY USIM over SG in E-UTRAN, with Proactive command, the USIM responds with '90 00', Allowed, no modification	Rel-8	Rel-12		E.1/12 AND E.1/26 AND E.1/110	E-USS or NB-SS (see note 1)		TCEP001
			Rel-13		C220	E.1/12 AND E.1/26 AND E.1/110	E-USS or NB-SS (see note 1)		TCEP001
	1.17	MO SM CONTROL BY USIM over SG in E-UTRAN, Send Short Message attempt by user, the USIM responds with '90 00', Allowed, no modification	Rel-8	Rel-12		E.1/12	E-USS or NB-SS (see note 1)		
			Rel-13		C220	E.1/12	E-USS or NB-SS (see note 1)		
27.22.9		**Handling of command number**							
	1.1	DISPLAY TEXT normal priority	R99		C177	E.1/17 AND E.1/110	No		
27.22.10		**Call Control on EPS PDN connection**							
	1.1	CALL CONTROL on EPS PDN for E-UTRAN – default PDN connection activation, allowed without modification	Rel-8	Rel-13		E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	E-USS or NB-SS (see note 1)		
			Rel-14		C222	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	E-USS or NB-SS (see note 1)		
	1.2	CALL CONTROL on EPS PDN for E-UTRAN – default PDN connection activation, not allowed	Rel-8	Rel-13		E.1/7 AND E.1/8 AND E.1/10 AND	E-USS or NB-SS (see note 1)		

					E.1/11 AND E.1/13 AND E.1/64 AND E.1/142			
		Rel-14		C222	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	E-USS or NB-SS (see note 1)		
1.3	CALL CONTROL on EPS PDN for E-UTRAN – default PDN connection activation, allowed with modification	Rel-8	Rel-13		E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	E-USS or NB-SS (see note 1)		
		Rel-14		C222	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	E-USS or NB-SS (see note 1)		
1.4	CALL CONTROL on EPS PDN for E-UTRAN – PDN connection triggered by user, UICC sends 90 00	Rel-8	Rel-13		E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	E-USS only		
		Rel-14		C190	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	E-USS only		
1.5	CALL CONTROL on EPS PDN for E-UTRAN – PDN connection triggered by user, UICC sends 93 00	Rel-8	Rel-13		E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND	E-USS only		

						E.1/142			
			Rel-14		C190	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	E-USS only		
	1.6	CALL CONTROL on EPS PDN for E-UTRAN – PDN connection triggered by user, allowed with modification	Rel-8	Rel-13		E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	E-USS only		
			Rel-14		C190	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	E-USS only		
	1.7	CALL CONTROL on EPS PDN - PDN connection activation from OPEN CHANNEL command	Rel-8	Rel-13		E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	E-USS only		
			Rel-14		C182	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	E-USS only		
27.22.11		**Call Control on PDP Context Activation**							
	1.1	CALL CONTROL on PDP Context Activation – default PDP connection activation, allowed without modification	R99	Rel-13	N/A	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	USS or SS only		
			Rel-14		C183	E.1/7 AND E.1/8 AND	USS or SS only		

					E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142			
1.2	CALL CONTROL on PDP Context Activation – default PDP connection activation, not allowed	R99	Rel-13	N/A	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	USS or SS only		
		Rel-14		C183	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	USS or SS only		
1.3	CALL CONTROL on PDP Context Activation – default PDP connection activation, allowed with modification	R99	Rel-13	N/A	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	USS or SS only		
		Rel-14		C183	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	USS or SS only		
1.4	CALL CONTROL on PDP Context Activation – PDP connection triggered by user, UICC sends 90 00	R99	Rel-13	N/A	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	USS or SS only		
		Rel-14		C183	E.1/7 AND E.1/8 AND E.1/10 AND	USS or SS only		

						E.1/11 AND E.1/13 AND E.1/64 AND E.1/142			
	1.5	CALL CONTROL on PDP Context Activation – PDP connection triggered by user, UICC sends 93 00	R99	Rel-13	N/A	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	USS or SS only		
			Rel-14		C183	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	USS or SS only		
	1.6	CALL CONTROL on PDP Context Activation – PDP connection triggered by user, allowed with modification	R99	Rel-13	N/A	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	USS or SS only		
			Rel-14		C183	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	USS or SS only		
	1.7	CALL CONTROL on PDP Context Activation - PDP connection activation from OPEN CHANNEL command	R99	Rel-13	N/A	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64 AND E.1/142	USS or SS only		
			Rel-14		C191 AND C183	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND	USS or SS only		

						E.1/13 AND E.1/64 AND E.1/142			
27.22.12		**Change eCall mode**							
	1.1	REFRESH after change eCall mode, disable FDN in EF_{EST}, E-UTRAN	Rel-8	Rel-13		E.1/24 AND E.1/2	E-USS only		
			Rel-14		C190	E.1/24 AND E.1/2	E-USS only		
	1.2	REFRESH after change eCall mode, enable FDN in EF_{EST}, E-UTRAN	Rel-8	Rel-13		E.1/24 AND E.1/2	E-USS only		
			Rel-14		C190	E.1/24 AND E.1/2	E-USS only		
	1.3	REFRESH after changing eCall mode, disable FDN in EF_{EST}, IMS Emergency Services in E-UTRAN	Rel-14		C202	E.1/24 AND E.1/2	E-USS only		
	1.4	REFRESH after changing eCall mode, disable FDN in EF_{EST}, UTRAN/GERAN	Rel-8	Rel-13		E.1/24 AND E.1/2	USS or SS only		
			Rel-14		C167	E.1/24 AND E.1/2	USS or SS only		
	1.5	REFRESH after change eCall mode, enable FDN in EF_{EST}, UTRAN/GERAN	Rel-8	Rel-13		E.1/24 AND E.1/2	USS or SS only		
			Rel-14		C167	E.1/24 AND E.1/2	USS or SS only		
27.22.13		**CALL CONTROL EVENT on NG-RAN for PDU Session Establishment**							
	1.1 – 1.6	CALL CONTROL on PDU Session for NG-RAN, PDU Session Establishment, allowed without modificationPDU Session establishment triggered by User	Rel-15		C231	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	NG-SS only		
	1.2	CALL CONTROL on PDU Session for NG-RAN, PDU Session Establishment, Not allowed	Rel-15		C231	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	NG-SS only		
	1.3	CALL CONTROL on PDU Session for NG-RAN, PDU Session Establishment triggered by user, UICC sends 90 00	Rel-15		C231	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	NG-SS only		
	1.4	CALL CONTROL on PDU Session for NG-RAN, PDU Session Establishment	Rel-15		C231	E.1/7 AND E.1/8 AND E.1/10 AND	NG-SS only		

		triggered by user, UICC sends 93 00				E.1/11 AND E.1/13 AND E.1/64			
	1.5	CALL CONTROL on PDU Session for NG-RAN, PDU Session Establishment triggered by user, allowed with modification of SM PDU DN request container	Rel-15		C234	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	NG-SS only		
	1.6	CALL CONTROL on PDU Session for NG-RAN, PDU Session Establishment triggered by user, allowed with modification of ePCO	Rel-15		C231	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	NG-SS only		
	1.7	PDU Session establishment triggered by OPEN CHANNEL	Rel-15		C232	E.1/7 AND E.1/8 AND E.1/10 AND E.1/11 AND E.1/13 AND E.1/64	NG-SS only		
27.22.14		**ENVELOPE SMS-PP Data Download on NAS messages**							
27.22.14.1		**Routing Indicator Data update via DL NAS TRANSPORT messages**							
	1.1	SMS-PP Data Dowload after UE parameters update data (Routing Indicator Data) via DL NAS TRANSPORT message "acknowledgement not requested" and "re-registration not requested"	Rel-15		C231	E.1/24 AND E.1/2	NG-SS only		
	1.2	SMS-PP Data Dowload after UE parameters update data (Routing Indicator Data) via DL NAS TRANSPORT message "acknowledgement not requested" and "re-registration requested"	Rel-15		C231	E.1/24 AND E.1/2	NG-SS only		
	1.3	SMS-PP Data Dowload after UE parameters update data (Routing Indicator Data) via DL NAS TRANSPORT message "acknowledgement requested" and "re-registration requested"	Rel-15		C231	E.1/24 AND E.1/2	NG-SS only		
	1.4	SMS-PP Data Dowload after UE parameters update data (Routing Indicator Data) via DL NAS TRANSPORT message "acknowledgement requested" and "re-registration not requested"	Rel-15		C231	E.1/24 AND E.1/2	NG-SS only		

27.22.14.2		**Steering of Roaming via DL NAS TRANSPORT message**							
	2.1	SMS-PP Data Download after Steering of Roaming via DL NAS TRANSPORT message with REFRESH command [Steering of Roaming]	Rel-15		C231	E.1/24 AND E.1/2	NG-SS only		
	2.3	Steering of Roaming via DL NAS TRANSPORT message with "Acknowledgement requested" and REFRESH command [Steering of Roaming]	Rel-15		C231	E.1/24 AND E.1/2	NG-SS only		
	2.4	SMS-PP Data Download in several ENVELOPE commands after Steering of Roaming via DL NAS TRANSPORT long message with REFRESH command [Steering of Roaming]	Rel-16		C231	E.1/24 AND E.1/2	NG-SS only		
27.22.14.3		**Steering of Roaming via REGISTRATION ACCEPT message**							
	3.1	SMS-PP Data Download after Steering of Roaming via REGISTRATION ACCEPT message with REFRESH command [Steering of Roaming]	Rel-15		C231	E.1/24 AND E.1/2	NG-SS only		
	3.3	SMS-PP Data Download after Steering of Roaming via REGISTRATION ACCEPT long message with REFRESH command [Steering of Roaming]	Rel-15		C231	E.1/24 AND E.1/2	NG-SS only		
27.22.15		**Geographical location discovery**							
	1.1	Geographical location discovery, Preferred GAD shapes is Ellipsoid point with altitude, NG-RAN	Rel-15		C237	E.1/181 AND E.1/238)	NG-SS only		

NOTE 1: For Rel-13 if the UE supports NB-IoT, this test case shall be verified by accessing the NB System Simulator (NB-SS).
NOTE 2: Blank entries indicate the latest valid release at the time of publication of this specification

C101	IF A.1/1 THEN M ELSE N/A	-- O_Cap_Conf
C102	void	
C103	void	
C104	IF A.1/2 THEN M ELSE N/A	-- O_Sust_text
C105	IF A.1/3 AND A.1/41 THEN M ELSE N/A	-- O_Ucs2_Entry AND O_UCS2_Cyrillic
C106	IF A.1/4 THEN M ELSE N/A	-- O_Ext_Str
C107	IF A.1/5 THEN M ELSE N/A	-- O_Help
C108	IF A.1/6 THEN O.1 ELSE N/A	-- O_Icons
C109	IF A.1/7 THEN M ELSE N/A	-- O_Dual_Slot
C110	IF A.1/9 AND A.1/46 THEN M ELSE N/A	-- O_Run_At AND O_+CIMI
C111	IF (A.1/10 OR E.1/71) THEN M ELSE N/A	-- O_LB
C112	IF A.1/11 THEN M ELSE N/A	-- O_Soft_key
C113	void	
C114	IF C110 AND C108 THEN O.1 ELSE N/A	-- O_Run_At AND O_+CIMI AND O_Icons

C115	IF C111 AND C108 THEN M ELSE N/A	-- O_LB AND O_Icons
C116	IF A.1/7 AND A.1/8 THEN M ELSE N/A	-- O_Dual_Slot AND O_Detach_Rdr
C117	void	
C118	IF A.1/15 AND A.1/41 THEN M ELSE N/A	-- O_Ucs2_Disp AND O_UCS2_Cyrillic
C119	IF A.1/19 THEN M ELSE N/A	-- O_Redial
C120	IF A.1/20 THEN M ELSE N/A	-- O_D_NoResp
C121	IF A.1/21 AND A.1/17 THEN M ELSE N/A	-- O_BIP_GPRS AND O_UDP
C122	IF C111 AND A.1/16 THEN M ELSE N/A	-- O_LB AND O_GPRS
C123	void	
C124	IF A.1/22, test x.A M ELSE x.B M (where x is the expected sequence number value)	-- O_CP_Subaddr
C125	IF A.1/23 THEN M ELSE N/A	-- O_Imm_Resp
C126	IF A.1/24 THEN M ELSE N/A	-- O_Duration
C127	void	
C128	void	
C129	void	
C130	void	
C131	void	
C132	IF A.1/27 THEN M ELSE N/A	-- O_BIP_Local
C133	void	
C134	IF A.1/38 THEN M ELSE N/A	-- O_MMS
C135	void	
C136	void	
C137	void	
C138	void	
C139	IF A.1/35 THEN M ELSE N/A	-- O_Batt
C140	IF A.1/39 THEN M ELSE N/A	-- O_UC_Before_EnvCC
C141	IF A.1/40 THEN M ELSE N/A	-- O_UC_After_EnvCC
C142	IF A.1/3 AND A.1/42 THEN M ELSE N/A	-- O_UCS2_Entry AND O_UCS2_Chinese
C143	IF A.1/15 AND A.1/42 THEN M ELSE N/A	-- O_UCS2_Disp AND O_UCS2_Chinese
C144	IF A.1/3 AND A.1/43 THEN M ELSE N/A	-- O_UCS2_Entry AND O_UCS2_Katakana
C145	IF A.1/15 AND A.1/43 THEN M ELSE N/A	-- O_UCS2_Disp AND O_UCS2_Katakana
C146	IF A.1/45 THEN M ELSE N/A	-- O_FDN
C147	IF A.1/44 THEN M ELSE N/A	-- O_BDN
C148	IF A.1/9 AND A.1/47 THEN M ELSE N/A	-- O_Run_At AND O_+CGMI
C149	IF C148 AND C118 THEN M ELSE N/A	-- O_Run_At AND O_+CGMI AND O_Ucs2_Disp AND O_Ucs2_Cyrillic
C150	IF C148 AND C143 THEN M ELSE N/A	-- O_Run_At AND O_+CGMI AND O_Ucs2_Disp AND O_Ucs2_Chinese
C151	IF C148 AND C145 THEN M ELSE N/A	-- O_Run_At AND O_+CGMI AND O_Ucs2_Disp AND O_Ucs2_Katakana
C152	IF C121 AND A.1/49 THEN M ELSE N/A	-- O_BIP_GPRS AND O_UDP AND O_BUFFER_SIZE
C153	IF A.1/50 THEN M ELSE N/A	-- O_TAT_AL
C154	IF A.1/51 THEN M ELSE N/A	-- O_TAT_AC
C155	IF A.1/52 THEN M ELSE N/A	-- O_TAT_AR
C156	IF A.1/53 THEN M ELSE N/A	-- O_TAT_FSN
C157	IF A.1/54 THEN M ELSE N/A	-- O_TAT_FSL
C158	IF A.1/55 THEN M ELSE N/A	-- O_TAT_FSS
C159	IF A.1/56 THEN M ELSE N/A	-- O_TAT_SN
C160	IF A.1/57 THEN M ELSE N/A	-- O_TAT_SB
C161	IF A.1/58 THEN M ELSE N/A	-- O_TAT_SI
C162	IF A.1/59 THEN M ELSE N/A	-- O_TAT_SU
C163	IF A.1/60 THEN M ELSE N/A	-- O_TAT_SS
C164	IF A.1/61 THEN M ELSE N/A	-- O_TAT_STFC

C165	IF A.1/62 THEN M ELSE N/A	-- O_TAT_STFB
C166	IF A.1/63 THEN test step option n.A M ELSE test step option n.B M	-- O_longFTN
C167	IF A.1/64 THEN M ELSE N/A	-- O_GERAN
C168	IF A.1/65 THEN M ELSE N/A	-- O_Global_PB
C169	IF (C121 AND A.1/68 THEN test x.A M ELSE IF (C121 AND NOT A.1/68) test x.B M ELSE N/A	-- (O_BIP_GPRS AND O_UDP AND O_User_Confirm_Before_PDP_Context_Request) OR (O_BIP_GPRS AND O_UDP AND NOT O_User_Confirm_Before_PDP_Context_Request)
C170	IF A.1/69 THEN M ELSE N/A	-- O_Serv_SS_HOLD
C171	IF A.1/6 THEN O.2 ELSE N/A	-- O_Icons
C172	IF A.1/6 THEN O.4 ELSE N/A	-- O_Icons
C173	IF C110 AND A.1/6 THEN O.2 ELSE N/A	-- O_Run_At AND O_+CIMI AND O_Icons
C174	IF A.1/78 AND A.1/79 THEN M ELSE N/A	-- O_AddInfo_SS AND O_Serv_SS_CFU
C175	IF A.1/78 AND A.1/80 THEN M ELSE N/A	-- O_AddInfo_SS AND O_Serv_SS_CLIR
C176	IF A.1/44 THEN N/A ELSE M	-- O_BDN
C177	IF A.1/84 THEN M ELSE N/A	-- O_No_Type_ND
C178	IF A.1/85 THEN M ELSE N/A	-- O_No_Type_NK
C179	IF A.1/86 THEN M ELSE N/A	-- O_No_Type_NA
C180	IF A.1/87 THEN M ELSE N/A	-- O_No_Type_NS
C181	IF A.1/88 THEN M ELSE N/A	-- O_No_Type_NL
C182	IF A.1/18 AND (A.1/132 OR A.1/133) THEN M ELSE N/A	-- O_TCP AND (pc_BIP_eFDD OR pc_BIP_eTDD)
C183	IF (NOT A.1/135) AND (A.1/64 OR A.1/134) THEN M ELSE N/A	-- (NOT O_EUTRAN_NO_UTRAN_NO_GERAN) AND (O_GERAN OR O_UTRAN)
C184	IF A.1/134 THEN M ELSE N/A	-- O_UTRAN
C185	IF A.1/6 AND A.1/111 THEN M ELSE N/A	-- O_Icons AND O_Icon_Rec1_Send_SS
C186	IF A.1/6 AND A.1/115 THEN M ELSE N/A	-- O_Icons AND O_Icon_Rec2_Send_USSD
C187	IF A.1/6 AND A.1/114 THEN M ELSE N/A	-- O_Icons AND O_Icon_Rec1_Send_USSD
C188	IF A.1/6 AND A.1/120 THEN M ELSE N/A	-- O_Icons AND O_Icon_Rec1_Set_Up_Idle_Mode_Text
C189	IF C110 AND A.1/6 AND A.1/123 THEN M ELSE N/A	-- O_Run_At AND O_+CIMI AND O_Icons AND O_Icon_Rec1_Run_AT_Cmd
C190	IF (A.1/139 OR A.1/140) THEN M ELSE N/A	-- pc_eTDD OR pc_eFDD
C191	IF A.1/21 AND A.1/18 THEN M ELSE N/A	-- O_BIP_GPRS AND O_TCP
C192	IF A.1/21 AND A.1/18 AND A.1/72 THEN M ELSE N/A	-- O_BIP_GPRS AND O_TCP AND O_TCP_UICC_ServerMode
C193	IF (A.1/10 OR (E.1/71 AND E.1/42)) AND A.1/193 THEN M ELSE N/A	-- O_LB AND O_Browser_Termination
C194	IF A.1/138 THEN M ELSE N/A	-- O_Select_Item_Default_Item
C195	IF A.1/137 THEN M ELSE N/A	-- O_CSG_Cell_Discovery
C196	IF A.1/142 AND (A.1/139 OR A.1/140) THEN M ELSE N/A	-- pc_MO_SM-over-IMS AND (pc_eFDD OR pc_eTDD)
C197	IF A.1/142 AND A.1/134 AND A.1/194 THEN M ELSE N/A	-- pc_MO_SM-over-IMS AND O_UTRAN AND O_IMS_UTRAN
C198	IF A.1/141 AND (A.1/139 OR A.1/140) THEN M ELSE N/A	-- pc_SM-over-IP-receiver AND (pc_eFDD OR pc_eTDD)
C199	IF A.1/141 AND A.1/134 AND A.1/194 THEN M ELSE N/A	-- pc_SM-over-IP-receiver AND O_UTRAN AND O_IMS_UTRAN
C200	IF A.1/136 THEN M ELSE N/A	-- O_Event_CSG_Cell_Selection
C201	IF A.1/64 AND A.1/149 THEN M ELSE N/A	-- O_GERAN AND O_SMS-CB_Data_Download
C202	IF (A.1/139 OR A.1/140) AND A.1/150 THEN M ELSE N/A	-- (pc_eFDD OR pc_eTDD) AND O_IMS
C203	IF A.1/134 AND A.1/150 THEN M ELSE N/A	-- O_UTRAN AND O_IMS
C204	IF A.1/151 THEN N/A ELSE M	-- O_PS_OPMODE
C205	IF (A.1/139 OR A.1/140) AND A.1/152 THEN M ELSE N/A	-- (pc_eFDD OR pc_eTDD) AND O_SMS_SGs_MT

C206	IF (A.1/139 OR A.1/140) AND A.1/153 THEN M ELSE N/A	-- (pc_eFDD OR pc_eTDD) AND O_SMS_SGs_MO
C207	IF A.1/147 AND A.1/148 AND A.1/150 THEN M ELSE O	-- O_Event_IMS_Registration AND O_UICC_ACCESS_IMS AND O_IMS
C208	IF A.1/146 AND A.1/147 AND A.1/148 AND A.1/150 THEN M ELSE N/A	-- O_Event_Incoming_IMS_Data AND O_Event_IMS_Registration AND O_UICC_ACCESS_IMS AND O_IMS
C209	IF (A.1/157 OR A.1/159) THEN M ELSE N/A	-- (pc_SMS_CS_MO OR pc_SMS_PS_MO)
C210	IF (NOT A.1/135) AND (A.1/64 OR A.1/134) AND (A.1/157 OR A.1/159) THEN M ELSE N/A	-- (NOT (O_EUTRAN_NO_UTRAN_NO_GERAN) AND (O_GERAN OR O_UTRAN)) AND (pc_SMS_CS_MO OR pc_SMS_PS_MO)
C211	IF (A.1/156 OR A.1/158) THEN M ELSE N/A	-- (pc_SMS_CS_MT OR pc_SMS_PS_MT)
C212	IF (NOT A.1/135) AND (A.1/64 OR A.1/134) AND (A.1/156 OR A.1/158) THEN M ELSE N/A	-- (NOT (O_EUTRAN_NO_UTRAN_NO_GERAN) AND (O_GERAN OR O_UTRAN)) AND (pc_SMS_CS_MT OR pc_SMS_PS_MT)
C213	IF (NOT A.1/160) THEN M ELSE N/A	-- NOT O_Rej_Launch_Browser_withDefURL
C214	IF A.1/160 THEN M ELSE N/A	-- O_Rej_Launch_Browser_withDefURL
C215	IF A.1/16 THEN M ELSE N/A	-- O_GPRS
C216	IF A.1/161 THEN M ELSE N/A	-- O_Lang_Select
C217	IF A.1/162 THEN M ELSE N/A	-- O_Provide_Local_LS
C218	IF A.1/163 THEN M ELSE N/A	-- O_Lang_Notif
C219	IF A.1/164 THEN M ELSE N/A	-- O_Refresh_AlphaIdentifier
C220	IF (A.1/139 OR A.1/140 OR A.1/173) AND A.1/153 THEN M ELSE N/A	-- (pc_eFDD OR pc_eTDD OR pc_NB) AND O_SMS_SGs_MO
C221	IF (A.1/139 OR A.1/140 OR A.1/173) AND A.1/152 THEN M ELSE N/A	-- (pc_eFDD OR pc_eTDD OR pc_NB) AND O_SMS_SGs_MT
C222	IF (A.1/139 OR A.1/140 OR A.1/173) THEN M ELSE N/A	-- pc_eTDD OR pc_eFDD OR pc_NB
C223	IF A.1/18 AND (A.1/132 OR A.1/133 OR A.1/177) THEN M ELSE N/A	-- O_TCP AND (pc_BIP_eFDD OR pc_BIP_eTDD OR pc_BIP_NB)
C224	IF A.1/18 AND A.1/178 AND (A.1/132 OR A.1/133 OR A.1/177) THEN M ELSE N/A	-- O_TCP AND pc_Multiple_PDN AND (pc_BIP_eFDD OR pc_BIP_eTDD OR pc_BIP_NB)
C225	IF A.1/18 AND (A.1/132 OR A.1/133 OR A.1/177) AND A.1/182 THEN M ELSE N/A	-- O_TCP AND (pc_BIP_eFDD OR pc_BIP_eTDD OR pc_BIP_NB) AND O_PSM_SUSPEND_UICC
C226	IF A.1/18 AND (A.1/132 OR A.1/133 OR A.1/177) AND A.1/181 THEN M ELSE N/A	-- O_TCP AND (pc_BIP_eFDD OR pc_BIP_eTDD OR pc_BIP_NB) AND O_PSM_DEAC_UICC
C227	IF A.1/18 AND (A.1/132 OR A.1/133 OR A.1/177) AND A.1/183 THEN M ELSE N/A	-- O_TCP AND (pc_BIP_eFDD OR pc_BIP_eTDD OR pc_BIP_NB) AND O_eDRX_SUSPEND_UICC
C228	IF (A.1/132 OR A.1/133) AND A.1/152 AND A.1/184 THEN M ELSE N/A	-- (pc_BIP_eFDD OR pc_BIP_eTDD) AND O_SMS_SGs_MT AND O_PS_Data_Off
C229	IF (A.1/132 OR A.1/133 OR A.1/177) THEN M ELSE N/A	-- pc_BIP_eFDD OR pc_BIP_eTDD OR pc_BIP_NB
C230	A.1/17 AND A.1/178 AND (A.1/132 OR A.1/133 OR A.1/177) THEN M ELSE N/A	-- O_UDP AND pc_Multiple_PDN AND (pc_BIP_eFDD OR pc_BIP_eTDD OR pc_BIP_NB)
C231	IF A.1/187 THEN M ELSE N/A	-- pc_NG_RAN
C232	IF (A.1/187 AND A.1/188) THEN M ELSE N/A	-- pc_NG_RAN AND pc_BIP_NG_RAN
C233	IF (A.1/191) THEN M ELSE N/A	--O_SUPI_NAI
C234	IF A.1/187 AND A.1/195 THEN M ELSE N/A	-- pc_NG_RAN AND O_Set_DN_Specific_ID
C235	IF (A.1/187 AND A.1/196) THEN M ELSE N/A	-- pc_NG_RAN AND pc_CAG
C236	IF A.1/197 THEN M ELSE N/A	-- pc_nonTerrestrialNetwork_r17
C237	IF (A.1/81 AND A.1/187) THEN M ELSE N/A	-- O_Geo_Location_Discovery AND pc_NG_RAN
C238	IF (A.1/83 AND A.1/187) THEN M ELSE N/A	-- O_Toolkit_GBA AND pc_NG_RAN
C239	IF (A.1/187 AND A.1/199) THEN M ELSE N/A	-- pc_NG_RAN AND pc_SORCMCI

C240	IF (A.1/187 AND A.1/200) THEN M ELSE N/A	-- pc_NG_RAN AND O_Slice_Status_change_Event

O.1	IF A.1/zz tests x.yA M ELSE tests x.yB M (where zz corresponds to the option relating to the command being tested (e.g. A.1/90 if Display Text supports icons as defined in record 1 of EF(IMG)) and x.y is the expected sequence number value)	
O.2	IF A.1/zz tests x.yA M ELSE tests x.yB M (where zz corresponds to the option relating to the command being tested (e.g. A.1/91 if Display Text supports icons as defined in record 2 of EF(IMG)) and x.y is the expected sequence number value)	
O.3	void	
O.4	IF A.1/zz AND A.1/ww tests x.yA M ELSE tests x.yB M (where zz and ww correspond to the option relating to the command being tested (e.g. A.1/90 if Display Text supports icons as defined in record 1 of EF(IMG) and A.1.92 if Display Text supports icons as defined in record 5 of EF(IMG)) and x.y is the expected sequence number value)	
TCEP001	IF NOT A.1/84 THEN during the test execution, the display or the non-display of any alpha identifier, text string or icon shall be treated as successfully verified.	
TCEP002	IF NOT A.1/85 THEN the terminal may open the channel without explicit confirmation by the user.	
TCEP003	If A.1/181 and/or A.1/182 is supported, in addition to the test case initial conditions, any specific information or particular UE configurations required to ensure that the UE performs UICC deactivation/suspension in PSM shall be provided by the UE manufacturer	
TCEP004	If A.1/183 is supported, in addition to the test case initial conditions, any specific information or particular UE configurations required to ensure that the UE suspends the UICC in eDRX shall be provided by the UE manufacturer	
AER001	IF ((A.1/21 AND A.1/17) AND ((A.1/132 OR A.1/133) AND (A.1/134 OR A.1/64))) THEN R(27.22.4.27.6, Seq. 6.1) ELSE A	-- (O_BIP_GPRS AND O_UDP) AND (pc_BIP_eFDD OR pc_BIP_eTDD) AND (O_UTRAN OR O_GERAN)
AER002	IF ((A.1/132 OR A.1/133 OR A.1/173) AND (A.1/134 OR A.1/64))) THEN R(27.22.7.4 Seq. 1.2) ELSE A	-- (pc_BIP_eFDD OR pc_BIP_eTDD OR pc_NB) AND (O_GERAN OR O_UTRAN)
AER003	IF ((A.1/132 OR A.1/133) AND (A.1/134 OR A.1/64))) THEN R(27.22.4.15 Seq. 1.17) ELSE A	-- (pc_BIP_eFDD OR pc_BIP_eTDD) AND (O_UTRAN OR O_GERAN)
AER004	IF ((A.1/132 OR A.1/133) AND (A.1/134 OR A.1/64))) THEN R(27.22.4.15 Seq. 1.14) ELSE A	-- (pc_BIP_eFDD OR pc_BIP_eTDD) AND (O_UTRAN OR O_GERAN)
AER005	IF ((A.1/21 AND A.1/17) AND ((A.1/132 OR A.1/133) AND (A.1/134 OR A.1/64))) THEN R(27.22.4.27.6, Seq. 6.4) ELSE A	-- (O_BIP_GPRS AND O_UDP) AND (pc_BIP_eFDD OR pc_BIP_eTDD) AND (O_UTRAN OR O_GERAN)
AER006	IF ((A.1/21 AND A.1/17) AND ((A.1/132 OR A.1/133) AND (A.1/134 OR A.1/64))) THEN R(27.22.4.27.6, Seq. 6.3) ELSE A	-- (O_BIP_GPRS AND O_UDP) AND (pc_BIP_eFDD OR pc_BIP_eTDD) AND (O_UTRAN OR O_GERAN)
AER007	IF ((A.1/21 AND A.1/17) AND ((A.1/132 OR A.1/133) AND (A.1/134 OR A.1/64))) THEN R(27.22.4.27.6, Seq. 6.5) ELSE A	-- (O_BIP_GPRS AND O_UDP) AND (pc_BIP_eFDD OR pc_BIP_eTDD) AND (O_UTRAN OR O_GERAN)
AER008	IF ((A.1/21 AND A.1/17) AND ((A.1/132 OR A.1/133) AND (A.1/134 OR A.1/64))) THEN R(27.22.4.29, Seq. 1.2) ELSE A	-- (O_BIP_GPRS AND O_UDP) AND (pc_BIP_eFDD OR pc_BIP_eTDD) AND (O_UTRAN OR O_GERAN)

3.5 Conventions for mathematical notations

The conventions for mathematical notations specified below shall apply.

3.5.1 Mathematical signs

The "plus or minus" sign is expressed by "±".

The sign "multiplied by" is expressed by "*".

The sign "divided by" is expressed by "/", or the common division bar.

The sign "greater than or equal to" is expressed by "≥".

The sign "less than or equal to" is expressed by "≤".

4 Test equipment

The test equipment is specified in TS 34.108 [12] clause 4.

5 Testing methodology in general

When possible the present document refers to ETSI TS 102 384 [26] to describe generic aspects of application toolkit tests.

5.1 Testing of optional functions and procedures

Any function or procedure which is optional, as indicated in the present document, may be subject to a conformance test if it is implemented in the ME.

5.2 Test interfaces and facilities

The UICC and NG-SS/NB-SS/E-USS/USS/SS interfaces provide the main test interfaces for the purpose of performing conformance tests.

The tests which require a network simulator shall be carried out with using a Next Generation System Simulator when accessing a NG-RAN, a NB System Simulator when accessing an E-UTRAN in NB-S1 mode, an Evolved Universal System Simulator when accessing an E-UTRAN in WB-S1 mode, a Universal System Simulator when accessing a UTRAN, and if these tests have to be performed additionally when accessing a GERAN a System Simulator shall be used instead.

5.3 Information to be provided by the apparatus supplier

The information to be provided by the apparatus supplier specified in TS 38.508-1 [39], TS 36.523-2 [34], TS 36.508 [33], TS 34.108 [12] and TS 51.010-1 [23] shall apply, unless otherwise specified in the present clause.

In addition, the apparatus supplier shall provide the information with respect to the Supported Option table A.1 and to ME's default configuration table A.2.

Table A.2: ME's default configuration

Item	Description	Value	Status
1	DISPLAY TEXT: No Response from user timeout interval		C
2	GET INKEY: No response from user Timeout interval		C
3	GET INPUT: No response from user Timeout interval		C

4	SELECT ITEM: No response from user Timeout interval		C
5	DISPLAY TEXT Text Attributes Alignment [Left or Center or Right]		C
6	GET INKEY Text Attributes Alignment [Left or Center or Right]		C
7	GET IMPUT Text Attributes Alignment [Left or Center or Right]		C
8	PLAY TONE Text Attributes Alignment [Left or Center or Right]		C
9	SET UP MENU Text Attributes Alignment [Left or Center or Right]		C
10	SELECT ITEM Text Attributes Alignment [Left or Center or Right]		C
11	SEND SHORT MESSAGE Text Attributes Alignment [Left or Center or Right]		C
12	SEND SS Text Attributes Alignment [Left or Center or Right]		C
13	SEND USSD Text Attributes Alignment [Left or Center or Right]		C
14	SET UP CALL Text Attributes Alignment [Left or Center or Right]		C
15	SET UP IDLE MODE TEXT Text Attributes Alignment [Left or Center or Right]		C
16	RUN AT Text Attributes Alignment [Left or Center or Right]		C
17	SEND DTMF Text Attributes Alignment [Left or Center or Right]		C
18	LAUNCH BROWSER Text Attributes Alignment [Left or Center or Right]		C
19	OPEN CHANNEL Text Attributes Alignment [Left or Center or Right]		C
20	CLOSE CHANNEL Text Attributes Alignment [Left or Center or Right]		C
21	RECEIVE DATA Text Attributes Alignment [Left or Center or Right]		C
22	SEND DATA Text Attributes Alignment [Left or Center or Right]		C
23	IMEI		M
24	IMEISV		C
25	[Reserved]		
26	Additional Card Reader Id		C
27	Channel Id		C
28	Manufacturer identification as implemented according to TS 27.007, cl. 5.1		C
29	Preferred buffer size supported by the terminal for Open Channel command		C
Note: Conditional values shall be provided if the corresponding option is supported in the table A.1			

6 Implicit testing

For some 3GPP features conformance is not verified explicitly in the present document. This does not imply that correct functioning of these features is not essential, but that these are implicitly tested to a sufficient degree in other tests.

It should be noted that for these features some aspects have to be and are explicitly tested, e.g. the ability to switch between 1.8v and 3v operation.

Some UICC features will be explicitly tested as result of other tests. These should be identified for the following reason:

- To identify the areas of overlap and thus provide a more efficient testing.

7 Measurement uncertainty

The measured value relating to the corresponding limit shall be used to determine whether or not a terminal equipment meets the requirement. (ETR 028, annex B).

This process is often referred to as "shared risk".

8 Format of tests

In general the following basic format for tests is used:

27.22.X.X. Tested command

27.22.X.X.1 Command tested in «environment #1" (NORMAL, ICONS, UCS2 …)

27.22.X.X.1.1 Definition and applicability

This clause refers back to clause 3.2.2.

27.22.X.X.1.2 Conformance requirement

Only if required, this clause details the necessary core specification references.

27.22.X.X.1.3 Test purpose

This clause details the purpose of the test.

27.22.X.X.1.4 Method of test

27.22.X.X.1.4.1 Initial conditions

If present this clause defines the initial conditions to be established before running each test sequence.

27.22.X.X.1.4.2 Procedure

This clause details the test procedure. Each test sequence shall be carried out independently unless otherwise stated.

- Sequence 1.1 (further initial conditions, added here)

Command 1.1.1
TERMINAL RESPONSE1.1.1A or 1.1.1B
Command 1.1.2
TERMINAL RESPONSE1.1.2

PROACTIVE COMMAND 1.1.1

TERMINAL RESPONSE 1.1.1A

TERMINAL RESPONSE 1.1.1B

PROACTIVE COMMAND 1.1.2

TERMINAL RESPONSE 1.1.2

- Sequence 1.2

Command 1.2.1
TERMINAL RESPONSE 1.2.1
Command 1.2.2
TERMINAL RESPONSE1.2.2 (same as TERMINAL RESPONSE 1.2.1)
Command 1.2.3
TERMINAL RESPONSE 1.2.3

PROACTIVE COMMAND 1.2.1

PROACTIVE COMMAND 1.2.2

PROACTIVE COMMAND 1.2.3

TERMINAL RESPONSE 1.2.1

TERMINAL RESPONSE 1.2.2

TERMINAL RESPONSE 1.2.3

- Sequence 1.3

Command 1.3.1
TERMINAL RESPONSE1.3.1

PROACTIVE COMMAND 1.3.1

TERMINAL RESPONSE 1.3.1

27.22.X.X.1.5 Test requirement

This clause details the conditions to be met for successful completion of the test.

27.22.X.X.2 Command tested in "environment #2" (NORMAL, ICONS, UCS2 …)

27.22.X.X. 2.1 Definition and applicability

27.22.X.X. 2.2 Conformance requirement

27.22.X.X. 2.3 Test purpose

27.22.X.X. 2.4 Method of test

27.22.X.X. 2.4.1.1 Initial conditions

27.22.X.X. 2.4.1.2 Procedure

- Sequence 2.1

Command 2.1.1
TERMINAL RESPONSE2.1.1A or 2.1.1B
Command 2.1.2
TERMINAL RESPONSE2.1.2

PROACTIVE COMMAND 2.1.1

TERMINAL RESPONSE 2.1.1A

TERMINAL RESPONSE 2.1.1B

PROACTIVE COMMAND 2.1.2

TERMINAL RESPONSE 2.1.2

- Sequence 2.2

Command 2.2.1
TERMINAL RESPONSE 2.2.1
Command 2.2.2
TERMINAL RESPONSE 2.2.2 (same as TERMINAL RESPONSE 2.2.1)
Command 2.2.3
TERMINAL RESPONSE 2.2.3

PROACTIVE COMMAND 2.2.1

PROACTIVE COMMAND 2.2.2

PROACTIVE COMMAND 2.2.3

Coding TERMINAL RESPONSE 2.2.1

Coding TERMINAL RESPONSE 2.2.2

Coding TERMINAL RESPONSE 2.2.3

27.22.X.X.2.5 Test requirement

9 Generic call set up procedures

The generic call set up procedure for PS and CS calls specified for GERAN, UTRAN, E-UTRAN and NG-RAN shall apply.

For a ME accessing E-UTRAN in NB-S1 mode the procedures defined in TS 36.508 [33] shall be the basis for all performed procedures during the test. The procedures in TS 36.508 [33] clause 8.1.5 describe the default behaviour of a conformant ME regarding the specified protocols to be used for E-UTRAN in NB-S1 mode and the required procedures from the NAS.

For a ME accessing E-UTRAN in WB-S1 mode the procedures defined in TS 36.508 [33] shall be the basis for all performed procedures during the test. The procedures in TS 36.508 [33] clause 4.5 describe the default behaviour of a conformant ME regarding the specified protocols to be used for E-UTRAN in WB-S1 mode and the required procedures from the NAS.

For a ME accessing UTRAN the call set up procedures specified in TS 34.108 [12] clause 7.2 shall be the basis for all performed procedures during the test. The procedures in TS 34.108 [12] clause 7 describe the default behaviour of a conformant UE regarding the specified protocols to be used for UTRAN and the required procedures from the NAS.

For a ME accessing GERAN the call set up procedures specified in TS 51.010-1 [23] clause 26.9 shall apply, for session setup the ones defined in clauses 45.2 and 45.4, unless otherwise specified in the present clause.

For a ME accessing NG-RAN the procedures defined in TS 38.508-1 [39] shall be the basis for all performed procedures during the test. The procedures in TS 38.508-1 [39] clause 4.5 describe the default behaviour of a conformant ME regarding the specified protocols to be used for NG-RAN and the required procedures from the NAS.

10 - 26 Not used

27 Testing of the UICC/ME interface

27.0 Introduction

This clause is an addition to TS 31.121 [21] to confirm the correct interpretation of the USIM Application Toolkit commands and the correct operation of the Toolkit facilities.

The definitions, declarations and default values specified in TS 31.121 [21] clause 4.1 shall apply, unless otherwise specified in the present clause.

A USIM Simulator with the appropriate USIM Application Toolkit functionality will be required. Alternatively, USIMs programmed with specific data and USIM Application Toolkit applets may be used. The USIM data defined below shall be used for all test cases unless otherwise specified within the test case.

The comprehension required flags in SIMPLE-TLV objects that are included in a TERMINAL RESPONSE or an ENVELOPE shall be set as described in TS 31.111 [15]. This means that in cases where it is up to the ME to decide if this flag is used or not, the corresponding Tag coding in the TERMINAL RESPONSEs and ENVELOPEs in this document represents only one of the two valid possibilities.

TS 31.111 [15] defines that in case of the general result "Command performed successfully" some proactive commands require additional information in the command result and in which cases this is mandatory or optional. Thus when additional information bytes are optional in the Result TLV, the additional information bytes of the Result TLVin the Terminal Responses shall be ignored.

27.1 - 27.21 Void

27.22 USIM Application Toolkit

27.22.1A General Test purpose

Testing of functional conformance to USIM Application Toolkit commands, including proactive UICC commands.

All facilities given by the TERMINAL PROFILE as supported, for which tests exist in the present document, shall be tested.

Many of the proactive UICC commands include an alpha identifier data object. This is intended to be a short one or two word identifier for the ME to optionally display on the screen along with any other indications, at the same time as the ME performs the UICC command.

Note: The sequence of USIM Application Toolkit commands are specific to the Toolkit Application being executed within the UICC, hence sequential testing of commands is not possible. The testing will therefore have to be performed on a command by command basis.

27.22.2A Definition of default values for USIM Application Toolkit testing

A UICC containing the following default values is used for all tests of this clause unless otherwise stated.

For each item, the logical default values and the coding within the Elementary Files (EF) of the USIM follow, as defined in:

- TS 31.121 [21], clause 4.1.
- ETSI TS 102 384 [26], clause 27.22.1B.

Note 1: Bx represents byte x of the coding.

Note 2: Unless otherwise defined, the coding values in binary.

EF_{UST} (USIM Service Table)

Logically:

Service n°1:	Local Phone Book	available
Service n°2:	Fixed Dialling Numbers (FDN)	available
Service n°6:	Barred Dialling Numbers (BDN)	available
Service n°10:	Short Message Storage (SMS)	available
Service n°11:	Short Message Status Reports (SMSR)	available
Service n°12:	Short Message Service Parameters (SMSP)	available
Service n°15:	Cell Broadcast Message Identifier	available
Service n°17:	Group Identifier Level 1	not available
Service n°18:	Group Identifier Level 2	not available
Service n°20:	User controlled PLMN selector with Access Technology	available
Service n°22:	Image (IMG)	available
Service n°27:	GSM Access	available
Service n°28:	Data download via SMS-PP	available
Service n°29:	Data download via SMS-CB	available
Service n°30:	Call Control by USIM	not available
Service n°31:	MO-SMS Control by USIM	not available
Service n°32:	RUN AT COMMAND command	available
Service n°33:	shall be set to '1'	available
Service n°34:	Enabled Services Table	available
Service n°85	EPS Mobility Management Information	not available
Service n°86	Allowed CSG Lists and corresponding indications	not available

Byte:	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**
binary	xx1x xx11	x1xx 111x	xx1x 1x00	1001 11xx	xxx xx11	xxxx xxxx
	B7	**B8**	**B9**	**B10**	**B11**	
	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx	xx00 xxxx	

The coding of EF_{UST} shall conform with the capabilities of the USIM used.

EF_{EST} (Enabled Services Table)

Logically:

Service n°1:	Fixed Dialling Numbers (FDN)
Service n°2:	Barred Dialling Numbers (BDN)
Service n°3:	APN Control List (ACL)

Byte:	**B1**
Coding	00

EF_{IMSI} (International Mobile Subscriber Identity)

Logically:

Length:	8 bytes
IMSI:	001 01 0123456789

Coding:	'08 09 10 10 10 32 54 76 98'

EF_{AD} (Administrative Data)

Logically: Type approval operations
OFM to be deactivated by the Terminal
MNC: 2 digit

Coding:	B1	B2	B3	B4

Hex	80	00	00	02

EF_{LOCI} (Location Information)

Logically:

LAI-MCC: 001
LAI-MNC: 01
LAI-LAC: 0001
TMSI: "FF .. FF"

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11
Hex	FF	FF	FF	FF	00	F1	10	00	01	FF	00

EF_{PSLOCI} (Packet Switch Location Information)

Logically:

RAI-MCC: 001
RAI-MNC: 01
RAI-LAC: 0001
RAI-RAC: 05
P-TMSI: "FF….FF"
P-TMSI signature value:"FF…FF"

Coding:	B1	B2	B3	B4	B5	B6	B7
Hex	FF	FF	FF	FF	FF	FF	FF

Coding:	B8	B9	B10	B11	B12	B13	B14
Hex	00	F1	10	00	01	05	00

EF_{CBMI} (Cell Broadcast Message Identifier)

Logically:

Cell Broadcast Message Identifier 1: '03 E7'

Coding:	03	E7	FF	..	FF						

EF_{CBMID} (Cell Broadcast Message Identifier for Data Download)

Logically:

Cell Broadcast Message Identifier 1: '10 01'

Coding:	10	01	FF	..	FF						

EF_{FDN} (Fixed Dialling Numbers)

Logically:

Record 1: Length of alp ha identifier: 6 characters;
Alpha identifier: "FDN111";
Length of BCD number: "03";
TON and NPI: Telephony and unknown;
Dialled number: 123;
CCI: None;
Ext2: None.

Coding for record 1:

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13
Hex	46	44	4E	31	31	31	03	81	21	F3	FF	FF	FF

	B14	B15	B16	B17	B18	B19	B20						
	FF	FF	FF	FF	FF	FF	FF						

Record 2: Length of alpha identifier: 6 characters;
Alpha identifier: "FDN222";
Length of BCD number: "03";
TON and NPI: Telephony and Unknown;
Dialled number: 9876;
CCI: None;
Ext2: None.

Coding for record 2:

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13
Hex	46	44	4E	32	32	32	03	81	89	67	FF	FF	FF

	B14	B15	B16	B17	B18	B19	B20						
	FF	FF	FF	FF	FF	FF	FF						

Record 3: Length of alpha identifier: 6 characters;
Alpha identifier: "FDN333";
Length of BCD number: "0B";
TON and NPI: Telephony and International;
Dialled number: +12345678901234567890;
CCI: None;
Ext2: None.

Coding for record 3:

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13
Hex	46	44	4E	33	33	33	0B	91	21	43	65	87	09

	B14	B15	B16	B17	B18	B19	B20						
	21	43	65	87	09	FF	FF						

EF_{BDN} (Barred Dialling Numbers)

Logically:

Record 1: Length of alpha identifier: 6 characters;
Alpha identifier: "BDN111";
Length of BCD number: "06";
TON and NPI: Telephony and International;
Dialled number: +1357924680;
CCI: None;
Ext4: None
Comprehension method pointer: None.

Coding for record 1:

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13
Hex	42	44	4E	31	31	31	06	91	31	75	29	64	08

	B14	B15	B16	B17	B18	B19	B20	B21					
	FF	FF	FF	FF	FF	FF	FF	FF					

Record 2: Length of alpha identifier: 6 characters;
Alpha identifier: "BDN222";
Length of BCD number: "03";
TON and NPI: Telephony and Unknown;
Dialled number: 122;
CCI: None;
Ext4: None
Comprehension method pointer: None.

Coding for record 2:

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13
Hex	42	44	4E	32	32	32	04	81	21	F2	FF	FF	FF

	B14	B15	B16	B17	B18	B19	B20	B21					
	FF	FF	FF	FF	FF	FF	FF	FF					

Record 3: Length of alpha identifier: 6 characters;
Alpha identifier: "BDN333";
Length of BCD number: "03";
TON and NPI: Telephony and Unknown;
Dialled number: 112;
CCI: None;
Ext4: None.
Comprehension method pointer: None

Coding for record 3:

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13
Hex	42	44	4E	33	33	33	03	81	11	F2	FF	FF	FF

	B14	B15	B16	B17	B18	B19	B20	B21					
	FF	FF	FF	FF	FF	FF	FF	FF					

EF_{ECC} (Emergency Call Codes)

Logically: Emergency call code: "122";
Emergency call code alpha identifier: "TEST";
Emergency call Service Category: RFU

Coding:	B1	B2	B3	B4	B5	B6	B7	B8
Hex	21	F2	FF	54	45	53	54	00

EF_{SMSS} (SMS Status)

Logically: Last used TP-MR set to"00".
Memory capacity available (flag unset b1="1").

Coding:	B1	B2
Hex	00	FF

EF_{SMSP} (Short message service parameters)

Logically:

Record 1:
Record length: 28 bytes
Parameter Indicators:

TP-Destination Address: Parameter absent
TS-Service Centre Address: Parameter present
TP-Protocol Identifier: Parameter absent
TP-Data Coding Scheme: Parameter absent
TP-Validity Period: Parameter absent

TS-Service Centre Address:
TON: International Number
NPI: "ISDN / telephone numbering plan"
Dialled number string: "112233445566778"

Coding:	B1	B2	B3	...	B13	B14	B15	B16	B17	B18	B19	B20	B21	B22	B23
Record 1:	FD	FF	FF	...	FF	09	91	11	22	33	44	55	66	77	F8

B24	B25	B26	B27	B28
FF	FF	FF	FF	FF

For the display of icon: See ETSI TS 102 384 [26] clause 27.22.1B.

27.22.2B Definition of default values for LTE related USIM Application Toolkit testing

27.22.2B.1 Definition of E-UTRAN/EPC UICC

For each item, the logical default values and the coding within the Elementary Files (EF) of the USIM follow, as defined in clause 27.22.2A of the present document with the following execptions:

EF_{UST} (USIM Service Table)

Logically:

Settings from 27.22.2A of the present document apply with the following changes:

Service n°85 EPS Mobility Management Information available

Byte:	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**
binary	xx1x xx11	x1xx 111x	xx1x 1x00	1001 11xx	xxx xx11	xxxx xxxx
	B7	**B8**	**B9**	**B10**	**B11**	
	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx	xx01 xxxx	

The coding of EF_{UST} shall conform with the capabilities of the USIM used.

$EF_{EPSLOCI}$ (EPS Information)

Logically: GUTI: 00101000102663411122
Last visited registered TAI: 001/01/0001
EPS update status: not updated

Byte:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11
Hex:	0B	F6	00	F1	10	00	01	02	66	43	11

	B12	B13	B14	B15	B16	B17	B18				
	22	00	F1	10	00	01	01				

EF_{EPSNSC} (EPS NAS Security Context)

Logically: Key Set Identifier KSI_{ASME}: '07' (no key available)

ASME Key (KSI_{ASME}): 32 byte key, any value
Uplink NAS count: '00'
Downlink NAS count: '00'
Identifiers of selected NAS
integrity and encryption algorithm: 'FF'

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	…	…	…	…
Hex	A0	34	80	01	07	81	20	xx	…	…	…	…
	…	**…**	**B39**	**B40**	**B41**	**B42**	**B43**	**B44**	**B45**	**B46**	**B47**	**B48**
			xx	82	04	00	00	00	00	83	04	00
	B49	**B50**	**B51**	**B52**	**B53**	**B54**						
	00	00	00	84	01	FF						

27.22.2B.2 Definition of E-UTRAN parameters

The default E-UTRAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 0001;
- Cell Identity value = 0001;

The default EPS bearer context is defined in "Reference default EPS bearer context #1" in cl. 6.6.1 of TS 36.508 [33].

The default PDP type shall be "IP".

27.22.2C Definition of E-UTRAN/EPC ISIM-UICC

27.22.2C.1 Applications on the E-UTRAN/EPC ISIM-UICC

The E-UTRAN/EPC ISIM-UICC shall contain a USIM as defined in clause 27.22.2B.1 and an ISIM as defined in clause 27.22.2C.3.

27.22.2C.2 Default USIM values of E-UTRAN/EPC ISIM-UICC

The E-UTRAN/EPC ISIM-UICC related test cases require a USIM to access the E-UTRAN/EPC. For this purpose the USIM shall be configured as defined in clause 27.22.2B.1.

27.22.2C.3 Default ISIM values of E-UTRAN/EPC ISIM-UICC

The E-UTRAN/EPC ISIM-UICC shall contain an ISIM for IMS access with the following values:

27.22.2C.3.1 EF_{AD} (Administrative Data)

Logically: Type approval operations

Byte:	B01	B02	B03
Coding:	80	00	00

27.22.2C.3.2 EF_{IST} (ISIM Service Table)

Logically:

Service n°1:	P-CSCF address	available
Service n°2	Generic Bootstrapping Architecture (GBA)	not available
Service n°3	HTTP Digest	not available
Service n°4	GBA-based Local Key Establishment Mechanism	not available

Service n°5	Support of P-CSCF discovery for IMS Local Break Out	not available
Service n°6	Short Message Storage (SMS)	available
Service n°7	Short Message Status Reports (SMSR)	available
Service n°8	Support for SM-over-IP including data download via SMS-PP as defined in TS 31.111 [31]	available

Byte:	B1
Coding:	111x xxx1

27.22.2C.3.3 EF_{IMPI} (IMS private user identity)

Logically: 001010123456789@test.3gpp.com

Byte:	B01	B02	B03	B04	B05	B06	B07	B08	B09	B10
Coding:	80	1D	30	30	31	30	31	30	31	32
	B11	**B12**	**B13**	**B14**	**B15**	**B16**	**B17**	**B18**	**B19**	**B20**
	33	34	35	36	37	38	39	40	74	65
	B21	**B22**	**B23**	**B24**	**B25**	**B26**	**B27**	**B28**	**B29**	**B30**
	73	74	2E	33	67	70	70	2E	63	6F
	B31	**B32**	**B33**	**B34**	**B35**	**B36**	**B37**	**B38**	**B39**	**B40**
	6D	FF	FF	FF	FF	FF	FF	FF	FF	FF

27.22.2C.3.4 EF_{DOMAIN} (Home Network Domain Name)

Logically: test.3gpp.com

Byte:	B01	B02	B03	B04	B05	B06	B07	B08	B09	B10
Coding:	80	0D	74	65	73	74	2E	33	67	70
	B11	**B12**	**B13**	**B14**	**B15**	**B16**	**B17**	**B18**	**B19**	**B20**
	70	2E	63	6F	6D	FF	FF	FF	FF	FF

27.22.2C.3.5 EF_{IMPU} (IMS public user identity)

Record 1:

Logically: sip:001010123456789@ims.mnc246.mcc081.3gppnetwork.org

Byte:	B01	B02	B03	B04	B05	B06	B07	B08	B09	B10
Coding:	80	35	73	69	70	3A	30	30	31	30
	B11	**B12**	**B13**	**B14**	**B15**	**B16**	**B17**	**B18**	**B19**	**B20**
	31	30	31	32	33	34	35	36	37	38
	B21	**B22**	**B23**	**B24**	**B25**	**B26**	**B27**	**B28**	**B29**	**B30**
	39	40	69	6D	73	2E	6D	6E	63	32
	B31	**B32**	**B33**	**B34**	**B35**	**B36**	**B37**	**B38**	**B39**	**B40**
	34	36	2E	6D	63	63	30	38	31	2E
	B41	**B42**	**B43**	**B44**	**B45**	**B46**	**B47**	**B48**	**B49**	**B50**
	33	67	70	70	6E	65	74	77	6F	72
	B51	**B52**	**B53**	**B54**	**B55**	**B56**	**B57**	**B58**	**B59**	**B60**
	6B	2E	6F	72	67	FF	FF	FF	FF	FF

Record 2:

Logically: sip:+11234567890@test.3gpp.com

Byte:	B01	B02	B03	B04	B05	B06	B07	B08	B09	B10
Coding:	80	1E	73	69	70	3A	2B	31	31	32
	B11	**B12**	**B13**	**B14**	**B15**	**B16**	**B17**	**B18**	**B19**	**B20**
	33	34	35	36	37	38	39	30	40	74
	B21	**B22**	**B23**	**B24**	**B25**	**B26**	**B27**	**B28**	**B29**	**B30**
	65	73	74	2E	33	67	70	70	2E	63
	B31	**B32**	**B33**	**B34**	**B35**	**B36**	**B37**	**B38**	**B39**	**B40**

6F	6D	FF	FF	FF	FF	FF	FF	FF	FF
B41	**B42**	**B43**	**B44**	**B45**	**B46**	**B47**	**B48**	**B49**	**B50**
FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
B51	**B52**	**B53**	**B54**	**B55**	**B56**	**B57**	**B58**	**B59**	**B60**
FF	FF	FF	FF	FF	FF	FF	FF	FF	FF

Record 3:

Logically: tel:+11234567890

Byte:	**B01**	**B02**	**B03**	**B04**	**B05**	**B06**	**B07**	**B08**	**B09**	**B10**
Coding:	80	10	74	65	6C	3A	2B	31	31	32
	B11	**B12**	**B13**	**B14**	**B15**	**B16**	**B17**	**B18**	**B19**	**B20**
	33	34	35	36	37	38	39	30	FF	FF
	B21	**B22**	**B23**	**B24**	**B25**	**B26**	**B27**	**B28**	**B29**	**B30**
	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
	B31	**B32**	**B33**	**B34**	**B35**	**B36**	**B37**	**B38**	**B39**	**B40**
	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
	B41	**B42**	**B43**	**B44**	**B45**	**B46**	**B47**	**B48**	**B49**	**B50**
	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
	B51	**B52**	**B53**	**B54**	**B55**	**B56**	**B57**	**B58**	**B59**	**B60**
	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF

27.22.2C.3.6 $EF_{P\text{-}CSCF}$ (P-CSCF ADDRESS)

Logically:

Address Type: FQDN
P-CSCF Address: pcscf1.anyims.test.3gpp.com

Byte:	**B01**	**B02**	**B03**	**B04**	**B05**	**B06**	**B07**	**B08**	**B09**	**B10**
Coding:	80	1C	00	70	63	73	63	66	31	2E
	B11	**B12**	**B13**	**B14**	**B15**	**B16**	**B17**	**B18**	**B19**	**B20**
	61	6E	79	69	6D	73	2E	74	65	73
	B21	**B22**	**B23**	**B24**	**B25**	**B26**	**B27**	**B28**	**B29**	**B30**
	74	2E	33	67	70	70	2E	63	6F	6D
	B31	**B32**	**B33**	**B34**	**B35**	**B36**	**B37**	**B38**	**B39**	**B40**
	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF

Note: This EF does not apply for 3GPP and shall not be used by a terminal using a 3GPP access network or a 3GPP Interworking WLAN.

27.22.2C.3.7 EF_{SMS} (Short Message Service)

At least 10 records.
All records shall be empty.

Logically: Status byte set to empty.

Record 1-x (x ≥10):

Byte:	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**B8**	**B9**	**B10**	**B11**	**B12**	**…**	**B176**
Coding:	00	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	…	FF

27.22.2C.3.8 EF_{SMSR} (Short message status reports)

This EF shall contain as many records as EF_{SMS}.
All records shall be empty.

Logically: Status byte set to empty.

Record 1-x (x ≥10):

Byte:	**B01**	**B02**	**B03**	**B04**	**B05**	**B06**	**B07**	**B08**	**B09**	**B10**
Coding:	00	FF	FF	FF	FF	FF	FF	FF	FF	FF
	B11	**B12**	**B13**	**B14**	**B15**	**B16**	**B17**	**B18**	**B19**	**B20**
	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
	B21	**B22**	**B23**	**B24**	**B25**	**B26**	**B27**	**B28**	**B29**	**B30**
	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF

27.22.2C.3.9 EF_{SMSP} (Short message service parameters)

Logically:

Record 1:
Record length: 28 bytes
Parameter Indicators:
TP-Destination Address: Parameter absent
TS-Service Centre Address: Parameter present
TP-Protocol Identifier: Parameter absent
TP-Data Coding Scheme: Parameter absent
TP-Validity Period: Parameter absent
TS-Service Centre Address:
TON: International Number
NPI: "ISDN / telephone numbering plan"
Dialled number string: "112233445566778"

Byte:	B1	B2	B3	...	B13	B14	B15	B16	B17	B18	B19	B20	B21	B22	B23
Coding:	FD	FF	FF	...	FF	09	91	11	22	33	44	55	66	77	F8
	B24	B25	B26	B27	B28										
	FF	FF	FF	FF	FF										

a) All other records shall be empty.

27.22.2C.3.10 EF_{SMSS} (SMS Status)

Logically: Last used TP-MR set to"00".
a) Memory capacity available (flag unset b1="1").

Byte:	B1	B2
Coding:	00	FF

27.22.2C.4 Default values at DF_TELECOM

27.22.2C.4.1 $EF_{PSISMSC}$ (Public Service Identity of the SM-SC)

1 record only.

Logically:
Record 1:
Public Service Identity of the SM-SC: tel:+112233445566778

Byte:	**B01**	**B02**	**B03**	**B04**	**B05**	**B06**	**B07**	**B08**	**B09**	**B10**
Coding:	80	14	74	65	6C	3A	2B	31	31	32
	B11	**B12**	**B13**	**B14**	**B15**	**B16**	**B17**	**B18**	**B19**	**B20**
	32	33	33	34	34	35	35	36	36	37
	B21	**B22**	**B23**	**B24**	**B25**	**B26**	**B27**	**B28**	**…**	**Bxx**

37	38	FF	FF	FF	FF	FF	FF	…	FF

27.22.2D Definition of default values for NG-RAN related USIM Application Toolkit testing

27.22.2D.1 Definition of NG-RAN UICC

For each item, the logical default values and the coding within the Elementary Files (EF) of the USIM follow, as defined in clause 27.22.2B of the present document with the following exceptions:

EF_{UST} (USIM Service Table)

Logically:

Settings from 27.22.2B of the present document apply with the following changes:

Service n°86	Allowed CSG Lists and corresponding indications	available
Service n°122	5GS Mobility Management Information	available
Service n°123	5G Security Parameters	available
Service n°124	Subscription identifier privacy support	available
Service n°125	SUCI calculation by the USIM	not available

Byte:	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**B8**
binary:	xxxx xx1x	xxxx xxxx	xxxx 1x00	xxxx x1xx	xxxx xx11	xxxx xxxx	xxxx xxxx	xxxx xxxx
	B9	**B10**	**B11**		**B16**			
	xxxx xxxx	xxxx xxxx	xx11 xxxx	.....	xxx0 111x			

The coding of EF_{UST} shall conform with the capabilities of the USIM used.

$EF_{5GS3GPPLOCI}$ (5GS 3GPP location information)

Logically:

5G-GUTI:FF FF FF FF FF FF FF FF FF FF FF FF FF

TAI: 246 081 000000

5GS update status: 5U2 NOT UPDATED

Coding:	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**B8**
Hex	FF	FF	FF	FF	FF	FF	FF	FF
	B9	**B10**	**B11**	**B12**	**B13**	**B14**	**B15**	**B16**
	FF	FF	FF	FF	FF	42	16	80
	B17	**B18**	**B19**	**B20**				
	00	00	00	01				

$EF_{SUCI\_Calc\_Info}$ (Subscription Concealed Identifier Calculation Information EF)

Logically:

Protection Scheme Identifier List data object

Protection Scheme Identifier 1 – null

Key Index 1: 0

Coding:	B1	B2	B3	B4	B5	B6
Hex	A0	02	00	00	A1	00

$EF_{Routing\_Indicator}$ (Routing Indicator EF)

Logically:

Routing Indicator: 17

Coding:	B1	B2	B3	B4
Hex	71	FF	00	00

$EF_{5GS3GPPNSC}$ (5GS 3GPP Access NAS Security Context EF)

Logically:

5GS NAS Security Context:

ngKSI: 00

K_{AMF}: 32 bytes, value not checked

Uplink NAS count: any value

Downlink NAS count: any value

Identifiers of selected NAS integrity and encryption algorithms: any value

Identifiers of selected EPS NAS integrity and encryption algorithms for use after mobility to EPS: any value

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	Bx
Hex	A0	XX	80	01	00	81	xx	xx	…	xx

27.22.2D.2 Definition of NG-RAN cell parameters

The default NG-RAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 000001;
- Cell Identity value = 0001 (36 bits);

27.22.2D.3 Definition of NG-RAN UICC supporting Rel-17 features

For each item, the logical default values and the coding within the Elementary Files (EF) of the USIM follow, as defined in clause 27.22.2D.1 of the present document with the following exceptions:

EF_{UST} (USIM Service Table)

Logically:

Settings from clause 27.22.2D.1 of the present document apply with the following changes:

Service n°147 to n°152 not defined not available

Coding:

Byte:	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**B8**
Binary:	xxxx xx1x	xxxx xxxx	xxxx 1x00	xxxx x1xx	xxxx xx11	xxxx xxxx	xxxx xxxx	xxxx xxxx
	B9	**B10**	**B11**	**…**	**B16**	**B17**	**B18**	**B19**

xxxx xxxx	xxxx xxxx	xx11 xxxx	...	xxx0 111x	xxxx xxxx	xxxx xxxx	0000 00xx

27.22.2D.4 Definition of NG-RAN UICC supporting CAG

For each item, the logical default values and the coding within the Elementary Files (EF) of the USIM follow, as defined in clause 27.22.2D.3 of the present document with the following exceptions:

EF_{UST} (USIM Service Table)

Logically:

Settings from clause 27.22.2D.3 of the present document apply with the following changes:

Service n°137: Preconfigured CAG information list available

Coding:

Byte:	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**B8**
Binary:	xxxx xx1x	xxxx xxxx	xxxx 1x00	xxxx x1xx	xxxx xx11	xxxx xxxx	xxxx xxxx	xxxx xxxx
	B9	**B10**	**B11**	**…**	**B16**	**B17**	**B18**	**B19**
	xxxx xxxx	xxxx xxxx	xx11 xxxx	...	xxx0 111x	xxxx xxxx	xxxx xxx1	0000 00xx

EF_{CAG} (Pre-configured CAG information list)

Logically:

PLMN: 244 083 (MCC MNC)

CAG only: 1

Range indication: 1

CAG-ID range: 00 00 00 01 – 00 00 00 07

PLMN: 244 084 (MCC MNC)

CAG only: 1

Range indication: 1

CAG-ID range: 00 00 00 01 – 00 00 00 07

Coding:

Byte	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**B8**	**B9**	**B10**
Hex	00	1A	0C	42	34	80	03	00	00	00
	B11	**B12**	**B13**	**B14**	**B15**	**B16**	**B17**	**B18**	**B19**	**B20**
	01	00	00	00	07	0C	42	44	80	03
	B21	**B22**	**B23**	**B24**	**B25**	**B26**	**B27**	**B28**		
	00	00	00	01	00	00	00	07		

27.22.2D.5 Definition of NG-RAN UICC supporting Rel-18 features

For each item, the logical default values and the coding within the Elementary Files (EF) of the USIM follow, as defined in clause 27.22.2D.1 of the present document with the following exceptions:

EF_{UST} (USIM Service Table)

Logically:

Settings from clause 27.22.2D.1 of the present document apply with the following changes:

Service n°151 to n°152 not defined not available

Coding:

Byte:	B1	B2	B3	B4	B5	B6	B7	B8
Binary:	xxxx xx1x	xxxx xxxx	xxxx 1x00	xxxx x1xx	xxxx xx11	xxxx xxxx	xxxx xxxx	xxxx xxxx
	B9	**B10**	**B11**	**…**	**B16**	**B17**	**B18**	**B19**
	xxxx xxxx	xxxx xxxx	xx11 xxxx	...	xxx0 111x	xxxx xxxx	xxxx xxxx	00xx xxxx

27.22.2E Definition of NG-RAN ISIM-UICC

27.22.2E.1 Applications on the NG-RAN ISIM-UICC

The NG-RAN ISIM-UICC shall contain a USIM as defined in clause 27.22.2D.1 and an ISIM as defined in clause27.22.2E.2.

27.22.2E.2 Default ISIM values of NG-RAN ISIM-UICC

The NG-RAN ISIM-UICC shall contain an ISIM for IMS access. The values defined in 27.22.2C.3 shall be used.

27.22.1 Initialization of USIM Application Toolkit Enabled UICC by USIM Application Toolkit Enabled ME (Profile Download)

27.22.1.1 Definition and applicability

See clause 3.2.2.

27.22.1.2 Conformance requirement

The ME shall support the PROFILE DOWNLOAD command as defined in:

- TS 31.111 [15] clause 5.2.

27.22.1.3 Test purpose

To verify that the ME sends a TERMINAL PROFILE command in accordance with the above requirements.

27.22.1.4 Method of test

27.22.1.4.1 Initial conditions

The ME is connected to the USIM Simulator. All elementary files are coded as the default Toolkit personalization..

27.22.1.4.2 Procedure

Expected Sequence 1 (PROFILE DOWNLOAD)

Step	Direction	Message / Action	Comments
1	USER → ME	Power on ME	[UICC Activation]
2	ME → UICC	Select EF PL	
3	UICC → ME	Read EF PL	
4	ME → UICC	TERMINAL PROFILE 1.1	PROFILE DOWNLOAD
5	UICC → ME	NORMAL ENDING OF COMMAND 1.1	
6	ME → UICC	Select USIM Application	

TERMINAL PROFILE: 1.1

Logically:

Coding:

APDU:	CLA=80	INS=10	P1=00	P2=00	P3=XX

DATA IN:	YY	ZZ	…

With XX representing the length of the following DATA IN depending on the USIM Toolkit commands supported by the ME, and with YY, ZZ, … representing here the bytes of the TERMINAL PROFILE data, as specified in TS 31.111 [15], clause 5.2.

NORMAL ENDING OF COMMAND: 1.1

Logically:

Coding:

SW1=90	SW2=00

27.22.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.2 Contents of the TERMINAL PROFILE command

27.22.2.1 Definition and applicability

See table E.1 in annex B.

27.22.2.2 Conformance requirement

The ME shall support the PROFILE DOWNLOAD command as defined in:

- TS 31.111 [15] clause 5.2.

27.22.2.3 Test purpose

1. Verify that the TERMINAL PROFILE indicates that Profile Download facility is supported.
2. Record which USIM Application Toolkit facilities are supported by the ME, to determine which subsequent tests are required.

27.22.2.4 Method of test

27.22.2.4.1 Initial conditions

The ME is connected to the USIM Simulator. All elementary files are coded as the default USIM Application Toolkit personalization.

27.22.1.4.2 Procedure

a) The ME is powered on.

b) After the ME sends the TERMINAL PROFILE command to the USIM Simulator, the USIM Simulator shall record the content of the TERMINAL PROFILE.

c) The USIM Simulator shall return SW1 / SW2 of '90 00'.

d) The contents of the TERMINAL PROFILE is recorded and compared to the corresponding table E.1 "status" column.

The test is terminated upon the ME sending the TERMINAL PROFILE command to the USIM Simulator.

27.22.2.5 Test requirement

1) After step a) the ME shall send the TERMINAL PROFILE command to the USIM Simulator with bit 1 of the first byte set to 1 (facility supported by ME).

2) In table E.1 for the corresponding ME USIM Toolkit Release and Options, The TERMINAL PROFILE information "support" recorded must be in accordance with the "Status" column. Support of features defined only in releases later than currently tested release shall be ignored.

27.22.3 Servicing of proactive UICC commands

27.22.3.1 Definition and applicability

See clause 3.2.2.

27.22.3.2 Conformance requirement

On detection of a pending USIM Application Toolkit command from the UICC the ME shall perform the FETCH command to retrieve the proactive UICC command. The result of the executed command shall be transmitted from the ME to the UICC within a TERMINAL RESPONSE command.

The MORE TIME proactive command is used in this test. The ME shall have knowledge of this command, but may not support this USIM Application Toolkit facility.

- TS 31.111 [15] clause 6.3.

27.22.3.3 Test purpose

To verify that the ME uses the FETCH command to obtain the proactive UICC command, after detection of a pending proactive UICC command. The pending proactive UICC command is indicated by the response parameters '91 xx' from the UICC.

To verify that the ME transmits the result of execution of the proactive UICC command to the UICC in the TERMINAL RESPONSE command.

27.22.3.4 Method of test

27.22.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as the USIM Application Toolkit default.

The USIM Simulator is configured to indicate that a proactive UICC command is pending.

The USIM Simulator is configured to monitor the UICC - ME interface.

27.22.3.4.2 Procedure

a) The ME is powered on.

b) After the ME has performed the PROFILE DOWNLOAD procedure, the USIM Simulator indicates that a Proactive UICC Command is pending with SW1 / SW2 of '91 0B'.

c) After the ME sends the FETCH command to the USIM Simulator, the USIM Simulator returns Proactive UICC Command 2.1: MORE TIME.

27.22.3.5 Test requirement

1) After step b) the ME shall send the FETCH command to the UICC.

2) After step c) the ME shall send the TERMINAL REPONSE command with command number "01", type of command "02" and command qualifier "00".

27.22.4 Proactive UICC commands

27.22.4.1 DISPLAY TEXT

27.22.4.1.1 DISPLAY TEXT (Normal)

27.22.4.1.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.1.2 Conformance requirements

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

TS 31.111 [15], clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.31.

27.22.4.1.1.3 Test purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.1.4 Method of test

27.22.4.1.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.1.4.2 Procedure

Expected Sequence 1.1 (DISPLAY TEXT normal priority, Unpacked 8 bit data for Text String, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.1.1.4.2, Expected Sequence 1.1.

Expected Sequence 1.2 (DISPLAY TEXT normal priority, Unpacked 8 bit data for Text String, screen busy)

See ETSI TS 102 384 [26] in clause 27.22.4.1.1.4.2, Expected Sequence 1.2.

Expected Sequence 1.3 (DISPLAY TEXT, high priority, Unpacked 8 bit data for Text String, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.1.1.4.2, Expected Sequence 1.3.

Expected Sequence 1.4 (DISPLAY TEXT, Packed, SMS default alphabet, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.1.1.4.2, Expected Sequence 1.4.

Expected Sequence 1.5 (DISPLAY TEXT, Clear message after delay, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.1.1.4.2, Expected Sequence 1.5.

Expected Sequence 1.6 (DISPLAY TEXT, Text string with 160 bytes, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.1.1.4.2, Expected Sequence 1.6.

Expected Sequence 1.7 (DISPLAY TEXT, Backward move in UICC session, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.1.1.4.2, Expected Sequence 1.7.

Expected Sequence 1.8 (DISPLAY TEXT, session terminated by user)

See ETSI TS 102 384 [26] in clause 27.22.4.1.1.4.2, Expected Sequence 1.8.

Expected Sequence 1.9 (DISPLAY TEXT, icon and text to be displayed, no text string given, not understood by ME)

See ETSI TS 102 384 [26] in clause 27.22.4.1.1.4.2, Expected Sequence 1.9.

27.22.4.1.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.9.

27.22.4.1.2 DISPLAY TEXT (Support of "No response from user")

27.22.4.1.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.2.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

27.22.4.1.2.3 Test purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive UICC command, and returns a "No response from user" result value in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.2.4 Method of test

27.22.4.1.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

ME Manufacturers shall set the "no response from user" period of time as declared in table A.2/1..

The USIM simulator shall be set to that period of time.

27.22.4.1.2.4.2 Procedure

Expected Sequence 2.1 (DISPLAY TEXT, no response from user)

See ETSI TS 102 384 [26] in clause 27.22.4.1.2.4.2, Expected Sequence.

2.1.27.22.4.1.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

27.22.4.1.3 DISPLAY TEXT (Display of extension text)

27.22.4.1.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.3.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.15.

27.22.4.1.3.3 Test purpose

To verify that the ME displays the extension text contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.3.4 Method of test

27.22.4.1.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.3.4.2 Procedure

Expected Sequence 3.1 (DISPLAY TEXT, display of the extension text)

See ETSI TS 102 384 [26] in clause 27.22.4.1.3.4.2, Expected Sequence 3.1.

27.22.4.1.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1.

27.22.4.1.4 DISPLAY TEXT (Sustained text)

27.22.4.1.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.4.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.15, clause 8.15.

27.22.4.1.4.3 Test purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive UICC command, returns a successful result in the TERMINAL RESPONSE command send to the UICC and sustain the display beyond sending the TERMINAL response.

27.22.4.1.4.4 Method of test

27.22.4.1.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.4.4.2 Procedure

Expected Sequence 4.1 (DISPLAY TEXT, sustained text, unpacked data 8 bits, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.1.4.4.2, Expected Sequence 4.1.

Expected Sequence 4.2 (DISPLAY TEXT, sustained text, clear message after delay, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.1.4.4.2, Expected Sequence 4.2.

Expected Sequence 4.3 (DISPLAY TEXT, sustained text, wait for user MMI to clear, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.1.4.4.2, Expected Sequence 4.3.

Expected Sequence 4.4 (DISPLAY TEXT, sustained text, wait for high priority event to clear, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: DISPLAY TEXT 4.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: DISPLAY TEXT 4.4.1	[wait for user to clear message]
4	ME → USER	Display "Toolkit Test 4"	
5	ME → UICC	TERMINAL RESPONSE: DISPLAY TEXT 4.4.1	[Command performed successfully]
6	UICC → ME	PROACTIVE UICC SESSION ENDED	
7	ME → USER	Display of "Toolkit Test 4"	Text shall sustain until - a higher priority event occurs.
8	USS → ME	INCOMING MOBILE TERMINATED CALL	

PROACTIVE COMMAND: DISPLAY TEXT 4.4.1

Logically:

Command details
Command number: 1
Command type: DISPLAY TEXT
Command qualifier: normal priority, wait for user to clear message
Device identities
Source device: UICC
Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data
Text: "Toolkit Test 4"

Immediate Response

Coding:

BER-TLV:	D0	1C	81	03	01	21	80	82	02	81	02	8D
	0F	04	54	6F	6F	6C	6B	69	74	20	54	65
	73	74	20	34	AB	00						

TERMINAL RESPONSE: DISPLAY TEXT 4.4.1

Logically:

Command details

Command number: 1
Command type: DISPLAY TEXT
Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	21	80	82	02	82	81	83	01	00

27.22.4.1.4.5 Test requirement

The ME shall operate in the manner defined in expected sequences 4.1 to 4.4.

27.22.4.1.5 DISPLAY TEXT (Display of icons)

27.22.4.1.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.5.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.31.

27.22.4.1.5.3 Test purpose

To verify that the ME displays the icons which are referred to in the contents of the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.5.4 Method of test

27.22.4.1.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME screen shall be in its normal stand-by display.

27.22.4.1.5.4.2 Procedure

Expected Sequence 5.1A (DISPLAY TEXT, display of basic icon, self-explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.1.5.4.2, Expected Sequence 5.1A.

Expected Sequence 5.1B (DISPLAY TEXT, display of basic icon, self-explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.1.5.4.2, Expected Sequence 5.1B.

Expected Sequence 5.2A (DISPLAY TEXT, display of colour icon, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.1.5.4.2, Expected Sequence 5.2A.

Expected Sequence 5.2B (DISPLAY TEXT, display of colour icon, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.1.5.4.2, Expected Sequence 5.2B.

Expected Sequence 5.3A (DISPLAY TEXT, display of basic icon, not self explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.1.5.4.2, Expected Sequence 5.3A.

Expected Sequence 5.3B (DISPLAY TEXT, display of basic icon, not self explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.1.5.4.2, Expected Sequence 5.3B.27.22.4.1.5.5 Test requirement

The ME shall operate in the manner defined in expected sequences 5.1A to 5.3B.

27.22.4.1.6 DISPLAY TEXT (UCS2 display in Cyrillic)

27.22.4.1.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.6.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.31.

The ME shall support the UCS2 alphabet for the coding of the Cyrillic alphabet, as defined in the following technical specification: ISO/IEC 10646 [17].

27.22.4.1.6.3 Test purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.6.4 Method of test

27.22.4.1.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.6.4.2 Procedure

Expected Sequence 6.1 (DISPLAY TEXT, UCS2 coded in Cyrillic)

See ETSI TS 102 384 [26] in clause 27.22.4.1.6.4.2, Expected Sequence 6.1.

27.22.4.1.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1.

27.22.4.1.7 DISPLAY TEXT (Variable Time out)

27.22.4.1.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.7.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.31 and clause 8.43.

The ME shall support the variable time out for the display text.

27.22.4.1.7.3 Test purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.7.4 Method of test

27.22.4.1.7.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.7.4.2 Procedure

Expected Sequence 7.1 (DISPLAY TEXT, variable timeout of 10 seconds)

See ETSI TS 102 384 [26] in clause 27.22.4.1.7.4.2, Expected Sequence 7.1.

27.22.4.1.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 7.1.

27.22.4.1.8 DISPLAY TEXT (Support of Text Attribute)

27.22.4.1.8.1 DISPLAY TEXT (Support of Text Attribute – Left Alignment)

27.22.4.1.8.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.8.1.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.31, clause 8.43 and clause 8.70.

The ME shall support the text attribute with Left Alignment for the display text.

27.22.4.1.8.1.3 Test purpose

To verify that the ME displays the text formatted according to the left alignment text attribute configuration contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.8.1.4 Method of test

27.22.4.1.8.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.8.1.4.2 Procedure

Expected Sequence 8.1 (DISPLAY TEXT, Text Attribute with Left Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.1.8.1.4.2, Expected Sequence 8.1.

27.22.4.1.8.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.1.

27.22.4.1.8.2 DISPLAY TEXT (Support of Text Attribute – Center Alignment)

27.22.4.1.8.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.8.2.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.31, clause 8.43 and clause 8.70.

The ME shall support the text attribute with Centre Alignment for the display text.

27.22.4.1.8.2.3 Test purpose

To verify that the ME displays the text formatted according to the center alignment text attribute configuration contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.8.2.4 Method of test

27.22.4.1.8.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.8.2.4.2 Procedure

Expected Sequence 8.2 (DISPLAY TEXT, Text Attribute with Center Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.1.8.2.4.2, Expected Sequence 8.2.

27.22.4.1.8.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.2.

27.22.4.1.8.3 DISPLAY TEXT (Support of Text Attribute – Right Alignment)

27.22.4.1.8.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.8.3.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.31, clause 8.43 and clause 8.70.

The ME shall support the text attribute with Right Alignment for the display text.

27.22.4.1.8.3.3 Test purpose

To verify that the ME displays the text formatted according to the right alignment text attribute configuration contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.8.3.4 Method of test

27.22.4.1.8.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.8.3.4.2 Procedure

Expected Sequence 8.3 (DISPLAY TEXT, Text Attribute with Right Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.1.8.3.4.2, Expected Sequence 8.3.

27.22.4.1.8.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.3.

27.22.4.1.8.4 DISPLAY TEXT (Support of Text Attribute – Large Font Size)

27.22.4.1.8.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.8.4.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.31, clause 8.43 and clause 8.70.

The ME shall support the text attribute with large font size for the display text.

27.22.4.1.8.4.3 Test purpose

To verify that the ME displays the text formatted according to the large size font text attribute configuration contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.8.4.4 Method of test

27.22.4.1.8.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.8.4.4.2 Procedure

Expected Sequence 8.4 (DISPLAY TEXT, Text Attribute with Large Font Size)

See ETSI TS 102 384 [26] in clause 27.22.4.1.8.4.4.2, Expected Sequence 8.4.

27.22.4.1.8.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.4.

27.22.4.1.8.5 DISPLAY TEXT (Support of Text Attribute – Small Font Size)

27.22.4.1.8.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.8.5.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.31, clause 8.43 and clause 8.70.

The ME shall support the text attribute with small font size for the display text.

27.22.4.1.8.5.3 Test purpose

To verify that the ME displays the text formatted according to the small size font text attribute configuration contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.8.5.4 Method of test

27.22.4.1.8.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.8.5.4.2 Procedure

Expected Sequence 8.5 (DISPLAY TEXT, Text Attribute with Small Font Size)

See ETSI TS 102 384 [26] in clause 27.22.4.1.8.5.4.2, Expected Sequence 8.5.

27.22.4.1.8.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.5.

27.22.4.1.8.6 DISPLAY TEXT (Support of Text Attribute – Bold On)

27.22.4.1.8.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.8.6.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.31, clause 8.43 and clause 8.70.

The ME shall support the text attribute with bold on for the display text.

27.22.4.1.8.6.3 Test purpose

To verify that the ME displays the text formatted according to the bold text attribute configuration contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.8.6.4 Method of test

27.22.4.1.8.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.8.6.4.2 Procedure

Expected Sequence 8.6 (DISPLAY TEXT, Text Attribute with Bold On)

See ETSI TS 102 384 [26] in clause 27.22.4.1.8.6.4.2, Expected Sequence 8.6.

27.22.4.1.8.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.6.

27.22.4.1.8.7 DISPLAY TEXT (Support of Text Attribute – Italic On)

27.22.4.1.8.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.8.7.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.31, clause 8.43 and clause 8.70.

The ME shall support the text attribute with italic on for the display text.

27.22.4.1.8.7.3 Test purpose

To verify that the ME displays the text formatted according to the italic text attribute configuration contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.8.7.4 Method of test

27.22.4.1.8.7.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.8.7.4.2 Procedure

Expected Sequence 8.7 (DISPLAY TEXT, Text Attribute with Italic On)

See ETSI TS 102 384 [26] in clause 27.22.4.1.8.7.4.2, Expected Sequence 8.7.

27.22.4.1.8.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.7.

27.22.4.1.8.8 DISPLAY TEXT (Support of Text Attribute – Underline On)

27.22.4.1.8.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.8.8.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.31, clause 8.43 and clause 8.70.

The ME shall support the text attribute with underline on for the display text.

27.22.4.1.8.8.3 Test purpose

To verify that the ME displays the text formatted according to the underline text attribute configuration contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.8.8.4 Method of test

27.22.4.1.8.8.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.8.8.4.2 Procedure

Expected Sequence 8.8 (DISPLAY TEXT, Text Attribute with Underline On)

See ETSI TS 102 384 [26] in clause 27.22.4.1.8.8.4.2, Expected Sequence 8.8.

27.22.4.1.8.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.8.

27.22.4.1.8.9 DISPLAY TEXT (Support of Text Attribute – Strikethrough On)

27.22.4.1.8.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.8.9.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.31, clause 8.43 and clause 8.70.

The ME shall support the text attribute with underline on for the display text.

27.22.4.1.8.9.3 Test purpose

To verify that the ME displays the text formatted according to the strikethrough text attribute configuration contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.8.9.4 Method of test

27.22.4.1.8.9.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.8.9.4.2 Procedure

Expected Sequence 8.9 (DISPLAY TEXT, Text Attribute with Strikethrough On)

See ETSI TS 102 384 [26] in clause 27.22.4.1.8.9.4.2, Expected Sequence 8.9.

27.22.4.1.8.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.9.

27.22.4.1.8.10 DISPLAY TEXT (Support of Text Attribute – Foreground and Background Colours)

27.22.4.1.8.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.8.10.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.31, clause 8.43 and clause 8.70.

The ME shall support the text attribute with different foreground and background colours for the display text.

27.22.4.1.8.10.3 Test purpose

To verify that the ME displays the text formatted according to the foreground and background colour text attribute configuration contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.8.10.4 Method of test

27.22.4.1.8.10.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.8.10.4.2 Procedure

Expected Sequence 8.10 (DISPLAY TEXT, Text Attribute with Foreground and Background Colours)

See ETSI TS 102 384 [26] in clause 27.22.4.1.8.10.4.2, Expected Sequence 8.10.

27.22.4.1.8.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.10.

27.22.4.1.9 DISPLAY TEXT (UCS2 display in Chinese)

27.22.4.1.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.9.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.31.

The ME shall support the UCS2 alphabet for the coding of the Chinese characters, as defined in the following technical specification: ISO/IEC 10646 [17].

27.22.4.1.9.3 Test purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.9.4 Method of test

27.22.4.1.9.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.9.4.2 Procedure

Expected Sequence 9.1 (DISPLAY TEXT, UCS2 coded – Chinese characters)

See ETSI TS 102 384 [26] in clause 27.22.4.1.9.4.2, Expected Sequence 9.1.

27.22.4.1.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.1.

27.22.4.1.10 DISPLAY TEXT (UCS2 display in Katakana)

27.22.4.1.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.1.10.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.31.

The ME shall support the UCS2 alphabet for the coding of the Katakana characters, as defined in the following technical specification: ISO/IEC 10646 [17].

27.22.4.1.10.3 Test purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.1.10.4 Method of test

27.22.4.1.10.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.10.4.2 Procedure

Expected Sequence 10.1 (DISPLAY TEXT, UCS2 coded – Katakana characters)

See ETSI TS 102 384 [26] in clause 27.22.4.1.10.4.2, Expected Sequence 10.1.

27.22.4.1.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 10.1.

27.22.4.2 GET INKEY

27.22.4.2.1 GET INKEY(normal)

27.22.4.2.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.1.2 Conformance Requirement

The ME shall support the GET INKEY command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

27.22.4.2.1.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive UICC command, and returns the single character entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.1.4 Method of test

27.22.4.2.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be set to a display other than the idle display.

27.22.4.2.1.4.2 Procedure

Expected Sequence 1.1 (GET INKEY, digits only for character, Unpacked 8 bit data for Text String, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.1.4.2, Expected Sequence 1.1.

Expected Sequence 1.2 (GET INKEY, digits only for character set, SMS default Alphabet for Text String, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.1.4.2, Expected Sequence 1.2.

Expected Sequence 1.3 (GET INKEY, backward move)

See ETSI TS 102 384 [26] in clause 27.22.4.2.1.4.2, Expected Sequence 1.3.

Expected Sequence 1.4 (GET INKEY, abort)

See ETSI TS 102 384 [26] in clause 27.22.4.2.1.4.2, Expected Sequence 1.4.

Expected Sequence 1.5 (GET INKEY, SMS default alphabet for character set, Unpacked 8 bit data for Text String, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.1.4.2, Expected Sequence 1.5.

Expected Sequence 1.6 (GET INKEY, Max length for the Text String, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.1.4.2, Expected Sequence 1.6.

27.22.4.2.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.6.

27.22.4.2.2 GET INKEY (No response from User)

27.22.4.2.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.2.2 Conformance requirement

The ME shall support the GET INKEY command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

27.22.4.2.2.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive UICC command, and returns a "No response from user" result value in the TERMINAL RESPONSE command send to the UICC.

27.22.4.2.2.4 Method of test

27.22.4.2.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

ME Manufacturers shall set the "no response from user" period of time as declared in table A.2/2.

The USIM Simulator shall be set to that period of time.

27.22.4.2.2.4.2 Procedure

Expected Sequence 2.1 (GET INKEY, no response from the user)

See ETSI TS 102 384 [26] in clause 27.22.4.2.2.4.2, Expected Sequence 2.1.

27.22.4.2.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

27.22.4.2.3 GET INKEY (UCS2 display in Cyrillic)

27.22.4.2.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.3.2 Conformance requirement

The ME shall support the GET INKEY command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

Additionally, the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646 [17].

27.22.4.2.3.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.3.4 Method of test

27.22.4.2.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.2.3.4.2 Procedure

Expected Sequence 3.1 (GET INKEY, Text String coding in UCS2 Alphabet in Cyrillic, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.3.4.2, Expected Sequence 3.1.

Expected Sequence 3.2 (GET INKEY, max length for the Text String coding in UCS2 Alphabet in Cyrillic, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.3.4.2, Expected Sequence 3.2.

27.22.4.2.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1 to 3.2.

27.22.4.2.4 GET INKEY (UCS2 entry in Cyrillic)

27.22.4.2.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.4.2 Conformance requirement

The ME shall support the GET INKEY command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

Additionally, the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646 [17].

27.22.4.2.4.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.4.4 Method of test

27.22.4.2.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.2.4.4.2 Procedure

Expected Sequence 4.1 (GET INKEY, characters from UCS2 alphabet in Cyrillic, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.4.4.2, Expected Sequence 4.1.

27.22.4.2.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.1.

27.22.4.2.5 GET INKEY ("Yes/No" Response)

27.22.4.2.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.5.2 Conformance requirement

The ME shall support the GET INKEY command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

27.22.4.2.5.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.5.4 Method of test

27.22.4.2.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.2.5.4.2 Procedure

Expected Sequence 5.1(GET INKEY, "Yes/No" Response for the input, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.5.4.2, Expected Sequence 5.1.

27.22.4.2.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 5.1.

27.22.4.2.6 GET INKEY (display of Icon)

27.22.4.2.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.6.2 Conformance requirement

The ME shall support the GET INKEY command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.31.

27.22.4.2.6.3 Test purpose

To verify that the ME displays the Icon contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.6.4 Method of test

27.22.4.2.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME screen shall be in its normal stand-by display.

27.22.4.2.6.4.2 Procedure

Expected Sequence 6.1A (GET INKEY, Basic icon, self-explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.6.4.2, Expected Sequence 6.1A.

Expected Sequence 6.1B (GET INKEY, Basic icon, self-explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.2.6.4.2, Expected Sequence 6.1B.

Expected Sequence 6.2A (GET INKEY, Basic icon, non self-explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.6.4.2, Expected Sequence 6.2A.

Expected Sequence 6.2B (GET INKEY, Basic icon, non self-explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.2.6.4.2, Expected Sequence 6.2B.

Expected Sequence 6.3A (GET INKEY, Colour icon, self-explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.6.4.2, Expected Sequence 6.3A.

Expected Sequence 6.3B (GET INKEY, Colour icon, self-explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.2.6.4.2, Expected Sequence 6.3B.

Expected Sequence 6.4A (GET INKEY, Colour icon, non self-explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.6.4.2, Expected Sequence 6.4A.

Expected Sequence 6.4B (GET INKEY, Colour icon, non self-explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.2.6.4.2, Expected Sequence 6.4B.

27.22.4.2.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1A to 6.4B.

27.22.4.2.7 GET INKEY (Help Information)

27.22.4.2.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.7.2 Conformance requirement

The ME shall support the GET INKEY command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.31.

27.22.4.2.7.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.7.4 Method of test

27.22.4.2.7.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.2.7.4.2 Procedure

Expected Sequence 7.1 (GET INKEY, help information available)

See ETSI TS 102 384 [26] in clause 27.22.4.2.7.4.2, Expected Sequence 7.1.

27.22.4.2.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 7.1.

27.22.4.2.8 GET INKEY (Variable Time out)

27.22.4.2.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.8.2 Conformance requirement

The ME shall support the GET INKEY command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.31.

27.22.4.2.8.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.8.4 Method of test

27.22.4.2.8.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.2.8.4.2 Procedure

Expected Sequence 8.1 (GET INKEY, variable time out of 10 seconds)

See ETSI TS 102 384 [26] in clause 27.22.4.2.8.4.2, Expected Sequence 8.1.

27.22.4.2.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.1.

27.22.4.2.9 GET INKEY (Support of Text Attribute)

27.22.4.2.9.1 GET INKEY (Support of Text Attribute – Left Alignment)

27.22.4.2.9.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.9.1.2 Conformance requirement

The ME shall support the GET INKEY command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3, clause 8.31 and clause 8.70.

27.22.4.2.9.1.3 Test purpose

To verify that the ME displays the text formatted according to the left alignment text attribute configuration contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.9.1.4 Method of test

27.22.4.2.9.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.2.9.1.4.2 Procedure

Expected Sequence 9.1 (GET INKEY, Text attribute with Left Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.2.9.1.4.2, Expected Sequence 9.1.

27.22.4.2.9.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.1.

27.22.4.2.9.2 GET INKEY (Support of Text Attribute – Center Alignment)

27.22.4.2.9.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.9.2.2 Conformance requirement

The ME shall support the GET INKEY command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3, clause 8.31 and clause 8.70.

27.22.4.2.9.2.3 Test purpose

To verify that the ME displays the text formatted according to the center alignment text attribute configuration contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.9.2.4 Method of test

27.22.4.2.9.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.2.9.2.4.2 Procedure

Expected Sequence 9.2 (GET INKEY, Text attribute with Center Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.2.9.2.4.2, Expected Sequence 9.2.

27.22.4.2.9.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.2.

27.22.4.2.9.3 GET INKEY (Support of Text Attribute – Right Alignment)

27.22.4.2.9.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.9.3.2 Conformance requirement

The ME shall support the GET INKEY command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3, clause 8.31 and clause 8.70.

27.22.4.2.9.3.3 Test purpose

To verify that the ME displays the text formatted according to the right alignment text attribute configuration contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.9.3.4 Method of test

27.22.4.2.9.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.2.9.3.4.2 Procedure

Expected Sequence 9.3 (GET INKEY, Text attribute with Right Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.2.9.3.4.2, Expected Sequence 9.3.

27.22.4.2.9.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.3.

27.22.4.2.9.4 GET INKEY (Support of Text Attribute – Large Font Size)

27.22.4.2.9.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.9.4.2 Conformance requirement

The ME shall support the GET INKEY command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3, clause 8.31 and clause 8.70.

27.22.4.2.9.4.3 Test purpose

To verify that the ME displays the text formatted according to the large font size text attribute configuration contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.9.4.4 Method of test

27.22.4.2.9.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.2.9.4.4.2 Procedure

Expected Sequence 9.4 (GET INKEY, Text attribute with Large Font Size)

See ETSI TS 102 384 [26] in clause 27.22.4.2.9.4.4.2, Expected Sequence 9.4.

27.22.4.2.9.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.4.

27.22.4.2.9.5 GET INKEY (Support of Text Attribute – Small Font Size)

27.22.4.2.9.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.9.5.2 Conformance requirement

The ME shall support the GET INKEY command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3, clause 8.31 and clause 8.70.

27.22.4.2.9.5.3 Test purpose

To verify that the ME displays the text formatted according to the small font size text attribute configuration contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.9.5.4 Method of test

27.22.4.2.9.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.2.9.5.4.2 Procedure

Expected Sequence 9.5 (GET INKEY, Text attribute with Small Font Size)

See ETSI TS 102 384 [26] in clause 27.22.4.2.9.5.4.2, Expected Sequence 9.5.

27.22.4.2.9.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.5.

27.22.4.2.9.6 GET INKEY (Support of Text Attribute – Bold On)

27.22.4.2.9.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.9.6.2 Conformance requirement

The ME shall support the GET INKEY command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3, clause 8.31 and clause 8.70.

27.22.4.2.9.6.3 Test purpose

To verify that the ME displays the text formatted according to the bold text attribute configuration contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.9.6.4 Method of test

27.22.4.2.9.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.2.9.6.4.2 Procedure

Expected Sequence 9.6 (GET INKEY, Text attribute with Bold On)

See ETSI TS 102 384 [26] in clause 27.22.4.2.9.6.4.2, Expected Sequence 9.6.

27.22.4.2.9.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.6.

27.22.4.2.9.7 GET INKEY (Support of Text Attribute – Italic On)

27.22.4.2.9.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.9.7.2 Conformance requirement

The ME shall support the GET INKEY command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3, clause 8.31 and clause 8.70.

27.22.4.2.9.7.3 Test purpose

To verify that the ME displays the text formatted according to the italic text attribute configuration contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.9.7.4 Method of test

27.22.4.2.9.7.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.2.9.7.4.2 Procedure

Expected Sequence 9.7 (GET INKEY, Text attribute with Italic On)

See ETSI TS 102 384 [26] in clause 27.22.4.2.9.7.4.2, Expected Sequence 9.7.

27.22.4.2.9.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.7.

27.22.4.2.9.8 GET INKEY (Support of Text Attribute – Underline On)

27.22.4.2.9.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.9.8.2 Conformance requirement

The ME shall support the GET INKEY command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3, clause 8.31 and clause 8.70.

27.22.4.2.9.8.3 Test purpose

To verify that the ME displays the text formatted according to the underline text attribute configuration contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.9.8.4 Method of test

27.22.4.2.9.8.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.2.9.8.4.2 Procedure

Expected Sequence 9.8 (GET INKEY, Text attribute with Underline On)

See ETSI TS 102 384 [26] in clause 27.22.4.2.9.8.4.2, Expected Sequence 9.8.

27.22.4.2.9.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.8.

27.22.4.2.9.9 GET INKEY (Support of Text Attribute – Strikethrough On)

27.22.4.2.9.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.9.9.2 Conformance requirement

The ME shall support the GET INKEY command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3, clause 8.31 and clause 8.70.

27.22.4.2.9.9.3 Test purpose

To verify that the ME displays the text formatted according to the strikethrough text attribute configuration contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.9.9.4 Method of test

27.22.4.2.9.9.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.2.9.9.4.2 Procedure

Expected Sequence 9.9 (GET INKEY, Text attribute with Strikethrough On)

See ETSI TS 102 384 [26] in clause 27.22.4.2.9.9.4.2, Expected Sequence 9.9.

27.22.4.2.9.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.9.

27.22.4.2.9.10 GET INKEY (Support of Text Attribute – Foreground and Background Colour)

27.22.4.2.9.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.9.10.2 Conformance requirement

The ME shall support the GET INKEY command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.8, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3, clause 8.31 and clause 8.70.

27.22.4.2.9.10.3 Test purpose

To verify that the ME displays the text formatted according to the foreground and background colour text attribute configuration contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.9.10.4 Method of test

27.22.4.2.9.10.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.2.9.10.4.2 Procedure

Expected Sequence 9.10 (GET INKEY, Text attribute with Foreground and Background Colour)

See ETSI TS 102 384 [26] in clause 27.22.4.2.9.10.4.2, Expected Sequence 9.10.

27.22.4.2.9.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.10.

27.22.4.2.10 GET INKEY (UCS2 display in Chinese)

27.22.4.2.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.10.2 Conformance requirement

The ME shall support the GET INKEY command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

Additionally, the ME shall support the UCS2 facility for the coding of the Chinese characters, as defined in the following technical specifications: ISO/IEC 10646 [17].

27.22.4.2.10.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.10.4 Method of test

27.22.4.2.10.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.2.10.4.2 Procedure

Expected Sequence 10.1 (GET INKEY, Text String coding in UCS2 Alphabet - Chinese characters, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.10.4.2, Expected Sequence 10.1.

Expected Sequence 10.2 (GET INKEY, max length for the Text String coding in UCS2 Alphabet - Chinese characters, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.10.4.2, Expected Sequence 10.2.

27.22.4.2.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 10.1 to 10.2.

27.22.4.2.11 GET INKEY (UCS2 entry in Chinese)

27.22.4.2.11.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.11.2 Conformance requirement

The ME shall support the GET INKEY command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

Additionally, the ME shall support the UCS2 facility for the coding of the Chinese character, as defined in the following technical specifications: ISO/IEC 10646 [17].

27.22.4.2.11.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.11.4 Method of test

27.22.4.2.11.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.2.11.4.2 Procedure

Expected Sequence 11.1 (GET INKEY, characters from UCS2 alphabet - Chinese characters, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.11.4.2, Expected Sequence 11.1.

27.22.4.2.11.5 Test requirement

The ME shall operate in the manner defined in expected sequence 11.1

27.22.4.2.12 GET INKEY (UCS2 display in Katakana)

27.22.4.2.12.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.12.2 Conformance requirement

The ME shall support the GET INKEY command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

Additionally, the ME shall support the UCS2 facility for the coding of the Katakana characters, as defined in the following technical specifications: ISO/IEC 10646 [17].

27.22.4.2.12.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.12.4 Method of test

27.22.4.2.12.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.2.12.4.2 Procedure

Expected Sequence 12.1 (GET INKEY, Text String coding in UCS2 Alphabet - Katakana characters, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.12.4.2, Expected Sequence 12.1.

Expected Sequence 12.2 (GET INKEY, max length for the Text String coding in UCS2 Alphabet - Katakana characters, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.12.4.2, Expected Sequence 12.2.

27.22.4.2.12.5 Test requirement

The ME shall operate in the manner defined in expected sequence 12.1 to 12.2.

27.22.4.2.13 GET INKEY (UCS2 entry in Katakana)

27.22.4.2.13.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.13.2 Conformance requirement

The ME shall support the GET INKEY command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

Additionally, the ME shall support the UCS2 facility for the coding of the Katakana characters, as defined in the following technical specifications: ISO/IEC 10646 [17].

27.22.4.2.13.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.2.13.4 Method of test

27.22.4.2.13.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.2.13.4.2 Procedure

Expected Sequence 13.1 (GET INKEY, characters from UCS2 alphabet - Katakana characters, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.2.13.4.2, Expected Sequence 13.1.

27.22.4.2.13.5 Test requirement

The ME shall operate in the manner defined in expected sequence 13.1

27.22.4.3 GET INPUT

27.22.4.3.1 GET INPUT (normal)

27.22.4.3.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.1.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

27.22.4.3.1.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.1.4 Method of test

27.22.4.3.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.3.1.4.2 Procedure

Expected Sequence 1.1 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

See ETSI TS 102 384 [26] in clause 27.22.4.3.1.4.2, Expected Sequence 1.1.

Expected Sequence 1.2 (GET INPUT, digits only, SMS default alphabet, ME to echo text, packing SMS Point-to-point required by ME)

See ETSI TS 102 384 [26] in clause 27.22.4.3.1.4.2, Expected Sequence 1.2.

Expected Sequence 1.3 (GET INPUT, character set, SMS Default Alphabet, ME to echo text, ME supporting 8 bit data Message)

See ETSI TS 102 384 [26] in clause 27.22.4.3.1.4.2, Expected Sequence 1.3.

Expected Sequence 1.4 (GET INPUT, digits only, SMS default alphabet, ME to hide text, ME supporting 8 bit data Message)

See ETSI TS 102 384 [26] in clause 27.22.4.3.1.4.2, Expected Sequence 1.4.

Expected Sequence 1.5 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

See ETSI TS 102 384 [26] in clause 27.22.4.3.1.4.2, Expected Sequence 1.5.

Expected Sequence 1.6 (GET INPUT, backwards move)

See ETSI TS 102 384 [26] in clause 27.22.4.3.1.4.2, Expected Sequence 1.6.

Expected Sequence 1.7 (GET INPUT, abort)

See ETSI TS 102 384 [26] in clause 27.22.4.3.1.4.2, Expected Sequence 1.7.

Expected Sequence 1.8 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

See ETSI TS 102 384 [26] in clause 27.22.4.3.1.4.2, Expected Sequence 1.8.

Expected Sequence 1.9 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

See ETSI TS 102 384 [26] in clause 27.22.4.3.1.4.2, Expected Sequence 1.9.

Expected Sequence 1.10 (GET INPUT, null length for the text string, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.1.4.2, Expected Sequence 1.10.

27.22.4.3.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.10.

27.22.4.3.2 GET INPUT (No response from User)

27.22.4.3.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.2.2 Conformance requirement

The ME shall support the GET INPUT command as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

27.22.4.3.2.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive UICC command, and returns a "No response from user" result value in the TERMINAL RESPONSE command send to the UICC.

27.22.4.3.2.4 Method of test

27.22.4.3.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

ME Manufacturers shall set the "no response from user" period of time as declared in table A.2/3.

The USIM Simulator shall be set to that period of time.

27.22.4.3.2.4.2 Procedure

Expected Sequence 2.1 (GET INPUT, no response from the user)

See ETSI TS 102 384 [26] in clause 27.22.4.3.2.4.2, Expected Sequence 2.1.

27.22.4.3.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

27.22.4.3.3 GET INPUT (UCS2 display in Cyrillic)

27.22.4.3.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.3.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646 [17].

27.22.4.3.3.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.3.4 Method of test

27.22.4.3.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.3.3.4.2 Procedure

Expected Sequence 3.1 (GET INPUT, text string coding in UCS2 in Cyrillic, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.3.4.2, Expected Sequence 3.1.

Expected Sequence 3.2 (GET INPUT, max length for the text string coding in UCS2 in Cyrillic, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.3.4.2, Expected Sequence 3.2.

27.22.4.3.3.5 Test requirement

The ME shall operate in the manner defined in expected sequences 3.1 to 3.2.

27.22.4.3.4 GET INPUT (UCS2 entry in Cyrillic)

27.22.4.3.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.4.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in ISO/IEC 10646 [17].

27.22.4.3.4.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.4.4 Method of test

27.22.4.3.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.3.4.4.2 Procedure

Expected Sequence 4.1 (GET INPUT, character set from UCS2 alphabet in Cyrillic, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.4.4.2, Expected Sequence 4.1.

Expected Sequence 4.2 (GET INPUT, character set from UCS2 alphabet in Cyrillic, Max length for the input, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.4.4.2, Expected Sequence 4.2.

27.22.4.3.4.5 Test requirement

The ME shall operate in the manner defined in expected sequences 4.1 to 4.2.

27.22.4.3.5 GET INPUT (default text)

27.22.4.3.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.5.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.23.

27.22.4.3.5.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.5.4 Method of test

27.22.4.3.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.3.5.4.2 Procedure

Expected Sequence 5.1(GET INPUT, default text for the input, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.5.4.2, Expected Sequence 5.1.

Expected Sequence 5.2 (GET INPUT, default text for the input with max length, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.5.4.2, Expected Sequence 5.2.

27.22.4.3.5.5 Test requirement

The ME shall operate in the manner defined in expected sequences 5.1 to 5.2.

27.22.4.3.6 GET INPUT (display of Icon)

27.22.4.3.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.6.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.5.4, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 12.31.

27.22.4.3.6.3 Test purpose

To verify that the ME displays the Icon contained in the GET INPUT proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.6.4 Method of test

27.22.4.3.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME screen shall be in its normal stand-by display.

27.22.4.3.6.4.2 Procedure

Expected Sequence 6.1A (GET INPUT, Basic icon, self-explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.6.4.2, Expected Sequence 6.1A.

Expected Sequence 6.1B (GET INPUT, Basic icon, self-explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.3.6.4.2, Expected Sequence 6.1B.

Expected Sequence 6.2A (GET INPUT, Basic icon, non self-explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.6.4.2, Expected Sequence 6.2A.

Expected Sequence 6.2B (GET INPUT, Basic icon, non self-explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.3.6.4.2, Expected Sequence 6.2B.

Expected Sequence 6.3A (GET INPUT, Colour icon, self-explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.6.4.2, Expected Sequence 6.3A.

Expected Sequence 6.3B (GET INPUT, Colour icon, self-explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.3.6.4.2, Expected Sequence 6.3B.

Expected Sequence 6.4A (GET INPUT, Colour icon, non self-explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.6.4.2, Expected Sequence 6.4A.

Expected Sequence 6.4B (GET INPUT, Colour icon, non self-explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.3.6.4.2, Expected Sequence 6.4B.

27.22.4.3.6.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 6.1A to 6.4B.

27.22.4.3.7 GET INPUT (Help Information)

27.22.4.3.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.7.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

27.22.4.3.7.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive UICC command, and returns a 'help information required by the user' result value in the TERMINAL RESPONSE command sent to the UICC if the user has indicated the need to get help information.

27.22.4.3.7.4 Method of test

27.22.4.3.7.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.3.7.4.2 Procedure

Expected Sequence 7.1 (GET INPUT, digits only, ME to echo text, ME supporting 8 bit data Message, help information available)

See ETSI TS 102 384 [26] in clause 27.22.4.3.7.4.2, Expected Sequence 7.1.

27.22.4.3.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 7.1.

27.22.4.3.8 GET INPUT (Support of Text Attribute)

27.22.4.3.8.1 GET INPUT (Support of Text Attribute – Left Alignment)

27.22.4.3.8.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.8.1.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.70.

27.22.4.3.8.1.3 Test purpose

To verify that the ME displays the text formatted according to the left alignment text attribute configuration contained in the GET INPUT proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.8.1.4 Method of test

27.22.4.3.8.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.3.8.1.4.2 Procedure

Expected Sequence 8.1 (GET INPUT, Text attribute – Left Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.3.8.1.4.2, Expected Sequence 8.1.

27.22.4.3.8.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.1.

27.22.4.3.8.2 GET INPUT (Support of Text Attribute – Center Alignment)

27.22.4.3.8.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.8.2.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.70.

27.22.4.3.8.2.3 Test purpose

To verify that the ME displays the text formatted according to the center alignment text attribute configuration contained in the GET INPUT proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.8.2.4 Method of test

27.22.4.3.8.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.3.8.2.4.2 Procedure

Expected Sequence 8.2 (GET INPUT, Text attribute – Center Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.3.8.2.4.2, Expected Sequence 8.2.

27.22.4.3.8.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.2.

27.22.4.3.8.3 GET INPUT (Support of Text Attribute – Right Alignment)

27.22.4.3.8.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.8.3.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.70.

27.22.4.3.8.3.3 Test purpose

To verify that the ME displays the text formatted according to the right alignment text attribute configuration contained in the GET INPUT proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.8.3.4 Method of test

27.22.4.3.8.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.3.8.3.4.2 Procedure

Expected Sequence 8.3 (GET INPUT, Text attribute – Right Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.3.8.3.4.2, Expected Sequence 8.3.

27.22.4.3.8.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.3.

27.22.4.3.8.4 GET INPUT (Support of Text Attribute – Large Font Size)

27.22.4.3.8.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.8.4.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.70.

27.22.4.3.8.4.3 Test purpose

To verify that the ME displays the text formatted according to the large font size text attribute configuration contained in the GET INPUT proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.8.4.4 Method of test

27.22.4.3.8.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.3.8.4.4.2 Procedure

Expected Sequence 8.4 (GET INPUT, Text attribute – Large Font Size)

See ETSI TS 102 384 [26] in clause 27.22.4.3.8.4.4.2, Expected Sequence 8.4.

27.22.4.3.8.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.4.

27.22.4.3.8.5 GET INPUT (Support of Text Attribute – Small Font Size)

27.22.4.3.8.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.8.5.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.70.

27.22.4.3.8.5.3 Test purpose

To verify that the ME displays the text formatted according to the small font size text attribute configuration contained in the GET INPUT proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.8.5.4 Method of test

27.22.4.3.8.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.3.8.5.4.2 Procedure

Expected Sequence 8.5 (GET INPUT, Text attribute – Small Font Size)

See ETSI TS 102 384 [26] in clause 27.22.4.3.8.5.4.2, Expected Sequence 8.5.

27.22.4.3.8.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.5.

27.22.4.3.8.6 GET INPUT (Support of Text Attribute – Bold On)

27.22.4.3.8.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.8.6.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.70.

27.22.4.3.8.6.3 Test purpose

To verify that the ME displays the text formatted according to the bold text attribute configuration contained in the GET INPUT proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.8.6.4 Method of test

27.22.4.3.8.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.3.8.6.4.2 Procedure

Expected Sequence 8.6 (GET INPUT, Text attribute – Bold On)

See ETSI TS 102 384 [26] in clause 27.22.4.3.8.6.4.2, Expected Sequence 8.6.

27.22.4.3.8.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.6.

27.22.4.3.8.7 GET INPUT (Support of Text Attribute – Italic On)

27.22.4.3.8.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.8.7.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.70.

27.22.4.3.8.7.3 Test purpose

To verify that the ME displays the text formatted according to the italic text attribute configuration contained in the GET INPUT proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.8.7.4 Method of test

27.22.4.3.8.7.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.3.8.7.4.2 Procedure

Expected Sequence 8.7 (GET INPUT, Text attribute – Italic On)

See ETSI TS 102 384 [26] in clause 27.22.4.3.8.7.4.2, Expected Sequence 8.7.

27.22.4.3.8.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.7.

27.22.4.3.8 GET INPUT (Support of Text Attribute – Underline On)

27.22.4.3.8.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.8.8.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.70.

27.22.4.3.8.8.3 Test purpose

To verify that the ME displays the text formatted according to the underline text attribute configuration contained in the GET INPUT proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.8.8.4 Method of test

27.22.4.3.8.8.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.3.8.8.4.2 Procedure

Expected Sequence 8.8 (GET INPUT, Text attribute – Underline On)

See ETSI TS 102 384 [26] in clause 27.22.4.3.8.8.4.2, Expected Sequence 8.8.

27.22.4.3.8.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.8.

27.22.4.3.8.9 GET INPUT (Support of Text Attribute – Strikethrough On)

27.22.4.3.8.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.8.9.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.70.

27.22.4.3.8.9.3 Test purpose

To verify that the ME displays the text formatted according to the strikethrough text attribute configuration contained in the GET INPUT proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.8.9.4 Method of test

27.22.4.3.8.9.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.3.8.9.4.2 Procedure

Expected Sequence 8.9 (GET INPUT, Text attribute – Strikethrough On)

See ETSI TS 102 384 [26] in clause 27.22.4.3.8.9.4.2, Expected Sequence 8.9.

27.22.4.3.8.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.9.

27.22.4.3.8.10 GET INPUT (Support of Text Attribute – Foreground and Background Colour)

27.22.4.3.8.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.8.10.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2, clause 8.15.3 and clause 8.70.

27.22.4.3.8.10.3 Test purpose

To verify that the ME displays the text formatted according to the fore- and background colour text attribute configuration contained in the GET INPUT proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.8.10.4 Method of test

27.22.4.3.8.10.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.3.8.10.4.2 Procedure

Expected Sequence 8.10 (GET INPUT, Text attribute – Foreground and Background Colour)

See ETSI TS 102 384 [26] in clause 27.22.4.3.8.10.4.2, Expected Sequence 8.10.

27.22.4.3.8.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.10.

27.22.4.3.9 GET INPUT (UCS2 display in Chinese)

27.22.4.3.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.9.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

Additionally the ME shall support the UCS2 facility for the coding of the Chinese character, as defined in the following technical specifications: ISO/IEC 10646 [17].

27.22.4.3.9.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.9.4 Method of test

27.22.4.3.9.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.3.9.4.2 Procedure

Expected Sequence 9.1 (GET INPUT, text string coding in UCS2 - Chinese characters, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.9.4.2, Expected Sequence 9.1.

Expected Sequence 9.2 (GET INPUT, max length for the text string coding in UCS2 - Chinese characters, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.9.4.2, Expected Sequence 9.2.

27.22.4.3.9.5 Test requirement

The ME shall operate in the manner defined in expected sequences 9.1 to 9.2

27.22.4.3.10 GET INPUT (UCS2 entry in Chinese)

27.22.4.3.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.10.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

Additionally the ME shall support the UCS2 facility for the coding of the Chinese character, as defined in ISO/IEC 10646 [17].

27.22.4.3.10.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.10.4 Method of test

27.22.4.3.10.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.3.10.4.2 Procedure

Expected Sequence 10.1 (GET INPUT, character set from UCS2 alphabet - Chinese characters, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.10.4.2, Expected Sequence 10.1.

Expected Sequence 10.2 (GET INPUT, character set from UCS2 alphabet - Chinese characters, Max length for the input, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.10.4.2, Expected Sequence 10.2.

27.22.4.3.10.5 Test requirement

The ME shall operate in the manner defined in expected sequences 10.1 to 10.2

27.22.4.3.11 GET INPUT (UCS2 display in Katakana)

27.22.4.3.11.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.11.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

Additionally the ME shall support the UCS2 facility for the coding of the Katakana characters, as defined in the following technical specifications: ISO/IEC 10646 [17].

27.22.4.3.11.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.11.4 Method of test

27.22.4.3.11.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.3.11.4.2 Procedure

Expected Sequence 11.1 (GET INPUT, text string coding in UCS2 in Katakana, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.11.4.2, Expected Sequence 11.1.

Expected Sequence 11.2 (GET INPUT, max length for the text string coding in UCS2 in Katakana, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.11.4.2, Expected Sequence 11.2.

27.22.4.3.11.5 Test requirement

The ME shall operate in the manner defined in expected sequences 11.1 to 11.2

27.22.4.3.12 GET INPUT (UCS2 entry in Katakana)

27.22.4.3.12.1 Definition and applicability

See clause 3.2.2.

27.22.4.3.12.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.11, clause 8.15, clause 8.15.1, clause 8.15.2 and clause 8.15.3.

Additionally the ME shall support the UCS2 facility for the coding of the Chinese character, as defined in ISO/IEC 10646 [17].

27.22.4.3.12.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive UICC command, and returns the text string entered in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.3.12.4 Method of test

27.22.4.3.12.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.3.12.4.2 Procedure

Expected Sequence 12.1 (GET INPUT, character set from UCS2 alphabet in Katakana, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.12.4.2, Expected Sequence 12.1.

Expected Sequence 12.2 (GET INPUT, character set from UCS2 alphabet in Katakana, Max length for the input, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.3.12.4.2, Expected Sequence 12.2.

27.22.4.3.12.5 Test requirement

The ME shall operate in the manner defined in expected sequences 12.1 to 12.2.

27.22.4.4 MORE TIME

27.22.4.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.4.2 Conformance requirement

The ME shall support the MORE TIME command as defined in:

- TS 31.111 [15] clause 6.4.4, clause 6.6.4, clause 5.2, clause 8.6 and clause 8.7.

27.22.4.4.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (OK) to the UICC after the ME receives the MORE TIME proactive UICC command.

27.22.4.4.4 Method of test

27.22.4.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.4.4.2 Procedure

Expected Sequence 1.1 (MORE TIME)

See ETSI TS 102 384 [26] in clause 27.22.4.4.4.2, Expected Sequence 1.1.

27.22.4.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.4.5 PLAY TONE

27.22.4.5.1 PLAY TONE (Normal)

27.22.4.5.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.5.1.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.5, clause 6.6.5, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.16 and clause 8.8.

27.22.4.5.1.3 Test purpose

To verify that the ME plays an audio tone of a type and duration contained in the PLAY TONE proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME plays the requested audio tone through the earpiece whilst not in call and shall superimpose the tone on top of the downlink audio whilst in call.

To verify that the ME displays the text contained in the PLAY TONE proactive UICC command.

27.22.4.5.1.4 Method of test

27.22.4.5.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.1.4.2 Procedure

Expected Sequence 1.1 (PLAY TONE)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.1	
4	ME → USER	Display "Dial Tone" Play a standard supervisory dial tone through the external ringer for a duration of 5 s	
5	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.1	[Command performed successfully]
6	UICC → ME	PROACTIVE UICC SESSION ENDED	
7	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.2	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.2	
10	ME → USER	Display "Sub. Busy" Play a standard supervisory called subscriber busy tone for a duration of 5 s	
11	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.2	[Command performed successfully]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.3	
14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.3	

Step	Direction	MESSAGE / Action	Comments
16	ME → USER	Display "Congestion" Play a standard supervisory congestion tone for a duration of 5 s	
17	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.3	[Command performed successfully]
18	UICC → ME	PROACTIVE UICC SESSION ENDED	
19	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.4	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.4	
22	ME → USER	Display "RP Ack" Play a standard supervisory radio path acknowledgement tone	
23	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.4	[Command performed successfully]
24	UICC → ME	PROACTIVE UICC SESSION ENDED	
25	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.5	
26	ME → UICC	FETCH	
27	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.5	
28	ME → USER	Display "No RP" Play a standard supervisory radio path not available / call dropped tone for a duration of 5 s	[Note: The ME will only play three bursts as specified in TS 22.001 [2]]
29	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.5	[Command performed successfully]
30	UICC → ME	PROACTIVE UICC SESSION ENDED	
31	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.6	
32	ME → UICC	FETCH	
33	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.6	
34	ME → USER	Display "Spec Info" Play a standard supervisory error / special information tone for a duration of 5 s	
35	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.6	[Command performed successfully]
36	UICC → ME	PROACTIVE UICC SESSION ENDED	
37	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.7	
38	ME → UICC	FETCH	
39	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.7	
40	ME → USER	Display "Call Wait" Play a standard supervisory call waiting tone for a duration of 5 s	
41	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.7	[Command performed successfully]
42	UICC → ME	PROACTIVE UICC SESSION ENDED	
43	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.8	
44	ME → UICC	FETCH	
45	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.8	
46	ME → USER	Display "Ring Tone" Play a standard supervisory ringing tone for duration of 5 s	

Step	Direction	MESSAGE / Action	Comments
47	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.8	[Command performed successfully]
48	UICC → ME	PROACTIVE UICC SESSION ENDED	
49	USER → ME	Set up a voice call	[User dials 123456789 to connect to the network manually]
50	ME → USS	Establish voice call	[Voice call is established]
51	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.1	
52	ME → UICC	FETCH	
53	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.1	
54	ME → USER	Display "Dial Tone" Superimpose the standard supervisory dial tone on the audio downlink for the duration of 5 s	
55	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.1	[Command performed successfully]
56	UICC → ME	PROACTIVE UICC SESSION ENDED	
57	USER → ME	The user ends the call	
58	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.9	
59	ME → UICC	FETCH	
60	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.9	
61	ME → USER	Display "This command instructs the ME to play an audio tone. Upon receiving this command, the ME shall check if it is currently in, or in the process of setting up (SET-UP message sent to the network, see GSM"04.08"(8)), a speech call. - If the ME I" Play a general beep	
62	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.9a or TERMINAL RESPONSE: PLAY TONE 1.1.9b	[Command performed successfully] or [Command beyond ME's capabilities]
63	UICC → ME	PROACTIVE UICC SESSION ENDED	
64	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.10	
65	ME → UICC	FETCH	
66	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.10	
67	ME → USER	Display "Beep" Play a ME proprietary general beep	
68	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.10a Or TERMINAL RESPONSE: PLAY TONE 1.1.10b	[Command performed successfully] or [Command beyond ME's capabilities]
69	UICC → ME	PROACTIVE UICC SESSION ENDED	
70	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.11	
71	ME → UICC	FETCH	
72	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.11	
73	ME → USER	Display "Positive" Play a ME proprietary positive acknowledgement tone	

Step	Direction	MESSAGE / Action	Comments
74	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.11a or TERMINAL RESPONSE: PLAY TONE 1.1.11b	[Command performed successfully] or [Command beyond ME's capabilities]
75	UICC → ME	PROACTIVE UICC SESSION ENDED	
76	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.12	
77	ME → UICC	FETCH	
78	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.12	
79	ME → USER	Display "Negative" Play a ME proprietary negative acknowledgement tone	
80	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.12a or TERMINAL RESPONSE: PLAY TONE 1.1.12b	[Command performed successfully] or [Command beyond ME's capabilities]
81	UICC → ME	PROACTIVE UICC SESSION ENDED	
82	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.13	
83	ME → UICC	FETCH	
84	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.13	
85	ME → USER	Display "Quick" Play a ME proprietary general beep	
86	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.13a or TERMINAL RESPONSE: PLAY TONE 1.1.13b	[Command performed successfully] or [Command beyond ME's capabilities]
87	UICC → ME	PROACTIVE UICC SESSION ENDED	
88	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.14	
89	ME → UICC	FETCH	
90	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.14	
91	ME → USER	Display "<ABORT>" Play an ME Error / Special information tone until user aborts this command (the command shall be aborted by the user within 1 minute)	
92	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.14	[Proactive UICC session terminated by the user]
93	UICC → ME	PROACTIVE UICC SESSION ENDED	
94	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.15	
95	ME → UICC	FETCH	
96	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.1.15	[No alpha identifier, no tone tag, no duration tag]
97	ME → User	ME plays general beep, or if not supported any (defined by ME-manufacturer) other supported tone	[ME uses default duration defined by ME-manufacturer]
98	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.1.15	[Command performed successfully], [ME uses general beep, or if not supported any (defined by ME-manufacturer) other supported tone, uses default duration defined by ME-manufacturer]

Step	Direction	MESSAGE / Action	Comments
99	UICC → ME	PROACTIVE UICC SESSION ENDED	

For coding, see ETSI TS 102 384 [26] in clause 27.22.4.5.1.4.2, Expected Sequence 1.1.

27.22.4.5.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.4.5.2 PLAY TONE (UCS2 display in Cyrillic)

27.22.4.5.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.5.2.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.2, clause 8.16 and clause 8.8.

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in ISO/IEC 10646 [17].

27.22.4.5.2.3 Test purpose

To verify that the ME displays the text contained in the PLAY TONE proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME plays the requested audio tone through the earpiece.

27.22.4.5.2.4 Method of test

27.22.4.5.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.2.4.2 Procedure

Expected Sequence 2.1 (PLAY TONE, character set from UCS2 alphabet in Russian, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.5.2.4.2, Expected Sequence 2.1.

27.22.4.5.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

27.22.4.5.3 PLAY TONE (display of Icon)

27.22.4.5.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.5.3.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.5, clause 6.6.5, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.16, clause 8.8 and clause 8.31.

27.22.4.5.3.3 Test purpose

To verify that the ME plays an audio tone of a type and duration contained in the PLAY TONE proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME plays the requested audio tone through the earpiece.

To verify that the ME displays the icon contained in the PLAY TONE proactive UICC command.

27.22.4.5.3.4 Method of test

27.22.4.5.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.3.4.2 Procedure

Expected Sequence 3.1A (PLAY TONE, Basic icon, self-explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.5.3.4.2, Expected Sequence 3.1A.

Expected Sequence 3.1B (PLAY TONE, Basic icon, self-explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.5.3.4.2, Expected Sequence 3.1B.

Expected Sequence 3.2A (PLAY TONE, Basic icon, non self-explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.5.3.4.2, Expected Sequence 3.2A.

Expected Sequence 3.2B (PLAY TONE, Basic icon, non self-explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.5.3.4.2, Expected Sequence 3.2B.

Expected Sequence 3.3A (PLAY TONE, Colour icon, self-explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.5.3.4.2, Expected Sequence 3.3A.

Expected Sequence 3.3B (PLAY TONE, Colour icon, self-explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.5.3.4.2, Expected Sequence 3.3B.

Expected Sequence 3.4A (PLAY TONE, Colour icon, non self-explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.5.3.4.2, Expected Sequence 3.4A.

Expected Sequence 3.4B (PLAY TONE, Colour icon, non self-explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.5.3.4.2, Expected Sequence 3.4B.

27.22.4.5.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 3.1A to 3.4B.

27.22.4.5.4 PLAY TONE (Support of Text Attribute)

27.22.4.5.4.1 PLAY TONE (Support of Text Attribute – Left Alignment)

27.22.4.5.4.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.5.4.1.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.5, clause 6.6.5, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.16, clause 8.8, clause 8.31 and clause 8.70.

27.22.4.5.4.1.3 Test purpose

To verify that the ME displays the text formatted according to the left alignment text attribute configuration contained in the PLAY TONE proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.5.4.1.4 Method of test

27.22.4.5.4.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.4.1.4.2 Procedure

Expected Sequence 4.1 (PLAY TONE, Text Attribute – Left Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.5.4.1.4.2, Expected Sequence 4.1.

27.22.4.5.4.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.1.

27.22.4.5.4.2 PLAY TONE (Support of Text Attribute – Center Alignment)

27.22.4.5.4.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.5.4.2.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.5, clause 6.6.5, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.16, clause 8.8, clause 8.31 and clause 8.70.

27.22.4.5.4.2.3 Test purpose

To verify that the ME displays the text formatted according to the center alignment text attribute configuration contained in the PLAY TONE proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.5.4.2.4 Method of test

27.22.4.5.4.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.4.2.4.2 Procedure

Expected Sequence 4.2 (PLAY TONE, Text Attribute – Centre Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.5.4.2.4.2, Expected Sequence 4.2.

27.22.4.5.4.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.2.

27.22.4.5.4.3 PLAY TONE (Support of Text Attribute – Right Alignment)

27.22.4.5.4.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.5.4.3.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.5, clause 6.6.5, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.16, clause 8.8, clause 8.31 and clause 8.70.

27.22.4.5.4.3.3 Test purpose

To verify that the ME displays the text formatted according to the right alignment text attribute configuration contained in the PLAY TONE proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.5.4.3.4 Method of test

27.22.4.5.4.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.4.3.4.2 Procedure

Expected Sequence 4.3 (PLAY TONE, Text Attribute – Right Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.5.4.3.4.2, Expected Sequence 4.3.

27.22.4.5.4.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.3.

27.22.4.5.4.4 PLAY TONE (Support of Text Attribute – Large Font Size)

27.22.4.5.4.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.5.4.4.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.5, clause 6.6.5, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.16, clause 8.8, clause 8.31 and clause 8.70.

27.22.4.5.4.4.3 Test purpose

To verify that the ME displays the text formatted according to the large font size text attribute configuration contained in the PLAY TONE proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.5.4.4.4 Method of test

27.22.4.5.4.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.4.4.4.2 Procedure

Expected Sequence 4.4 (PLAY TONE, Text Attribute – Large Font Size)

See ETSI TS 102 384 [26] in clause 27.22.4.5.4.4.4.2, Expected Sequence 4.4.

27.22.4.5.4.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.4.

27.22.4.5.4.5 PLAY TONE (Support of Text Attribute – Small Font Size)

27.22.4.5.4.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.5.4.5.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.5, clause 6.6.5, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.16, clause 8.8, clause 8.31 and clause 8.70.

27.22.4.5.4.5.3 Test purpose

To verify that the ME displays the text formatted according to the small font size text attribute configuration contained in the PLAY TONE proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.5.4.5.4 Method of test

27.22.4.5.4.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.4.5.4.2 Procedure

Expected Sequence 4.5 (PLAY TONE, Text Attribute – Small Font Size)

See ETSI TS 102 384 [26] in clause 27.22.4.5.4.5.4.2, Expected Sequence 4.5.

27.22.4.5.4.5.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.5.

27.22.4.5.4.6 PLAY TONE (Support of Text Attribute – Bold On)

27.22.4.5.4.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.5.4.6.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.5, clause 6.6.5, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.16, clause 8.8, clause 8.31 and clause 8.70.

27.22.4.5.4.6.3 Test purpose

To verify that the ME displays the text formatted according to the bold text attribute configuration contained in the PLAY TONE proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.5.4.6.4 Method of test

27.22.4.5.4.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.4.6.4.2 Procedure

Expected Sequence 4.6 (PLAY TONE, Text Attribute – Bold On)

See ETSI TS 102 384 [26] in clause 27.22.4.5.4.6.4.2, Expected Sequence 4.6.

27.22.4.5.4.6.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.6.

27.22.4.5.4.7 PLAY TONE (Support of Text Attribute – Italic On)

27.22.4.5.4.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.5.4.7.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.5, clause 6.6.5, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.16, clause 8.8, clause 8.31 and clause 8.70.

27.22.4.5.4.7.3 Test purpose

To verify that the ME displays the text formatted according to the italic text attribute configuration contained in the PLAY TONE proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.5.4.7.4 Method of test

27.22.4.5.4.7.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.4.7.4.2 Procedure

Expected Sequence 4.7 (PLAY TONE, Text Attribute – Italic On)

See ETSI TS 102 384 [26] in clause 27.22.4.5.4.7.4.2, Expected Sequence 4.7.

27.22.4.5.4.7.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.7.

27.22.4.5.4.8 PLAY TONE (Support of Text Attribute – Underline On)

27.22.4.5.4.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.5.4.8.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.5, clause 6.6.5, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.16, clause 8.8, clause 8.31 and clause 8.70.

27.22.4.5.4.8.3 Test purpose

To verify that the ME displays the text formatted according to the underline text attribute configuration contained in the PLAY TONE proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.5.4.8.4 Method of test

27.22.4.5.4.8.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.4.8.4.2 Procedure

Expected Sequence 4.8 (PLAY TONE, Text Attribute – Underline On)

See ETSI TS 102 384 [26] in clause 27.22.4.5.4.8.4.2, Expected Sequence 4.8.

27.22.4.5.4.8.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.8.

27.22.4.5.4.9 PLAY TONE (Support of Text Attribute – Strikethrough On)

27.22.4.5.4.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.5.4.9.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.5, clause 6.6.5, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.16, clause 8.8, clause 8.31 and clause 8.70.

27.22.4.5.4.9.3 Test purpose

To verify that the ME displays the text formatted according to the strikethrough text attribute configuration contained in the PLAY TONE proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.5.4.9.4 Method of test

27.22.4.5.4.9.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.4.9.4.2 Procedure

Expected Sequence 4.9 (PLAY TONE, Text Attribute – Strikethrough On)

See ETSI TS 102 384 [26] in clause 27.22.4.5.4.9.4.2, Expected Sequence 4.9.

27.22.4.5.4.9.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.9.

27.22.4.5.4.10 PLAY TONE (Support of Text Attribute – Foreground and Background Colour)

27.22.4.5.4.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.5.4.10.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.5, clause 6.6.5, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.16, clause 8.8, clause 8.31 and clause 8.70.

27.22.4.5.4.10.3 Test purpose

To verify that the ME displays the text formatted according to the foreground and background colour text attribute configuration contained in the PLAY TONE proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.5.4.10.4 Method of test

27.22.4.5.4.10.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.4.10.4.2 Procedure

Expected Sequence 4.10 (PLAY TONE, Text Attribute – Foreground and Background Colour)

See ETSI TS 102 384 [26] in clause 27.22.4.5.4.10.4.2, Expected Sequence 4.10.

27.22.4.5.4.10.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.10.

27.22.4.5.5 PLAY TONE (UCS2 display in Chinese)

27.22.4.5.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.5.5.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.2, clause 8.16 and clause 8.8.

Additionally the ME shall support the UCS2 facility for the coding of the Chinese characters, as defined in ISO/IEC 10646 [17].

27.22.4.5.5.3 Test purpose

To verify that the ME displays the text contained in the PLAY TONE proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME plays the requested audio tone through the earpiece.

27.22.4.5.5.4 Method of test

27.22.4.5.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.5.4.2 Procedure

Expected Sequence 5.1 (PLAY TONE, character set from UCS2 alphabet in Chinese, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.5.5.4.2, Expected Sequence 5.1.

27.22.4.5.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 5.1.

27.22.4.5.6 PLAY TONE (UCS2 display in Katakana)

27.22.4.5.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.5.6.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.2, clause 8.16 and clause 8.8.

Additionally the ME shall support the UCS2 facility for the coding of the Katakana characters, as defined in ISO/IEC 10646 [17].

27.22.4.5.6.3 Test purpose

To verify that the ME displays the text contained in the PLAY TONE proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME plays the requested audio tone through the earpiece.

27.22.4.5.6.4 Method of test

27.22.4.5.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.6.4.2 Procedure

Expected Sequence 6.1 (PLAY TONE, with UCS2 in Katakana, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.5.6.4.2, Expected Sequence 6.1.

27.22.4.5.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1.

27.22.4.6 POLL INTERVAL

27.22.4.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.6.2 Conformance requirement

The ME shall support the POLL INTERVAL command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.6, clause 6.6.6, clause 5.2, clause 8.6, clause 8.7 and clause 8.8.

27.22.4.6.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (OK) to the UICC after the ME receives the POLL INTERVAL proactive UICC command.

To verify that the ME gives a valid response to the polling interval requested by the UICC.

To verify that the ME sends STATUS commands to the UICC at an interval no longer than the interval negotiated by the UICC.

27.22.4.6.4 Method of test

27.22.4.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.6.4.2 Procedure

See ETSI TS 102 384 [26] in clause 27.22.4.6.4.2, Expected Sequence 1.1.

Note: If the requested poll interval is not supported by the ME, the ME is allowed to use a different one as stated in TS 31.111 [15], clause 6.4.6.

27.22.4.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.4.7 REFRESH

27.22.4.7.1 REFRESH (normal)

27.22.4.7.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.7.1.2 Conformance requirement

The ME shall support the REFRESH command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.7, clause 6.6.13, clause 5.2, clause 8.6, clause 8.7 and clause 8.18.

Consequently the ME shall support the USIM Initialization procedure as defined in:

- TS 31.102 [14] clause 5.1.1.2 and ETSI TS 102 221[13] clause 11.1.2

27.22.4.7.1.3 Test purpose

To verify that the ME performs the Proactive Command – REFRESH in accordance with the Command Qualifier. This shall require the ME to perform:

- the UICC and USIM initialization,
- a re-read of the contents and structure of the EFs on the UICC that have been notified as changed and are either part of initialization or used during the test,
- a restart of the card session,
- a successfull return of the result of the execution of the command in the TERMINAL RESPONSE command send to the UICC.

27.22.4.7.1.4 Method of test

27.22.4.7.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table..

The elementary files are coded as Toolkit default except for expected sequence 1.3.

For expected sequence 1.3 the global phonebook shall be present.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

These values might be overwritten with values defined in the expected sequences itself.

Prior to the execution of expected sequence 1.2 the FDN service shall be enabled.

27.22.4.7.1.4.2 Procedure

Expected Sequence 1.1 (REFRESH, USIM Initialization)

Step	Direction	MESSAGE / Action	Comments
1	UICC→ ME	PROACTIVE COMMAND PENDING: REFRESH 1.1.1	[To inform the ME that FDN becomes enabled]
2	ME → UICC	FETCH	

3	UICC → ME	PROACTIVE COMMAND: REFRESH 1.1.1	
4	UICC	EF EST contents states FDN enabled	[New EF EST value: 01]
5	ME → UICC	USIM Initialization including send STATUS[P1='01']	[ME performs USIM initialization in accordance with TS 31.111 [15] clause 6.4.7]
6	ME → UICC	TERMINAL RESPONSE: REFRESH 1.1.1A Or TERMINAL RESPONSE: REFRESH 1.1.1B	[normal ending] [additional EFs read]
7	UICC → ME	PROACTIVE UICC SESSION ENDED	
8	USER → ME	Call setup to "321"	
9	ME → USER	Call set up not allowed	
10	USER → ME	Call setup to "123"	
11	ME → USS	Setup	Called party BCD number shall be "123"

PROACTIVE COMMAND: REFRESH 1.1.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Initialization
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	03	82	02	81	82	

TERMINAL RESPONSE: REFRESH 1.1.1A

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Initialization
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	03	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 1.1.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Initialization
Device identities
Source device: ME

Destination device: UICC

Result

General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	03	82	02	82	81	83	01	03

Expected Sequence 1.2 (REFRESH, File Change Notification)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 1.2.1	[To inform the ME that EF FDN will be in an updated state, FDN service already enabled]
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: REFRESH 1.2.1	
4	UICC	Update EF FDN RECORD 1	[EF FDN record 1 updated to contain the dialling string "0123456789"]
5	ME → UICC	TERMINAL RESPONSE: REFRESH 1.2.1A Or TERMINAL RESPONSE: REFRESH 1.2.1B	[normal ending] [additional EFs read]
6	UICC → ME	PROACTIVE UICC SESSION ENDED	
7	USER → ME	Call setup to "123"	
8	ME → USER	Call set up not allowed	
9	USER → ME	Call setup to "0123456789"	
10	ME → USS	Setup	Called party BCD number shall be "0123456789"

PROACTIVE COMMAND: REFRESH 1.2.1

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: File Change Notification

Device identities

Source device: UICC

Destination device: ME

File List: EF FDN

Coding:

BER-TLV:	D0	12	81	03	01	01	01	82	02	81	82	92
	07	01	3F	00	7F	FF	6F	3B				

TERMINAL RESPONSE: REFRESH 1.2.1A

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: File Change Notification

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	01	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 1.2.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: File Change Notification
Device identities
Source device: ME
Destination device: UICC
Result
General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	01	82	02	82	81	83	01	03

Expected Sequence 1.3 (REFRESH, USIM Initialization and File Change Notification)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 1.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: REFRESH 1.3.1	
4	UICC	Update EF ADN in the global phonebook	[EF ADN entry 1 of the global phonebook to contain the the new and previously unused alpha identifier "Changed"
5	ME → UICC	USIM Initialization including sending STATUS [P1='01']	[ME performs USIM initialization in accordance with TS 31.111 [15] clause 6.4.7]
6	ME → UICC	TERMINAL RESPONSE: REFRESH 1.3.1A Or TERMINAL RESPONSE: REFRESH 1.3.1B	[normal ending] [additional EFs read]
7	UICC → ME	PROACTIVE UICC SESSION ENDED	
8	USER → ME	Use an MMI dependent procedure to display the entry with the alpha identifier "Changed" stored in record 1 of EF ADN in the global phonebook	[To ensure that EF ADN in the global phonebook has been read after issuing the Refresh command]
9	ME → USER	The ME shall display the alpha identifier "Changed" for record 1 of EF ADN in the global phonebook	

PROACTIVE COMMAND: REFRESH 1.3.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Initialization and File Change Notification
Device identities
Source device: UICC

Destination device: ME
File List: ADN in the global phonebook

Coding:

BER-TLV:	D0	12	81	03	01	01	02	82	02	81	82	92
	Note 1											

Note 1: Length and data of the file list TLV depend on the card configuration used in this test. The global phonebook shall be used. The number of changed files shall be set to '01'.

TERMINAL RESPONSE: REFRESH 1.3.1A

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Initialization and File Change Notification
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	02	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 1.3.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Initialization and File Change Notification
Device identities
Source device: ME
Destination device: UICC
Result
General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	02	82	02	82	81	83	01	03

Expected Sequence 1.4 (REFRESH, USIM Initialization and Full File Change Notification)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 1.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: REFRESH 1.4.1	
4	UICC	EF EST contents states FDN enabled	[New EF EST value: 01]
5	UICC	Update EF FDN	[EF FDN record 1 updated to contain the dialling string "0123456789"]
6	ME → UICC	USIM Initialization including send STATUS[P1='01']	[ME performs USIM initialization in accordance with TS 31.111 [15] clause 6.4.7]

7	ME → UICC	TERMINAL RESPONSE: REFRESH 1.4.1A Or TERMINAL RESPONSE: REFRESH 1.4.1B	[normal ending] [additional EFs read]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	Call setup to "321"	
10	ME → USER	Call set up not allowed	
11	USER → ME	Call setup to "0123456789"	
12	ME → USS	Setup	Called party BCD number shall be "0123456789"

PROACTIVE COMMAND: REFRESH 1.4.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Initialization and Full File Change Notification
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	00	82	02	81	82

TERMINAL RESPONSE: REFRESH 1.4.1A

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Initialization and Full file Change Notification
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	00	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 1.4.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Initialization and full File change Notification
Device identities
Source device: ME
Destination device: UICC
Result
General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	00	82	02	82	81	83	01	03

Expected Sequence 1.5 (REFRESH, UICC Reset)

Step	Direction	MESSAGE / Action	Comments
1	UICC→ ME	PROACTIVE COMMAND PENDING: REFRESH 1.5.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: REFRESH 1.5.1	
4	ME → UICC	STATUS[P1='02']	ME indicates to USIM that the termination procedure is starting
5	ME → UICC	ME resets the UICC, performs USIM initialisation, including send STATUS[P1='01'] and no TERMINAL RESPONSE shall be sent	

PROACTIVE COMMAND: REFRESH 1.5.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: UICC Reset

Device identities
- Source device: UICC
- Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	04	82	02	81	82	

Expected Sequence 1.6 (REFRESH, USIM Initialization after SMS-PP data download)

Step	Direction	MESSAGE / Action	Comments
1	ME	The ME shall be in its normal idle mode	[Start a sequence to verify that the ME returns the RP-ACK message back to the USS, if the UICC responds with '90 00']
2	USS → ME	SMS-PP Data Download Message 1.6.1	
3	ME → USER	The ME shall not display the message or alert the user of a short message waiting	
4	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 1.6.1	
5	UICC → ME	SW1/SW2 of '90 00'	
6	ME → USS	RP-ACK	
7	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 1.1.1	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: REFRESH 1.1.1	
10	UICC	EF EST contents states FDN enabled	[New EF EST value: 01]
11	ME → UICC	USIM Initialization including send STATUS[P1='01']	[ME performs USIM initialization in accordance with TS 31.111 [15] clause 6.4.7]
12	ME → UICC	TERMINAL RESPONSE: REFRESH 1.1.1A Or TERMINAL RESPONSE: REFRESH 1.1.1B	[normal ending] [additional EFs read]

13	UICC → ME	PROACTIVE UICC SESSION ENDED	
14	USER → ME	Call setup to "321"	
15	ME → USER	Call set up not allowed	
16	USER → ME	Call setup to "123"	
17	ME → USS	Setup	Called party BCD number shall be "123"

SMS-PP (Data Download) Message 1.6.1

Logically:

SMS TPDU
TP-MTI SMS-DELIVER
TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME
TP-OA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "1234"
TP-PID (U)SIM Data download
TP-DCS
Coding Group General Data Coding
Compression Text is uncompressed
Message Class Class 2 (U)SIM Specific Message
Alphabet 8 bit data
TP-SCTS: 01/01/98 00:00:00 +0
TP-UDL 13
TP-UD "Short Message"

Coding:

Coding	04	04	91	21	43	7F	16	89	10	10	00	00
	00	00	0D	53	68	6F	72	74	20	4D	65	73
	73	61	67	65								

ENVELOPE: SMS-PP DOWNLOAD 1.6.1

Logically:

SMS-PP Download
Device identities
Source device: Network
Destination device: UICC
Address
TON International number
NPI "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-DELIVER
TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME
TP-OA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "1234"
TP-PID (U)SIM Data download
TP-DCS

Coding Group General Data Coding
Compression Text is uncompressed
Message Class Class 2 (U)SIM Specific Message
Alphabet 8 bit data
TP-SCTS: 01/01/98 00:00:00 +0
TP-UDL 13
TP-UD "Short Message"

Coding:

BER-TLV:	D1	2D	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1C	04	04	91	21	43
	7F	16	89	10	10	00	00	00	00	0D	53	68
	6F	72	74	20	4D	65	73	73	61	67	65	

Expected Sequence 1.7 (REFRESH, USIM Application Reset)

Step	Direction	MESSAGE / Action	Comments
1	UICC→ ME	PROACTIVE COMMAND PENDING: REFRESH 1.7.1	[To inform the ME that FDN becomes enabled]
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: REFRESH 1.7.1	No UICC reset shall be performed between steps 3 and 9.
4	ME → UICC	STATUS[P1='02']	ME indicates to USIM that the termination procedure is starting
5	ME → UICC	Select AID=USIM (P2='44') OR (P2='4C')	Application termination
6	UICC	EF EST contents states FDN enabled	[New EF EST value: 01]
7	ME → UICC	USIM Initialization, including send STATUS[P1='01']	[ME performs USIM initialization]
8	ME → UICC	TERMINAL RESPONSE: REFRESH 1.7.1	[normal ending]
9	UICC → ME	PROACTIVE UICC SESSION ENDED	
10	USER → ME	Call setup to "321"	
11	ME → USER	Call set up not allowed	
12	USER → ME	Call setup to "123"	
13	ME → USS	Setup	Called party BCD number shall be "123"
14	USS → ME	The ME receives the CONNECT message from the USS.	
15	USER → ME	The user ends the call after a few seconds.	

PROACTIVE COMMAND: REFRESH 1.7.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Application Reset
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	05	82	02	81	82	

TERMINAL RESPONSE: REFRESH 1.7.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Application Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	05	82	02	82	81	83	01	00

27.22.4.7.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.7.

27.22.4.7.2 REFRESH (IMSI changing procedure)

27.22.4.7.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.7.2.2 Conformance requirement

The ME shall support the REFRESH command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.1, clause 6.4.7, clause 6.6.13, clause 7.5.4, clause 8.2, clause 8.6, clause 8.7 and clause 8.90.

Consequently the Rel-7 or later ME shall support the steering of roaming procedure as defined in:

- TS 23.122 [29] clause 4.4.6.

27.22.4.7.2.3 Test purpose

To verify that the ME performs the Proactive Command – REFRESH in accordance with the Command Qualifier. This shall require the ME to perform:

- the steering of roaming procedure,
- a successful return of the result of the execution of the command in the TERMINAL RESPONSE command send to the UICC.

27.22.4.7.2.4 Method of test

27.22.4.7.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and connected to the USS and registered in idle mode.

The USS uses Network Mode of Operation II according to TS 34.108 [12] clause 7.2.2.

The GERAN or UTRAN parameters of the USS are:

- Mobile Country Code (MCC) = 246;
- Mobile Network Code (MNC) = 81;
- Location Area Code (LAC) = 0001;

- Routing Area Code (RAC) = 05;

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ATT flag broadcast in the SYSTEM INFORMATION BLOCK TYPE 1 on the BCCH is set to "UEs shall apply IMSI attach and detach procedure" for Expected Sequences 2.1 to 2.7.

27.22.4.7.2.4.2 Procedure

Expected Sequence 2.1 (REFRESH, UICC Reset for IMSI Changing procedure)

Step	Direction	MESSAGE / Action	Comments
1	UICC→ ME	PROACTIVE COMMAND PENDING: REFRESH 2.1.1	[To inform the ME that IMSI has changed]
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: REFRESH 2.1.1	
4	ME → USS	IMSI DETACH INDICATION and/or DETACH REQUEST	Indicates IMSI detach and/or GPRS detach, depending on if the ME is CS and/or PS registered according to its capabilities Note: this step can be performed in parallel or after step 5.
5	ME → UICC	STATUS[P1='02']	ME indicates to USIM that the termination procedure is starting
6	ME → UICC	ME performs UICC reset	Both cold and warm resets are allowed
7	UICC	Update EF IMSI, EF LOCI and EF PSLOCI	Update the content of EF IMSI to "246813579", TMSI in EF LOCI and P-TMSI in EF PSLOCI be set to 'FF FF FF FF'
8	ME → UICC	ME performs USIM Initialization, including send STATUS[P1='01'] and no TERMINAL RESPONSE shall be sent	
9	ME → USS	LOCATION UPDATING REQUEST and/or ATTACH REQUEST	The ME will register using IMSI "246813579" in CS and/or PS depending on its capabilities
10	USS → ME	LOCATION UPDATING ACCEPT and/or ATTACH ACCEPT	
11	ME → USS	TMSI REALLOCATION COMPLETE and/or ATTACH COMPLETE	

PROACTIVE COMMAND: REFRESH 2.1.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: UICC RESET
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	04	82	02	81	82

Expected Sequence 2.2 (REFRESH, USIM Application Reset for IMSI Changing procedure)

Step	Direction	MESSAGE / Action	Comments

1	UICC→ ME	PROACTIVE COMMAND PENDING: REFRESH 2.2.1	[To inform the ME that IMSI has changed]
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: REFRESH 2.2.1	
4	ME→USS	IMSI DETACH INDICATION and/or DETACH REQUEST	Indicates IMSI detach and/or GPRS detach, depending on if the ME is CS and/or PS registered according to its capabilities (performed in parallel or after step 5 and 6)
5	ME → UICC	STATUS[P1='02']	ME indicates to USIM that the termination procedure is starting
6	ME → UICC		Application termination
7	UICC	Update EF IMSI, EF LOCI and EF PSLOCI	The 3G session termination procedure has been completed by the ME. The content of EF IMSI has been updated to "246813579" and TMSI in EF LOCI and P-TMSI in EF PSLOCI are updated to 'FF FF FF FF'
8	ME → UICC	SELECT AID=USIM (P2='0x')	Application selection
9	ME → UICC	USIM Initialization, including send STATUS[P1='01']	[ME performs USIM initialization]
10	ME → UICC	TERMINAL RESPONSE: REFRESH 2.2.1	[normal ending]
11	UICC → ME	PROACTIVE UICC SESSION ENDED	
12	ME → USS	LOCATION UPDATING REQUEST and/or ATTACH REQUEST	The ME will register using IMSI "246813579" in CS and/or PS depending on its capabilities
13	USS → ME	LOCATION UPDATING ACCEPT and/or ATTACH ACCEPT	
14	ME → USS	TMSI REALLOCATION COMPLETE and/or ATTACH COMPLETE	

PROACTIVE COMMAND: REFRESH 2.2.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: USIM Application Reset

Device identities
- Source device: UICC
- Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	05	82	02	81	82

TERMINAL RESPONSE: REFRESH 2.2.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: USIM Application Reset

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	05	82	02	82	81	83	01	00

Expected Sequence 2.3 (REFRESH, 3G Session Reset for IMSI Changing procedure)

Step	Direction	MESSAGE / Action	Comments
1	UICC→ ME	PROACTIVE COMMAND PENDING: REFRESH 2.3.1	[To inform the ME that IMSI has changed]
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: REFRESH 2.3.1	
4	ME→USS	IMSI DETACH INDICATION and/or DETACH REQUEST	Indicates IMSI detach and/or GPRS detach, depending on if the ME is CS and/or PS registered according to its capabilities Note: this step can be performed in parallel or after step 5.
5	ME → UICC	STATUS[P1='02']	If A.1/172 is supported, then the ME indicates to USIM that the termination procedure is starting,. completes the 3G session termination procedure and resets the application via SELECT by DF name command with the AID. The ME performs the USIM initialization.
6	UICC	Update EF IMSI, EF LOCI and EF PSLOCI	The content of EF IMSI has been updated to "246813579" and TMSI in EF LOCI and P-TMSI in EF PSLOCI are updated to 'FF FF FF FF'
7	ME → UICC	TERMINAL RESPONSE: REFRESH 2.3.1A Or TERMINAL RESPONSE: REFRESH 2.3.1B	[normal ending]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	ME→ USS	LOCATION UPDATING REQUEST and/or ATTACH REQUEST	The ME will register using IMSI "246813579" in CS and/or PS depending on its capabilities
10	USS → ME	LOCATION UPDATING ACCEPT and/or ATTACH ACCEPT	
11	ME → USS	TMSI REALLOCATION COMPLETE and/or ATTACH COMPLETE	

PROACTIVE COMMAND: REFRESH 2.3.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: 3G Session Reset

Device identities
- Source device: UICC
- Destination device: ME

File list
- Number of files: 3
- File: EF IMSI
- File: EF PSLOCI
- File: EF LOCI

Coding:

BER-TLV:	D0	1E	81	03	01	01	06	82	02	81	82	92
	13	03	3F	00	7F	FF	6F	07	3F	00	7F	FF
	6F	73	3F	00	7F	FF	6F	7E				

TERMINAL RESPONSE: REFRESH 2.3.1A

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 2.3.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	01	03

Expected Sequence 2.4 (REFRESH, reject 3G Session Reset for IMSI Changing procedure during CS call)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	MO Call setup	
2	ME → USS	Call established and maintained	
3	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 2.4.1	
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: REFRESH 2.4.1	

6	ME → UICC	TERMINAL RESPONSE: REFRESH 2.4.1A Or TERMINAL RESPONSE: REFRESH 2.4.1B	ME rejects REFRESH proactive command
7	UICC → ME	PROACTIVE UICC SESSION ENDED	Note: EF IMSI, EF LOCI and EF PSLOCI are not updated by the UICC, see TS 31.111[15], cl. 6.4.7.1
8	USER → ME	The MO call is terminated	

PROACTIVE COMMAND: REFRESH 2.4.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: 3G Session Reset

Device identities
- Source device: UICC
- Destination device: ME

File list
- Number of files: 3
- File: EF IMSI
- File: EF PSLOCI
- File: EF LOCI

Coding:

BER-TLV:	D0	1E	81	03	01	01	06	82	02	81	82	92
	13	03	3F	00	7F	FF	6F	07	3F	00	7F	FF
	6F	73	3F	00	7F	FF	6F	7E				

TERMINAL RESPONSE: REFRESH 2.4.1A

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: 3G Session Reset

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: ME currently unable to process command
- Additional information on result: ME currently busy on call

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	02	20
	02											

TERMINAL RESPONSE: REFRESH 2.4.1B

Logically:

Command details
- Command number: 1
- Command type: REFRESH

Command qualifier: 3G Session Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: ME currently unable to process command
Additional information on result: Screen is busy

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	02	20
	01											

Expected Sequence 2.5 (REFRESH, reject UICC Reset for IMSI Changing procedure during CS call)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	CS MO Call setup	
2	ME → USS	Call established and maintained	
3	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 2.5.1	
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: REFRESH 2.5.1	
6	ME → UICC	TERMINAL RESPONSE: REFRESH 2.5.1A Or TERMINAL RESPONSE: REFRESH 2.5.1B	ME rejects REFRESH proactive command
7	UICC → ME	PROACTIVE UICC SESSION ENDED	Note: EF IMSI, EF LOCI and EF PS LOCI are not updated by the UICC, see TS 31.111[15], cl. 6.4.7.1
8	USER → ME	The CS MO call is terminated	

PROACTIVE COMMAND: REFRESH 2.5.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: UICC RESET
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	04	82	02	81	82	

TERMINAL RESPONSE: REFRESH 2.5.1A

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: UICC RESET
Device identities
Source device: ME
Destination device: UICC

Result

General Result: ME currently unable to process command
Additional information on result: ME currently busy on call

Coding:

BER-TLV:	81	03	01	01	04	82	02	82	81	83	02	20
	02											

TERMINAL RESPONSE: REFRESH 2.5.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: UICC RESET
Device identities
Source device: ME
Destination device: UICC
Result
General Result: ME currently unable to process command
Additional information on result: Screen is busy

Coding:

BER-TLV:	81	03	01	01	04	82	02	82	81	83	02	20
	01											

Expected Sequence 2.6 (REFRESH, UICC Reset for IMSI Changing procedure during active PDP context)

Step	Direction	MESSAGE / Action	Comments
1	USER→ ME	Data Call setup	PDP context will be established
2	ME →USS	PDP context established and maintained	
3	UICC→ ME	PROACTIVE COMMAND PENDING: REFRESH	[To inform the ME that IMSI has changed]
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: REFRESH 2.6.1 or 2.6.2	IF terminal supports PD_ Refresh_Enforcement_Policy use PROACTIVE COMMAND: REFRESH 2.6.2, ELSE 2.6.1.
6	ME→USS	Deactivate PDP context	Mobile will deactivate the PDP context Note 1: this step is performed locally and may not reflect on the interface to the USS. Note 2: this step can happen after step 8.
7	ME→USS	IMSI DETACH INDICATION and/or DETACH REQUEST	Indicates IMSI detach and/or GPRS detach, depending on if the ME is CS and/or PS registered according to its capabilities. Note: this step can happen after step 8
8	ME → UICC	STATUS[P1='02']	ME indicates to USIM that the termination procedure is starting
9	ME → UICC	ME performs UICC reset	Both cold and warm resets are allowed
10	UICC	Update EF IMSI, EF LOCI and EF PSLOCI	The content of EF IMSI has been updated to "246813579" and TMSI in EF LOCI and P-TMSI in EF PSLOCI are updated to 'FF FF FF FF'
11	ME → UICC	ME resets the UICC, perform USIM Initialization, including send STATUS[P1='01'] and no TERMINAL RESPONSE shall be sent	[ME resets and performs USIM initialization]

12	ME→ USS	LOCATION UPDATING REQUEST and/or ATTACH REQUEST	The ME will register using IMSI "246813579" in CS and/or PS depending on its capabilities
13	USS → ME	LOCATION UPDATING ACCEPT and/or ATTACH ACCEPT	
14	ME → USS	TMSI REALLOCATION COMPLETE and/or ATTACH COMPLETE	

PROACTIVE COMMAND: REFRESH 2.6.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: UICC RESET
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	04	82	02	81	82

PROACTIVE COMMAND: REFRESH 2.6.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: UICC RESET
Device identities
Source device: UICC
Destination device: ME

Refresh enforcement policy: Force immediate REFRESH even if the terminal is busy on data call

Coding:

BER-TLV:	D0	0C	81	03	01	01	04	82	02	81	82	3A
	01	02										

Expected Sequence 2.7 (REFRESH, 3G Session Reset for IMSI Changing procedure during active PDP context)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Data Call setup	PDP context will be established
2	ME → USS	PDP context establishedand maintained	
3	UICC→ ME	PROACTIVE COMMAND PENDING: REFRESH	[To inform the ME that IMSI has changed]
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: REFRESH 2.7.1 or 2.7.2	IF terminal supports PD_ Refresh_Enforcement_Policy use PROACTIVE COMMAND: REFRESH 2.7.2, ELSE 2.7.1.

6	ME→USS	Deactivate PDP context	Mobile will deactivate the PDP context Note: this step can be performed in parallel or after step 8.
7	ME→USS	IMSI DETACH INDICATION and/or DETACH REQUEST	Indicates IMSI detach and/or GPRS detach, depending on if the ME is CS and/or PS registered according to its capabilities Note 1: this step is performed locally and may not reflect on the interface to the USS. Note 2: this step can be performed in parallel or after step 8.
8	ME → UICC	STATUS[P1='02']	If A.1/172 is supported, then the ME indicates to USIM that the termination procedure is starting, completes the 3G session termination procedure and resets the application via SELECT by DF name command with the AID. The ME performs the USIM initialization.
9	UICC	Update EF IMSI, EF LOCI and EF PSLOCI	The content of EF IMSI has been updated to "246813579" and TMSI in EF LOCI and P-TMSI in EF PSLOCI are updated to 'FF FF FF FF'
10	ME → UICC	TERMINAL RESPONSE: REFRESH 2.7.1A Or TERMINAL RESPONSE: REFRESH 2.7.1B	[normal ending]
11	UICC → ME	PROACTIVE UICC SESSION ENDED	
12	ME→ USS	LOCATION UPDATING REQUEST and/or ATTACH REQUEST	The ME will register using IMSI "246813579" in CS and/or PS depending on its capabilities
13	USS → ME	LOCATION UPDATING ACCEPT and/or ATTACH ACCEPT	
14	ME → USS	TMSI REALLOCATION COMPLETE and/or ATTACH COMPLETE	

PROACTIVE COMMAND: REFRESH 2.7.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: 3G Session Reset

Device identities
- Source device: UICC
- Destination device: ME

File list
- Number of files: 3
- File: EF IMSI
- File: EF PSLOCI
- File: EF LOCI

Coding:

BER-TLV:	D0	1E	81	03	01	01	06	82	02	81	82	92
	13	03	3F	00	7F	FF	6F	07	3F	00	7F	FF
	6F	73	3F	00	7F	FF	6F	7E				

PROACTIVE COMMAND: REFRESH 2.7.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: UICC
Destination device: ME

File list
Number of files: 3
File: EF IMSI
File: EF PSLOCI
File: EF LOCI
Refresh enforcement policy: Force immediate REFRESH even if the terminal is busy on data call

Coding:

BER-TLV:	D0	21	81	03	01	01	06	82	02	81	82	92
	13	03	3F	00	7F	FF	6F	07	3F	00	7F	FF
	6F	73	3F	00	7F	FF	6F	7E	3A	01	02	

TERMINAL RESPONSE: REFRESH 2.7.1A

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 2.7.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	01	03

27.22.4.7.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.7.

27.22.4.7.3 REFRESH (Steering of roaming)

27.22.4.7.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.7.3.2 Conformance requirement

The ME shall support the REFRESH command as defined in:

- TS 31.111 [15] clause 5.2, clause 6.1, clause 6.4.7, clause 6.6.13, clause 7.5.4, clause 8.2, clause 8.6, clause 8.7, clause 8.90 and 8.146.

Consequently the Rel-7 or later ME shall support the steering of roaming procedure as defined in:

- TS 23.122 [29] clause 4.4.6 and Annex C.4.

27.22.4.7.3.3 Test purpose

To verify that the ME performs the Proactive Command – REFRESH in accordance with the Command Qualifier. This shall require the ME to perform:

- the steering of roaming procedure,
- a successfull return of the result of the execution of the command in the TERMINAL RESPONSE command send to the UICC.

For sequence 3.5, the ME shall release PDU session 'DNN' after a Tsor-cm period expiration.

For sequence 3.6, the ME shall release PDU session 'S-NSSAI SST and SD' after a Tsor-cm period expiration.

For sequence 3.7, the ME shall release PDU session 'DNN' and 'S-NSSAI SST and SD' after Tsor-cm expiration of the highest timer of the two matching SOR-CMCI criterions type (i.e. 'DNN' and 'S-NSSAI SST and SD'), and shall release all other PDU session after a Tsor-cm period expiration of 'match all' criterion.

27.22.4.7.3.4 Method of test

27.22.4.7.3.4.1 Initial conditions

For sequences 3.1 and 3.2 the ME is connected to the USIM Simulator and connected to the USS/SS.

For sequence 3.3 the ME supporting E-UTRAN/NB-IoT is connected to the USIM Simulator and connected to the E-USS/NB-SS.

For sequence 3.4, 3.5, 3.6 and 3.7 the ME supporting NG-RAN is connected to the USIM Simulator and connected to the NG-SS.

For sequences 3.1 and 3.2:

The elementary files are coded as Toolkit default with the following exceptions:

EF_{UST} (USIM Service Table)

Settings from 27.22.2A apply with the following changes:

Logically:

Service n°42: Operator controlled PLMN selector with Access Technology available

Byte:	B1	B2	B3	B4	B5	B6
binary	xx1x xx11	x1xx 111x	xx1x 1x00	1001 11xx	xxx xx11	xxxx xx1x
	B7	B8	B9	B10	B11	
	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx	xx00 xxxx	

EF_{FPLMN}

Logically: PLMN1: 254 002 (MCC MNC)
PLMN2: 254 003
PLMN3: 254 004
PLMN4: 234 004
PLMN5: 234 005
PLMN6: 234 006

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
Hex	52	24	00	52	34	00	52	44	00	32	44	00

	B13	B14	B15	B16	B17	B18						
	32	54	00	32	64	00						

$EF_{OPLMNwACT}$

Logically: 1st PLMN:254 001 (MCC MNC)
1st ACT: UTRAN
2nd PLMN: 254 001
2nd ACT: GSM
3rd PLMN: 274 002
3rd ACT: UTRAN
4th PLMN: 274 003
4th ACT: UTRAN
5th PLMN: 274 004
5th ACT: UTRAN
6th PLMN: 274 005
6th ACT: UTRAN
7th PLMN: 274 006
7th ACT: UTRAN
8th PLMN: 274 007
8th ACT: UTRAN

Coding:	**B01**	**B02**	**B03**	**B04**	**B05**	**B06**	**B07**	**B08**	**B09**	**B10**
Hex	52	14	00	80	00	52	14	00	00	80

	B11	**B12**	**B13**	**B14**	**B15**	**B16**	**B17**	**B18**	**B19**	**B20**
	72	24	00	80	00	72	34	00	80	00

	B21	**B22**	**B23**	**B24**	**B25**	**B26**	**B27**	**B28**	**B29**	**B30**
	72	44	00	80	00	72	54	00	80	00

	B31	**B32**	**B33**	**B34**	**B35**	**B36**	**B37**	**B38**	**B39**	**B40**
	72	64	00	80	00	72	74	00	80	00

For sequence 3.3:

The default E-UTRAN UICC, the default E-USS/NB-SS parameters and the following parameters are used:

EF_{UST} (USIM Service Table)

Settings from 27.22.2B.1 apply with the following changes:

Logically:

Service n°42: Operator controlled PLMN selector with Access Technology available

Byte:	B1	B2	B3	B4	B5	B6
binary	xx1x xx11	x1xx 111x	xx1x 1x00	1001 11xx	xxx xx11	xxxx xx1x
	B7	B8	B9	B10	B11	
	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx	xx01 xxxx	

EF_{FPLMN}

Logically: PLMN1: 254 002 (MCC MNC)
PLMN2: 254 003
PLMN3: 254 004
PLMN4: 234 004
PLMN5: 234 005
PLMN6: 234 006

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
Hex	52	24	00	52	34	00	52	44	00	32	44	00

	B13	B14	B15	B16	B17	B18						
	32	54	00	32	64	00						

$EF_{OPLMNwACT}$

Logically: 1st PLMN:254 001 (MCC MNC)
1st ACT: E-UTRAN, UTRAN
2nd PLMN: 254 001
2nd ACT: GSM
3rd PLMN: 274 002
3rd ACT: E-UTRAN
4th PLMN: 274 003
4th ACT: E-UTRAN
5th PLMN: 274 004
5th ACT: E-UTRAN
6th PLMN: 274 005
6th ACT: E-UTRAN
7th PLMN: 274 006
7th ACT: E-UTRAN
8th PLMN: 274 007
8th ACT: UTRAN

Coding:	B01	B02	B03	B04	B05	B06	B07	B08	B09	B10
Hex	52	14	00	C0	00	52	14	00	00	80

	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
	72	24	00	40	00	72	34	00	40	00

	B21	B22	B23	B24	B25	B26	B27	B28	B29	B30
	72	44	00	40	00	72	54	00	40	00

	B31	B32	B33	B34	B35	B36	B37	B38	B39	B40
	72	64	00	40	00	72	74	00	80	00

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For sequence 3.4:

The default NG-RAN UICC, the default NG-SS parameters and the following parameters are used:

EF_{UST} (USIM Service Table)

Settings from 27.22.2D.1 apply with the following changes:

Logically:
Service n°42: Operator controlled PLMN selector with Access Technology available

Byte:	B1	B2	B3	B4	B5	B6	B7	B8
binary:	xxxx xx1x	xxxx xxxx	xxxx 1x00	xxxx x1xx	xxxx xx11	xxxx xx1x	xxxx xxxx	xxxx xxxx
	B9	B10	B11		B16			
	xxxx xxxx	xxxx xxxx	xx11 xxxx	.....	xxx0 111x			

EF_{FPLMN}

Logically: PLMN1: 254 002 (MCC MNC)
PLMN2: 254 003
PLMN3: 254 004
PLMN4: 234 004
PLMN5: 234 005
PLMN6: 234 006

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
Hex	52	24	00	52	34	00	52	44	00	32	44	00

	B13	B14	B15	B16	B17	B18						
	32	54	00	32	64	00						

$EF_{OPLMNwACT}$

Logically: 1st PLMN:254 001 (MCC MNC)
1st ACT: NG-RAN
2nd PLMN: 254 001
2nd ACT: GSM
3rd PLMN: 274 002
3rd ACT: E-UTRAN
4th PLMN: 274 003
4th ACT: E-UTRAN
5th PLMN: 274 004
5th ACT: E-UTRAN
6th PLMN: 274 005
6th ACT: E-UTRAN
7th PLMN: 274 006
7th ACT: E-UTRAN
8th PLMN: 274 007
8th ACT: UTRAN

Coding:	B01	B02	B03	B04	B05	B06	B07	B08	B09	B10
Hex	52	14	00	08	00	52	14	00	00	80

	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
	72	24	00	40	00	72	34	00	40	00

	B21	B22	B23	B24	B25	B26	B27	B28	B29	B30
	72	44	00	40	00	72	54	00	40	00

	B31	B32	B33	B34	B35	B36	B37	B38	B39	B40
	72	64	00	40	00	72	74	00	80	00

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For sequences 3.5, 3.6 and 3.7:

The NG-SS shall be able to support 2 active PDU sessions at the same time, the Allowed S-NSSAI list is configured to '01 01 01 01'.

Settings from NG-RAN UICC supporting Rel-17 features apply with the following changes:

$EF_{OPLMNwACT}$

Logically: 1st PLMN:254 001 (MCC MNC)
1st ACT: NG-RAN
2nd PLMN: 254 001
2nd ACT: GSM
3rd PLMN: 274 002
3rd ACT: E-UTRAN

Coding:	B01	B02	B03	B04	B05	B06	B07	B08	B09	B10
Hex	52	14	00	08	00	52	14	00	00	80

	B11	B12	B13	B14	B15					
	72	24	00	40	00					

27.22.4.7.3.4.2 Procedure

Expected Sequence 3.1 (REFRESH, Steering of roaming, UTRAN)

Step	Direction	MESSAGE / Action	Comments
1	USS	The first UMTS USS transmits on BCCH, with the following network parameters: - Attach/detach: disabled. - LAI (MCC/MNC/LAC): 254/001/0001. - Access control: unrestricted. The second UMTS USS transmits on BCCH, with the following network parameters: - Attach/detach: disabled. - LAI (MCC/MNC/LAC): 254/002/0001. - Access control: unrestricted.	
2	ME → USS	The ME registers to the first USS.	
3	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 3.1.1	[Setting up LOCATION STATUS Event]
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 3.1.1	
6a	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 3.1.1	
6b	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 3.1.2	This step applies only if A.1/171
7	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 3.1.1	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: REFRESH 3.1.1	Note: Step 11 can occur at any time during execution of steps 10a to 10d
10a	UICC	Void	
10b	ME → UICC	Update of EF FPLMN	[Deletion of the entries with PLMN 254/003 and PLMN 254/004]
10c	ME	Update of ME's internal memory	[Not explicitly verified: Deletion of the FPLMN entries with PLMN 254/003 and PLMN 254/004]
10d	ME → USS	From steps 9 -13: The ME does not register to another USS than the currently selected and shall not send new LOCATION STATUS event to the UICC.	
11	ME → UICC	TERMINAL RESPONSE: REFRESH 3.1.1	[normal ending] Note: For a pre-release 11 ME, the UICC simulator does not need to evaluate the response
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13		Wait approx. 180 seconds	[The ME does not register to another USS than the currently selected.]

14	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 3.1.2	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: REFRESH 3.1.2	Note: Step 18 can occur at any time during execution of steps 17a to 17c
17a	UICC	Void	
17b	ME → UICC	Update of EF FPLMN	[Deletion of the entry with PLMN 254/002]
17c	ME	Update of ME's internal memory	[Not explicitly verified: Deletion of the FPLMN entry with PLMN 254/002]
18	ME → UICC	TERMINAL RESPONSE: REFRESH 3.1.2	[normal ending]
19	UICC → ME	PROACTIVE UICC SESSION ENDED	
20	ME → USS	The ME registers to the second USS.	Note: The ME might have registered to the second USS also before steps 18/19.
21	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 3.1.1	PLMN MCC/MNC: 254/002, Normal service Note: The ME send the Envelope after registration to the second USS, thus might have sent the Envelope also before steps 18/19.
22	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 3.1.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: REFRESH 3.1.3	Note: Step 26 can occur at any time during execution of steps 25a to 25c
25a	UICC	Void	
25b	UICC	EF FPLMN	[PLMN entries 254/003 and PLMN 254/001 not existent in EF FPLMN]
25c	ME	ME's internal memory	[Not explicitly verified: PLMN entries 254/003 and PLMN 254/001 not existent in FPLMN list]
26	ME → UICC	TERMINAL RESPONSE: REFRESH 3.1.2	[normal ending]
27	UICC → ME	PROACTIVE UICC SESSION ENDED	
28	ME → USS	The ME registers to the first USS.	Note: The ME might have registered to the first USS also before steps 26/27.
29	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 3.1.2	PLMN MCC/MNC: 254/001 Note: The ME send the Envelope after registration to the first USS, thus might have sent the Envelope also before steps 26/27.
30	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 3.2.1	
31	ME → UICC	FETCH	
32	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 3.2.1	[Event LOCATION STATUS download removed]
33	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 3.2.1	The content of the Terminal Response is not part of the evaluation of the test case
34	USER → ME	SWITCH OFF ME	

PROACTIVE COMMAND: SET UP EVENT LIST 3.1.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in clause 27.22.7.4.1.4.2.

TERMINAL RESPONSE: SET UP EVENT LIST 3.1.1

Same as TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 in clause 27.22.7.4.1.4.2.

PROACTIVE COMMAND: SET UP EVENT LIST 3.2.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.3.2 in clause 27.22.4.16.1.4.2.

TERMINAL RESPONSE: SET UP EVENT LIST 3.2.1

Same as TERMINAL RESPONSE: SET UP EVENT LIST 1.3.2 in clause 27.22.4.16.1.4.2.

PROACTIVE COMMAND: REFRESH 3.1.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwACT List

1stPLMN:254/003
1stACT: UTRAN
2ndPLMN: 254/004
2ndACT: GERAN

Coding:

BER-TLV:	D0	15	81	03	01	01	07	82	02	81	82	72
	0A	52	34	00	80	00	52	44	00	00	80	

TERMINAL RESPONSE: REFRESH 3.1.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	07	82	02	82	81	83	01	00

PROACTIVE COMMAND: REFRESH 3.1.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwACT List

1stPLMN:254/002
1stACT: UTRAN/GERAN

2ndPLMN: 254/001
2ndACT: UTRAN/GERAN

Coding:

BER-TLV:	D0	15	81	03	01	01	07	82	02	81	82	72
	0A	52	24	00	80	80	52	14	00	80	80	

TERMINAL RESPONSE: REFRESH 3.1.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	07	82	02	82	81	83	01	00

EVENT DOWNLOAD - LOCATION STATUS 3.1.1

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: normal service
Location Information
MCC & MNC the mobile country and network code (254/002)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value, see also Note 1

Coding:

BER-TLV:	D6	15	19	01	03	82	02	82	81	1B	01	00
	13	09	52	24	00	00	01	00	01	Note 1		

NOTE 1: The Extended Cell Identity Value is present. The values of the two bytes shall not be verified.

PROACTIVE COMMAND: REFRESH 3.1.3

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwACT List

1stPLMN:254/003

1stACT: UTRAN/GERAN
2ndPLMN: 254/001
2ndACT: UTRAN/GERAN

Coding:

BER-TLV:	D0	15	81	03	01	01	07	82	02	81	82	72
	0A	52	34	00	80	80	52	14	00	80	80	

EVENT DOWNLOAD - LOCATION STATUS 3.1.2

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: normal service
Location Information
MCC & MNC: the mobile country and network code (254/001)
LAC: the location Area Code (0001)
Cell ID: Cell Identity Value (0001)
Extended Cell ID: RNC-id value, see also Note 1

Coding:

BER-TLV:	D6	15	19	01	03	82	02	82	81	1B	01	00
	13	09	52	14	00	00	01	00	01	Note 1		

NOTE 1: The Extended Cell Identity Value is present. The values of the two bytes shall not be verified.

Expected Sequence 3.2 (REFRESH, Steering of roaming, InterRAT)

Step	Direction	MESSAGE / Action	Comments
1	USS	The UMTS USS transmits on BCCH, with the following network parameters: - Attach/detach: disabled. - LAI (MCC/MNC/LAC): 254/001/0001. - Access control: unrestricted. The GSM SS transmits on BCCH, with the following network parameters: - Attach/detach: disabled. - LAI (MCC/MNC/LAC): 254/002/0001. - Cell ID: 0001 - Access control: unrestricted.	
2	ME → USS	The ME registers to the UMTS USS and achieves updated idle mode.	
3	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 3.1.1	[Setting up LOCATION STATUS Event]
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 3.1.1	
6	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 3.1.1	IF A.1/171 THEN ME sends an ENVELOPE: EVENT DOWNLOAD - Location Status 3.2.2
7	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 3.2.1	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: REFRESH 3.2.1	Note: Step 11 can occur at any time during execution of steps 10a to 10c
10a	UICC	Void	
10b	ME → UICC	Update of EF_{FPLMN}	[Deletion of the entry with PLMN 254/002]

10c	ME	Update of ME's internal memory	[Not explicitly verified: Deletion of the FPLMN entry with PLMN 254/002]
11	ME → UICC	TERMINAL RESPONSE: REFRESH 3.1.2	[normal ending]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	ME → USS	The ME registers to the GSM SS and is in updated idle mode.	Note: The ME might have registered to the second USS also before steps 11/12.
14	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 3.2.1	PLMN MCC/MNC: 254/002, Normal service Note: The ME send the Envelope after registration to the GSM SS, thus might have sent the Envelope also before steps 11/12.
15	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 3.2.2	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: REFRESH 3.2.2	Note: Step 19 can occur at any time during execution of steps 18a to 18c
18a	UICC	Void	
18b	UICC	EF_{FPLMN}	[Entries with PLMN 254/002 and PLMN 254/001 not existent in EF_{FPLMN}]
18c	ME	ME's internal memory	[Not explicitly verified: FPLMN entries with PLMN 254/002 and PLMN 254/001 not existent in FPLMN list]
19	ME → UICC	TERMINAL RESPONSE: REFRESH 3.1.2	[normal ending]
20	UICC → ME	PROACTIVE UICC SESSION ENDED	
21	ME → USS	The ME registers to the UMTS USS and is in updated idle mode.	Note: The ME might have registered to the first USS also before steps 19/20.
22	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 3.2.2	PLMN MCC/MNC: 254/001 Note: The ME send the Envelope after registration to the first USS, thus might have sent the Envelope also before steps 19/20.
23	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 3.2.1	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 3.2.1	[Event LOCATION STATUS download removed]
26	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 3.2.1	The content of the Terminal Response is not part of the evaluation of the test case
27	USER → ME	SWITCH OFF ME	

PROACTIVE COMMAND: REFRESH 3.2.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwACT List

1stPLMN:254/002
1stACT: GERAN
2ndPLMN: 254/001

2ndACT: UTRAN

Coding:

BER-TLV:	D0	15	81	03	01	01	07	82	02	81	82	72
	0A	52	24	00	00	80	52	14	00	80	00	

PROACTIVE COMMAND: REFRESH 3.2.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwACT List

1stPLMN:254/003
1stACT: GERAN
2ndPLMN: 254/001
2ndACT: UTRAN

Coding:

BER-TLV:	D0	15	81	03	01	01	07	82	02	81	82	72
	0A	52	34	00	00	80	52	14	00	80	00	

EVENT DOWNLOAD - LOCATION STATUS 3.2.1

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: normal service
Location Information
MCC & MNC the mobile country and network code (254/002)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D6	13	19	01	03	82	02	82	81	1B	01	00
	13	07	52	24	00	00	01	00	01			

EVENT DOWNLOAD - LOCATION STATUS 3.2.2

Same as PROACTIVE COMMAND: EVENT DOWNLOAD - LOCATION STATUS 3.1.2 in clause 27.22.4.7.3.4.2.

Expected Sequence 3.3 (REFRESH, Steering of roaming, E-UTRAN)

Step	Direction	MESSAGE / Action	Comments

1	E-USS/NB-SS	The first E-USS/NB-SS transmits on BCCH, with the following network parameters: - Attach/detach: disabled. - TAI (MCC/MNC/TAC): 254/001/0001. - Access control: unrestricted. The second E-USS/NB-SS transmits on BCCH, with the following network parameters: - Attach/detach: disabled. - TAI (MCC/MNC/TAC): 254/002/0001. - Access control: unrestricted.	
2	ME → E-USS/NB-SS	The ME registers to the first E-USS/NB-SS.	
3	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 3.1.1	[Setting up LOCATION STATUS Event]
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 3.1.1	
6	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 3.1.1	IF A.1/171 THEN ME sends a ENVELOPE: EVENT DOWNLOAD - Location Status 3.3.3
7	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 3.3.1	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: REFRESH 3.3.1	Note: Step 11 can occur at any time during execution of steps 10a to 10d
10a	UICC	Void	
10b	ME → UICC	Update of EF FPLMN	[Deletion of the entries with PLMN 254/003 and PLMN 254/004]
10c	ME	Update of ME's internal memory	[Not explicitly verified: Deletion of the FPLMN entries with PLMN 254/003 and PLMN 254/004]
10d	ME → E-USS/NB-SS	From steps 9 -13: The ME does not register to another E-USS/NB-SS than the currently selected and shall not send new LOCATION STATUS event to the UICC.	
11	ME → UICC	TERMINAL RESPONSE: REFRESH 3.3.1	[normal ending] Note: For a pre-release 11 ME, the UICC simulator does not need to evaluate the response
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13		Wait approx. 180 seconds	[The ME does not register to another E-USS/NB-SS than the currently selected.]
14	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 3.3.2	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: REFRESH 3.3.2	Note: Step 18 can occur at any time during execution of steps 17a to 17c
17a	UICC	Void	
17b	ME → UICC	Update of EF FPLMN	[Deletion of the entry with PLMN 254/002]
17c	ME	Update of ME's internal memory	[Not explicitly verified: Deletion of the FPLMN entry with PLMN 254/002]
18	ME → UICC	TERMINAL RESPONSE: REFRESH 3.3.2	[normal ending]
19	UICC → ME	PROACTIVE UICC SESSION ENDED	
20	ME → E-USS/NB-SS	The ME registers to the second E-USS/NB-SS.	Note: The ME might have registered to the second E-USS/NB-SS also before steps 18/19.

21	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 3.3.2	PLMN MCC/MNC: 254/002 Note: The ME send the Envelope after registration to the second E-USS/NB-SS, thus might have sent the Envelope also before steps 18/19.
22	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 3.1.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: REFRESH 3.3.3	Note: Step 26 can occur at any time during execution of steps 25a to 25c
25a	UICC	Void	
25b	UICC	EF FPLMN	[PLMN entries 254/003 and PLMN 254/001 not existent in EF FPLMN]
25c	ME	ME's internal memory	[Not explicitly verified: PLMN entries 254/003 and PLMN 254/001 not existent in FPLMN list]
26	ME → UICC	TERMINAL RESPONSE: REFRESH 3.3.2	[normal ending]
27	UICC → ME	PROACTIVE UICC SESSION ENDED	
28	ME → E-USS/NB-SS	The ME registers to the first E-USS/NB-SS.	Note: The ME might have registered to the first E-USS/NB-SS also before steps 26/27.
29	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 3.3.3	PLMN MCC/MNC: 254/001 Note: The ME send the Envelope after registration to the second E-USS/NB-SS, thus might have sent the Envelope also before steps 26/27.
30	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 3.2.1	
31	ME → UICC	FETCH	
32	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 3.2.1	[Event LOCATION STATUS download removed]
33	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 3.2.1	The content of the Terminal Response is not part of the evaluation of the test case
34	USER → ME	SWITCH OFF ME	

PROACTIVE COMMAND: REFRESH 3.3.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwACT List

1stPLMN:254/003
1stACT: E-UTRAN, UTRAN
2ndPLMN: 254/004
2ndACT: GERAN

Coding:

BER-TLV:	D0	15	81	03	01	01	07	82	02	81	82	72
	0A	52	34	00	C0	00	52	44	00	00	80	

TERMINAL RESPONSE: REFRESH 3.3.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	07	82	02	82	81	83	01	00

PROACTIVE COMMAND: REFRESH 3.3.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwACT List

1stPLMN: 254/002
1stACT: E-UTRAN/UTRAN/GERAN
2ndPLMN: 254/001
2ndACT: E-UTRAN/UTRAN/GERAN

Coding:

BER-TLV:	D0	15	81	03	01	01	07	82	02	81	82	72
	0A	52	24	00	C0	80	52	14	00	C0	80	

TERMINAL RESPONSE: REFRESH 3.3.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	07	82	02	82	81	83	01	00

EVENT DOWNLOAD - LOCATION STATUS 3.3.2

Logically:

Event list: Location status
Device identities

Source device: ME
Destination device: UICC
Location status: normal service
Location Information
MCC & MNC the mobile country and network code (254/002)
TAC 0001
E-UTRAN cell id: 0001 (28bits)

Coding:

BER-TLV:	D6	15	19	01	03	82	02	82	81	1B	01	00
	13	09	52	24	00	00	01	00	00	00	1F	

PROACTIVE COMMAND: REFRESH 3.3.3

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwACT List

1stPLMN:254/003
1stACT: E-UTRAN/UTRAN/GERAN
2ndPLMN: 254/001
2ndACT: E-UTRAN/UTRAN/GERAN

Coding:

BER-TLV:	D0	15	81	03	01	01	07	82	02	81	82	72
	0A	52	34	00	C0	80	52	14	00	C0	80	

EVENT DOWNLOAD - LOCATION STATUS 3.3.3

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: normal service
Location Information
MCC & MNC the mobile country and network code (254/001)
TAC 0001
E-UTRAN cell id: 0001 (28bits)

Coding:

BER-TLV:	D6	15	19	01	03	82	02	82	81	1B	01	00
	13	09	52	14	00	00	01	00	00	00	1F	

Expected Sequence 3.4 (REFRESH, Steering of roaming, NG-RAN)

Step	Direction	MESSAGE / Action	Comments

1	NG-SS	The first NG-SS transmits on BCCH, with the following network parameters: - Attach/detach: disabled. - TAI (MCC/MNC/TAC): 254/001/000001. - Access control: unrestricted. The second NG-SS transmits on BCCH, with the following network parameters: - Attach/detach: disabled. - TAI (MCC/MNC/TAC): 254/002/000001. - Access control: unrestricted.	
2	ME → NG-SS	The ME registers to the first NG-SS.	
3	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 3.1.1	[Setting up LOCATION STATUS Event]
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 3.1.1	
6a	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 3.1.1	
6b	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 3.4.3	
7	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 3.4.1	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: REFRESH 3.4.1	Note: Step 11 can occur at any time during execution of steps 10a to 10c
10a	ME → UICC	Update of EF FPLMN	[Deletion of the entries with PLMN 254/003 and PLMN 254/004]
10b	ME	Update of ME's internal memory	[Not explicitly verified: Deletion of the FPLMN entries with PLMN 254/003 and PLMN 254/004]
10c	ME → NG-SS	From steps 9-13: The ME does not register to another NG-SS than the currently selected and shall not send new LOCATION STATUS event to the UICC.	
11	ME → UICC	TERMINAL RESPONSE: REFRESH 3.4.1	[normal ending] Note: For a pre-release 11 ME, the UICC simulator does not need to evaluate the response
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13		Wait approx. 180 seconds	[The ME does not register to another NG-SS than the currently selected.]
14	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 3.4.2	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: REFRESH 3.4.2	Note: Step 18 can occur at any time during execution of steps 17a to 17b
17a	ME → UICC	Update of EF FPLMN	[Deletion of the entry with PLMN 254/002]
17b	ME	Update of ME's internal memory	[Not explicitly verified: Deletion of the FPLMN entry with PLMN 254/002]
18	ME → UICC	TERMINAL RESPONSE: REFRESH 3.4.2	[normal ending]
19	UICC → ME	PROACTIVE UICC SESSION ENDED	
20	ME → NG-SS	The ME registers to the second NG-SS	Note: The ME might have registered to the second NG-SS also before steps 18/19.
21	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 3.4.2	PLMN MCC/MNC: 254/002 Note: The ME send the Envelope after registration to the second NG-SS, thus might have sent the Envelope also before steps 18/19.
22	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 3.4.3	

23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: REFRESH 3.4.3	Note: Step 26 can occur at any time during execution of steps 25a to 25b
25a	UICC	EF FPLMN	[PLMN entries 254/003 and PLMN 254/001 not existent in EF FPLMN]
25b	ME	ME's internal memory	[Not explicitly verified: PLMN entries 254/003 and PLMN 254/001 not existent in FPLMN list]
26	ME → UICC	TERMINAL RESPONSE: REFRESH 3.4.3	[normal ending]
27	UICC → ME	PROACTIVE UICC SESSION ENDED	
28a	ME -> UICC	ENVELOPE: EVENT DOWNLOAD – Location Status 3.4.3A	This step is optional and applies in case ME did not successfully register to first NG-SS cell yet. Note: If ME sends this Envelope (3.4.3A), it shall occur only before the Envelope (3.4.3) specified in step 29.
28b	ME → NG-SS	The ME registers to the first NG-SS.	Note: The ME might have registered to the first NG-SS also before steps 26/27.
29	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 3.4.3	PLMN MCC/MNC: 254/001 Note: The ME send the Envelope after registration to the first NG-SS, thus might have sent the Envelope also before steps 26/27.
30	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 3.2.1	
31	ME → UICC	FETCH	
32	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 3.2.1	[Event LOCATION STATUS download removed]
33	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 3.2.1	The content of the Terminal Response is not part of the evaluation of the test case
34	USER → ME	SWITCH OFF ME	

PROACTIVE COMMAND: REFRESH 3.4.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwACT List

1stPLMN:254/003
1stACT: E-UTRAN, UTRAN
2ndPLMN: 254/004
2ndACT: GERAN

Coding:

BER-TLV:	D0	15	81	03	01	01	07	82	02	81	82	72
	0A	52	34	00	C0	00	52	44	00	00	80	

TERMINAL RESPONSE: REFRESH 3.4.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	07	82	02	82	81	83	01	00

PROACTIVE COMMAND: REFRESH 3.4.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwACT List

1stPLMN:254/002
1stACT: NG-RAN/UTRAN/GERAN
2ndPLMN: 254/001
2ndACT: E-UTRAN/UTRAN/GERAN

Coding:

BER-TLV:	D0	15	81	03	01	01	07	82	02	81	82	72
	0A	52	24	00	88	80	52	14	00	C0	80	

TERMINAL RESPONSE: REFRESH 3.4.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	07	82	02	82	81	83	01	00

ENVELOPE: EVENT DOWNLOAD - LOCATION STATUS 3.4.2

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC

Location status: normal service
Location Information
MCC & MNC the mobile country and network code (254/002)
TAC 000001
NR Cell id: 0000000001 (36bits)

Coding:

BER-TLV:	D6	17	19	01	03	82	02	82	81	1B	01	00
	13	0B	52	24	00	00	00	01	00	00	00	00
	1F											

PROACTIVE COMMAND: REFRESH 3.4.3

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwACT List

1stPLMN:254/003
1stACT: E-UTRAN/UTRAN/GERAN
2ndPLMN: 254/001
2ndACT: NG-RAN/UTRAN/GERAN

Coding:

BER-TLV:	D0	15	81	03	01	01	07	82	02	81	82	72
	0A	52	34	00	C0	80	52	14	00	88	80	

TERMINAL RESPONSE: REFRESH 3.4.3

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	07	82	02	82	81	83	01	00

ENVELOPE: EVENT DOWNLOAD - LOCATION STATUS 3.4.3A

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: No service

Coding:

BER-TLV:	D6	0A	19	01	03	82	02	82	81	9B	01	02

ENVELOPE: EVENT DOWNLOAD - LOCATION STATUS 3.4.3

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: normal service
Location Information
MCC & MNC the mobile country and network code (254/001)
TAC 000001
NR Cell id: 0000000001 (36bits)
Coding:

BER-TLV:	D6	17	19	01	03	82	02	82	81	1B	01	00
	13	0B	52	14	00	00	00	01	00	00	00	00
	1F											

Expected Sequence 3.5 (REFRESH, Steering of roaming with SOR-CMCI criterion 'DNN')

Step	Direction	MESSAGE / Action	Comments
1	NG-SS	The NG-SS transmits on BCCH, with the following network parameters: - Attach/detach: disabled. - TAI (MCC/MNC/TAC): 254/001/000001. - Access control: unrestricted.	
2	ME → NG-SS	The ME registers to the NG-SS.	No SOR transparent container Information Element in REGISTRATION ACCEPT message
3	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 3.1.1	[Setting up LOCATION STATUS Event]
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 3.1.1	
6	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 3.1.1	
7	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 3.5.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 3.5.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: REFRESH 3.5.2	
11	ME	Update of ME's internal memory on SOR-CMCI rules	[Not explicitly verified]
12	ME → UICC	TERMINAL RESPONSE: REFRESH 3.5.2	[normal ending]
13	UICC → ME	PROACTIVE UICC SESSION ENDED	
14	ME → NG-SS	First PDU Session is established successfully.	DNN = 'internet',
15	ME → NG-SS	Second PDU Session is established successfully.	S-NSSAI = '01010101' DNN is not 'internet',
16	ME → NG-SS	First PDU session is released	First PDU session is released after SOR-CMCI Tsor-cm expiration (1 minute) since step 14 completion. Second PDU session is never released
17	USER → ME	SWITCH OFF ME	

ENVELOPE: EVENT DOWNLOAD - LOCATION STATUS 3.5.1

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: normal service
Location Information
MCC & MNC the mobile country and network code (254/001)
TAC 000001
NR Cell id: 0000000001 (36bits)
Coding:

BER-TLV:	D6	17	19	01	03	82	02	82	81	1B	01	00
	13	0B	52	14	00	00	00	01	00	00	00	00
	1F											

PROACTIVE COMMAND: REFRESH 3.5.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwAcT List
empty
SOR-CMCI
Tsor-cm timer value:'00100001' (1 minute)
Criterion type: DNN
Criterion value: internet

Coding:

BER-TLV:	D0	19	81	03	01	01	07	82	02	81	82	72
	00	73	0C	0B	21	01	08	69	6E	74	65	72
	6E	65	74									

TERMINAL RESPONSE: REFRESH 3.5.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	07	82	02	82	81	83	01	00

Expected Sequence 3.6 (REFRESH, Steering of roaming with SOR-CMCI criterion 'S-NSSAI SST and SD')

Step	Direction	MESSAGE / Action	Comments
1	NG-SS	The NG-SS transmits on BCCH, with the following network parameters: - Attach/detach: disabled. - TAI (MCC/MNC/TAC): 254/001/000001. - Access control: unrestricted.	
2	ME → NG-SS	The ME registers to the NG-SS.	No SOR transparent container Information Element in REGISTRATION ACCEPT message
3	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 3.1.1	[Setting up LOCATION STATUS Event]
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 3.1.1	
6	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 3.1.1	
7	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 3.6.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 3.6.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: REFRESH 3.6.2	
11	ME	Update of ME's internal memory on SOR-CMCI rules	[Not explicitly verified]
12	ME → UICC	TERMINAL RESPONSE: REFRESH 3.6.2	[normal ending]
13	UICC → ME	PROACTIVE UICC SESSION ENDED	
14	ME → NG-SS	First PDU Session is established successfully.	Without S-NSSAI
15	ME → NG-SS	Second PDU Session is established successfully.	S-NSSAI = ‘01010101’
16	ME → NG-SS	Second PDU session is released	Second PDU session is released after Tsor-cm expiration (2 minutes) since step 15 completion First PDU session is never released
17	USER → ME	SWITCH OFF ME	

PROACTIVE COMMAND: REFRESH 3.6.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwAcT List
empty
SOR-CMCI rules
Rule 1:
Tsor-cm timer value:'00100010' (2 minutes)
Criterion type: S-NSSAI SST and SD
Criterion value: '01 01 01 01' (SST: eMBB, SD: '010101')

Coding:

BER-TLV:	D0	13	81	03	01	01	07	82	02	81	82	72
	00	73	06	22	03	01	01	01	01			

TERMINAL RESPONSE: REFRESH 3.6.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	07	82	02	82	81	83	01	00

Expected Sequence 3.7 (REFRESH, Steering of roaming with SOR-CMCI criterions 'DNN' and 'S-NSSAI SST and SD' and 'match all')

Step	Direction	MESSAGE / Action	Comments
1	NG-SS	The NG-SS transmits on BCCH, with the following network parameters: - Attach/detach: disabled. - TAI (MCC/MNC/TAC): 254/001/000001. - Access control: unrestricted.	
2	ME → NG-SS	The ME registers to the NG-SS.	No SOR transparent container Information Element in REGISTRATION ACCEPT message
3	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 3.1.1	[Setting up LOCATION STATUS Event]
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 3.1.1	
6	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 3.1.1	
7	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 3.5.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 3.7.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: REFRESH 3.7.2	
11	ME	Update of ME's internal memory on SOR-CMCI rules	[Not explicitly verified]
12	ME → UICC	TERMINAL RESPONSE: REFRESH 3.7.2	[normal ending]
13	UICC → ME	PROACTIVE UICC SESSION ENDED	
14	ME → NG-SS	First PDU Session is established successfully.	DNN = 'internet', S-NSSAI = '01010101'
15	ME → NG-SS	Second PDU Session is established successfully.	DNN is not 'internet', Without S-NSSAI
16	ME → NG-SS	First PDU session is released	First PDU session is released after SOR-CMCI Tsor-cm expiration (2 minutes) since step 14 completion
17	ME → NG-SS	Second PDU session is released	Second PDU session is released after SOR-CMCI Tsor-cm expiration (3 minutes) since step 15 completion
18	USER → ME	SWITCH OFF ME	

PROACTIVE COMMAND: REFRESH 3.7.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwAcT List
empty
SOR-CMCI rules
Rule 1:
Tsor-cm timer value:'00100001' (1 minute)
Criterion type: DNN
Criterion value: internet
Rule 2:
Tsor-cm timer value:'00100010' (2 minutes)
Criterion type: S-NSSAI SST and SD
Criterion value: '01 01 01 01' (SST: eMBB, SD: '010101')
Rule 3:
Tsor-cm timer value:'00100011' (3 minutes)
Criterion type: match all

Coding:

BER-TLV:	D0	23	81	03	01	01	07	82	02	81	82	72
	00	73	16	0B	21	01	08	69	6E	74	65	72
	6E	65	74	06	22	03	01	01	01	01	02	23
	FF											

TERMINAL RESPONSE: REFRESH 3.7.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of roaming
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	07	82	02	82	81	83	01	00

27.22.4.7.3.5 Test requirement

The ME shall operate in the manner defined in expected sequences 3.1 to 3.7.

For sequences 3.5 to 3.7, an extra guard time of 10% is allowed.

27.22.4.7.4 REFRESH (AID)

27.22.4.7.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.7.4.2 Conformance requirement

The ME shall support the REFRESH command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.7, clause 6, clause 6.6.13, clause 5.2, clause 8.6, clause 8.7, clause 8.18 and clause 8.60.

The ME shall support the IMS related requirements as defined and tested in:

- TS 24.229 [38] clause 5.1.1.7 and Annex C.4
- TS 34.229-1 [36] clause 8.15, Annex C.2, C.17 and C.18

The ME shall support the USIM Initialization procedure as defined in:

- TS 31.102 [14] clause 5.1.2 and Annex I.

27.22.4.7.4.3 Test purpose

To verify that the ME performs the Proactive Command – REFRESH in accordance with the Command Qualifier and additionally correctly takes into account the Application Identifier if present in the Refresh command.

- Verification of correct Refresh command execution within the application executed on a any logical channel if the corresponding AID is present in the Refresh command

This may require the ME to perform:

- a USIM or ISIM initialization
- a re-read of the contents and structure of the ISIM on the USIM
- a successful return of the result of the execution of the command in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.7.4.4 Method of test

27.22.4.7.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as defined for the E-UTRAN/EPC ISIM-UICC in clause 27.22.2C.

For sequence 4.1 the ME is connected to the E-USS or the USS.

27.22.4.7.4.4.2 Procedure

Expected Sequence 4.1 (REFRESH with AID)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profile Download, USIM and ISIM initialisation
2	ME → NWS	ME activates the required bearer, discoveres P-CSCF and registers with the values from the ISIM to IMS services	For E-UTRAN: The EPS bearer context activation according to the procedures defined in TS 34.229-1 [36], Annex C.2 and C.18 is performed For UTRAN: A PDP context activation according to the procedures defined in TS 34.229-1 [36], Annex C.2 and C.17 is performed.
3	UICC→ ME	PROACTIVE COMMAND PENDING: REFRESH 4.1.1	To inform the ME that EF_FPLMN shall be re-read.

4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: REFRESH 4.1.1	EF_FPLMN shall be read by the UE, but this might occur even after the Terminal Response. An update of EF_FPLMN by the UICC is not required in this test.
6	ME → UICC	TERMINAL RESPONSE: REFRESH 4.1.1A Or TERMINAL RESPONSE: REFRESH 4.1.1B	[normal ending] [additional EFs read]
7	UICC → ME	PROACTIVE UICC SESSION ENDED	
8		Continue with steps 1 – 4 of the "Expected Sequence" of test 8.15 of TS 34.229-1 with the following parameters: • REFRESH command: PROACTIVE COMMAND: Refresh 4.2.1 • Initial Home Domain name = Updated Home Domain name • New IMPI in EF_IMPI= 00101555666@test.3gpp.com • New IMPU in record 1 of EF_IMPU= 00101555666@ims.mnc246.mcc081.3gppnetwork.org	The following requirements shall be verified: 1) After step 1 and before step 4 of the "Expected Sequence" of test 8.15 of TS 34.229-1the ME shall have sent TERMINAL RESPONSE: REFRESH 4.2.1A or TERMINAL RESPONSE: REFRESH 4.2.1B 2) The ME shall have fulfilled the test requieremnts defined in TS 34.229, clause 8.15.5

PROACTIVE COMMAND: REFRESH 4.1.1

Logically:

Command details

Command number: 1
Command type: REFRESH
Command qualifier: File Change Notification

Device identities

Source device: UICC
Destination device: ME

File List

File 1: EF FPLMN

Application Identifier

Content: The 3GPP USIM AID used in the test system configuration

Coding:

BER-TLV:	D0	24	81	03	01	01	01	82	02	81	82
	92	07	01	3F	00	7F	FF	6F	7B	2F	10
	A0	00	00	00	87	10	02	xx	xx	xx	xx
	xx	xx	xx	xx	xx						

PROACTIVE COMMAND: REFRESH 4.2.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: ISIM Initialization
Device identities
Source device: UICC
Destination device: ME

Application Identifier
Content: The 3GPP ISIM AID used in the test system configuration

Coding:

BER-TLV:	D0	1B	81	03	01	01	03	82	02	81	82
	2F	10	A0	00	00	00	87	10	04	xx	xx
	xx	xx	xx	xx	xx	xx	xx				

TERMINAL RESPONSE: REFRESH 4.1.1A/4.2.1A

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM/ISIM Initialization
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	03	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 4.1.1B/ 4.2.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM/ISIM Initialization
Device identities
Source device: ME
Destination device: UICC
Result
General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	03	82	02	82	81	83	01	03

27.22.4.7.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.1.

27.22.4.7.5 REFRESH (IMSI changing procedure, E-UTRAN)

27.22.4.7.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.7.5.2 Conformance requirement

The ME shall support the REFRESH command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.7, clause 6.4.7.1, clause 6.6.13, clause 5.2, clause 8.6, clause 8.7 and clause 8.18.

Additionally, the ME shall support the USIM Initialization and USIM application closure procedure as defined in:

- TS 31.102 [14] clause 5.1.2 and Annex I.

27.22.4.7.5.3 Test purpose

To verify that the ME performs the Proactive Command – REFRESH in accordance with the Command Qualifier and the IMSI changing procedure. This may require the ME to perform:

- the USIM initialization
- a re-read of the contents and structure of the IMSI on the USIM
- a restart of the card session
- a successful return of the result of the execution of the command in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.7.5.4 Method of test

27.22.4.7.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and connected to the E-USS/NB-SS, registered and has the default PDN connection established.

The E-UTRAN/NB-IoT parameters of the E-USS/NB-SS are:

- Mobile Country Code (MCC) = 246;
- Mobile Network Code (MNC) = 81;
- Tracking Area Code (TAC) = 0001;

The elementary files are coded as the default E-UTRAN/EPC UICC,

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.7.5.4.2 Procedure

Expected Sequence 5.1 (REFRESH, UICC Reset for IMSI Changing procedure, E-UTRAN)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 5.1.1	[To inform the ME that IMSI has changed]
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: REFRESH 5.1.1 or 5.1.2	IF terminal supports PD_Refresh_Enforcement_Policy use PROACTIVE COMMAND: REFRESH 5.1.2, ELSE 5.1.1.

4	ME → E-USS/ NB-SS	Deactivate PDN Connection	ME will deactivate the PDN Connection Note 1: this step is performed locally and may not reflect on the interface to the E-USS/ NB-SS Note 2: if the ME supports pc_NB this step is performed only in case pc_AttachWithPDN is supported by the ME.
5	ME → E-USS/ NB-SS	DETACH REQUEST	Indicates EPS detach or combined EPS/IMSI detach. Note: this step can be performed in parallel or after step 6.
6	ME → UICC	STATUS[P1='02']	ME indicates to USIM that the termination procedure is starting
7	ME → UICC	ME performs UICC reset	Both, cold and warm resets are allowed
8	UICC	Update EF_IMSI and EF_EPSLOCI	The content of EF_IMSI has been changed to "246813579" and the GUTI in EF_EPSLOCI is updated to 'FF FF FF FF FF FF FF FF FF FF FF FF'
9	ME → UICC	ME performs USIM Initialization, including send STATUS[P1='01'] and no TERMINAL RESPONSE shall be sent	[ME resets and performs USIM initialization]
10	ME → E-USS/ NB-SS	ATTACH REQUEST	The ME will register using IMSI "246813579".
11	E-USS/ NB-SS → ME	ATTACH ACCEPT	
12	ME → E-USS/ NB-SS	ATTACH COMPLETE	

PROACTIVE COMMAND: REFRESH 5.1.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: UICC RESET
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	04	82	02	81	82

PROACTIVE COMMAND: REFRESH 5.1.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: UICC RESET
Device identities
Source device: UICC
Destination device: ME

Refresh enforcement policy: Force immediate REFRESH even if the terminal is busy on data call

Coding:

BER-TLV:	D0	0C	81	03	01	01	04	82	02	81	82	3A
	01	02										

Expected Sequence 5.2 (REFRESH, 3G Session Reset for IMSI Changing procedure, E-UTRAN)

Step	Direction	MESSAGE / Action	Comments
1	UICC→ ME	PROACTIVE COMMAND PENDING: REFRESH 5.2.1	[To inform the ME that IMSI has changed]
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: REFRESH 5.2.1 or 5.2.2	IF terminal supports PD_ Refresh_Enforcement_Policy use PROACTIVE COMMAND: REFRESH 5.2.2, ELSE 5.2.1.
4	ME→E-USS/NB-SS	Deactivate PDN Connection	ME will deactivate the PDN Connection Note 1: this step is performed locally and may not reflect on the interface to the E-USS/NB-SS Note 2: if the ME supports pc_NB this step is performed only in case pc_AttachWithPDN is supported by the ME. Note 3: this step can be performed in parallel or after step 6.
5	ME→E-USS/NB-SS	DETACH REQUEST	Note: this step can be performed in parallel or after step 6.
6	ME → UICC	STATUS[P1='02']	If A.1/172 is supported, then the ME indicates to USIM that the termination procedure is starting, completes the 3G session termination procedure and resets the application via SELECT by DF name command with the AID. The ME performs the USIM initialization.
7	UICC	Update EF IMSI and EF EPSLOCI	The content of EF IMSI has been updated to "246813579" and GUTI in EF EPSLOCI is updated to 'FF FF FF FF FF FF FF FF FF FF FF FF'
8	ME → UICC	TERMINAL RESPONSE: REFRESH 5.2.1A Or TERMINAL RESPONSE: REFRESH 5.2.1B	[normal ending]
9	UICC → ME	PROACTIVE UICC SESSION ENDED	
10	ME→ E-USS/NB-SS	ATTACH REQUEST	The ME will register using IMSI "246813579" in PS.
11	E-USS/NB-SS → ME	ATTACH ACCEPT	
12	ME → E-USS/NB-SS	ATTACH COMPLETE	

PROACTIVE COMMAND: REFRESH 5.2.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: 3G Session Reset

Device identities
- Source device: UICC
- Destination device: ME

File list
- Number of files: 2
- File: EF IMSI

File: EF EPSLOCI

Coding:

BER-TLV:	D0	18	81	03	01	01	06	82	02	81	82	92
	0D	02	3F	00	7F	FF	6F	07	3F	00	7F	FF
	6F	E3										

PROACTIVE COMMAND: REFRESH 5.2.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: UICC
Destination device: ME

File list
Number of files: 2
File: EF IMSI
File: EF EPSLOCI
Refresh enforcement policy: Force immediate REFRESH even if the terminal is busy on data call

Coding:

BER-TLV:	D0	1B	81	03	01	01	06	82	02	81	82	92
	0D	02	3F	00	7F	FF	6F	07	3F	00	7F	FF
	6F	E3	3A	01	02							

TERMINAL RESPONSE: REFRESH 5.2.1A

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 5.2.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	01	03

27.22.4.7.5.5 Test requirement

The ME shall operate in the manner defined in expected sequences 5.1 to 5.2.

27.22.4.7.6 REFRESH (IMSI changing procedure, NG-RAN)

27.22.4.7.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.7.6.2 Conformance requirement

The ME shall support the REFRESH command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.7, clause 6.4.7.1, clause 6, clause 6.6.13, clause 5.2, clause 8.6, clause 8.7 and clause 8.18.

Additionally, the ME shall support the USIM Initialization and USIM application closure procedure as defined in:

- TS 31.102 [14] clause 5.1.2, clause 5.1.3 and Annex I.

27.22.4.7.6.3 Test purpose

To verify that the ME performs the Proactive Command – REFRESH in accordance with the Command Qualifier and the IMSI changing procedure. This may require the ME to perform:

- the USIM initialization
- a re-read of the contents and structure of the IMSI on the USIM
- a restart of the card session
- a successful return of the result of the execution of the command in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.7.6.4 Method of test

27.22.4.7.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and connected to the NG-SS.

The NG-RAN parameters of the NG-SS are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 000001;

The default NG-RAN UICC is used.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.7.6.4.2 Procedure

Expected Sequence 6.1 (REFRESH, UICC Reset for IMSI Changing procedure, NG-RAN)

Step	Direction	MESSAGE / Action	Comments

1	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
2	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 6.1.1 or REFRESH 6.1.2	[To inform the ME that IMSI has changed]
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: REFRESH 6.1.1 or REFRESH 6.1.2	IF terminal supports PD_Refresh_Enforcement_Policy use PROACTIVE COMMAND: REFRESH 6.1.2 ELSE REFRESH 6.1.1.
5	ME→NG-SS	Deregistration Request	
6	ME → UICC	STATUS[P1='02']	ME indicates to USIM that the termination procedure is starting
7	ME → UICC	ME performs UICC reset.	Both cold and warm resets are allowed
8	UICC	Update EF_{IMSI} and $EF_{5GS3GPPLOCI}$.	The content of EF_{IMSI} has been changed to "246813579" and the 5G-GUTI in $EF_{5GS3GPPLOCI}$ is updated to 'FF FF FF FF FF FF FF FF FF FF FF FF'.
9	ME→UICC	ME performs USIM Initialization, including send STATUS[P1='01'] and no TERMINAL RESPONSE shall be sent.	[ME resets and performs USIM initialization]
10	ME→NG-SS	Registration Request	The ME will register using IMSI "246813579" in NG-RAN.
11	NG-SS→ME	Registration Accept	
12	ME→NG-SS	Registration Complete	

PROACTIVE COMMAND: REFRESH 6.1.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: UICC RESET

Device identities
- Source device: UICC
- Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	04	82	02	81	82

PROACTIVE COMMAND: REFRESH 6.1.2

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: UICC RESET

Device identities
- Source device: UICC
- Destination device: ME

Refresh enforcement policy: Force immediate REFRESH even if the terminal is busy on data call

Coding:

BER-TLV:	D0	0C	81	03	01	01	04	82	02	81	82	3A
	01	02										

Expected Sequence 6.2 (REFRESH, 3G Session Reset for IMSI Changing procedure, NG-RAN)

Step	Direction	MESSAGE / Action	Comments
1	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
2	UICC→ ME	PROACTIVE COMMAND PENDING: REFRESH 6.2.1 or REFRESH 6.2.2	[To inform the ME that IMSI has changed]
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: REFRESH 6.2.1 or REFRESH 6.2.2	IF terminal supports PD_Refresh_Enforcement_Policy use PROACTIVE COMMAND:REFRESH 6.2.2 ELSE REFRESH 6.2.1.
5	ME→NG-SS	Deregistration Request	
6	ME → UICC	STATUS[P1='02']	If A.1/172 is supported, then the ME indicates to USIM that the termination procedure is starting, completes the 3G session termination procedure and resets the application via SELECT by DF name command with the AID. The ME performs the USIM initialization.
7	UICC	Update EF_{IMSI} and $EF_{5GS3GPPLOCI}$	The content of EF_{IMSI} has been updated to "246813579" and 5G-GUTI in $EF_{5GS3GPPLOCI}$ is updated to 'FF FF FF FF FF FF FF FF FF FF FF FF'
8	ME → UICC	TERMINAL RESPONSE: REFRESH 6.2.1A or TERMINAL RESPONSE: REFRESH 6.2.1B	[normal ending]
9	UICC → ME	PROACTIVE UICC SESSION ENDED	
10	ME→NG-SS	Registration Request	The ME will register using IMSI "246813579" in NG-RAN.
11	NG-SS→ME	Registration Accept	
12	ME→NG-SS	Registration Complete	

PROACTIVE COMMAND: REFRESH 6.2.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: 3G Session Reset

Device identities
- Source device: UICC
- Destination device: ME

File list
- Number of files: 2
- File: EF IMSI
- File: EF 5GS3GPPLOCI

Coding:

BER-TLV:	D0	1A	81	03	01	01	06	82	02	81	82	92
	0F	02	3F	00	7F	FF	6F	07	3F	00	7F	FF
	5F	C0	4F	01								

PROACTIVE COMMAND: REFRESH 6.2.2

Logically:

Command details

Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: UICC
Destination device: ME

File list
Number of files: 2
File: EF IMSI
File: EF 5GS3GPPLOCI
Refresh enforcement policy: Force immediate REFRESH even if the terminal is busy on data call

Coding:

BER-TLV:	D0	1D	81	03	01	01	06	82	02	81	82	92
	0F	02	3F	00	7F	FF	6F	07	3F	00	7F	FF
	5F	C0	4F	01	3A	01	02					

TERMINAL RESPONSE: REFRESH 6.2.1A

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 6.2.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	01	03

Expected Sequence 6.3 (REFRESH, USIM Application Reset for IMSI Changing procedure, NG-RAN)

Step	Direction	MESSAGE / Action	Comments
1	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
2	UICC→ ME	PROACTIVE COMMAND PENDING: REFRESH 6.3.1	[To inform the ME that IMSI has changed]

3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: REFRESH 6.3.1	
5	ME→NG-SS	Deregistration Request	
6	ME → UICC	STATUS[P1='02']	ME indicates to USIM that the termination procedure is starting
7	ME → UICC	Select AID=USIM (P2='44') OR (P2='4C')	Application termination
8	UICC	Update EF IMSI and EF 5GS3GPPLOCI.	The content of EFIMSI has been updated to "246813579" and 5G-GUTI in EF5GS3GPPLOCI is updated to 'FF FF FF FF FF FF FF FF FF FF FF FF'
9	ME → UICC	USIM Initialization, including send STATUS[P1='01']	[ME performs USIM initialization]
10	ME → UICC	TERMINAL RESPONSE: REFRESH 6.3.1	[normal ending]
11	UICC → ME	PROACTIVE UICC SESSION ENDED	
12	ME→NG-SS	Registration Request	The ME will register using IMSI "246813579" in NG-RAN.
13	NG-SS→ME	Registration Accept	
14	ME→NG-SS	Registration Complete	

PROACTIVE COMMAND: REFRESH 6.3.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: USIM Application Reset

Device identities
- Source device: UICC
- Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	05	82	02	81	82	

TERMINAL RESPONSE: REFRESH 6.3.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: USIM Application Reset

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	05	82	02	82	81	83	01	00

Expected Sequence 6.4 (REFRESH, reject 3G Session Reset for IMSI Changing procedure during mobile originated call, NG-RAN)

Step	Direction	MESSAGE / Action	Comments

0	ME	ME successfully REGISTER with NG-RAN cell.	
1	User → ME	Set up an IMS voice call	Call needs to be connected
2	ME → NG-SS	Establish IMS voice call	The established IMS voice call needs to be held
3	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 6.4.1	
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: REFRESH 6.4.1 or REFRESH 6.4.2	
6	ME → UICC	TERMINAL RESPONSE: REFRESH 6.4.1A Or TERMINAL RESPONSE: REFRESH 6.X.1B	ME rejects REFRESH proactive command
7	UICC → ME	PROACTIVE UICC SESSION ENDED	
8	USER → ME	The MO call is terminated	

PROACTIVE COMMAND: REFRESH 6.4.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: 3G Session Reset

Device identities
- Source device: UICC
- Destination device: ME

File list
- Number of files: 2
- File: EF IMSI
- File: EF 5GS3GPPLOCI

Coding:

BER-TLV:	D0	1A	81	03	01	01	06	82	02	81	82	92
	0F	02	3F	00	7F	FF	6F	07	3F	00	7F	FF
	5F	C0	4F	01								

PROACTIVE COMMAND: REFRESH 6.4.2

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: 3G Session Reset

Device identities
- Source device: UICC
- Destination device: ME

File list
- Number of files: 2
- File: EF IMSI
- File: EF 5GS3GPPLOCI

Refresh enforcement policy: Force immediate REFRESH even if the terminal is busy on data call

Coding:

BER-TLV:	D0	1D	81	03	01	01	06	82	02	81	82	92
	0F	02	3F	00	7F	FF	6F	07	3F	00	7F	FF

5F	C0	4F	01	3A	01	02					

TERMINAL RESPONSE: REFRESH 6.4.1A

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: ME currently unable to process command
Additional information on result: ME currently busy on call

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	02	20
	02											

TERMINAL RESPONSE: REFRESH 6.4.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: ME currently unable to process command
Additional information on result: Screen is busy

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	02	20
	01											

27.22.4.7.6.5 Test requirement

The ME shall operate in the manner defined in expected sequences 6.1 to 6.4.

27.22.4.7.7 REFRESH (SUPI_NAI changing procedure, NG-RAN)

27.22.4.7.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.7.7.2 Conformance requirement

The ME shall support the REFRESH command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.7, clause 6.4.7.1, clause 6, clause 6.6.13, clause 5.2, clause 8.6, clause 8.7 and clause 8.18.

Additionally the ME shall support the USIM Initialization and USIM application closure procedure as defined in:

- TS 31.102 [14] clause 5.1.1.2, clause 5.1.3 and Annex I.

27.22.4.7.7.3 Test purpose

To verify that the ME performs the Proactive Command – REFRESH in accordance with the Command Qualifier and the SUPI_NAI changing procedure. This may require the ME to perform:

- the USIM initialization
- a re-read of the contents and structure of the SUPI_NAI on the USIM
- a restart of the card session
- a successful return of the result of the execution of the command in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.7.7.4 Method of test

27.22.4.7.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and connected to the NG-SS.

The NG-RAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 000001;

The elementary files are coded as the default NG-RAN UICC with the following exceptions:

EF_{UST} (USIM Service Table)

Logically:

User controlled PLMN selector available

Fixed dialling numbers available

The GSM Access available

The Group Identifier level 1 and level 2 not available

Service n 33 (Packed Switched Domain) shall be set to '1'

Enabled Services Table available

EPS Mobility Management Information available

Allowed CSG Lists and corresponding indications

5GS Mobility Management Information available

5G Security Parameters available

Subscription identifier privacy support available

SUCI calculation by the USIM not available

Support for SUPI of type NSI or GLI or GCI available

Byte:	B1	B2	B3	B4	B5	B6	B7	B8
Binary:	xxxx xx1x	xxxx xxxx	xxxx 1x00	xxxx x1xx	xxxx xx11	xxxx xxxx	xxxx xxxx	xxxx xxxx
	B9	B10	B11		B16	B17		
	xxxx xxxx	xxxx xxxx	xx11 xxxx	.....	xxx0 111x	xxxxxx1x		

The coding of EF_{UST} shall conform with the capabilities of the USIM used.

EF_{SUPI_NAI} (SUPI as Network Access Identifier)

Logically: userid18@example.com

SUPI Type: NSI

Username: userid18

Realm: example.com

Coding:	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**B8**
Hex	80	14	75	73	65	72	69	64
	B9	**B10**	**B11**	**B12**	**B13**	**B14**	**B15**	**B16**
	31	38	40	65	78	61	6D	70
	B17	**B18**	**B19**	**B20**	**B21**	**B22**		
	6C	65	2E	63	6F	6D		

EF_{IMSI} (IMSI)

This file shall not be available.

EF_{AD} (Administrative Data)

Logically: Type approval operations
OFM to be deactivated by the Terminal
Length of MNC in the IMSI: 0

Coding:	B1	B2	B3	B4
Hex	80	00	00	00

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.7.7.4.2 Procedure

Expected Sequence 7.1 (REFRESH, UICC Reset for SUPI_NAI Changing procedure, NG-RAN)

Step	Direction	MESSAGE / Action	Comments
1	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	The ME registers using SUPI_NAI "userid18@example.com" in NG-RAN
2	UICC	Update EF SUPI_NAI and EF 5GSN3GPPLOCI.	The content of EF SUPI_NAI has been changed to "userid19@example.com" and the 5G-GUTI in EF 5GSN3GPPLOCI is updated to 'FF FF FF FF FF FF FF FF FF FF FF FF FF'.
3	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 7.1.1	[To inform the ME that SUPI_NAI has changed]
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: REFRESH 7.1.1 or 7.1.2	IF terminal supports PD_ Refresh_Enforcement_Policy use PROACTIVE COMMAND: REFRESH 7.1.2, ELSE 7.1.1.
6	ME→NG-SS	Deregistration Request	
7	ME → UICC	ME performs UICC reset.	Both cold and warm resets are allowed
8	ME→NG-SS	Registration Request	The ME will register using SUPI_NAI "userid19@example.com" in NG-RAN.

9	NG-SS→ME	Registration Accept	
10	ME→NG-SS	Registration Complete	

PROACTIVE COMMAND: REFRESH 7.1.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: UICC RESET
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	04	82	02	81	82

PROACTIVE COMMAND: REFRESH 7.1.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: UICC RESET
Device identities
Source device: UICC
Destination device: ME

Refresh enforcement policy: Force immediate REFRESH even if the terminal is busy on data call

Coding:

BER-TLV:	D0	0C	81	03	01	01	04	82	02	81	82	3A
	01	02										

Expected Sequence 7.2 (REFRESH, 3G Session Reset for SUPI_NAI Changing procedure, NG-RAN)

Step	Direction	MESSAGE / Action	Comments
1	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	The ME registers using SUPI_NAI "userid18@example.com" in NG-RAN
2	UICC	Update EF SUPI_NAI and EF 5GSN3GPPLOCI.	The content of EF SUPI_NAI has been changed to "userid19@example.com" and the 5G-GUTI in EF 5GSN3GPPLOCI is updated to 'FF FF FF FF FF FF FF FF FF FF FF FF FF'.
3	UICC→ ME	PROACTIVE COMMAND PENDING: REFRESH 7.2.1	[To inform the ME that SUPI_NAI has changed]
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: REFRESH 7.2.1 or 7.2.2	IF terminal supports PD_ Refresh_Enforcement_Policy use PROACTIVE COMMAND: REFRESH 7.2.2, ELSE 7.2.1.
6	ME→NG-SS	Deregistration Request	

7	ME → UICC	STATUS[P1='02']	If A.1/172 is supported, then the ME indicates to USIM that the termination procedure is starting, completes the 3G session termination procedure and resets the application via SELECT by DF name command with the AID. The ME performs the USIM initialization.
8	ME → UICC	TERMINAL RESPONSE: REFRESH 7.2.1A or TERMINAL RESPONSE: REFRESH 7.2.1B	[normal ending]
9	UICC → ME	PROACTIVE UICC SESSION ENDED	
10	ME→NG-SS	Registration Request	The ME will register using SUPI_NAI "userid19@example.com" in NG-RAN.
11	NG-SS→ME	Registration Accept	
12	ME→NG-SS	Registration Complete	

PROACTIVE COMMAND: REFRESH 7.2.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: 3G Session Reset

Device identities
- Source device: UICC
- Destination device: ME

File list
- Number of files: 2
- File: EF SUPI_NAI
- File: EF 5GSN3GPPLOCI

Coding:

BER-TLV:	D0	1C	81	03	01	01	06	82	02	81	82	92
	11	02	3F	00	7F	FF	5F	C0	4F	09	3F	00
	7F	FF	5F	C0	4F	02						

PROACTIVE COMMAND: REFRESH 7.2.2

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: 3G Session Reset

Device identities
- Source device: UICC
- Destination device: ME

File list
- Number of files: 2
- File: EF SUPI_NAI
- File: EF 5GSN3GPPLOCI

Refresh enforcement policy: Force immediate REFRESH even if the terminal is busy on data call

Coding:

BER-TLV:	D0	1F	81	03	01	01	06	82	02	81	82	92
	11	02	3F	00	7F	FF	5F	C0	4F	09	3F	00
	7F	FF	5F	C0	4F	02	3A	01	02			

TERMINAL RESPONSE: REFRESH 7.2.1A

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 7.2.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	01	03

Expected Sequence 7.3 (REFRESH, USIM Application Reset for SUPI_NAI Changing procedure, NG-RAN)

Step	Direction	MESSAGE / Action	Comments
1	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	The ME registers using SUPI_NAI "userid18@example.com" in NG-RAN
2	UICC→ ME	PROACTIVE COMMAND PENDING: REFRESH 7.3.1	[To inform the ME that SUPI_NAI has changed]
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: REFRESH 7.3.1	
5	ME→NG-SS	Deregistration Request	
6	ME → UICC	STATUS[P1='02']	ME indicates to USIM that the termination procedure is starting
7	ME → UICC	Select AID=USIM (P2='44') OR (P2='4C')	Application termination
8	UICC	Update EF IMSI and EF 5GS3GPPLOCI.	The content of EFIMSI has been updated to "246813579" and 5G-GUTI in EF5GS3GPPLOCI is updated to 'FF FF FF FF FF FF FF FF FF FF FF FF FF FF'
9	ME → UICC	USIM Initialization, including send STATUS[P1='01']	[ME performs USIM initialization]
10	ME → UICC	TERMINAL RESPONSE: REFRESH 7.3.1	[normal ending]
11	UICC → ME	PROACTIVE UICC SESSION ENDED	

12	ME→NG-SS	Registration Request	The ME will register using SUPI_NAI "userid19@example.com" in NG-RAN.
13	NG-SS→ME	Registration Accept	
14	ME→NG-SS	Registration Complete	

PROACTIVE COMMAND: REFRESH 7.3.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Application Reset
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	05	82	02	81	82	

TERMINAL RESPONSE: REFRESH 7.3.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Application Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	05	82	02	82	81	83	01	00

Expected Sequence 7.4 (REFRESH, reject 3G Session Reset for SUPI_NAI Changing procedure during mobile originated call, NG-RAN)

Step	Direction	MESSAGE / Action	Comments
0	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	The ME registers using SUPI_NAI "userid18@example.com" in NG-RAN
1	User → ME	Set up an IMS voice call	Call needs to be connected
2	ME → NG-SS	Establish IMS voice call	The established IMS voice call needs to be held
3	UICC→ ME	PROACTIVE COMMAND PENDING: REFRESH 7.4.1	[To inform the ME that SUPI_NAI has changed]
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: REFRESH 7.4.1A Or REFRESH 7.4.1B	
6	ME → UICC	TERMINAL RESPONSE: REFRESH 7.4.1A Or TERMINAL RESPONSE: REFRESH 7.4.1B	ME rejects REFRESH proactive command
7	UICC → ME	PROACTIVE UICC SESSION ENDED	

8	USER → ME	The MO call is terminated	

PROACTIVE COMMAND: REFRESH 7.4.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: UICC
Destination device: ME

File list
Number of files: 2
File: EF SUPI_NAI
File: EF 5GSN3GPPLOCI

Coding:

BER-TLV:	D0	1C	81	03	01	01	06	82	02	81	82	92
	11	02	3F	00	7F	FF	5F	C0	4F	09	3F	00
	7F	FF	5F	C0	4F	02						

PROACTIVE COMMAND: REFRESH 7.4.2

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: UICC
Destination device: ME

File list
Number of files: 2
File: EF SUPI_NAI
File: EF 5GSN3GPPLOCI
Refresh enforcement policy: Force immediate REFRESH even if the terminal is busy on data call

Coding:

BER-TLV:	D0	1F	81	03	01	01	06	82	02	81	82	92
	11	02	3F	00	7F	FF	5F	C0	4F	09	3F	00
	7F	FF	5F	C0	4F	02	3A	01	02			

TERMINAL RESPONSE: REFRESH 7.4.1A

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: ME currently unable to process command
Additional information on result: ME currently busy on call

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	02	20
	02											

TERMINAL RESPONSE: REFRESH 7.4.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: 3G Session Reset
Device identities
Source device: ME
Destination device: UICC
Result
General Result: ME currently unable to process command
Additional information on result: Screen is busy

Coding:

BER-TLV:	81	03	01	01	06	82	02	82	81	83	02	20
	01											

27.22.4.7.7.5 Test requirement

The ME shall operate in the manner defined in expected sequences 7.1 to 7.4.

27.22.4.7.8 REFRESH (Generic Bootstrapping Procedure Request, NG-RAN)

27.22.4.7.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.

7.8.2 Conformance requirement

The ME shall support the REFRESH command as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.7, clause 6.4.7.1, clause 6, clause 6.6.13, clause 5.2, clause 8.6, clause 8.7 and clause 8.18.

The ME shall support the USIM Initialization and USIM application closure procedure as defined in:

- TS 31.102 [14] clause 5.1.2, clause 5.1.3 and Annex I.

The ME shall support GBA bootstrapping procedure and Toolkit-initiated GBA as defined in:

- TS 31.102 [14] clause 7.1.1.4.
- TS 31.111 [15] clause 5.2 and clause 6.4.7.2.

27.22.4.7.8.3 Test purpose

To verify that the ME performs the Proactive Command – REFRESH in accordance with the Command Qualifier and Generic Bootstrapping Procedure. This may require the ME to perform:

- the USIM initialization
- a re-read of the contents and structure of the EF_{GBABP} on the USIM
- a restart of the card session
- a successful return of the result of the execution of the command in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.7.8.4 Method of test

27.22.4.7.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and connected to the NG-SS.

The NG-RAN parameters of the NG-SS are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 000001;

The elementary files are coded as the default NG-RAN UICC with the following exceptions.

EF_{UST} (USIM Service Table)

Service n°68 Generic Bootstrapping Architecture (GBA) available

EF_{GBABP} (GBA Bootstrapping parameters)

Logically: 'FF…FF' (70bytes)

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.7.8.4.2 Procedure

Expected Sequence 8.1 (REFRESH, USIM File Change Notification for Generic Bootstrapping Procedure Request, NG-RAN)

Step	Direction	MESSAGE / Action	Comments
1	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
2	UICC	Update EF_{GBABP}	The content of EF_{GBABP} has been changed to "100123456789ABCDEFFEDCBA987654321 0320011223344556677889 9AABBCCDDEEF F00112233445566778899AABBCCDDEEFF0 011223344556677889 9AABBCCDDEEFF001 101FF"
3	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 8.1.1	[To inform the ME that GBA Bootstrapping parameters will be in an updated state, GBA service already enabled]
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: REFRESH 8.1.1	
6	ME → UICC	TERMINAL RESPONSE: REFRESH 8.1.1A	[normal ending]
		Or	[additional EFs read]
		TERMINAL RESPONSE: REFRESH 8.1.1B	

7	ME	Perform a GBA bootstrapping procedure using the updated GBA Bootstrapping parameters	

PROACTIVE COMMAND: REFRESH 8.1.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: File Change Notification
Device identities
Source device: UICC
Destination device: ME
File List: EF_{GBABP}

Coding:

BER-TLV:	D0	12	81	03	01	01	01	82	02	81	82	92
	07	01	3F	00	7F	FF	6F	D6				

TERMINAL RESPONSE: REFRESH 8.1.1A

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: File Change Notification
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	01	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 8.1.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: File Change Notification
Device identities
Source device: ME
Destination device: UICC
Result
General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	01	82	02	82	81	83	01	03

27.22.4.7.8.5 Test requirement

The ME shall operate in the manner defined in expected sequences 8.1.

27.22.4.8 SET UP MENU and ENVELOPE MENU SELECTION

27.22.4.8.1 SET UP MENU (normal) and ENVELOPE MENU SELECTION

27.22.4.8.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.1.2 Conformance requirement

The ME shall support the SET UP MENU command as defined in:

- TS 31.111 [15] clause 5, clause 6.4.8, clause 6.6.7, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.2, clause 8.9 and clause 9.4.

The ME shall support MENU SELECTION as defined in:

- TS 31.111 [15] clause 4.4, clause 5.2, clause 6.4.8, clause 6.9, clause 7.2, clause 8.7 and clause 8.10.

27.22.4.8.1.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME replaces the current list of menu items with the list of menu items contained in the SET UP MENU command.

To verify that the ME removes the current list of menu items following receipt of a SET UP MENU command with no items.

To verify that the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

To verify that when the help is available for the command and the user gas indicated the need to get help information on one of the items, the ME informs properly the UICC about an HELP REQUEST, using the MENU SELECTION mechanism.

27.22.4.8.1.4 Method of test

27.22.4.8.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.1.4.2 Procedure

Expected Sequence 1.1 (SET UP MENU and MENU SELECTION, without Help Request, Replace and Remove a Toolkit Menu)

See ETSI TS 102 384 [26] in clause 27.22.4.8.1.4.2, Expected Sequence 1.1.

Expected Sequence 1.2 (SET UP MENU, Large Menu with many items or with large items or with Large Alpha Identifier)

See ETSI TS 102 384 [26] in clause 27.22.4.8.1.4.2, Expected Sequence 1.2.

The following table details the test requirements with relation to the tested features:

	Proactive UICC Command Facilities		
Proactive UICC Command Number	**Alpha Identifier Length**	**Number of items**	**Maximum length of item**
1.1.1	12	4	6
1.1.2	12	2	3
1.1.3	10	0	-
1.2.1	10	30	8
1.2.2	10	7	37
1.2.3	235	1	1

27.22.4.8.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1 and in expected sequence 1.2.

27.22.4.8.2 SET UP MENU (help request support) and ENVELOPE MENU SELECTION

27.22.4.8.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.2.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- TS 31.111 [15] clause 8.21.

27.22.4.8.2.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that when the help is available for the command and the user has indicated the need to get help information on one of the items, the ME informs properly the UICC about an HELP REQUEST, using the MENU SELECTION mechanism.

To verify that the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.2.4 Method of test

27.22.4.8.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.2.4.2 Procedure

Expected Sequence 2.1 (SET UP MENU and MENU SELECTION, with Help Request, Replace and Remove a Toolkit Menu)

See ETSI TS 102 384 [26] in clause 27.22.4.8.2.4.2, Expected Sequence 2.1.

27.22.4.8.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

27.22.4.8.3 SET UP MENU (next action support) and ENVELOPE MENU SELECTION

27.22.4.8.3.1 Definition and applicability

See clause 3.2.2.

If the UICC provides an Items Next Action Indicator data object, the comprehension required flag shall be set to '0'.

27.22.4.8.3.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- TS 31.111 [15] clause 8.24.

27.22.4.8.3.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the next action indicator is supported.

To verify that the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.3.4 Method of test

27.22.4.8.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.3.4.2 Procedure

Expected Sequence 3.1 (SET UP MENU, next action indicator "Send SM", "Set Up Call", "Launch Browser", "Provide Local Information", successful)

See ETSI TS 102 384 [26] in clause 27.22.4.8.3.4.2, Expected Sequence 3.1.

27.22.4.8.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1.

27.22.4.8.4 SET UP MENU (display of icons) and ENVELOPE MENU SELECTION

27.22.4.8.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.4.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- 3GPP 31.111 [15] clause 6.5.4, 8.31 and 8.32.

27.22.4.8.4.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that icons are displayed with the command Set Up Menu in the Alpha Identifier and Items Data Objects. To verify that the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.4.4 Method of test

27.22.4.8.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.4.4.2 Procedure

Expected Sequence 4.1A (SET UP MENU, BASIC ICON NOT SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.8.4.2, Expected Sequence 4.1A.

Expected Sequence 4.1B (SET UP MENU, BASIC ICON NOT SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.8.4.2, Expected Sequence 4.1B.

Expected Sequence 4.2A (SET UP MENU, BASIC ICON SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.8.4.2, Expected Sequence 4.2A.

Expected Sequence 4.2B (SET UP MENU, BASIC ICON SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.8.4.2, Expected Sequence 4.2B.

27.22.4.8.4.5 Test requirement

The ME shall operate in the manner defined in expected sequences 4.1A to 4.2B.

27.22.4.8.5 SET UP MENU (soft keys support) and ENVELOPE MENU SELECTION

27.22.4.8.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.5.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1.

27.22.4.8.5.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that if soft key preferred is indicated in the command details and soft key for SET UP MENU is supported by the ME and the number of icon items does not exceed the number of soft keys available, then the ME displays those icons as soft key.

To verify that the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.5.4 Method of test

27.22.4.8.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.5.4.2 Procedure

Expected Sequence 5.1 (SET UP MENU, SOFT KEY PREFERRED, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.8.5.4.2, Expected Sequence 5.1.

27.22.4.8.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 5.1.

27.22.4.8.6 SET UP MENU (support of Text Attribute) and ENVELOPE MENU SELECTION

27.22.4.8.6.1 SET UP MENU (support of Text Attribute – Left Alignment) and ENVELOPE MENU SELECTION

27.22.4.8.6.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.6.1.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.8.6.1.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that text is displayed according to the left alignment text attribute configuration within the command Set Up Menu and the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.6.1.4 Method of test

27.22.4.8.6.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.6.1.4.2 Procedure

Expected Sequence 6.1 (SET UP MENU, Text Attribute – Left Alignment, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.8.6.1.4.2, Expected Sequence 6.1.

27.22.4.8.6.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1.

27.22.4.8.6.2 SET UP MENU (support of Text Attribute – Center Alignment) and ENVELOPE MENU SELECTION

27.22.4.8.6.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.6.2.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.8.6.2.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that text is displayed according to the center alignment text attribute configuration within the command Set Up Menu and the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.6.2.4 Method of test

27.22.4.8.6.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.6.2.4.2 Procedure

Expected Sequence 6.2 (SET UP MENU, Text Attribute – Center Alignment, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.8.6.2.4.2, Expected Sequence 6.2.

27.22.4.8.6.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.2.

27.22.4.8.6.3 SET UP MENU (support of Text Attribute – Right Alignment) and ENVELOPE MENU SELECTION

27.22.4.8.6.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.6.3.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.8.6.3.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that text is displayed according to the right alignment text attribute configuration within the command Set Up Menu and the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.6.3.4 Method of test

27.22.4.8.6.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.6.3.4.2 Procedure

Expected Sequence 6.3 (SET UP MENU, Text Attribute – Right Alignment, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.8.6.3.4.2, Expected Sequence 6.3.

27.22.4.8.6.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.3.

27.22.4.8.6.4 SET UP MENU (support of Text Attribute – Large Font Size) and ENVELOPE MENU SELECTION

27.22.4.8.6.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.6.4.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.8.6.4.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that text is displayed according to the large font size text attribute configuration within the command Set Up Menu and the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.6.4.4 Method of test

27.22.4.8.6.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.6.4.4.2 Procedure

Expected Sequence 6.4 (SET UP MENU, Text Attribute – Large Font Size, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.8.6.4.4.2, Expected Sequence 6.4.

27.22.4.8.6.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.4.

27.22.4.8.6.5 SET UP MENU (support of Text Attribute – Small Font Size) and ENVELOPE MENU SELECTION

27.22.4.8.6.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.6.5.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.8.6.5.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that text is displayed according to the with small font size text attribute configuration within the command Set Up Menu and the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.6.5.4 Method of test

27.22.4.8.6.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.6.5.4.2 Procedure

Expected Sequence 6.5 (SET UP MENU, Text Attribute – Small Font Size, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.8.6.5.4.2, Expected Sequence 6.5.

27.22.4.8.6.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.5.

27.22.4.8.6.6 SET UP MENU (support of Text Attribute – Bold On) and ENVELOPE MENU SELECTION

27.22.4.8.6.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.6.6.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.8.6.6.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that text is displayed according to the text attribute configuration within the command Set Up Menu and the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.6.6.4 Method of test

27.22.4.8.6.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.6.6.4.2 Procedure

Expected Sequence 6.6 (SET UP MENU, Text Attribute – Bold On, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.8.6.6.4.2, Expected Sequence 6.6.

27.22.4.8.6.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.6.

27.22.4.8.6.7 SET UP MENU (support of Text Attribute – Italic On) and ENVELOPE MENU SELECTION

27.22.4.8.6.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.6.7.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.8.6.7.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that text is displayed according to the text attribute configuration within the command Set Up Menu and the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.6.7.4 Method of test

27.22.4.8.6.7.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.6.7.4.2 Procedure

Expected Sequence 6.7 (SET UP MENU, Text Attribute – Italic On, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.8.6.7.4.2, Expected Sequence 6.7.

27.22.4.8.6.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.7.

27.22.4.8.6.8 SET UP MENU (support of Text Attribute – Underline On) and ENVELOPE MENU SELECTION

27.22.4.8.6.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.6.8.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.8.6.8.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that text is displayed according to the text attribute configuration within the command Set Up Menu and the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.6.8.4 Method of test

27.22.4.8.6.8.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.6.8.4.2 Procedure

Expected Sequence 6.8 (SET UP MENU, Text Attribute – Underline On, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.8.6.8.4.2, Expected Sequence 6.8.

27.22.4.8.6.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.8.

27.22.4.8.6.9 SET UP MENU (support of Text Attribute – Strikethrough On) and ENVELOPE MENU SELECTION

27.22.4.8.6.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.6.9.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.8.6.9.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that text is displayed according to the text attribute configuration within the command Set Up Menu and the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.6.9.4 Method of test

27.22.4.8.6.9.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.6.9.4.2 Procedure

Expected Sequence 6.9 (SET UP MENU, Text Attribute – Strikethrough On, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.8.6.9.4.2, Expected Sequence 6.9.

27.22.4.8.6.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.9.

27.22.4.8.6.10 SET UP MENU (support of Text Attribute – Foreground and Background Colour) and ENVELOPE MENU SELECTION

27.22.4.8.6.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.6.10.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.8.6.10.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that text is displayed according to the text attribute configuration within the command Set Up Menu and the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.6.10.4 Method of test

27.22.4.8.6.10.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.6.10.4.2 Procedure

Expected Sequence 6.10 (SET UP MENU, Text Attribute – Foreground and Background Colour, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.8.6.10.4.2, Expected Sequence 6.10.

27.22.4.8.6.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.10.

27.22.4.8.7 SET UP MENU (UCS2 display in Cyrillic) and ENVELOPE MENU SELECTION

27.22.4.8.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.7.2 Conformance requirement

The ME shall support the SET UP MENU command as defined in:

- TS 31.111 [15] clause 5, clause 6.4.8, clause 6.6.7, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.2, clause 8.9 and clause 9.4.

The ME shall support MENU SELECTION as defined in:

- TS 31.111 [15] clause 4.4, clause 5.2, clause 6.4.8, clause 6.9, clause 7.2, clause 8.7 and clause 8.10.
- Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in ISO/IEC 10646 [17].

27.22.4.8.7.3 Test purpose

To verify that the ME correctly integrates the menu items in UCS2 coding contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME replaces the current list of menu items with the list of menu items contained in the SET UP MENU command.

To verify that the ME removes the current list of menu items following receipt of a SET UP MENU command with no items.

To verify that the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

To verify that when the help is available for the command and the user gas indicated the need to get help information on one of the items, the ME informs properly the UICC about an HELP REQUEST, using the MENU SELECTION mechanism.

27.22.4.8.7.4 Method of test

27.22.4.8.7.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.7.4.2 Procedure

Expected Sequence 7.1 (SET UP MENU and MENU SELECTION, without Help Request, Replace and Remove a Toolkit Menu, with UCS2 in Cyrillic Characters)

See ETSI TS 102 384 [26] in clause 27.22.4.8.7.4.2, Expected Sequence 7.1.

27.22.4.8.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 7.1.

27.22.4.8.8 SET UP MENU (UCS2 display in Chinese) and ENVELOPE MENU SELECTION

27.22.4.8.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.8.2 Conformance requirement

The ME shall support the SET UP MENU command as defined in:

- TS 31.111 [15] clause 5, clause 6.4.8, clause 6.6.7, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.2, clause 8.9 and clause 9.4

The ME shall support MENU SELECTION as defined in:

- TS 31.111 [15] clause 4.4, clause 5.2, clause 6.4.8, clause 6.9, clause 7.2, clause 8.7 and clause 8.10.
- Additionally the ME shall support the UCS2 facility for the coding of the Chinese characters, as defined in ISO/IEC 10646 [17].

27.22.4.8.8.3 Test purpose

To verify that the ME correctly integrates the menu items in UCS2 coding contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME replaces the current list of menu items with the list of menu items contained in the SET UP MENU command.

To verify that the ME removes the current list of menu items following receipt of a SET UP MENU command with no items.

To verify that the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

To verify that when the help is available for the command and the user gas indicated the need to get help information on one of the items, the ME informs properly the UICC about an HELP REQUEST, using the MENU SELECTION mechanism.

27.22.4.8.8.4 Method of test

27.22.4.8.8.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.8.4.2 Procedure

Expected Sequence 8.1 (SET UP MENU and MENU SELECTION, without Help Request, Replace and Remove a Toolkit Menu, with UCS2 – Chinese characters)

See ETSI TS 102 384 [26] in clause 27.22.4.8.8.4.2, Expected Sequence 8.1.

27.22.4.8.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.1.

27.22.4.8.9 SET UP MENU (UCS2 display in Katakana) and ENVELOPE MENU SELECTION

27.22.4.8.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.8.9.2 Conformance requirement

The ME shall support the SET UP MENU command as defined in:

- TS 31.111 [15] clause 5, clause 6.4.8, clause 6.6.7, clause 6.8, clause 6.11, clause 8.6, clause 8.7, clause 8.2, clause 8.9 and clause 9.4.

The ME shall support MENU SELECTION as defined in:

- TS 31.111 [15] clause 4.4, clause 5.2, clause 6.4.8, clause 6.9, clause 7.2, clause 8.7 and clause 8.10.
- Additionally the ME shall support the UCS2 facility for the coding of the Katakana characters, as defined in ISO/IEC 10646 [17].

27.22.4.8.9.3 Test purpose

To verify that the ME correctly integrates the menu items in UCS2 coding contained in the SET UP MENU proactive UICC command, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME replaces the current list of menu items with the list of menu items contained in the SET UP MENU command.

To verify that the ME removes the current list of menu items following receipt of a SET UP MENU command with no items.

To verify that the ME correctly passes the identifier of the selected menu item to the UICC using the ENVELOPE (MENU SELECTION) command.

To verify that when the help is available for the command and the user gas indicated the need to get help information on one of the items, the ME informs properly the UICC about an HELP REQUEST, using the MENU SELECTION mechanism.

27.22.4.8.9.4 Method of test

27.22.4.8.9.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.9.4.2 Procedure

Expected Sequence 9.1 (SET UP MENU and MENU SELECTION, without Help Request, Replace and Remove a Toolkit Menu, with UCS2 in Katakana Characters)

See ETSI TS 102 384 [26] in clause 27.22.4.8.9.4.2, Expected Sequence 9.1.

27.22.4.8.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.1.

27.22.4.9 SELECT ITEM

27.22.4.9.1 SELECT ITEM (mandatory features for ME supporting SELECT ITEM)

27.22.4.9.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.1.2 Conformance requirement

The ME shall support the Proactive UICC: Select Item facility as defined in the following technical specifications:

- TS 31.111 [15] clause 5, clause 6.4.9, clause 6.6.8, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.9, clause 9.4 and clause 10.

27.22.4.9.1.3 Test purpose

To verify that the ME correctly presents the set of items contained in the SELECT ITEM proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC with the identifier of the item chosen.

To verify that the ME allows a SELECT ITEM proactive UICC command within the maximum 255 byte BER-TLV boundary.

To verify that the ME returns a TERMINAL RESPONSE with "Proactive UICC application session terminated by the user", if the user has indicated the need to end the proactive UICC session.

To verify that the ME returns a TERMINAL RESPONSE with "Backwards move in the proactive UICC application session requested by the user", if the user has indicated the need to go backwards in the proactive UICC application session.

27.22.4.9.1.4 Method of test

27.22.4.9.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.1.4.2 Procedure

Expected Sequence 1.1 (SELECT ITEM, mandatory features, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.1.4.2, Expected Sequence 1.1.

Expected Sequence 1.2 (SELECT ITEM, large menu, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.1.4.2, Expected Sequence 1.2.

Expected Sequence 1.3 (SELECT ITEM, call options, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.1.4.2, Expected Sequence 1.3.

Expected Sequence 1.4 (SELECT ITEM, backward move by user, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.1.4.2, Expected Sequence 1.4.

Expected Sequence 1.5 (SELECT ITEM, "Y", successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.1.4.2, Expected Sequence 1.5.

Expected Sequence 1.6 (SELECT ITEM, Large menu, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.1.4.2, Expected Sequence 1.6.

The following table details the test commands with relation to the tested features:

	Proactive UICC Command Facilities		
Proactive UICC Command SELECT ITEM Number	**Alpha Identifier Length**	**Number of items**	**Maximum length of item**
1.1	14	4	6
1.2	10	30	8
1.3	10	7	43
1.4	11	2	3
1.5	236	1	1
1.6	10	7	37

27.22.4.9.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 (SELECT ITEM, mandatory features).

27.22.4.9.2 SELECT ITEM (next action support)

27.22.4.9.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.2.2 Conformance Requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.2.3 Test purpose

To verify that the mobile supports next action indicator mode.

27.22.4.9.2.4 Method of test

27.22.4.9.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.2.4.2 Procedure

Expected Sequence 2.1 (SELECT ITEM, next action indicator, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.2.4.2, Expected Sequence 2.1.

27.22.4.9.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1

27.22.4.9.3 SELECT ITEM (default item support)

27.22.4.9.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.3.2 Conformance requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.3.3 Test purpose

To verify that the mobile supports "default item" mode.

27.22.4.9.3.4 Method of test

27.22.4.9.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.3.4.2 Procedure

Expected Sequence 3.1 (SELECT ITEM, default item, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.3.4.2, Expected Sequence 3.1.

27.22.4.9.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1

27.22.4.9.4 SELECT ITEM (help request support)

27.22.4.9.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.4.2 Conformance requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.4.3 Test purpose

To verify that the mobile supports "help request" for the command Select Item.

27.22.4.9.4.4 Method of test

27.22.4.9.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.4.4.2 Procedure

Expected Sequence 4.1 (SELECT ITEM, help request, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.4.4.2, Expected Sequence 4.1.

27.22.4.9.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.1

27.22.4.9.5 SELECT ITEM (icons support)

27.22.4.9.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.5.2 Conformance requirement

Same as clause 27.22.4.9.1.2 and TS 31.111 [15] clause 8.31 and clause 8.32.

27.22.4.9.5.3 Test purpose

To verify that the mobile displays icons with the command Select Item.

27.22.4.9.5.4 Method of test

27.22.4.9.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.5.4.2 Procedure

Expected Sequence 5.1A (SELECT ITEM, BASIC ICON NOT SELF EXPLANATORY, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.5.4.2, Expected Sequence 5.1A.

Expected Sequence 5.1B (SELECT ITEM, BASIC ICON NOT SELF EXPLANATORY, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.9.5.4.2, Expected Sequence 5.1B.

Expected Sequence 5.2A (SELECT ITEM, BASIC ICON SELF EXPLANATORY, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.5.4.2, Expected Sequence 5.2A.

Expected Sequence 5.2B (SELECT ITEM, BASIC ICON SELF EXPLANATORY, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.9.5.4.2, Expected Sequence 5.2B.

27.22.4.9.5.5 Test requirement

The ME shall operate in the manner defined in expected sequences 5.1A to 5.2B.

27.22.4.9.6 SELECT ITEM (presentation style)

27.22.4.9.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.6.2 Conformance requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.6.3 Test purpose

To verify that the mobile supports the "presentation style" with the command Select Item.

27.22.4.9.6.4 Method of test

27.22.4.9.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.6.4.2 Procedure

Expected Sequence 6.1 (SELECT ITEM, PRESENTATION AS A CHOICE OF NAVIGATION OPTIONS, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.6.4.2, Expected Sequence 6.1.

Expected Sequence 6.2 (SELECT ITEM, PRESENTATION AS A CHOICE OF DATA VALUES, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.6.4.2, Expected Sequence 6.2.

27.22.4.9.6.5 Test requirement

The ME shall operate in the manner defined in expected sequences 6.1 and 6.2.

27.22.4.9.7 SELECT ITEM (soft keys support)

27.22.4.9.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.7.2 Conformance requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.7.3 Test purpose

To verify that the mobile supports the "soft keys" with the command Select Item.

27.22.4.9.7.4 Method of test

27.22.4.9.7.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.7.4.2 Procedure

Expected Sequence 7.1 (SELECT ITEM, SELECTING USING SOFT KEYS PREFERRED, successful, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.7.4.2, Expected Sequence 7.1.

27.22.4.9.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 7.1.

27.22.4.9.8 SELECT ITEM (Support of "No response from user")

27.22.4.9.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.8.2 Conformance requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.8.3 Test purpose

To verify that after a period of user inactivity the ME returns a "No response from user" result value in the TERMINAL RESPONSE command sent to the UICC.

27.22.4.9.8.4 Method of test

27.22.4.9.8.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME Manufacturer shall have defined the "no response from user" period of time as declared in table A.2/4.

The USIM Simulator shall be set to that period of time.

27.22.4.9.8.4.2 Procedure

Expected Sequence 8.1 (SELECT ITEM, no response from user)

See ETSI TS 102 384 [26] in clause 27.22.4.9.8.4.2, Expected Sequence 8.1.

27.22.4.9.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.1.

27.22.4.9.9 SELECT ITEM (Support of Text Attribute)

27.22.4.9.9.1 SELECT ITEM (Support of Text Attribute – Left Alignment)

27.22.4.9.9.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.9.1.2 Conformance requirement

Requirements are the same as in clause 27.22.4.9.1.2, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.9.9.1.3 Test purpose

To verify that the ME displays text formatted according to the left alignment text attribute configuration within the command Select Item.

27.22.4.9.9.1.4 Method of test

27.22.4.9.9.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.9.1.4.2 Procedure

Expected Sequence 9.1 (SELECT ITEM, Text Attribute – Left Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.9.9.1.4.2, Expected Sequence 9.1.

27.22.4.9.9.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.1.

27.22.4.9.9.2 SELECT ITEM (Support of Text Attribute – Center Alignment)

27.22.4.9.9.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.9.2.2 Conformance requirement

Requirements are the same as in clause 27.22.4.9.1.2, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.9.9.2.3 Test purpose

To verify that the ME displays text formatted according to the center alignment text attribute configuration within the command Select Item.

27.22.4.9.9.2.4 Method of test

27.22.4.9.9.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.9.2.4.2 Procedure

Expected Sequence 9.2 (SELECT ITEM, Text Attribute – Center Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.9.9.2.4.2, Expected Sequence 9.2.

27.22.4.9.9.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.2.

27.22.4.9.9.3 SELECT ITEM (Support of Text Attribute – Right Alignment)

27.22.4.9.9.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.9.3.2 Conformance requirement

Requirements are the same as in clause 27.22.4.9.1.2, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.9.9.3.3 Test purpose

To verify that the ME displays text formatted according to the right alignment text attribute configuration within the command Select Item.

27.22.4.9.9.3.4 Method of test

27.22.4.9.9.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.9.3.4.2 Procedure

Expected Sequence 9.3 (SELECT ITEM, Text Attribute – Right Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.9.9.3.4.2, Expected Sequence 9.3.

27.22.4.9.9.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.3.

27.22.4.9.9.4 SELECT ITEM (Support of Text Attribute – Large Font Size)

27.22.4.9.9.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.9.4.2 Conformance requirement

Requirements are the same as in clause 27.22.4.9.1.2, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.9.9.4.3 Test purpose

To verify that the ME displays text formatted according to the large font size text attribute configuration within the command Select Item.

27.22.4.9.9.4.4 Method of test

27.22.4.9.9.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.9.4.4.2 Procedure

Expected Sequence 9.4 (SELECT ITEM, Text Attribute – Large Font Size)

See ETSI TS 102 384 [26] in clause 27.22.4.9.9.4.4.2, Expected Sequence 9.4.

27.22.4.9.9.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.4.

27.22.4.9.9.5 SELECT ITEM (Support of Text Attribute – Small Font Size)

27.22.4.9.9.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.9.5.2 Conformance requirement

Requirements are the same as in clause 27.22.4.9.1.2, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.9.9.5.3 Test purpose

To verify that the ME displays text formatted according to the small font size text attribute configuration within the command Select Item.

27.22.4.9.9.5.4 Method of test

27.22.4.9.9.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.9.5.4.2 Procedure

Expected Sequence 9.5 (SELECT ITEM, Text Attribute – Small Font Size)

See ETSI TS 102 384 [26] in clause 27.22.4.9.9.5.4.2, Expected Sequence 9.5.

27.22.4.9.9.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.5.

27.22.4.9.9.6 SELECT ITEM (Support of Text Attribute – Bold On)

27.22.4.9.9.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.9.6.2 Conformance requirement

Requirements are the same as in clause 27.22.4.9.1.2, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.9.9.6.3 Test purpose

To verify that the ME displays text formatted according to the bold text attribute configuration within the command Select Item.

27.22.4.9.9.6.4 Method of test

27.22.4.9.9.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.9.6.4.2 Procedure

Expected Sequence 9.6 (SELECT ITEM, Text Attribute – Bold On)

See ETSI TS 102 384 [26] in clause 27.22.4.9.9.6.4.2, Expected Sequence 9.6.

27.22.4.9.9.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.6.

27.22.4.9.9.7 SELECT ITEM (Support of Text Attribute – Italic On)

27.22.4.9.9.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.9.7.2 Conformance requirement

Requirements are the same as in clause 27.22.4.9.1.2, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.9.9.7.3 Test purpose

To verify that the ME displays text formatted according to the italic text attribute configuration within the command Select Item.

27.22.4.9.9.7.4 Method of test

27.22.4.9.9.7.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.9.7.4.2 Procedure

Expected Sequence 9.7 (SELECT ITEM, Text Attribute – Italic On)

See ETSI TS 102 384 [26] in clause 27.22.4.9.9.7.4.2, Expected Sequence 9.7.

27.22.4.9.9.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.7.

27.22.4.9.9.8 SELECT ITEM (Support of Text Attribute – Underline On)

27.22.4.9.9.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.9.8.2 Conformance requirement

Requirements are the same as in clause 27.22.4.9.1.2, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.9.9.8.3 Test purpose

To verify that the ME displays text formatted according to the underline text attribute configuration within the command Select Item.

27.22.4.9.9.8.4 Method of test

27.22.4.9.9.8.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.9.8.4.2 Procedure

Expected Sequence 9.8 (SELECT ITEM, Text Attribute – Underline On)

See ETSI TS 102 384 [26] in clause 27.22.4.9.9.8.4.2, Expected Sequence 9.8.

27.22.4.9.9.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.8.

27.22.4.9.9.9 SELECT ITEM (Support of Text Attribute – Strikethrough On)

27.22.4.9.9.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.9.9.2 Conformance requirement

Requirements are the same as in clause 27.22.4.9.1.2, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.9.9.9.3 Test purpose

To verify that the ME displays text formatted according to the strikethrough text attribute configuration within the command Select Item.

27.22.4.9.9.9.4 Method of test

27.22.4.9.9.9.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.9.9.4.2 Procedure

Expected Sequence 9.9 (SELECT ITEM, Text Attribute – Strikethrough On)

See ETSI TS 102 384 [26] in clause 27.22.4.9.9.9.4.2, Expected Sequence 9.9.

27.22.4.9.9.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.9.

27.22.4.9.9.10 SELECT ITEM (Support of Text Attribute – Foreground and Background Colour)

27.22.4.9.9.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.9.10.2 Conformance requirement

Requirements are the same as in clause 27.22.4.9.1.2, with an additional one:

- 3GPP 31.111 [15] clauses 6.5.4, 8.70 and 8.71.

27.22.4.9.9.10.3 Test purpose

To verify that the ME displays text formatted according to the foreground and background colour text attribute configuration within the command Select Item.

27.22.4.9.9.10.4 Method of test

27.22.4.9.9.10.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.9.10.4.2 Procedure

Expected Sequence 9.10 (SELECT ITEM, Text Attribute – Foreground and Background Colour)

See ETSI TS 102 384 [26] in clause 27.22.4.9.9.10.4.2, Expected Sequence 9.10.

27.22.4.9.9.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 9.10.

27.22.4.9.10 SELECT ITEM (UCS2 display in Cyrillic)

27.22.4.9.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.10.2 Conformance requirement

The ME shall support the Proactive UICC: Select Item facility as defined in the following technical specifications:

- TS 31.111 [15] clause 5, clause 6.4.9, clause 6.6.8, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.9, clause 9.4 and clause 10.
- Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic characters, as defined in ISO/IEC 10646 [17].

27.22.4.9.10.3 Test purpose

To verify that the ME correctly presents the set of items in UCS2 coding contained in the SELECT ITEM proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC with the identifier of the item chosen.

To verify that the ME allows a SELECT ITEM proactive UICC command within the maximum 255 byte BER-TLV boundary.

To verify that the ME returns a TERMINAL RESPONSE with "Proactive UICC application session terminated by the user", if the user has indicated the need to end the proactive UICC session.

To verify that the ME returns a TERMINAL RESPONSE with "Backwards move in the proactive UICC application session requested by the user", if the user has indicated the need to go backwards in the proactive UICC application session.

27.22.4.9.10.4 Method of test

27.22.4.9.10.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.10.4.2 Procedure

Expected Sequence 10.1 (SELECT ITEM with UCS2 in Cyrillic characters, 0x80 UCS2 coding, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.10.4.2, Expected Sequence 10.1.

Expected Sequence 10.2 (SELECT ITEM with UCS2 in Cyrillic characters, 0x81 UCS2 coding, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.10.4.2, Expected Sequence 10.2.

Expected Sequence 10.3 (SELECT ITEM with UCS2 in Cyrillic characters, 0x82 UCS2 coding, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.10.4.2, Expected Sequence 10.3.

27.22.4.9.10.5 Test requirement

The ME shall operate in the manner defined in expected sequences 10.1 to 10.3.

27.22.4.9.11 SELECT ITEM (UCS2 display in Chinese)

27.22.4.9.11.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.11.2 Conformance requirement

The ME shall support the Proactive UICC: Select Item facility as defined in the following technical specifications:

- TS 31.111 [15] clause 5, clause 6.4.9, clause 6.6.8, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.9, clause 9.4 and clause 10.
- Additionally the ME shall support the UCS2 facility for the coding of the Chinese characters, as defined in ISO/IEC 10646 [17].

27.22.4.9.11.3 Test purpose

To verify that the ME correctly presents the set of items in UCS2 coding contained in the SELECT ITEM proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC with the identifier of the item chosen.

To verify that the ME allows a SELECT ITEM proactive UICC command within the maximum 255 byte BER-TLV boundary.

To verify that the ME returns a TERMINAL RESPONSE with "Proactive UICC application session terminated by the user", if the user has indicated the need to end the proactive UICC session.

To verify that the ME returns a TERMINAL RESPONSE with "Backwards move in the proactive UICC application session requested by the user", if the user has indicated the need to go backwards in the proactive UICC application session.

27.22.4.9.11.4 Method of test

27.22.4.9.11.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.11.4.2 Procedure

Expected Sequence 11.1 (SELECT ITEM with UCS2 in Chinese characters, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.11.4.2, Expected Sequence 11.1.

27.22.4.9.11.5 Test requirement

The ME shall operate in the manner defined in expected sequence 11.1.

27.22.4.9.12 SELECT ITEM (UCS2 display in Katakana)

27.22.4.9.12.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.12.2 Conformance requirement

The ME shall support the Proactive UICC: Select Item facility as defined in the following technical specifications:

- TS 31.111 [15] clause 5, clause 6.4.9, clause 6.6.8, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.9, clause 9.4 and clause 10.
- Additionally the ME shall support the UCS2 facility for the coding of the Katakana characters, as defined in ISO/IEC 10646 [17].

27.22.4.9.12.3 Test purpose

To verify that the ME correctly presents the set of items in UCS2 coding contained in the SELECT ITEM proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC with the identifier of the item chosen.

To verify that the ME allows a SELECT ITEM proactive UICC command within the maximum 255 byte BER-TLV boundary.

To verify that the ME returns a TERMINAL RESPONSE with "Proactive UICC application session terminated by the user", if the user has indicated the need to end the proactive UICC session.

To verify that the ME returns a TERMINAL RESPONSE with "Backwards move in the proactive UICC application session requested by the user", if the user has indicated the need to go backwards in the proactive UICC application session.

27.22.4.9.12.4 Method of test

27.22.4.9.12.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.12.4.2 Procedure

Expected Sequence 12.1 (SELECT ITEM with UCS2 in Katakana characters, 0x80 UCS2 coding, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.12.4.2, Expected Sequence 12.1.

Expected Sequence 12.2 (SELECT ITEM with UCS2 - Katakana characters, 0x81 UCS2 coding, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.12.4.2, Expected Sequence 12.2.

Expected Sequence 12.3 (SELECT ITEM with UCS2 - Katakana characters, 0x82 UCS2 coding, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.9.12.4.2, Expected Sequence 12.3.

27.22.4.9.12.5 Test requirement

The ME shall operate in the manner defined in expected sequences 12.1 to 12.3.

27.22.4.10 SEND SHORT MESSAGE

27.22.4.10.1 SEND SHORT MESSAGE (normal)

27.22.4.10.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.1.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31 and clause 5.2.

27.22.4.10.1.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (USS) as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.1.4 Method of test

27.22.4.10.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and connected to the USS.

27.22.4.10.1.4.2 Procedure

Expected Sequence 1.1 (Void)

Expected Sequence 1.2 (Void)

Expected Sequence 1.3 (Void)

Expected Sequence 1.4 (Void)

Expected Sequence 1.5 (Void)

Expected Sequence 1.6 (Void)

Expected Sequence 1.7 (Void)

Expected Sequence 1.8 (Void)

Expected Sequence 1.9 (Send Short Message over CS/PS, UTRAN/GERAN)

In case A.1/157 is supported perform the "CS related procedure" and continue with "Generic Test Procedure 1 (SEND SHORT MESSAGE)" as defined clause 27.22.4.10.7.4.2 as "Expected Sequence 1.9" with the following parameters:

- Used Network Simulator (NWS): USS (UMTS System Simulator or System Simulator)
- CS domain is used to send and receive short messages
- ME supports UTRAN or GERAN

CS related procedure:

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profile Download and USIM initialisation
2	ME → NWS	ME performs CS/PS or CS registration.	

3		CONTINUE WITH STEP 4 Generic Test Procedure 1 (SEND SHORT MESSAGE) in clause 27.22.4.10.7.4.2	

In case A.1/157 is not supported but A.1/159 is supported perform the "PS related procedure" and continue with "Generic Test Procedure 1 (SEND SHORT MESSAGE)" as defined clause 27.22.4.10.7.4.2 as "Expected Sequence 1.9" with the following parameters:

- Used Network Simulator (NWS): USS (UMTS System Simulator or System Simulator)
- PS domain is used to send and receive short messages
- ME supports UTRAN or GERAN

PS related procedure:

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profile Download and USIM initialisation
2	ME → NWS	ME performs CS/PS or PS registration.	
3		CONTINUE WITH STEP 4 Generic Test Procedure 1 (SEND SHORT MESSAGE) in clause 27.22.4.10.7.4.2	

27.22.4.10.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.9.

27.22.4.10.2 SEND SHORT MESSAGE (UCS2 display in Cyrillic)

27.22.4.10.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.2.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31 and clause 5.2.

Additionally, the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646 [17].

27.22.4.10.2.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (USS) as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.2.4 Method of test

27.22.4.10.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.2.4.2 Procedure

Expected Sequence 2.1 (SEND SHORT MESSAGE, packing not required, UCS2 (16-bit data in Cyrillic))

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 2.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 2.1.1	[packing not required, 16-bit data]
4	ME → USER	Display "ЗДРАВСТВУЙТЕ"	[Alpha Identifier] "Hello" in Russian, 0x80 coding of UCS2 format
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 2.1	Cyrillic
6	USS → ME	SMS RP-ACK	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 2.1.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "01"
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 2.1.2	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 2.1.2	
12	ME → USER	Display "ЗДРАВСТВУЙТЕ"	[Alpha Identifier] "Hello" in Russian, 0x81 coding of UCS2 format
13	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 2.2	
14	USS → ME	SMS RP-ACK	
15	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 2.1.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "02"
16	UICC → ME	PROACTIVE UICC SESSION ENDED	
17	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 2.1.3	
18	ME → UICC	FETCH	
19	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 2.1.3	[UCS2 alphabet]
20	ME → USER	Display "ЗДРАВСТВУЙТЕ"	[Alpha Identifier] "Hello" in Russian, 0x82 coding of UCS2 format
21	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 2.3	
22	USS → ME	SMS RP-ACK	
23	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 2.1.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "03"
24	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: SEND SHORT MESSAGE: 2.1.1

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "ЗДРАВСТВУЙТЕ"
Address
TON: International number
NPI: "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 16-bit data
Message class class 0
TP-UDL 24
TP-UD "ЗДРАВСТВУЙТЕ"

Coding:

BER-TLV:	D0	55	81	03	01	13	00	82	02	81	83	85
	19	80	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15	86	09	91	11	22	33	44	55	66	77
	F8	8B	24	01	00	09	91	10	32	54	76	F8
	40	08	18	04	17	04	14	04	20	04	10	04
	12	04	21	04	22	04	12	04	23	04	19	04
	22	04	15									

SMS-PP (SEND SHORT MESSAGE) Message 2.1

Logically:

SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "01"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding UCS2 (16-bit data)
Message class class 0
TP-UDL 24
TP-UD "ЗДРАВСТВУЙТЕ"

Coding:

Coding	01	01	09	91	10	32	54	76	F8	40	08	18
	04	17	04	14	04	20	04	10	04	12	04	21
	04	22	04	12	04	23	04	19	04	22	04	15

SMS-PP (SEND SHORT MESSAGE) Message 2.2

Logically:

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "02"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding UCS2 (16-bit data)
Message class class 0
TP-UDL 24
TP-UD "ЗДРАВСТВУЙТЕ"

Coding:

Coding	01	02	09	91	10	32	54	76	F8	40	08	18
	04	17	04	14	04	20	04	10	04	12	04	21
	04	22	04	12	04	23	04	19	04	22	04	15

SMS-PP (SEND SHORT MESSAGE) Message 2.3

Logically:

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "03"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding UCS2 (16-bit data)
Message class class 0
TP-UDL 24
TP-UD "ЗДРАВСТВУЙТЕ"

Coding:

Coding	01	03	09	91	10	32	54	76	F8	40	08	18

	04	17	04	14	04	20	04	10	04	12	04	21
	04	22	04	12	04	23	04	19	04	22	04	15

PROACTIVE COMMAND: SEND SHORT MESSAGE: 2.1.2

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "ЗДРАВСТВУЙТЕ"
Address
TON: International number
NPI: "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 16-bit data
Message class class 0
TP-UDL 24
TP-UD "ЗДРАВСТВУЙТЕ"

Coding:

BER-TLV:	D0	4B	81	03	01	13	00	82	02	81	83	85
	0F	81	0C	08	97	94	A0	90	92	A1	A2	92
	A3	99	A2	95	86	09	91	11	22	33	44	55
	66	77	F8	8B	24	01	00	09	91	10	32	54
	76	F8	40	08	18	04	17	04	14	04	20	04
	10	04	12	04	21	04	22	04	12	04	23	04
	19	04	22	04	15							

PROACTIVE COMMAND: SEND SHORT MESSAGE: 2.1.3

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "ЗДРАВСТВУЙТЕ"
Address

TON: International number
NPI: "ISDN / telephone numbering plan"
Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 16-bit data
Message class class 0
TP-UDL 24
TP-UD "ЗДРАВСТВУЙТЕ"

Coding:

BER-TLV:	D0	4C	81	03	01	13	00	82	02	81	83	85
	10	82	0C	04	10	87	84	90	80	82	91	92
	82	93	89	92	85	86	09	91	11	22	33	44
	55	66	77	F8	8B	24	01	00	09	91	10	32
	54	76	F8	40	08	18	04	17	04	14	04	20
	04	10	04	12	04	21	04	22	04	12	04	23
	04	19	04	22	04	15						

TERMINAL RESPONSE: SEND SHORT MESSAGE 2.1.1

Logically:

Command details

Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

27.22.4.10.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

27.22.4.10.3 SEND SHORT MESSAGE (icon support)

27.22.4.10.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.3.2 Conformance requirement

27.22.4.10.3.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (USS) as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.3.4 Method of test

27.22.4.10.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as Toolkit default.

The ME screen shall be in its normal stand-by display.

27.22.4.10.3.4.2 Procedure

Expected Sequence 3.1A (SEND SHORT MESSAGE, basic icon self-explanatory, packing not required, 8-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 3.1.1	[packing not required, 8-bit data]
4	ME → USER	Displays the icon and not the alpha identifier	[basic icon self-explanatory]
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 3.1	
6	USS → ME	SMS RP-ACK	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 3.1.1A	[Command performed successfully]

PROACTIVE COMMAND: SEND SHORT MESSAGE 3.1.1

Logically:

Command details
- Command number: 1
- Command type: SEND SHORT MESSAGE
- Command qualifier: packing not required

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "NO ICON"

Address
- TON: International number
- NPI: "ISDN / telephone numbering plan"
- Dialling number string "112233445566778"

SMS TPDU
- TP-MTI SMS-SUBMIT
- TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
- TP-VPF TP-VP field not present
- TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
- TP-UDHI The TP-UD field contains only the short message
- TP-SRR A status report is not requested

TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 8bit-data
Message class class 0
TP-UDL 12
TP-UD "Test Message"

Icon Identifier

Icon Qualifierself-explanatory
Icon Identifier 1 (number of record in EF IMG)

Coding:

BER-TLV:	D0	3B	81	03	01	13	00	82	02	81	83	85
	07	4E	4F	20	49	43	4F	4E	86	09	91	11
	22	33	44	55	66	77	F8	8B	18	01	00	09
	91	10	32	54	76	F8	40	F4	0C	54	65	73
	74	20	4D	65	73	73	61	67	65	9E	02	00
	01											

SMS-PP (SEND SHORT MESSAGE) Message 3.1

Logically:

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "01"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 8-bit data
Message class class 0
TP-UDL 12
TP-UD "Test Message"

Coding:

Coding	01	01	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

TERMINAL RESPONSE: SEND SHORT MESSAGE 3.1.1A

Logically:

Command details

Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

Expected Sequence 3.1B (SEND SHORT MESSAGE, basic icon self-explanatory, packing not required, 8-bit data, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 3.1.1	[packing not required, 8-bit data, basic icon self-explanatory]]
4	ME → USER	Displays the alpha identifier without the icon	
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 3.1	
6	USS → ME	SMS RP-ACK	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 3.1.1B	[Command performed successfully, but requested icon could not be displayed]

TERMINAL RESPONSE: SEND SHORT MESSAGE 3.1.1B

Logically:

Command details

Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	04

Expected Sequence 3.2A (SEND SHORT MESSAGE, basic icon non-self-explanatory, packing not required, 8-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 3.2.1	[packing not required, 8-bit data]
4	ME → USER	display the icon and "Send SM"	[basic icon non-self-explanatory]
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 3.2	
6	USS → ME	SMS RP-ACK	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 3.2.1A	[Command performed successfully]

PROACTIVE COMMAND: SEND SHORT MESSAGE 3.2.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha Identifier "Send SM"
Address
TON: International number
NPI: "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 8bit-data
Message class class 0
TP-UDL 12
TP-UD "Test Message"
Icon Identifier
Icon Qualifiernon-self-explanatory
Icon Identifier 1 (number of record in EF IMG)

Coding:

BER-TLV:	D0	3B	81	03	01	13	00	82	02	81	83	85
	07	53	65	6E	64	20	53	4D	86	09	91	11
	22	33	44	55	66	77	F8	8B	18	01	00	09
	91	10	32	54	76	F8	40	F4	0C	54	65	73
	74	20	4D	65	73	73	61	67	65	1E	02	01
	01											

SMS-PP (SEND SHORT MESSAGE) Message 3.2

Logically:

SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "01"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"

Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 8-bit data
Message class class 0
TP-UDL 12
TP-UD "Test Message"

Coding:

Coding	01	01	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

TERMINAL RESPONSE: SEND SHORT MESSAGE 3.2.1A

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

Expected Sequence 3.2B (SEND SHORT MESSAGE, basic icon non-self-explanatory, packing not required, 8-bit data, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 3.2.1	[packing not required, 8-bit data, basic icon non-self-explanatory]
4	ME → USER	display "Send SM" without the icon	
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 3.2	
6	USS → ME	SMS RP-ACK	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 3.2.1B	[Command performed successfully, but requested icon could not be displayed]

TERMINAL RESPONSE: SEND SHORT MESSAGE 3.2.1B

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully, but requested icon could not be displayed;

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	04

27.22.4.10.3.5 Test requirement

The ME shall operate in the manner defined in expected sequences 3.1A to 3.2B.

27.22.4.10.4 SEND SHORT MESSAGE (Support of Text Attribute)

27.22.4.10.4.1 SEND SHORT MESSAGE (Support of Text Attribute – Left Alignment)

27.22.4.10.4.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.4.1.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31, 8.67 and clause 5.2.

27.22.4.10.4.1.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (USS) and display the alpha identifier according to the left alignment text attribute configuration as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.4.1.4 Method of test

27.22.4.10.4.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.4.1.4.2 Procedure

Expected Sequence 4.1 (SEND SHORT MESSAGE, alpha identifier with Text attribute – Left Alignment, packing not required, SMS default alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.1.1	[packing not required, SMS default alphabet]
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with left alignment]
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.1	
6	USS → ME	SMS RP-ACK	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.1.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "01"

8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.1.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.1.2	[packing not required, SMS default alphabet]
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted without left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/11, no alignment change will take place]
12	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.2	
13	USS → ME	SMS RP-ACK	
14	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.1.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "02"

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.1.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.1.2

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "

Coding:

BER-TLV:	D0	26	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8B	09	01	00	02	91	10
	40	F0	01	20								

SMS-PP (SEND SHORT MESSAGE) Message 4.1

Logically:

SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "01"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "

Coding:

Coding	01	01	02	91	10	40	F0	01	20

SMS-PP (SEND SHORT MESSAGE) Message 4.2

Logically:

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "02"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "

Coding:

Coding	01	02	02	91	10	40	F0	01	20

SMS-PP (SEND SHORT MESSAGE) Message 4.3

Logically:

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "03"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "

Coding:

Coding	01	03	02	91	10	40	F0	01	20

SMS-PP (SEND SHORT MESSAGE) Message 4.4

Logically:

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "04"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "

Coding:

Coding	01	04	02	91	10	40	F0	01	20

TERMINAL RESPONSE: SEND SHORT MESSAGE 4.1.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

27.22.4.10.4.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.1.

27.22.4.10.4.2 SEND SHORT MESSAGE (Support of Text Attribute – Center Alignment)

27.22.4.10.4.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.4.2.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31, 8.67 and clause 5.2.

27.22.4.10.4.2.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (USS) and display the alpha identifier according to the center alignment text attribute configuration as indicated in the SEND SHORT MESSAGE proactive

UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.4.2.4 Method of test

27.22.4.10.4.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.4.2.4.2 Procedure

Expected Sequence 4.2 (SEND SHORT MESSAGE, alpha identifier with Text attribute – Center Alignment, packing not required, SMS default alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.2.1	[packing not required, SMS default alphabet]
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with center alignment]
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.1	
6	USS → ME	SMS RP-ACK	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.2.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "01"
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.2.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.2.2	[packing not required, SMS default alphabet]
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted without center alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/11, no alignment change will take place]
12	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.2	
13	USS → ME	SMS RP-ACK	
14	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.2.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "02"

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.2.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Center Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	01	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.2.2

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "

Coding:

BER-TLV:	D0	26	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8B	09	01	00	02	91	10
	40	F0	01	20								

TERMINAL RESPONSE: SEND SHORT MESSAGE 4.2.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

27.22.4.10.4.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.2.

27.22.4.10.4.3 SEND SHORT MESSAGE (Support of Text Attribute – Right Alignment)

27.22.4.10.4.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.4.3.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31, 8.67 and clause 5.2.

27.22.4.10.4.3.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (USS) and display the alpha identifier according to the right alignment text attribute configuration as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.4.3.4 Method of test

27.22.4.10.4.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.4.3.4.2 Procedure

Expected Sequence 4.3 (SEND SHORT MESSAGE, alpha identifier with Text attribute – Right Alignment, packing not required, SMS default alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.3.1	[packing not required, SMS default alphabet]
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with right alignment]
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.1	
6	USS → ME	SMS RP-ACK	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.3.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "01"
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.3.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.3.2	[packing not required, SMS default alphabet]
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted without right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/11, no alignment change will take place]
12	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.2	
13	USS → ME	SMS RP-ACK	
14	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.3.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "02"

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.3.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet

Message class class 0
TP-UDL 1
TP-UD " "
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Right Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	02	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.3.2

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "

Coding:

BER-TLV:	D0	26	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8B	09	01	00	02	91	10
	40	F0	01	20								

TERMINAL RESPONSE: SEND SHORT MESSAGE 4.3.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE

Command qualifier: packing not required

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

27.22.4.10.4.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.3.

27.22.4.10.4.4 SEND SHORT MESSAGE (Support of Text Attribute – Large Font Size)

27.22.4.10.4.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.4.4.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31, 8.67 and clause 5.2.

27.22.4.10.4.4.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (USS) and display the alpha identifier according to the large font size text attribute configuration as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.4.4.4 Method of test

27.22.4.10.4.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.4.4.4.2 Procedure

Expected Sequence 4.4 (SEND SHORT MESSAGE, alpha identifier with Text attribute – Large Font Size, packing not required, SMS default alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.4.1	[packing not required, SMS default alphabet]
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with large font size]
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.1	
6	USS → ME	SMS RP-ACK	

7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.4.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "01"
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.4.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.4.2	[packing not required, SMS default alphabet]
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with normal font size]
12	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.2	
13	USS → ME	SMS RP-ACK	
14	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.4.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "02"
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.4.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.4.1	[packing not required, SMS default alphabet]
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with large font size]
19	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.3	
20	USS → ME	SMS RP-ACK	
21	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.4.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "03"
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.4.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.4.3	[packing not required, SMS default alphabet]
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with normal font size]
26	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.3	
27	USS → ME	SMS RP-ACK	
28	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.4.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "04"

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.4.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested

TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Large Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	04	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.4.2

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.4.3

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 3"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "

Coding:

BER-TLV:	D0	26	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	8B	09	01	00	02	91	10
	40	F0	01	20								

TERMINAL RESPONSE: SEND SHORT MESSAGE 4.4.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

27.22.4.10.4.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.4.

27.22.4.10.4.5 SEND SHORT MESSAGE (Support of Text Attribute – Small Font Size)

27.22.4.10.4.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.4.5.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31, 8.67 and clause 5.2.

27.22.4.10.4.5.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (USS) and display the alpha identifier according to the small font size text attribute configuration as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.4.5.4 Method of test

27.22.4.10.4.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.4.5.4.2 Procedure

Expected Sequence 4.5 (SEND SHORT MESSAGE, alpha identifier with Text attribute – Small Font Size, packing not required, SMS default alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.5.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.5.1	[packing not required, SMS default alphabet]
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with small font size]
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.1	
6	USS → ME	SMS RP-ACK	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.5.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "01"
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.5.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.5.2	[packing not required, SMS default alphabet]

11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with normal font size]
12	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.2	
13	USS → ME	SMS RP-ACK	
14	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.5.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "02"
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.5.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.5.1	[packing not required, SMS default alphabet]
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with small font size]
19	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.3	
20	USS → ME	SMS RP-ACK	
21	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.5.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "03"
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.5.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.5.3	[packing not required, SMS default alphabet]
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with normal font size]
26	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.4	
27	USS → ME	SMS RP-ACK	
28	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.5.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "04"

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.5.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0

TP-UDL 1
TP-UD " "
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Small Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	08	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.5.2

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.5.3

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 3"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "

Coding:

BER-TLV:	D0	26	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	8B	09	01	00	02	91	10
	40	F0	01	20								

TERMINAL RESPONSE: SEND SHORT MESSAGE 4.5.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

27.22.4.10.4.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.5.

27.22.4.10.4.6 SEND SHORT MESSAGE (Support of Text Attribute – Bold On)

27.22.4.10.4.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.4.6.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31, 8.67 and clause 5.2.

27.22.4.10.4.6.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (USS) and display the alpha identifier according to the bold text attribute configuration as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.4.6.4 Method of test

27.22.4.10.4.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.4.6.4.2 Procedure

Expected Sequence 4.6 (SEND SHORT MESSAGE, alpha identifier with Text attribute – Bold On, packing not required, SMS default alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.6.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.6.1	[packing not required, SMS default alphabet]
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with bold on]
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.1	
6	USS → ME	SMS RP-ACK	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.6.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "01"
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.6.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.6.2	[packing not required, SMS default alphabet]
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with bold off]
12	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.2	
13	USS → ME	SMS RP-ACK	
14	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.6.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "02"
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.6.1	

16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.6.1	[packing not required, SMS default alphabet]
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with bold on]
19	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.3	
20	USS → ME	SMS RP-ACK	
21	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.6.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "03"
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.6.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.6.3	[packing not required, SMS default alphabet]
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with bold off]
26	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.4	
27	USS → ME	SMS RP-ACK	
28	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.6.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "04"

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.6.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold On, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	10	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.6.2

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.6.3

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 3"

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "

Coding:

BER-TLV:	D0	26	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	8B	09	01	00	02	91	10
	40	F0	01	20								

TERMINAL RESPONSE: SEND SHORT MESSAGE 4.6.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

27.22.4.10.4.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.6.

27.22.4.10.4.7 SEND SHORT MESSAGE (Support of Text Attribute – Italic On)

27.22.4.10.4.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.4.7.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31, 8.67 and clause 5.2.

27.22.4.10.4.7.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (USS) and display the alpha identifier according to the italic text attribute configuration as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.4.7.4 Method of test

27.22.4.10.4.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.4.7.4.2 Procedure

Expected Sequence 4.7 (SEND SHORT MESSAGE, alpha identifier with Text attribute – Italic On, packing not required, SMS default alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.7.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.7.1	[packing not required, SMS default alphabet]
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with italic on]
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.1	
6	USS → ME	SMS RP-ACK	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.7.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "01"
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.7.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.7.2	[packing not required, SMS default alphabet]
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with italic off]
12	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.2	
13	USS → ME	SMS RP-ACK	
14	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.7.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "02"
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.7.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.7.1	[packing not required, SMS default alphabet]
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with italic on]
19	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.3	
20	USS → ME	SMS RP-ACK	
21	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.7.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "03"
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.7.3	
23	ME → UICC	FETCH	

24	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.7.3	[packing not required, SMS default alphabet]
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with italic off]
26	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.4	
27	USS → ME	SMS RP-ACK	
28	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.7.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "04"

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.7.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	20	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.7.2

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required

Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.7.3

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 3"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS

Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "

Coding:

BER-TLV:	D0	26	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	8B	09	01	00	02	91	10
	40	F0	01	20								

TERMINAL RESPONSE: SEND SHORT MESSAGE 4.7.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

27.22.4.10.4.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.7.

27.22.4.10.4.8 SEND SHORT MESSAGE (Support of Text Attribute – Underline On)

27.22.4.10.4.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.4.8.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31, 8.67 and clause 5.2.

27.22.4.10.4.8.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (USS) and display the alpha identifier according to the underline text attribute configuration as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.4.8.4 Method of test

27.22.4.10.4.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.4.8.4.2 Procedure

Expected Sequence 4.8 (SEND SHORT MESSAGE, alpha identifier with Text attribute – Underline On, packing not required, SMS default alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.8.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.8.1	[packing not required, SMS default alphabet]
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with underline on]
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.1	
6	USS → ME	SMS RP-ACK	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.8.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "01"
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.8.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.8.2	[packing not required, SMS default alphabet]
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with underline off]
12	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.2	
13	USS → ME	SMS RP-ACK	
14	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.8.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "02"
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.8.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.8.1	[packing not required, SMS default alphabet]
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with underline on]
19	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.3	
20	USS → ME	SMS RP-ACK	
21	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.8.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "03"
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.8.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.8.3	[packing not required, SMS default alphabet]
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with underline off]
26	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.4	
27	USS → ME	SMS RP-ACK	
28	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.8.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "04"

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.8.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline On, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	40	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.8.2

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"

TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.8.3

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 3"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "

Coding:

BER-TLV:	D0	26	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	8B	09	01	00	02	91	10
	40	F0	01	20								

TERMINAL RESPONSE: SEND SHORT MESSAGE 4.8.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

27.22.4.10.4.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.8.

27.22.4.10.4.9 SEND SHORT MESSAGE (Support of Text Attribute – Strikethrough On)

27.22.4.10.4.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.4.9.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31, 8.67 and clause 5.2.

27.22.4.10.4.9.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (USS) and display the alpha identifier according to the strikethrough text attribute configuration as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.4.9.4 Method of test

27.22.4.10.4.9.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.4.9.4.2 Procedure

Expected Sequence 4.9 (SEND SHORT MESSAGE, alpha identifier with Text attribute – Strikethrough On, packing not required, SMS default alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.9.1	
2	ME → UICC	FETCH	

3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.9.1	[packing not required, SMS default alphabet]
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with strikethrough on]
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.1	
6	USS → ME	SMS RP-ACK	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.9.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "01"
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.9.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.9.2	[packing not required, SMS default alphabet]
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with strikethrough off]
12	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.2	
13	USS → ME	SMS RP-ACK	
14	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.9.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "02"
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.9.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.9.1	[packing not required, SMS default alphabet]
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with strikethrough on]
19	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.3	
20	USS → ME	SMS RP-ACK	
21	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.9.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "03"
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.9.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.9.3	[packing not required, SMS default alphabet]
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with strikethrough off]
26	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.4	
27	USS → ME	SMS RP-ACK	
28	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.9.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "04"

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.9.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1

TP-UD " "

Text Attribute

Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough On
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	80	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.9.2

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1

TP-UD " "

Text Attribute

Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.9.3

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 3"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "

Coding:

BER-TLV:	D0	26	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	8B	09	01	00	02	91	10
	40	F0	01	20								

TERMINAL RESPONSE: SEND SHORT MESSAGE 4.9.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

27.22.4.10.4.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.9.

27.22.4.10.4.10 SEND SHORT MESSAGE (Support of Text Attribute – Foreground and Background Colour)

27.22.4.10.4.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.4.10.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31, 8.67 and clause 5.2.

27.22.4.10.4.10.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (USS) and display the alpha identifier according to the foreground and background colour text attribute configuration as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.4.10.4 Method of test

27.22.4.10.4.10.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.4.10.4.2 Procedure

Expected Sequence 4.10 (SEND SHORT MESSAGE, alpha identifier with Text attribute – Foreground and Background Colour, packing not required, SMS default alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.10.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.10.1	[packing not required, SMS default alphabet]
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with foreground and background colour according to text attribute configuration]
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.1	
6	USS → ME	SMS RP-ACK	

7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.10.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "01"
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 4.10.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 4.10.2	[packing not required, SMS default alphabet]
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with ME's default foreground and background colour]
12	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 4.2	
13	USS → ME	SMS RP-ACK	
14	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 4.10.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "02"

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.10.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2C	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8B	09	01	00	02	91	10
	40	F0	01	20	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND SHORT MESSAGE 4.10.2

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "01"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 1
TP-UD " "

Coding:

BER-TLV:	D0	26	81	03	01	13	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8B	09	01	00	02	91	10
	40	F0	01	20								

TERMINAL RESPONSE: SEND SHORT MESSAGE 4.10.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

27.22.4.10.4.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.10.

27.22.4.10.5 SEND SHORT MESSAGE (UCS2 display in Chinese)

27.22.4.10.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.5.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31 and clause 5.2.

Additionally, the ME shall support the UCS2 facility for the coding of the Chinese characters, as defined in the following technical specifications: ISO/IEC 10646 [17].

27.22.4.10.5.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (USS) as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.5.4 Method of test

27.22.4.10.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.5.4.2 Procedure

Expected Sequence 5.1 (SEND SHORT MESSAGE, packing not required, UCS2 (16-bit data in Chinese))

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 5.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 5.1.1	[packing not required, 16-bit data]
4	ME → USER	Display "中一"	[Alpha Identifier] "Middle 1" in Chinese, 0x80 coding of UCS2 format
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 5.1	
6	USS → ME	SMS RP-ACK	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 5.1.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "01"
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 5.1.2	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND SEND SHORT MESSAGE 5.1.2	
12	ME → USER	Display "中一"	[Alpha Identifier] "Middle 1" in Chinese, 0x81 coding of UCS2 format
13	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 5.2	
14	USS → ME	SMS RP-ACK	

15	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 5.1.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "02"
16	UICC → ME	PROACTIVE UICC SESSION ENDED	
17	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 5.1.3	
18	ME → UICC	FETCH	
19	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 5.1.3	[UCS2 alphabet]
20	ME → USER	Display "中一"	[Alpha Identifier] "Middle 1" in Chinese, 0x82 coding of UCS2 format
21	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 5.3	
22	USS → ME	SMS RP-ACK	
23	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 5.1.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "03"
24	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: SEND SHORT MESSAGE: 5.1.1

Logically:

Command details
- Command number: 1
- Command type: SEND SHORT MESSAGE
- Command qualifier: packing not required

Device identities
- Source device: UICC
- Destination device: Network

Alpha identifier: "中一"

Address
- TON: International number
- NPI: "ISDN / telephone numbering plan"
- Dialling number string "112233445566778"

SMS TPDU
- TP-MTI SMS-SUBMIT
- TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
- TP-VPF TP-VP field not present
- TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
- TP-UDHI The TP-UD field contains only the short message
- TP-SRR A status report is not requested
- TP-MR "00"
- TP-DA
- TON International number
- NPI "ISDN / telephone numbering plan"
- Address value "012345678"
- TP-PID Short message type 0
- TP-DCS
- Message coding 16-bit data
- Message class class 0
- TP-UDL 24
- TP-UD "中一"

Coding:

BER-TLV:	D0	2D	81	03	01	13	00	82	02	81	83	85

	05	80	4E	2D	4E	00	86	09	91	11	22	33
	44	55	66	77	F8	8B	10	01	00	09	91	10
	32	54	76	F8	40	08	04	4E	2D	4E	00	

SMS-PP (SEND SHORT MESSAGE) Message 5.1

Logically:

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "01"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding UCS2 (16-bit data)
Message class class 0
TP-UDL 24
TP-UD "中一"

Coding:

BER-TLV:	01	01	09	91	10	32	54	76	F8	40	08	04
	4E	2D	4E	00								

SMS-PP (SEND SHORT MESSAGE) Message 5.2

Logically:

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "02"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding UCS2 (16-bit data)
Message class class 0
TP-UDL 24
TP-UD "中一"

Coding:

BER-TLV:	01	02	09	91	10	32	54	76	F8	40	08	04
	4E	2D	4E	00								

SMS-PP (SEND SHORT MESSAGE) Message 5.3

Logically:

SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "03"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding UCS2 (16-bit data)
Message class class 0
TP-UDL 24
TP-UD "中一"

Coding:

BER-TLV:	01	03	09	91	10	32	54	76	F8	40	08	04
	4E	2D	4E	00								

PROACTIVE COMMAND: SEND SHORT MESSAGE: 5.1.2

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "中一"
Address
TON: International number
NPI: "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 16-bit data
Message class class 0
TP-UDL 24

TP-UD "中一"

Coding:

BER-TLV:	D0	2D	81	03	01	13	00	82	02	81	83	85
	05	81	02	9C	AD	80	86	09	91	11	22	33
	44	55	66	77	F8	8B	10	01	00	09	91	10
	32	54	76	F8	40	08	04	4E	2D	4E	00	

PROACTIVE COMMAND: SEND SHORT MESSAGE: 5.1.3

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "中一"
Address
TON: International number
NPI: "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 16-bit data
Message class class 0
TP-UDL 24
TP-UD "中一"

Coding:

BER-TLV:	D0	2E	81	03	01	13	00	82	02	81	83	85
	06	82	02	4E	00	AD	80	86	09	91	11	22
	33	44	55	66	77	F8	8B	10	01	00	09	91
	10	32	54	76	F8	40	08	04	4E	2D	4E	00

TERMINAL RESPONSE: SEND SHORT MESSAGE 5.1.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

27.22.4.10.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

27.22.4.10.6 SEND SHORT MESSAGE (UCS2 display in Katakana)

27.22.4.10.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.6.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31 and clause 5.2.

Additionally, the ME shall support the UCS2 facility for the coding of the Katakana characters, as defined in the following technical specifications: ISO/IEC 10646 [17].

27.22.4.10.6.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (USS) as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.6.4 Method of test

27.22.4.10.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.6.4.2 Procedure

Expected Sequence 6.1 (SEND SHORT MESSAGE, packing not required, UCS2 (16-bit data, in Katakana))

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 6.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 6.1.1	[packing not required, 16-bit data]
4	ME → USER	Display "80ルᄋ0"	[Characters in katakana]
5	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 6.1	
6	USS → ME	SMS RP-ACK	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 6.1.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "01"

8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 6.1.2	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 6.1.2	[packing not required, 16-bit data]
12	ME → USER	Display "81ルレ1"	[Characters in katakana]
13	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 6.2	
14	USS → ME	SMS RP-ACK	
15	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 6.1.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "02"
16	UICC → ME	PROACTIVE UICC SESSION ENDED	
17	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 6.1.3	
18	ME → UICC	FETCH	
19	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 6.1.3	[packing not required, 16-bit data]
20	ME → USER	Display "82ルレ2"	[Characters in katakana]
21	ME → USS	Send SMS-PP (SEND SHORT MESSAGE) Message 6.3	
22	USS → ME	SMS RP-ACK	
23	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 6.1.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "03"
24	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: SEND SHORT MESSAGE: 6.1.1

Logically:

Command details
- Command number: 1
- Command type: SEND SHORT MESSAGE
- Command qualifier: packing not required

Device identities
- Source device: UICC
- Destination device: Network

Alpha identifier: "80ルレ0"

Address
- TON: International number
- NPI: "ISDN / telephone numbering plan"
- Dialling number string "112233445566778"

SMS TPDU
- TP-MTI SMS-SUBMIT
- TP-RD Instruct the SC to accept a SMS-SUBMIT for a SM
- TP-VPF TP-VP field not present
- TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
- TP-UDHI The TP-UD field contains only the short message
- TP-SRR A status report is not requested
- TP-MR "00"
- TP-DA
- TON International number
- NPI "ISDN / telephone numbering plan"
- Address value "012345678"
- TP-PID Short message type 0
- TP-DCS

Message coding 16-bit data
Message class class 0
TP-UDL 10
TP-UD "80ルレ1"

Coding:

BER-TLV:	D0	35	81	03	01	13	00	82	02	81	83	85
	09	80	00	38	00	30	30	EB	00	30	86	09
	91	11	22	33	44	55	66	77	F8	8B	14	01
	00	09	91	10	32	54	76	F8	40	08	08	00
	38	00	30	30	EB	00	31					

SMS-PP (SEND SHORT MESSAGE) Message 6.1

Logically:

SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "01"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding UCS2 (16-bit data)
Message class class 0
TP-UDL 10
TP-UD "80ルレ1"

Coding:

Coding	01	01	09	91	10	32	54	76	F8	40	08	08
	00	38	00	30	30	EB	00	31				

TERMINAL RESPONSE: SEND SHORT MESSAGE 6.1.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

PROACTIVE COMMAND: SEND SHORT MESSAGE: 6.1.2

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "81ルル1"
Address
TON: International number
NPI: "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept a SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 16-bit data
Message class class 0
TP-UDL 10
TP-UD "80ルル2"

Coding:

BER-TLV:	D0	33	81	03	01	13	00	82	02	81	83	85
	07	81	04	61	38	31	EB	31	86	09	91	11
	22	33	44	55	66	77	F8	8B	14	01	00	09
	91	10	32	54	76	F8	40	08	08	00	38	00
	30	30	EB	00	32							

SMS-PP (SEND SHORT MESSAGE) Message 6.2

Logically:

SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "02"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding UCS2 (16-bit data)
Message class class 0

TP-UDL 10
TP-UD "80ルル2"

Coding:

Coding	01	02	09	91	10	32	54	76	F8	40	08	08
	00	38	00	30	30	EB	00	32				

PROACTIVE COMMAND: SEND SHORT MESSAGE: 6.1.3

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "82ルル2"
Address
TON: International number
NPI: "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept a SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 16-bit data
Message class class 0
TP-UDL 10
TP-UD "80ルル3"

Coding:

BER-TLV:	D0	34	81	03	01	13	00	82	02	81	83	85
	08	82	04	30	A0	38	32	CB	32	86	09	91
	11	22	33	44	55	66	77	F8	8B	14	01	00
	09	91	10	32	54	76	F8	40	08	08	00	38
	00	30	30	EB	00	33						

SMS-PP (SEND SHORT MESSAGE) Message 6.3

Logically:

SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT

TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "03"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding UCS2 (16-bit data)
Message class class 0
TP-UDL 10
TP-UD "80ルル3"

Coding:

Coding	01	03	09	91	10	32	54	76	F8	40	08	08
	00	38	00	30	30	EB	00	33				

27.22.4.10.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1.

27.22.4.10.7 SEND SHORT MESSAGE (IMS)

27.22.4.10.7.1 Definition and applicability

See clause 3.2.2.

That the UE correctly implemented the role of an SMS-over-IP sender is tested in clause 18.1 of TS 34.229-1 [36].

27.22.4.10.7.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility for SMS over IP according to:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31 and clause 5.2.
- TS 31.103 [35].
- TS 34.229-1 [36], Annexes C.2, C.17 and C.18.
- TS 24.341 [37], clause 5.3.1.

27.22.4.10.7.3 Test purpose

1) To verify that the ME correctly formats and sends a short message via IMS to the E-USS/USS as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.
2) To verify that the ME uses the default service address as indicated in EF SMSP if no service center address is available in the Send Short Message command.
3) To verify that a device of Class ND does not reject the Send Short Message command if the proactive Send Short Message command contains an alpha identifier.

27.22.4.10.7.4 Method of test

27.22.4.10.7.4.1 Initial conditions

The ME is connected to the USIM Simulator. The elementary files are coded as defined for the E-UTRAN/EPC ISIM-UICC in clause 27.22.2C.

For sequence 7.1 the ME is additionally connected to the E-USS.

For sequence 7.2 the ME is additionally connected to the USS.

27.22.4.10.7.4.2 Procedure

Expected Sequence 7.1 (SEND SHORT MESSAGE, SMS-over-IP, E-UTRAN)

Perform the "IMS related procedure 1" and continue with "Generic Test Procedure 1 (SEND SHORT MESSAGE)" as defined in this clause as "Expected Sequence 7.1" with the following parameters:

- Used Network Simulator (NWS): E-USS
- SMS-over-IP is used to send and receive short messages
- ME supports eFDD or eTDD and SMS-over-IP

Expected Sequence 7.2 (SEND SHORT MESSAGE, SMS-over-IP, UTRAN)

Perform the "IMS related procedure 1" and continue with "Generic Test Procedure 1 (SEND SHORT MESSAGE)" as defined in this clause as "Expected Sequence 7.2" with the following parameters:

- Used Network Simulator (NWS): USS (UMTS System Simulator only)
- SMS-over-IP is used to send and receive short messages
- ME supports UTRAN and SMS-over-IP

IMS related procedure 1:

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profle Download, USIM and ISIM initialisation
2	ME → NWS	ME activates the required bearer, discoveres P-CSCF and registers with the values from the ISIM to IMS services	For E-UTRAN: The EPS bearer context activation according to the procedures defined in TS 34.229-1 [36], Annex C.2 and C.18 is performed For UTRAN: For SMS-over-IP a PDP context activation according to the procedures defined in TS 34.229-1 [36], Annex C.2 and C.17 is performed.
3		CONTINUE WITH STEP 4 Generic Test Procedure 1 (SEND SHORT MESSAGE)	

Generic Test Procedure 1 (SEND SHORT MESSAGE)

Step	Direction	MESSAGE / Action	Comments

4	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 7.1.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 7.1.1	[packing not required, SMS default alphabet]
7	ME → NWS	Send RP-DATA containing SMS-PP (SEND SHORT MESSAGE) Message 7.1	See Note 1. In case of SMS-over-IP the RP-Destination Address (SM Service Center Address within the RP-DATA) is taken from the ISIM (EF SMSP)
8	NWS → ME	RP-ACK	See Note 2.
9	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 7.1.1	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "01"
10	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 7.1. 2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 7.1.2	[packing required, 8 bit data]
13	ME → USER	Display "The address data object holds the RP_Destination_Address "	[Alpha Identifier not to be displayed by Terminals of Class_ND]
14	ME → NWS	Send RP-DATA containing SMS-PP (SEND SHORT MESSAGE) Message 7.2	See Note 1.
15	NWS → ME	RP-ACK	See Note 2.
16	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 7.1.2	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "02"
17	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 7.1.3	
18	ME → UICC	FETCH	
19	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 7.1.3	[packing not required, SMS default alphabet]
20	ME → USER	Display "The address data object holds the RP Destination Address "	[Alpha Identifier not to be displayed by Terminals of Class_ND]
21	ME → NWS	Send RP-DATA containing SMS-PP (SEND SHORT MESSAGE) Message 7.3	See Note 1.
22	NWS → ME	RP-ACK	See Note 2.
23	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 7.1.3	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "03"
24	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 7.1.4	
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 7.1.4	[packing not required, 8-bit data]
27	ME	No information to user	[Alpha identifier length '00']
28	ME → NWS	Send RP-DATA containing SMS-PP (SEND SHORT MESSAGE) Message 7.4	See Note 1.
29	NWS → ME	RP-ACK	See Note 2.
30	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 7.1.4	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "04"
31	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 7.1.5	
32	ME → UICC	FETCH	

33	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 7.1.5	[packing not required, 8-bit data]
34	ME → USER	May give information to user concerning what is happening	[No Alpha Identifier]
35	ME → NWS	Send RP-DATA containing SMS-PP (SEND SHORT MESSAGE) Message 7.5	See Note 1.
36	NWS → ME	RP-ACK	See Note 2.
37	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 7.1.5	[Command performed successfully] The UE shall have updated Last-Used-TP-MR of EF SMSS to "05"
38	USER → ME	The ME is switched off	

Note 1:
In case of IMS the RP-DATA is contained in the SIP MESSAGE which is built according to TS 24.341 [37], clause 5.3.1.2 including PSI of the SMSC from EF PSISMSC.

Note 2:
In case of IMS the RP-ACK message is contained in the message body of the SIP MESSAGE.

PROACTIVE COMMAND: SEND SHORT MESSAGE 7.1.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 13
TP-UD "Short Message"

Coding:

BER-TLV:	D0	23	81	03	01	13	00	82	02	81	83	8B
	18	01	00	09	91	10	32	54	76	F8	40	F0
	0D	53	F4	5B	4E	07	35	CB	F3	79	F8	5C
	06											

SMS-PP (SEND SHORT MESSAGE) Message 7.1

Logically:

SMS TPDU
TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "01"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 13
TP-UD "Short Message"

Coding:

Coding	01	01	09	91	10	32	54	76	F8	40	F0	0D
	53	F4	5B	4E	07	35	CB	F3	79	F8	5C	06

TERMINAL RESPONSE: SEND SHORT MESSAGE 7.1.1/7.1.3/7.1.4, 7.1.5

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

PROACTIVE COMMAND: SEND SHORT MESSAGE 7.1.2

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "The address data object holds the RP_Destination_Address"
Address
TON: International number
NPI: "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT

TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 8 bit data
Message class class 0
TP-UDL 160
TP-UD "Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transp"

Coding:

BER-TLV:	D0	81	FD	81	03	01	13	01	82	02	81	83
	85	38	54	68	65	20	61	64	64	72	65	73
	73	20	64	61	74	61	20	6F	62	6A	65	63
	74	20	68	6F	6C	64	73	20	74	68	65	20
	52	50	11	44	65	73	74	69	6E	61	74	69
	6F	6E	11	41	64	64	72	65	73	73	86	09
	91	11	22	33	44	55	66	77	F8	8B	81	AC
	01	00	09	91	10	32	54	76	F8	40	F4	A0
	54	77	6F	20	74	79	70	65	73	20	61	72
	65	20	64	65	66	69	6E	65	64	3A	20	2D
	20	41	20	73	68	6F	72	74	20	6D	65	73
	73	61	67	65	20	74	6F	20	62	65	20	73
	65	6E	74	20	74	6F	20	74	68	65	20	6E
	65	74	77	6F	72	6B	20	69	6E	20	61	6E
	20	53	4D	53	2D	53	55	42	4D	49	54	20
	6D	65	73	73	61	67	65	2C	20	6F	72	20
	61	6E	20	53	4D	53	2D	43	4F	4D	4D	41
	4E	44	20	6D	65	73	73	61	67	65	2C	20
	77	68	65	72	65	20	74	68	65	20	75	73
	65	72	20	64	61	74	61	20	63	61	6E	20
	62	65	20	70	61	73	73	65	64	20	74	72
	61	6E	73	70								

SMS-PP (SEND SHORT MESSAGE) Message 7.2

Logically:

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "02"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 160

TP-UD "Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transp"

Coding:

Coding		01	02	09	91	10	32	54	76	F8	40	F0
	A0	D4	FB	1B	44	CF	C3	CB	73	50	58	5E
	06	91	CB	E6	B4	BB	4C	D6	81	5A	A0	20
	68	8E	7E	CB	E9	A0	76	79	3E	0F	9F	CB
	20	FA	1B	24	2E	83	E6	65	37	1D	44	7F
	83	E8	E8	32	C8	5D	A6	DF	DF	F2	35	28
	ED	06	85	DD	A0	69	73	DA	9A	56	85	CD
	24	15	D4	2E	CF	E7	E1	73	99	05	7A	CB
	41	61	37	68	DA	9C	B6	86	CF	66	33	E8
	24	82	DA	E5	F9	3C	7C	2E	B3	40	77	74
	59	5E	06	D1	D1	65	50	7D	5E	96	83	C8
	61	7A	18	34	0E	BB	41	E2	32	08	1E	9E
	CF	CB	64	10	5D	1E	76	CF	E1			

TERMINAL RESPONSE: SEND SHORT MESSAGE 7.1.2

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing required
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	01	82	02	82	81	83	01	00

PROACTIVE COMMAND: SEND SHORT MESSAGE 7.1.3

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "The address data object holds the RP Destination Address"
Address
TON: International number
NPI: "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"

TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 160
TP-UD "Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transp"

Coding:

BER-TLV:	D0	81	E9	81	03	01	13	00	82	02	81	83
	85	38	54	68	65	20	61	64	64	72	65	73
	73	20	64	61	74	61	20	6F	62	6A	65	63
	74	20	68	6F	6C	64	73	20	74	68	65	20
	52	50	20	44	65	73	74	69	6E	61	74	69
	6F	6E	20	41	64	64	72	65	73	73	86	09
	91	11	22	33	44	55	66	77	F8	8B	81	98
	01	00	09	91	10	32	54	76	F8	40	F0	A0
	D4	FB	1B	44	CF	C3	CB	73	50	58	5E	06
	91	CB	E6	B4	BB	4C	D6	81	5A	A0	20	68
	8E	7E	CB	E9	A0	76	79	3E	0F	9F	CB	20
	FA	1B	24	2E	83	E6	65	37	1D	44	7F	83
	E8	E8	32	C8	5D	A6	DF	DF	F2	35	28	ED
	06	85	DD	A0	69	73	DA	9A	56	85	CD	24
	15	D4	2E	CF	E7	E1	73	99	05	7A	CB	41
	61	37	68	DA	9C	B6	86	CF	66	33	E8	24
	82	DA	E5	F9	3C	7C	2E	B3	40	77	74	59
	5E	06	D1	D1	65	50	7D	5E	96	83	C8	61
	7A	18	34	0E	BB	41	E2	32	08	1E	9E	CF
	CB	64	10	5D	1E	76	CF	E1				

SMS-PP (SEND SHORT MESSAGE) Message 7.3

Logically:

SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "03"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding SMS default alphabet
Message class class 0
TP-UDL 160
TP-UD "Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transp"

Coding:

Coding	01	03	09	91	10	32	54	76	F8	40	F0	A0
	D4	FB	1B	44	CF	C3	CB	73	50	58	5E	06
	91	CB	E6	B4	BB	4C	D6	81	5A	A0	20	68
	8E	7E	CB	E9	A0	76	79	3E	0F	9F	CB	20
	FA	1B	24	2E	83	E6	65	37	1D	44	7F	83
	E8	E8	32	C8	5D	A6	DF	DF	F2	35	28	ED
	06	85	DD	A0	69	73	DA	9A	56	85	CD	24
	15	D4	2E	CF	E7	E1	73	99	05	7A	CB	41
	61	37	68	DA	9C	B6	86	CF	66	33	E8	24
	82	DA	E5	F9	3C	7C	2E	B3	40	77	74	59
	5E	06	D1	D1	65	50	7D	5E	96	83	C8	61
	7A	18	34	0E	BB	41	E2	32	08	1E	9E	CF
	CB	64	10	5D	1E	76	CF	E1				

PROACTIVE COMMAND: SEND SHORT MESSAGE 7.1.4

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier:
Address
TON: International number
NPI: "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 8-bit data
Message class class 0
TP-UDL 12
TP-UD "Test Message"

Coding:

BER-TLV:	D0	30	81	03	01	13	00	82	02	81	83	85
	00	86	09	91	11	22	33	44	55	66	77	F8
	8B	18	01	00	09	91	10	32	54	76	F8	40
	F4	0C	54	65	73	74	20	4D	65	73	73	61
	67	65										

SMS-PP (SEND SHORT MESSAGE) Message 7.4

Logically:

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "04"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 8-bit data
Message class class 0
TP-UDL 12
TP-UD "Test Message"

Coding:

Coding	01	04	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

PROACTIVE COMMAND: SEND SHORT MESSAGE 7.1.5

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Address
TON: International number
NPI: "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 8-bit data
Message class class 0
TP-UDL 12
TP-UD "Test Message"

Coding:

BER-TLV:	D0	2E	81	03	01	13	00	82	02	81	83	86
	09	91	11	22	33	44	55	66	77	F8	8B	18
	01	00	09	91	10	32	54	76	F8	40	F4	0C

54	65	73	74	20	4D	65	73	73	61	67	65

SMS-PP (SEND SHORT MESSAGE) Message 7.5

Logically:

SMS TPDU
TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "05"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 8-bit data
Message class class 0
TP-UDL 12
TP-UD "Test Message"

Coding:

Coding	01	05	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

27.22.4.10.7.5 Test requirement

The ME supporting eFDD or eTDD shall operate in the manner defined in expected sequence 7.1.

The ME supporting UTRAN shall operate in the manner defined in expected sequence 7.2.

27.22.4.10.8 SEND SHORT MESSAGE (over SGs in E-UTRAN)

27.22.4.10.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.8.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 8.1, clause 8.2, clause 8.6, clause 8.7, clause 8.13, clause 8.31 and clause 5.2.

- TS 24.301 [32] clause 5.6.3.1, 5.6.3.3 and 9.9.3.22

27.22.4.10.8.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (E-USS/NB-SS) using SMS over SGs as indicated in the SEND SHORT MESSAGE proactive UICC command, and returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the Short Message.

27.22.4.10.8.4 Method of test

27.22.4.10.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and connected to the E-USS/NB-SS.

27.22.4.10.8.4.2 Procedure

Expected Sequence 8.1 (Send Short Message over SGs, E-UTRAN)

Perform the "SMS over SGs procedure" and continue with "Generic Test Procedure 1 (SEND SHORT MESSAGE)" as defined clause 27.22.4.10.7.4.2 as "Expected Sequence 8.1" with the following parameters:

- Used Network Simulator (NWS): E-USS/NB-SS
- SMS over SGs (DOWNLINK NAS TRANSPORT and UPLINK NAS TRANSPORT messages) is used to send and receive short messages
- ME supports eFDD or eTDD or NB-IoT
- ME supports SMS-over-SGs.

SMS over SGs related procedure:

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profile Download and USIM initialisation
2	ME → NWS	ME performs regular network registration.	UE is afterwards in state Registered, Idle Mode (state 2) according to TS 36.508 [33].
3		CONTINUE WITH STEP 4 Generic Test Procedure 1 (SEND SHORT MESSAGE) in clause 27.22.4.10.7.4.2	

27.22.4.10.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.1.

27.22.4.11 SEND SS

27.22.4.11.1 SEND SS (normal)

27.22.4.11.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.1.2 Conformance requirement

The ME shall support the Proactive UICC: Send SS facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 8.12.1, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.14, clause 8.31 and clause 6.5.

27.22.4.11.1.3 Test purpose

To verify that the ME correctly translates and sends the supplementary service request indicated in the SEND SS proactive UICC command to the USS.

To verify that the ME returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the SS and any contents of the SS result as additional data.

27.22.4.11.1.4 Method of test

27.22.4.11.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.The elementary files are coded as USIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.11.1.4.2 Procedure

Expected Sequence 1.1A (SEND SS, call forward unconditional, all bearers, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 1.1.1	
4	ME → USER	Display "Call Forward"	
5	ME → USS	REGISTER 1.1A	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1A	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 1.1.1A	

Expected Sequence 1.1B (SEND SS, call forward unconditional, all bearers, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 1.1.1	
4	ME → USER	Display "Call Forward"	
5	ME → USS	REGISTER 1.1B	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1B	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 1.1.1B	

PROACTIVE COMMAND: SEND SS 1.1.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Call Forward"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"

Coding:

BER-TLV:	D0	29	81	03	01	11	00	82	02	81	83	85
	0C	43	61	6C	6C	20	46	6F	72	77	61	72
	64	89	10	91	AA	12	0A	21	43	65	87	09
	21	43	65	87	A9	01	FB					

REGISTER 1.1A

Logically (only SS argument):

REGISTER SS ARGUMENT
SS-Code:
- Call Forwarding Unconditional
TeleserviceCode
- All Tele Services
ForwardedToNumber
- nature of address ind.: international
- numbering plan ind.: ISDN/Telephony (E.164)
- TBCD String: 01234567890123456789
- longFTN-Supported

Coding:

BER-TLV	30	15	04	01	21	83	01	00	84	0B	91	10
	32	54	76	98	10	32	54	76	98	89	00	

REGISTER 1.1B

Logically (only SS argument):

REGISTER SS ARGUMENT
SS-Code:
- Call Forwarding Unconditional
TeleserviceCode
- All Tele Services
ForwardedToNumber
- nature of address ind.: international
- numbering plan ind.: ISDN/Telephony (E.164)
- TBCD String: 01234567890123456789

Coding:

BER-TLV	30	13	04	01	21	83	01	00	84	0B	91	10
	32	54	76	98	10	32	54	76	98			

RELEASE COMPLETE (SS RETURN RESULT) 1.1A

Logically (only from operation code):

REGISTER SS RETURN RESULT
ForwardingInfo
SS-Code
- Call Forwarding Unconditional
ForwardFeatureList
ForwardingFeature
TeleserviceCode
- All Tele Services
SS-Status
- state ind.: operative
- provision ind.: provisioned
- registration ind.: registered
- activation ind.: active

longForwardedToNumber
- nature of address ind.: international
- numbering plan ind.: ISDN/Telephony (E.164)
- TBCD String: 01234567890123456789

Coding:

Coding	0A	A0	1A	04	01	21	30	15	30	13	83	01
	00	84	01	07	89	0B	91	10	32	54	76	98
	10	32	54	76	98							

RELEASE COMPLETE (SS RETURN RESULT) 1.1B

Logically (only from operation code):

REGISTER SS RETURN RESULT
ForwardingInfo
SS-Code
- Call Forwarding Unconditional
ForwardFeatureList
ForwardingFeature
TeleserviceCode
- All Tele Services
SS-Status
- state ind.: operative
- provision ind.: provisioned
- registration ind.: registered
- activation ind.: active

Coding:

Coding	0A	A0	0D	04	01	21	30	08	30	06	83	01
	00	84	01	07								

TERMINAL RESPONSE: SEND SS 1.1.1A

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	1E
	00	0A	A0	1A	04	01	21	30	15	30	13
	83	01	00	84	01	07	89	0B	91	10	32
	54	76	98	10	32	54	76	98			

TERMINAL RESPONSE: SEND SS 1.1.1B

Logically:

Command details
Command number: 1

Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully
Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	11
	00	0A	A0	0D	04	01	21	30	08	30	06
	83	01	00	84	01	07					

Expected Sequence 1.2 (SEND SS, call forward unconditional, all bearers, Return Error)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 1.1.1	
4	ME → USER	Display "Call Forward"	
5	ME → USS	REGISTER 1.1A Or REGISTER 1.1B	
6	USS → ME	RELEASE COMPLETE (SS RETURN ERROR) 1.1	[Return Error]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 1.2.1	

RELEASE COMPLETE (SS RETURN ERROR) 1.1

Logically (only from error code):

Error Code: Facility not supported

Coding:

Coding	02	01	15

TERMINAL RESPONSE: SEND SS 1.2.1

Logically:

Command details

Command number: 1
Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: ME
Destination device: UICC

Result

General Result: SS Return Error
Additional information: Error Code

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	02
	34	15									

Expected Sequence 1.3 (SEND SS, call forward unconditional, all bearers, Reject)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 1.1.1	
4	ME → USER	Display "Call Forward"	
5	ME → USS	REGISTER 1.1A Or REGISTER 1.1B	
6	USS → ME	RELEASE COMPLETE (SS REJECT) 1.1.	[Reject]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 1.3.1	

RELEASE COMPLETE (SS REJECT) 1.1

Logically (only from problem code):

Problem Code:
- General problem
- Unrecognized component

Coding:

Coding	80	01	00

TERMINAL RESPONSE: SEND SS 1.3.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: SS Return Error
Additional information: No specific cause can be given

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	02
	34	00									

Expected Sequence 1.4A (SEND SS, call forward unconditional, all bearers, successful, SS request size limit)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 1.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 1.4.1	
4	ME → USER	Display "Call Forward"	
5	ME → USS	REGISTER 1.2A	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.2A	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 1.4.1A	

Expected Sequence 1.4B (SEND SS, call forward unconditional, all bearers, successful, SS request size limit)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 1.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 1.4.1	
4	ME → USER	Display "Call Forward"	
5	ME → USS	REGISTER 1.2B	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.2B	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 1.4.1B	

PROACTIVE COMMAND: SEND SS 1.4.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Call Forward"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*012345678901234567890123456 7*11#"

Coding:

BER-TLV:	D0	2D	81	03	01	11	00	82	02	81	83	85
	0C	43	61	6C	6C	20	46	6F	72	77	61	72
	64	89	14	91	AA	12	0A	21	43	65	87	09
	21	43	65	87	09	21	43	65	A7	11	FB	

REGISTER 1.2A

Logically (only SS argument):

REGISTER SS ARGUMENT
RegisterSSArg
SS-Code
Call Forwarding Unconditional
TeleserviceCode
See Note 1
ForwardedToNumber
nature of address ind.: international
numbering plan ind.: ISDN/Telephony (E.164)
TBCD String:012345678901234567890123456 7
longFTN-Supported

Coding:

BER-TLV	30	19	04	01	21	83	01	Note 1	84	0F	91	10
	32	54	76	98	10	32	54	76	98	10	32	54
	76	89	00									

Note 1: TeleserviceCode is '11' for "Telephony" or is '10' for "allSpeechTransmissionServices"

REGISTER 1.2B

Logically (only SS argument):

REGISTER SS ARGUMENT
RegisterSSArg
SS-Code
Call Forwarding Unconditional
TeleserviceCode
See Note 1
ForwardedToNumber
nature of address ind.: international
numbering plan ind.: ISDN/Telephony (E.164)
TBCD String:012345678901234567890123456 7

Coding:

BER-TLV	30	17	04	01	21	83	01	Note 1	84	0F	91	10
	32	54	76	98	10	32	54	76	98	10	32	54
	76											

Note 1: TeleserviceCode is '11' for "Telephony" or is '10' for "allSpeechTransmissionServices"

Logically (only from operation code):

REGISTER SS RETURN RESULT
ForwardingInfo
SS-Code
- Call Forwarding Unconditional
ForwardFeatureList
ForwardingFeature
TeleserviceCode
- See Note 1
SS-Status
- state ind.: operative
- provision ind.: provisioned
- registration ind.: registered
- activation ind.: active
longForwardedToNumber
- nature of address ind.: international
- numbering plan ind.: ISDN/Telephony (E.164)
- TBCD String: 012345678901234567890123456 7

Coding:

Coding	0A	A0	1E	04	01	21	30	19	30	17	83	01
	Note 1	84	01	07	89	0F	91	10	32	54	76	98
	10	32	54	76	98	10	32	54	76			

Note 1: TeleserviceCode is '11' for "Telephony" or is '10' for "allSpeechTransmissionServices"

RELEASE COMPLETE (SS RETURN RESULT) 1.2B

Logically (only from operation code):

REGISTER SS RETURN RESULT
ForwardingInfo
SS-Code
- Call Forwarding Unconditional
ForwardFeatureList
ForwardingFeature
TeleserviceCode
- See Note 1
SS-Status

- state ind.: operative
- provision ind.: provisioned
- registration ind.: registered
- activation ind.: active

Coding:

Coding	0A	A0	0D	04	01	21	30	08	30	06	83	01
	Note 1	84	01	07								

Note 1: TeleserviceCode is '11' for "Telephony" or is '10' for "allSpeechTransmissionServices"

TERMINAL RESPONSE: SEND SS 1.4.1A

Logically:

Command details
- Command number: 1
- Command type: SEND SS
- Command qualifier: "00"

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully
- Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	22
	00	0A	A0	1E	04	01	21	30	19	30	17
	83	01	Note 1	84	01	07	89	0F	91	10	32
	54	76	98	10	32	54	76	98	10	32	54
	76										

Note 1: TeleserviceCode is '11' for "Telephony" or is '10' for "allSpeechTransmissionServices"

TERMINAL RESPONSE: SEND SS 1.4.1B

Logically:

Command details
- Command number: 1
- Command type: SEND SS
- Command qualifier: "00"

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully
- Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	11
	00	0A	A0	0D	04	01	21	30	08	30	06
	83	01	Note 1	84	01	07					

Note 1: TeleserviceCode is '11' for "Telephony" or is '10' for "allSpeechTransmissionServices"

Expected Sequence 1.5 (SEND SS, interrogate CLIR status, successful, alpha identifier limits)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 1.5.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 1.5.1	
4	ME → USER	Display "Even if the Fixed Dialling Number service is enabled, the supplementary service control string included in the SEND SS proactive command shall not be checked against those of the FDN list. Upon receiving this command, the ME shall deci"	
5	ME → USS	REGISTER 1.3	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.3	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 1.5.1	

PROACTIVE COMMAND: SEND SS 1.5.1

Logically:

Command details
- Command number: 1
- Command type: SEND SS
- Command qualifier: "00"

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "Even if the Fixed Dialling Number service is enabled, the supplementary service control string included in the SEND SS proactive command shall not be checked against those of the FDN list. Upon receiving this command, the ME shall deci"

SS String
- TON: Undefined
- NPI: Undefined
- SS string: "*#31#"

Coding:

BER-TLV:	D0	81	FD	81	03	01	11	00	82	02	81	83
	85	81	EB	45	76	65	6	20	69	66	20	74
	68	65	20	46	69	78	65	64	20	44	69	61
	6C	6C	69	6E	67	20	4E	75	6D	62	65	72
	20	73	65	72	76	69	63	65	20	69	73	20
	65	6E	61	62	6C	65	64	2C	20	74	68	65
	20	73	75	70	70	6C	65	6D	65	6E	74	61
	72	79	20	73	65	72	76	69	63	65	20	63
	6F	6E	74	72	6F	6C	20	73	74	72	69	6E
	67	20	69	6E	63	6C	75	64	65	64	20	69
	6E	20	74	68	65	20	53	45	4E	44	20	53
	53	20	70	72	6F	61	63	74	69	76	65	20
	63	6F	6D	6D	61	6E	64	20	73	68	61	6C
	6C	20	6E	6F	74	20	62	65	20	63	68	65
	63	6B	65	64	20	61	67	61	69	6E	73	74
	20	74	68	6F	73	65	20	6F	66	20	74	68
	65	20	46	44	4E	20	6C	69	73	74	2E	20
	55	70	6F	6E	20	72	65	63	65	69	76	69
	6E	67	20	74	68	69	73	20	63	6F	6D	6D
	61	6E	64	2C	20	74	68	65	20	4D	45	20
	73	68	61	6C	6C	20	64	65	63	69	89	04
	FF	BA	13	FB								

REGISTER 1.3

Logically (only SS argument):

INTERROGATE SS ARGUMENT
SS-Code
- Calling Line Id Restriction

Coding:

BER-TLV	30	03	04	01	12

RELEASE COMPLETE (SS RETURN RESULT) 1.3

Logically (only from operation code):

INTERROGATE SS RESULT
CliRestrictionInfo
SS-Status
- state ind.: operative
- provision ind.: provisioned
- registration ind.: registered
- activation ind.: not active
CliRestrictionOption
- Temporary Def Allowed

Coding:

Coding	0E	A4	06	04	01	06	0A	01	02

TERMINAL RESPONSE: SEND SS 1.5.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Additional information
Operation Code: SS Code
Parameters: SS Return Result

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	0A
	00	0E	A4	06	04	01	06	0A	01	02	

Expected Sequence 1.6A (SEND SS, call forward unconditional, all bearers, successful, null data alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 1.6.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 1.6.1	
4	ME	Should not give any information to the user on the fact that the ME is sending an SS request	
5	ME → USS	REGISTER 1.1A	

6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1A	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 1.1.1A	

Expected Sequence 1.6B (SEND SS, call forward unconditional, all bearers, successful, null data alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 1.6.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 1.6.1	
4	ME	Should not give any information to the user on the fact that the ME is sending an SS request	
5	ME → USS	REGISTER 1.1B	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1B	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 1.1.1B	

PROACTIVE COMMAND: SEND SS 1.6.1

Logically:

Command details
- Command number: 1
- Command type: SEND SS
- Command qualifier: "00"

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: null data object

SS String
- TON: International
- NPI: "ISDN / telephone numbering plan"
- SS string: "**21*01234567890123456789*10#"

Coding:

BER-TLV:	D0	1D	81	03	01	11	00	82	02	81	83	85
	00	89	10	91	AA	12	0A	21	43	65	87	09
	21	43	65	87	A9	01	FB					

27.22.4.11.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1 to 1.6.

27.22.4.11.2 SEND SS (Icon support)

27.22.4.11.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.2.2 Conformance requirement

27.22.4.11.2.3 Test purpose

To verify that the ME displays the text contained in the SEND SS proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

In addition to verify that if an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.11.2.4 Method of test

27.22.4.11.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and to the USS. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

The elementary files are coded as Toolkit default.

27.22.4.11.2.4.2 Procedure

Expected Sequence 2.1A (SEND SS, call forward unconditional, all bearers, successful, basic icon self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 2.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 2.1.1	[BASIC-ICON, self-explanatory]
4	ME → USER	Display the basic icon without the alpha identifier	
5	ME → USS	REGISTER 1.1A Or REGISTER 1.1B	Option A applies if A.1/63 is supported, Option B applies if A.1/63 is not supported
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1A or RELEASE COMPLETE (SS RETURN RESULT) 1.1B	[Successful] Option A applies if A.1/63 is supported, Option B applies if A.1/63 is not supported
7	ME → UICC	TERMINAL RESPONSE: SEND SS 2.1.1AA or TERMINAL RESPONSE: SEND SS 2.1.1AB	[Command performed successfully] Option AA applies if A.1/63 is supported, Option AB applies if A.1/63 is not supported

PROACTIVE COMMAND: SEND SS 2.1.1

Logically:

Command details
- Command number: 1
- Command type: SEND SS
- Command qualifier: "00"

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "Basic Icon"

SS String
- TON: International
- NPI: "ISDN / telephone numbering plan"
- SS string: "**21*01234567890123456789*10#"

Icon Identifier:
- Icon qualifier: icon is self-explanatory
- Icon Identifier: record 1 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	2B	81	03	01	11	00	82	02	81	83	85
	0A	42	61	73	69	63	20	49	63	6F	6E	89

10	91	AA	12	0A	21	43	65	87	09	21	43
65	87	A9	01	FB	9E	02	00	01			

TERMINAL RESPONSE: SEND SS 2.1.1AA

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	1E
	00	0A	A0	1A	04	01	21	30	15	30	13
	83	01	00	84	01	07	89	0B	91	10	32
	54	76	98	10	32	54	76	98			

TERMINAL RESPONSE: SEND SS 2.1.1AB

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	11
	00	0A	A0	0D	04	01	21	30	08	30	06
	83	01	00	84	01	07					

Expected Sequence 2.1B (SEND SS, call forward unconditional, all bearers, successful, basic icon self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 2.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 2.1.1	[BASIC-ICON, self-explanatory]
4	ME → USER	Display "Basic Icon" without the icon	
5	ME → USS	REGISTER 1.1A Or REGISTER 1.1B	Option A applies if A.1/63 is supported, Option B applies if A.1/63 is not supported

6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1A or RELEASE COMPLETE (SS RETURN RESULT) 1.1B	[Successful] Option A applies if A.1/63 is supported, Option B applies if A.1/63 is not supported
7	ME → UICC	TERMINAL RESPONSE: SEND SS 2.1.1BA or TERMINAL RESPONSE: SEND SS 2.1.1BB	[Command performed successfully, but requested icon could not be displayed] Option BA applies if A.1/63 is supported, Option BB applies if A.1/63 is not supported

TERMINAL RESPONSE: SEND SS 2.1.1BA

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully, but requested icon could not be displayed
Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:

81	03	01	11	00	82	02	82	81	03	1E
04	0A	A0	1A	04	01	21	30	15	30	13
83	01	00	84	01	07	89	0B	91	10	32
54	76	98	10	32	54	76	98			

TERMINAL RESPONSE: SEND SS 2.1.1BB

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully, but requested icon could not be displayed
Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:

81	03	01	11	00	82	02	82	81	03	11
04	0A	A0	0D	04	01	21	30	08	30	06
83	01	00	84	01	07					

Expected Sequence 2.2A (SEND SS, call forward unconditional, all bearers, successful, colour icon self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 2.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 2.2.1	[COLOUR-ICON, self-explanatory]

4	ME → USER	Display the colour icon without thealpha identifier	
5	ME → USS	REGISTER 1.1A Or REGISTER 1.1B	Option A applies if A.1/63 is supported, Option B applies if A.1/63 is not supported
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1A or RELEASE COMPLETE (SS RETURN RESULT) 1.1B	[Successful] Option A applies if A.1/63 is supported, Option B applies if A.1/63 is not supported
7	ME → UICC	TERMINAL RESPONSE: SEND SS 2.1.1AA or TERMINAL RESPONSE: SEND SS 2.1.1AB	[Command performed successfully] Option AA applies if A.1/63 is supported, Option AB applies if A.1/63 is not supported

PROACTIVE COMMAND: SEND SS 2.2.1

Logically:

Command details
- Command number: 1
- Command type: SEND SS
- Command qualifier: "00"

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "Colour Icon"

SS String
- TON: International
- NPI: "ISDN / telephone numbering plan"
- SS string: "**21*01234567890123456789*10#"

Icon Identifier:
- Icon qualifier: icon is self-explanatory
- Icon Identifier: record 2 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	2C	81	03	01	11	00	82	02	81	83	85
	0B	43	6F	6C	6F	75	72	20	49	63	6F	6E
	89	10	91	AA	12	0A	21	43	65	87	09	21
	43	65	87	A9	01	FB	9E	02	00	02		

Expected Sequence 2.2B (SEND SS, call forward unconditional, all bearers, successful, colour icon self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 2.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 2.2.1	[COLOUR-ICON, self-explanatory]
4	ME → USER	Display "Colour Icon" without the icon	
5	ME → USS	REGISTER 1.1A Or REGISTER 1.1B	Option A applies if A.1/63 is supported, Option B applies if A.1/63 is not supported
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1A or RELEASE COMPLETE (SS RETURN RESULT) 1.1B	[Successful] Option A applies if A.1/63 is supported, Option B applies if A.1/63 is not supported
7	ME → UICC	TERMINAL RESPONSE: SEND SS 2.1.1BA or TERMINAL RESPONSE: SEND SS 2.1.1BB	[Command performed but requested icon could not be displayed] Option BA applies if A.1/63 is supported, Option BB applies if A.1/63 is not supported

Expected Sequence 2.3A (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 2.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 2.3.1	[BASIC-ICON, non self-explanatory]
4	ME → USER	Display "Basic Icon" and the basic icon	
5	ME → USS	REGISTER 1.1A Or REGISTER 1.1B	Option A applies if A.1/63 is supported, Option B applies if A.1/63 is not supported
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1A or RELEASE COMPLETE (SS RETURN RESULT) 1.1B	[Successful] Option A applies if A.1/63 is supported, Option B applies if A.1/63 is not supported
7	ME → UICC	TERMINAL RESPONSE: SEND SS 2.1.1AA or TERMINAL RESPONSE: SEND SS 2.1.1AB	[Command performed successfully] Option AA applies if A.1/63 is supported, Option AB applies if A.1/63 is not supported

PROACTIVE COMMAND: SEND SS 2.3.1

Logically:

Command details
- Command number: 1
- Command type: SEND SS
- Command qualifier: "00"

Device identities
- Source device: UICC
- Destination device: Network

Alpha Identifier
- Text: "Basic Icon"

SS String
- TON: International
- NPI: "ISDN / telephone numbering plan"
- SS string: "**21*01234567890123456789*10#"

Icon Identifier
- Icon qualifier: icon is non self-explanatory
- Icon Identifier: record 1 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	2B	81	03	01	11	00	82	02	81	83	85
	0A	42	61	73	69	63	20	49	63	6F	6E	89
	10	91	AA	12	0A	21	43	65	87	09	21	43
	65	87	A9	01	FB	9E	02	01	01			

Expected Sequence 2.3B (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 2.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 2.3.1	[BASIC-ICON, non self-explanatory]
4	ME → USER	Display "Basic Icon" without the icon	

5	ME → USS	REGISTER 1.1A Or REGISTER 1.1B	Option A applies if A.1/63 is supported, Option B applies if A.1/63 is not supported
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1A or RELEASE COMPLETE (SS RETURN RESULT) 1.1B	[Successful] Option A applies if A.1/63 is supported, Option B applies if A.1/63 is not supported
7	ME → UICC	TERMINAL RESPONSE: SEND SS 2.1.1BA or TERMINAL RESPONSE: SEND SS 2.1.1BB	[Command performed but requested icon could not be displayed] Option BA applies if A.1/63 is supported, Option BB applies if A.1/63 is not supported

Expected Sequence 2.4 (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory, no alpha identifier presented)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 2.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 2.4.1	[BASIC-ICON, non self-explanatory]
4	ME → UICC	TERMINAL RESPONSE: SEND SS 2.4.1	[Command data not understood by ME]

PROACTIVE COMMAND: SEND SS 2.4.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789#"
Icon Identifier
Icon qualifier: icon is non self-explanatory
Icon Identifier: record 1 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	1D	81	03	01	11	00	82	02	81	83	89
	0E	91	AA	12	0A	21	43	65	87	09	21	43
	65	87	B9	9E	02	01	01					

TERMINAL RESPONSE: SEND SS 2.4.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result

General Result: Command data not understood by ME

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	83	01	32

27.22.4.11.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1A to 2.4.

27.22.4.11.3 SEND SS (UCS2 display in Cyrillic)

27.22.4.11.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.3.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 8.12.1 , clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.14, clause 8.31 and clause 6.5

Additionnally, the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in: ISO/IEC 10646 [17].

27.22.4.11.3.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND SS proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.11.3.4 Method of test

27.22.4.11.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.The elementary files are coded as USIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.11.3.4.2 Procedure

Expected Sequence 3.1 (SEND SS, call forward unconditional, all bearers, successful, UCS2 text in Cyrillic)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 3.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 3.1.1	
4	ME → USER	Display "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]
5	ME → USS	REGISTER 1.1A Or REGISTER 1.1B	Option A applies if A.1/63 is supported, Option B applies if A.1/63 is not supported
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1A or RELEASE COMPLETE (SS RETURN RESULT) 1.1B	[Successful] Option A applies if A.1/63 is supported, Option B applies if A.1/63 is not supported

7	ME → UICC	TERMINAL RESPONSE: SEND SS 1.1.1A or TERMINAL RESPONSE: SEND SS 1.1.1B	[Command performed successfully] Option A applies if A.1/63 is supported, Option B applies if A.1/63 is not supported

PROACTIVE COMMAND: SEND SS 3.1.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha Identifier
Data coding scheme: UCS2 (16bit)
Text: "ЗДРАВСТВУЙТЕ"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"

Coding:

BER-TLV:	D0	36	81	03	01	11	00	82	02	81	83	85
	19	80	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15	89	10	91	AA	12	0A	21	43	65	87
	09	21	43	65	87	A9	01	FB				

27.22.4.11.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1.

27.22.4.11.4 SEND SS (support of Text Attribute)

27.22.4.11.4.1 SEND SS (support of Text Attribute – Left Alignment)

27.22.4.11.4.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.4.1.2 Conformance requirement

The ME shall support the Proactive UICC: Send SS facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 8.12.1 , clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.14, clause 8.31 and clause 6.5.

27.22.4.11.4.1.3 Test purpose

To verify that the ME displays the alpha identifier according to the left alignment text attribute configuration in the SEND SS proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.11.4.1.4 Method of test

27.22.4.11.4.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.11.4.1.4.2 Procedure

Expected Sequence 4.1A (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Left Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.1.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with left alignment]
5	ME → USS	REGISTER 4.1A	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.1.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.1.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/12, no alignment change will take place]
12	ME → USS	REGISTER 4.1A	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	

Expected Sequence 4.1B (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Left Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.1.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with left alignment]
5	ME → USS	REGISTER 4.1B	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.1.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.1.2	

11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/12, no alignment change will take place]
12	ME → USS	REGISTER 4.1B	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	

PROACTIVE COMMAND: SEND SS 4.1.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	00	B4							

PROACTIVE COMMAND: SEND SS 4.1.2

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"

Coding:

BER-TLV:	D0	2D	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62

75	74	65	20	32	89	10	91	AA	12	0A	21
43	65	87	09	21	43	65	87	A9	01	FB	

REGISTER 4.1A

Same as cl 27.22.4.11.1.4.2 REGISTER 1.1A

REGISTER 4.1B

Same as cl 27.22.4.11.1.4.2 REGISTER 1.1B

RELEASE COMPLETE (SS RETURN RESULT) 4.1A

Same as cl 27.22.4.11.1.4.2 RELEASE COMPLETE (SS RETURN RESULT) 1.1A

RELEASE COMPLETE (SS RETURN RESULT) 4.1B

Same as cl 27.22.4.11.1.4.2 RELEASE COMPLETE (SS RETURN RESULT) 1.1B

TERMINAL RESPONSE: SEND SS 4.1.1A

Same as cl 27.22.4.11.1.4.2 TERMINAL RESPONSE: SEND SS 1.1.1A

TERMINAL RESPONSE: SEND SS 4.1.1B

Same as cl 27.22.4.11.1.4.2 TERMINAL RESPONSE: SEND SS 1.1.1B

27.22.4.11.4.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.1.

27.22.4.11.4.2 SEND SS (support of Text Attribute – Center Alignment)

27.22.4.11.4.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.4.2.2 Conformance requirement

The ME shall support the Proactive UICC: Send SS facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 8.12.1 , clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.14, clause 8.31 and clause 6.5.

27.22.4.11.4.2.3 Test purpose

To verify that the ME displays the alpha identifier according to the center alignment text attribute configuration in the SEND SS proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.11.4.2.4 Method of test

27.22.4.11.4.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.11.4.2.4.2 Procedure

Expected Sequence 4.2A (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Center Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.2.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with center alignment]
5	ME → USS	REGISTER 4.1A	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.2.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.2.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with center alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/12, no alignment change will take place]
12	ME → USS	REGISTER 4.1A	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	

Expected Sequence 4.2B (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Center Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.2.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with center alignment]
5	ME → USS	REGISTER 4.1B	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.2.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.2.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with center alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/12, no alignment change will take place]
12	ME → USS	REGISTER 4.1B	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	

PROACTIVE COMMAND: SEND SS 4.2.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*012345678901234567 89*10#"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Center Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	01	B4							

PROACTIVE COMMAND: SEND SS 4.2.2

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*012345678901234567 89*10#"

Coding:

BER-TLV:	D0	2D	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	

27.22.4.11.4.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.2.

27.22.4.11.4.3 SEND SS (support of Text Attribute – Right Alignment)

27.22.4.11.4.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.4.3.2 Conformance requirement

The ME shall support the Proactive UICC: Send SS facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 8.12.1 , clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.14, clause 8.31 and clause 6.5.

27.22.4.11.4.3.3 Test purpose

To verify that the ME displays the alpha identifier according to the right alignment text attribute configuration in the SEND SS proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.11.4.3.4 Method of test

27.22.4.11.4.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.11.4.3.4.2 Procedure

Expected Sequence 4.3A (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Right Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.3.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with right alignment]
5	ME → USS	REGISTER 4.1A	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.3.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.3.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/12, no alignment change will take place]
12	ME → USS	REGISTER 4.1A	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	

Expected Sequence 4.3B (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Right Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.3.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with right alignment]
5	ME → USS	REGISTER 4.1B	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.3.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.3.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/12, no alignment change will take place]
12	ME → USS	REGISTER 4.1B	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	

PROACTIVE COMMAND: SEND SS 4.3.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Right Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	02	B4							

PROACTIVE COMMAND: SEND SS 4.3.2

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"

Coding:

BER-TLV:	D0	2D	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	

27.22.4.11.4.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.3.

27.22.4.11.4.4 SEND SS (support of Text Attribute – Large Font Size)

27.22.4.11.4.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.4.4.2 Conformance requirement

The ME shall support the Proactive UICC: Send SS facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 8.12.1 , clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.14, clause 8.31 and clause 6.5.

27.22.4.11.4.4.3 Test purpose

To verify that the ME displays the alpha identifier according to the large font size text attribute configuration in the SEND SS proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.11.4.4.4 Method of test

27.22.4.11.4.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.11.4.4.4.2 Procedure

Expected Sequence 4.4A (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Large Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.4.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with large font size]
5	ME → USS	REGISTER 4.1A	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.4.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.4.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with normal font size]
12	ME → USS	REGISTER 4.1A	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.4.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SS 4.4.1	
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with large font size]
19	ME → USS	REGISTER 4.1A	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
21	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.4.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SS 4.4.3	
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with normal font size]
26	ME → USS	REGISTER 4.1A	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
28	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	

Expected Sequence 4.4B (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Large Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.4.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with large font size]

5	ME → USS	REGISTER 4.1B	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.4.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.4.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with normal font size]
12	ME → USS	REGISTER 4.1B	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.4.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SS 4.4.1	
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with large font size]
19	ME → USS	REGISTER 4.1B	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
21	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.4.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SS 4.4.3	
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with normal font size]
26	ME → USS	REGISTER 4.1B	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
28	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	

PROACTIVE COMMAND: SEND SS 4.4.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Large Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	04	B4							

PROACTIVE COMMAND: SEND SS 4.4.2

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	00	B4							

PROACTIVE COMMAND: SEND SS 4.4.3

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 3"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"

Coding:

BER-TLV:	D0	2D	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	89	10	91	AA	12	0A	21

43	65	87	09	21	43	65	87	A9	01	FB	

27.22.4.11.4.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.4.

27.22.4.11.4.5 SEND SS (support of Text Attribute – Small Font Size)

27.22.4.11.4.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.4.5.2 Conformance requirement

The ME shall support the Proactive UICC: Send SS facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 8.12.1 , clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.14, clause 8.31 and clause 6.5.

27.22.4.11.4.5.3 Test purpose

To verify that the ME displays the alpha identifier according to the small font size text attribute configuration in the SEND SS proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.11.4.5.4 Method of test

27.22.4.11.4.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.11.4.5.4.2 Procedure

Expected Sequence 4.5A (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Small Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.5.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.5.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with small font size]
5	ME → USS	REGISTER 4.1A	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.5.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.5.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with normal font size]
12	ME → USS	REGISTER 4.1A	

13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.5.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SS 4.5.1	
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with small font size]
19	ME → USS	REGISTER 4.1A	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
21	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.5.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SS 4.5.3	
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with normal font size]
26	ME → USS	REGISTER 4.1A	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
28	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	

Expected Sequence 4.5B (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Small Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.5.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.5.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with small font size]
5	ME → USS	REGISTER 4.1B	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.5.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.5.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with normal font size]
12	ME → USS	REGISTER 4.1B	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.5.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SS 4.5.1	
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with small font size]
19	ME → USS	REGISTER 4.1B	

20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
21	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.5.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SS 4.5.3	
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with normal font size]
26	ME → USS	REGISTER 4.1B	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
28	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	

PROACTIVE COMMAND: SEND SS 4.5.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Small Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	08	B4							

PROACTIVE COMMAND: SEND SS 4.5.2

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"

SS string: "**21*01234567890123456789*10#"

Text Attribute

Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	00	B4							

PROACTIVE COMMAND: SEND SS 4.5.3

Logically:

Command details

Command number: 1
Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: UICC
Destination device: Network

Alpha identifier: "Text Attribute 3"

SS String

TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"

Coding:

BER-TLV:	D0	2D	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	

27.22.4.11.4.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.5.

27.22.4.11.4.6 SEND SS (support of Text Attribute – Bold On)

27.22.4.11.4.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.4.6.2 Conformance requirement

The ME shall support the Proactive UICC: Send SS facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 8.12.1 , clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.14, clause 8.31 and clause 6.5.

27.22.4.11.4.6.3 Test purpose

To verify that the ME displays the alpha identifier according to the bold text attribute configuration in the SEND SS proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.11.4.6.4 Method of test

27.22.4.11.4.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.11.4.6.4.2 Procedure

Expected Sequence 4.6A (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Bold On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.6.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.6.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with bold on]
5	ME → USS	REGISTER 4.1A	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.6.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.6.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with bold off]
12	ME → USS	REGISTER 4.1A	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.6.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SS 4.6.1	
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with bold on]
19	ME → USS	REGISTER 4.1A	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
21	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.6.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SS 4.6.3	
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with bold off]
26	ME → USS	REGISTER 4.1A	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
28	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	

Expected Sequence 4.6B (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Bold On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.6.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.6.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with bold on]
5	ME → USS	REGISTER 4.1B	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.6.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.6.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with bold off]
12	ME → USS	REGISTER 4.1B	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.6.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SS 4.6.1	
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with bold on]
19	ME → USS	REGISTER 4.1B	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
21	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.6.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SS 4.6.3	
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with bold off]
26	ME → USS	REGISTER 4.1B	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
28	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	

PROACTIVE COMMAND: SEND SS 4.6.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SS String
TON: International

NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"

Text Attribute

Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold On, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	10	B4							

PROACTIVE COMMAND: SEND SS 4.6.2

Logically:

Command details

Command number: 1
Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: UICC
Destination device: Network

Alpha identifier: "Text Attribute 2"
SS String

TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"

Text Attribute

Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	00	B4							

PROACTIVE COMMAND: SEND SS 4.6.3

Logically:

Command details

Command number: 1
Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: UICC
Destination device: Network

Alpha identifier: "Text Attribute 3"
SS String

TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*012345678901234567 89*10#"

Coding:

BER-TLV:	D0	2D	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	

27.22.4.11.4.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.6.

27.22.4.11.4.7 SEND SS (support of Text Attribute – Italic On)

27.22.4.11.4.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.4.7.2 Conformance requirement

The ME shall support the Proactive UICC: Send SS facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 8.12.1 , clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.14, clause 8.31 and clause 6.5.

27.22.4.11.4.7.3 Test purpose

To verify that the ME displays the alpha identifier according to the italic text attribute configuration in the SEND SS proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.11.4.7.4 Method of test

27.22.4.11.4.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.11.4.7.4.2 Procedure

Expected Sequence 4.7A (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Italic On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.7.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.7.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with italic on]
5	ME → USS	REGISTER 4.1A	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	

8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.7.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.7.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with italic off]
12	ME → USS	REGISTER 4.1A	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.7.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SS 4.7.1	
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with italic on]
19	ME → USS	REGISTER 4.1A	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
21	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.7.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SS 4.7.3	
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with italic off]
26	ME → USS	REGISTER 4.1A	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
28	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	

Expected Sequence 4.7B (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Italic On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.7.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.7.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with italic on]
5	ME → USS	REGISTER 4.1B	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.7.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.7.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with italic off]
12	ME → USS	REGISTER 4.1B	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.7.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SS 4.7.1	
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with italic on]

19	ME → USS	REGISTER 4.1B	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
21	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.7.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SS 4.7.3	
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with italic off]
26	ME → USS	REGISTER 4.1B	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
28	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	

PROACTIVE COMMAND: SEND SS 4.7.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	20	B4							

PROACTIVE COMMAND: SEND SS 4.7.2

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"

SS string: "**21*01234567890123456789*10#"

Text Attribute

Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	00	B4							

PROACTIVE COMMAND: SEND SS 4.7.3

Logically:

Command details

Command number: 1
Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: UICC
Destination device: Network

Alpha identifier: "Text Attribute 3"

SS String

TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"

Coding:

BER-TLV:	D0	2D	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	

27.22.4.11.4.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.7.

27.22.4.11.4.8 SEND SS (support of Text Attribute – Underline On)

27.22.4.11.4.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.4.8.2 Conformance requirement

The ME shall support the Proactive UICC: Send SS facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 8.12.1 , clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.14, clause 8.31 and clause 6.5.

27.22.4.11.4.8.3 Test purpose

To verify that the ME displays the alpha identifier according to the underline text attribute configuration in the SEND SS proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.11.4.8.4 Method of test

27.22.4.11.4.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.11.4.8.4.2 Procedure

Expected Sequence 4.8A (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Underline On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.8.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.8.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with underline on]
5	ME → USS	REGISTER 4.1A	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.8.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.8.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with underline off]
12	ME → USS	REGISTER 4.1A	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.8.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SS 4.8.1	
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with underline on]
19	ME → USS	REGISTER 4.1A	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
21	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.8.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SS 4.8.3	
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with underline off]

26	ME → USS	REGISTER 4.1A	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
28	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	

Expected Sequence 4.8B (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Underline On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.8.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.8.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with underline on]
5	ME → USS	REGISTER 4.1B	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.8.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.8.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with underline off]
12	ME → USS	REGISTER 4.1B	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.8.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SS 4.8.1	
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with underline on]
19	ME → USS	REGISTER 4.1B	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
21	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.8.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SS 4.8.3	
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with underline off]
26	ME → USS	REGISTER 4.1B	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
28	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	

PROACTIVE COMMAND: SEND SS 4.8.1

Logically:

Command details

Command number: 1

Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline On, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	40	B4							

PROACTIVE COMMAND: SEND SS 4.8.2

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	00	B4							

PROACTIVE COMMAND: SEND SS 4.8.3

Logically:

Command details

Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 3"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"

Coding:

BER-TLV:	D0	2D	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	

27.22.4.11.4.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.8.

27.22.4.11.4.9 SEND SS (support of Text Attribute – Strikethrough On)

27.22.4.11.4.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.4.9.2 Conformance requirement

The ME shall support the Proactive UICC: Send SS facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 8.12.1 , clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.14, clause 8.31 and clause 6.5.

27.22.4.11.4.9.3 Test purpose

To verify that the ME displays the alpha identifier according to the strikethrough text attribute configuration in the SEND SS proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.11.4.9.4 Method of test

27.22.4.11.4.9.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.11.4.9.4.2 Procedure

Expected Sequence 4.9A (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Strikethrough On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.9.1	

2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.9.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with strikethrough on]
5	ME → USS	REGISTER 4.1A	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.9.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.9.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with strikethrough off]
12	ME → USS	REGISTER 4.1A	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.9.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SS 4.9.1	
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with strikethrough on]
19	ME → USS	REGISTER 4.1A	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
21	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.9.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SS 4.9.3	
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with strikethrough off]
26	ME → USS	REGISTER 4.1A	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
28	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	

Expected Sequence 4.9B (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Strikethrough On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.9.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.9.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with strikethrough on]
5	ME → USS	REGISTER 4.1B	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.9.2	
9	ME → UICC	FETCH	

10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.9.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with strikethrough off]
12	ME → USS	REGISTER 4.1B	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.9.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND SS 4.9.1	
18	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with strikethrough on]
19	ME → USS	REGISTER 4.1B	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
21	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.9.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND SS 4.9.3	
25	ME → USER	Display "Text Attribute 3"	[Message shall be formatted with strikethrough off]
26	ME → USS	REGISTER 4.1B	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
28	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	

PROACTIVE COMMAND: SEND SS 4.9.1

Logically:

Command details
- Command number: 1
- Command type: SEND SS
- Command qualifier: "00"

Device identities
- Source device: UICC
- Destination device: Network

Alpha identifier: "Text Attribute 1"

SS String
- TON: International
- NPI: "ISDN / telephone numbering plan"
- SS string: "**21*01234567890123456789*10#"

Text Attribute
- Formatting position: 0
- Formatting length: 16
- Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough On
- Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	80	B4							

PROACTIVE COMMAND: SEND SS 4.9.2

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	00	B4							

PROACTIVE COMMAND: SEND SS 4.9.3

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 3"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"

Coding:

BER-TLV:	D0	2D	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	

27.22.4.11.4.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.9.

27.22.4.11.4.10 SEND SS (support of Text Attribute – Foreground and Background Colour)

27.22.4.11.4.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.4.10.2 Conformance requirement

The ME shall support the Proactive UICC: Send SS facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 8.12.1 , clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.14, clause 8.31 and clause 6.5.

27.22.4.11.4.10.3 Test purpose

To verify that the ME displays the alpha identifier according to the foreground and background colour text attribute configuration in the SEND SS proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.11.4.10.4 Method of test

27.22.4.11.4.10.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.11.4.10.4.2 Procedure

Expected Sequence 4.10A (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Foreground and Background Colour)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.10.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.10.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with foreground and background colour according to text attribute configuration]
5	ME → USS	REGISTER 4.1A	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.10.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.10.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with ME's default foreground and background colour]
12	ME → USS	REGISTER 4.1A	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1A	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1A	

Expected Sequence 4.10B (SEND SS, call forward unconditional, all bearers, successful, alpha identifier with Text attribute – Foreground and Background Colour)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.10.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 4.10.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with foreground and background colour according to text attribute configuration]
5	ME → USS	REGISTER 4.1B	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 4.10.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND SS 4.10.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with ME's default foreground and background colour]
12	ME → USS	REGISTER 4.1B	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1B	[Successful]
14	ME → UICC	TERMINAL RESPONSE: SEND SS 4.1.1B	

PROACTIVE COMMAND: SEND SS 4.10.1

Logically:

Command details
- Command number: 1
- Command type: SEND SS
- Command qualifier: "00"

Device identities
- Source device: UICC
- Destination device: Network

Alpha identifier: "Text Attribute 1"

SS String
- TON: International
- NPI: "ISDN / telephone numbering plan"
- SS string: "**21*01234567890123456789*10#"

Text Attribute
- Formatting position: 0
- Formatting length: 16
- Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
- Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	33	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	D0
	04	00	10	00	B4							

PROACTIVE COMMAND: SEND SS 4.10.2

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"

Coding:

BER-TLV:	D0	2D	81	03	01	11	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	89	10	91	AA	12	0A	21
	43	65	87	09	21	43	65	87	A9	01	FB	

27.22.4.11.4.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.10.

27.22.4.11.5 SEND SS (UCS2 display in Chinese)

27.22.4.11.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.5.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 8.12.1 , clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.14, clause 8.31 and clause 6.5

Additionnally, the ME shall support the UCS2 facility for the coding of the Chinese characters, as defined in: ISO/IEC 10646 [17].

27.22.4.11.5.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND SS proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.11.5.4 Method of test

27.22.4.11.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.The elementary files are coded as USIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.11.5.4.2 Procedure

Expected Sequence 5.1A (SEND SS, call forward unconditional, all bearers, successful, UCS2 text in Chinese)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 5.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 5.1.1	
4	ME → USER	Display "你好"	["Hello" in Chinese]
5	ME → USS	REGISTER 5.1A	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 5.1A	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 5.1.1A	[Command performed successfully]

Expected Sequence 5.1B (SEND SS, call forward unconditional, all bearers, successful, UCS2 text in Chinese)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 5.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 5.1.1	
4	ME → USER	Display "你好"	["Hello" in Chinese]
5	ME → USS	REGISTER 5.1B	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 5.1B	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 5.1.1B	[Command performed successfully]

PROACTIVE COMMAND: SEND SS 5.1.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha Identifier
Data coding scheme: UCS2 (16bit)
Text: "你好"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*01234567890123456789*10#"

Coding:

BER-TLV:	D0	22	81	03	01	11	00	82	02	81	83	85
	05	80	4F	60	59	7D	89	10	91	AA	12	0A
	21	43	65	87	09	21	43	65	87	A9	01	FB

REGISTER 5.1A

Same as cl 27.22.4.11.1.4.2 REGISTER 1.1A

REGISTER 5.1B

Same as cl 27.22.4.11.1.4.2 REGISTER 1.1B

RELEASE COMPLETE (SS RETURN RESULT) 5.1A

Same as cl 27.22.4.11.1.4.2 RELEASE COMPLETE (SS RETURN RESULT) 1.1A

RELEASE COMPLETE (SS RETURN RESULT) 5.1B

Same as cl 27.22.4.11.1.4.2 RELEASE COMPLETE (SS RETURN RESULT) 1.1B

TERMINAL RESPONSE: SEND SS 5.1.1A

Same as cl 27.22.4.11.1.4.2 TERMINAL RESPONSE: SEND SS 1.1.1A

TERMINAL RESPONSE: SEND SS 5.1.1B

Same as cl 27.22.4.11.1.4.2 TERMINAL RESPONSE: SEND SS 1.1.1B

27.22.4.11.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 5.1.

27.22.4.11.6 SEND SS (UCS2 display in Katakana)

27.22.4.11.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.6.2 Conformance requirement

The ME shall support the Proactive UICC: SEND SHORT MESSAGE facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 8.12.1 , clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.14, clause 8.31 and clause 6.5

Additionnally, the ME shall support the UCS2 facility for the coding of the Katakana characters, as defined in: ISO/IEC 10646 [17].

27.22.4.11.6.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND SS proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.11.6.4 Method of test

27.22.4.11.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.The elementary files are coded as USIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.11.6.4.2 Procedure

Expected Sequence 6.1A (SEND SS, call forward unconditional, all bearers, successful, UCS2 text in Katakana)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 6.1.1	

2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 6.1.1	
4	ME → USER	Display "ル"	[Character in Katakana]
5	ME → USS	REGISTER 6.1A	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 6.1A	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 6.1.1A	[Command performed successfully]

Expected Sequence 6.1B (SEND SS, call forward unconditional, all bearers, successful, UCS2 text in Katakana)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SS 6.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SS 6.1.1	
4	ME → USER	Display "ル"	[Character in Katakana]
5	ME → USS	REGISTER 6.1B	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 6.1B	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND SS 6.1.1B	[Command performed successfully]

PROACTIVE COMMAND: SEND SS 6.1.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha Identifier
Data coding scheme: UCS2 (16bit)
Text: "ル"
SS String
TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*012345678901234567890*10#"

Coding:

BER-TLV:	D0	20	81	03	01	11	00	82	02	81	83	85
	03	80	30	EB	89	10	91	AA	12	0A	21	43
	65	87	09	21	43	65	87	A9	01	FB		

REGISTER 6.1A

Same as cl 27.22.4.11.1.4.2 REGISTER 1.1A

REGISTER 6.1B

Same as cl 27.22.4.11.1.4.2 REGISTER 1.1B

RELEASE COMPLETE (SS RETURN RESULT) 6.1A

Same as cl 27.22.4.11.1.4.2 RELEASE COMPLETE (SS RETURN RESULT) 1.1A

RELEASE COMPLETE (SS RETURN RESULT) 6.1B

Same as cl 27.22.4.11.1.4.2 RELEASE COMPLETE (SS RETURN RESULT) 1.1B

TERMINAL RESPONSE: SEND SS 6.1.1A

Same as cl 27.22.4.11.1.4.2 TERMINAL RESPONSE: SEND SS 1.1.1A

TERMINAL RESPONSE: SEND SS 6.1.1B

Same as cl 27.22.4.11.1.4.2 TERMINAL RESPONSE: SEND SS 1.1.1B

27.22.4.11.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1.

27.22.4.12 SEND USSD

27.22.4.12.1 SEND USSD (normal)

27.22.4.12.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.1.2 Conformance requirement

The ME shall support the Proactive UICC: Send USSD facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 8.12.7, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.17, clause 8.31 and clause 6.5.
- TS 23.038 [7] clause 5

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in: ISO/IEC 10646 [17].

27.22.4.12.1.3 Test purpose

To verify that the ME correctly translates and sends the unstructured supplementary service request indicated in the SEND USSD proactive UICC command to the USS.

To verify that the ME returns a TERMINAL RESPONSE command to the UICC indicating the status of the transmission of the USSD request and including a USSD result as a text string in the TERMINAL RESPONSE.

27.22.4.12.1.4 Method of test

27.22.4.12.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.The elementary files are coded as USIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.12.1.4.2 Procedure

Expected Sequence 1.1 (SEND USSD, 7-bit data, successful)

Step	Direction	MESSAGE / Action	Comments

1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 1.1.1	
4	ME → USER	Display "7-bit USSD"	
5	ME → USS	REGISTER 1.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 1.1.1	

PROACTIVE COMMAND: SEND USSD 1.1.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "7-bit USSD"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	50	81	03	01	12	00	82	02	81	83	85
	0A	37	2D	62	69	74	20	55	53	53	44	8A
	39	F0	41	E1	90	5^8	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	B3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E5	60		

REGISTER 1.1

Logically (only USSD argument)

ProcessUnstructuredSS-Request ARGUMENT
USSD-DataCodingScheme:
- 7-bit default, no message class
USSD string:
- "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV	30	3D	04	01	F0	04	38	41	E1	90	58	^{3}4
	1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB	E6
	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F	D3
	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD	76
	C3	E5	60									

RELEASE COMPLETE (SS RETURN RESULT) 1.1

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT
USSD-DataCodingScheme:
- 7-bit default, no message class
USSD string:
- "USSD string received from SS"

Coding:

BER-TLV	30	1E	04	01	F0	04	19	D5	E9	94	08	9A
	D3	E5	69	F7	19	24	2F	8F	CB	69	7B	99
	0C	32	CB	DF	6D	D0	74	0A				

TERMINAL RESPONSE: SEND USSD 1.1.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Text String
Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

Expected Sequence 1.2 (SEND USSD, 8-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 1.2.1	
4	ME → USER	Display "8-bit USSD"	
5	ME → USS	REGISTER 1.2	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.2	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 1.2.1	

PROACTIVE COMMAND: SEND USSD 1.2.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC

Destination device: Network
Alpha identifier: "8-bit USSD"

USSD String

Data coding scheme: Uncompressed, no message class meaning, 8-bit data
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	58	81	03	01	12	00	82	02	81	83	85
	0A	38	2D	62	69	74	20	55	53	53	44	8A
	41	44	41	42	43	44	45	46	47	48	49	4A
	4B	4C	4D	4E	4F	50	51	52	53	54	55	56
	57	58	59	5A	2D	61	62	63	64	65	66	67
	68	69	6A	6B	6C	6D	6E	6F	70	71	72	73
	74	75	76	77	78	79	7A	2D	31	32	33	34
	35	36	37	38	39	30						

REGISTER 1.2

Logically (only USSD argument):

ProcessUnstructuredSS-Request ARGUMENT

USSD-DataCodingScheme:
- Uncompressed, no message class meaning, 8-bit data
USSD string:
- "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV	30	45	04	01	44	04	40	41	42	43	44	45
	46	47	48	49	4A	4B	4C	4D	4E	4F	50	51
	52	53	54	55	56	57	58	59	5A	2D	61	62
	63	64	65	66	67	68	69	6A	6B	6C	6D	6E
	6F	70	71	72	73	74	75	76	77	78	79	7A
	2D	31	32	33	34	35	36	37	38	39	30	

RELEASE COMPLETE (SS RETURN RESULT) 1.2

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT

USSD-DataCodingScheme:
- Uncompressed, no message class meaning, 8-bit data
USSD string:
- "USSD string received from SS"

Coding:

BER-TLV	30	21	04	01	44	04	1C	55	53	53	44	20
	73	74	72	69	6E	67	20	72	65	63	65	69
	76	65	64	20	66	72	6F	6D	20	53	53	

TERMINAL RESPONSE: SEND USSD 1.2.1

Logically:

Command details

Command number: 1
Command type: SEND USSD
Command qualifier: "00"

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Text String

Data coding scheme: Uncompressed, no message class meaning, 8-bit data
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1D	04	55	53	53	44	20	73	74
	72	69	6E	67	20	72	65	63	65	69	76
	65	64	20	66	72	6F	6D	20	53	53	

Expected Sequence 1.3 (SEND USSD, UCS2 data, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 1.3.1	
4	ME → USER	Display "UCS2 USSD"	
5	ME → USS	REGISTER 1.3	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.3	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 1.3.1	

PROACTIVE COMMAND: SEND USSD 1.3.1

Logically:

Command details

Command number: 1
Command type: SEND USSD
Command qualifier: "00"

Device identities

Source device: UICC
Destination device: Network
Alpha identifier: "UCS2 USSD"

USSD String

Data coding scheme: Uncompressed, no message class meaning, UCS2 (16 bit)
USSD string: "ЗДРАВСТВУЙТЕ" ("Hello" in Russian)

Coding:

BER-TLV:	D0	2F	81	03	01	12	00	82	02	81	83	85
	09	55	43	53	32	20	55	53	53	44	8A	19
	48	04	17	04	14	04	20	04	10	04	12	04
	21	04	22	04	12	04	23	04	19	04	22	04
	15											

REGISTER 1.3

Logically (only USSD argument):

ProcessUnstructuredSS-Request ARGUMENT

USSD-DataCodingScheme:
- Uncompressed, no message class meaning, UCS2 (16 bit)
USSD string:
- "ЗДРАВСТВУЙТЕ" ("Hello" in Russian)

Coding:

BER-TLV	30	1D	04	01	48	04	18	04	17	04	14	04
	20	04	10	04	12	04	21	04	22	04	12	04
	23	04	19	04	22	04	15					

RELEASE COMPLETE (SS RETURN RESULT) 1.3

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT
USSD-DataCodingScheme:
- Uncompressed, no message class meaning, UCS2 (16 bit)
USSD string:
- "USSD string received from SS"

Coding:

BER-TLV	30	3D	04	01	48	04	38	00	55	00	53	00
	53	00	44	00	20	00	73	00	74	00	72	00
	69	00	6E	00	67	00	20	00	72	00	65	00
	63	00	65	00	69	00	76	00	65	00	64	00
	20	00	66	00	72	00	6F	00	6D	00	20	00
	53	00	53									

TERMINAL RESPONSE: SEND USSD 1.3.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Text String
Data coding scheme: Uncompressed, no message class meaning, UCS2 (16 bit)
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	39	08	00	55	00	53	00	53	00
	44	00	20	00	73	00	74	00	72	00	69
	00	6E	00	67	00	20	00	72	00	65	00
	63	00	65	00	69	00	76	00	65	00	64
	00	20	00	66	00	72	00	6F	00	6D	00
	20	00	53	00	53						

Expected Sequence 1.4 (SEND USSD, 7-bit data, unsuccessful (Return Error))

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 1.1.1	
4	ME → USER	Display "7-bit USSD"	
5	ME → USS	REGISTER 1.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN ERROR) 1.1	Return Error

7	ME → UICC	TERMINAL RESPONSE: SEND USSD 1.4.1	

RELEASE COMPLETE (SS RETURN ERROR) 1.1

Logically (only from Return Error code):

ProcessUnstructuredSS-Request RETURN ERROR
Return Error code:
- Unknown alphabet

Coding:

Coding	02	01	47

TERMINAL RESPONSE: SEND USSD 1.4.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: USSD Return Error
Additional information: "Unknown alphabet"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	02
	37	47									

Expected Sequence 1.5 (SEND USSD, 7-bit data, unsuccessful (Reject))

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 1.1.1	
4	ME → USER	Display "7-bit USSD"	
5	ME → USS	REGISTER 1.1	
6	USS → ME	RELEASE COMPLETE (SS REJECT) 1.1	Reject
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 1.5.1	

RELEASE COMPLETE (SS REJECT) 1.1

Logically (only from Problem code):

ProcessUnstructuredSS-Request REJECT
Invoke Problem code:
- Mistyped parameter

Coding:

Coding	81	01	02

TERMINAL RESPONSE: SEND USSD 1.5.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: USSD Return Error
Additional information: "No specific cause can be given"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	02
	37	00									

Expected Sequence 1.6 (SEND USSD, 256 octets, 7-bit data, successful, long alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.6.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 1.6.1	
4	ME → USER	Display "once a RELEASE COMPLETE message containing the USSD Return Result message not containing an error has been received from the network, the ME shall inform the SIM that the command has"	
5	ME → USS	REGISTER 1.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 1.1.1	

PROACTIVE COMMAND: SEND USSD 1.6.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "once a RELEASE COMPLETE message containing the USSD Return Result message not containing an error has been received from the network, the ME shall inform the SIM that the command has"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	81	FD	81	03	01	12	00	82	02	81	83
	85	81	B6	6F	6E	63	65	20	61	20	52	45
	4C	45	41	53	45	20	43	4F	4D	50	4C	45
	54	45	20	6D	65	73	73	61	67	65	20	63
	6F	6E	74	6^{1}	69	6^{E}	69	6E	67	20	74	68
	65	20	55	53	53	44	20	52	65	74	75	$^{7}2$
	6E	20	52	65	73	75	6C	74	20	6D	65	73
	73	61	67	65	20	6E	6F	74	20	63	6F	6E

74	61	69	6E	69	6E	67	20	61	6E	20	65
72	72	6F	72	20	68	61	73	20	62	65	65
6E	20	72	65	63	65	69	76	65	64	20	66
72	6F	6D	20	74	68	65	20	6E	65	74	77
6F	72	6B	2C	20	74	68	65	20	4D	45	20
73	68	61	6C	6C	20	69	6E	66	6F	72	6D
20	74	68	65	20	53	49	4D	20	74	68	61
74	20	74	68	65	20	63	6F	6D	6D	61	6E
64	20	68	61	73	8A	39	F0	41	E1	90	58
34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
76	C3	E5	60								

Expected Sequence 1.7 (SEND USSD, 7-bit data, successful, no alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.7.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 1.7.1	
4	ME → USER	Optionally display an informative message	
5	ME → USS	REGISTER 1.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 1.1.1	

PROACTIVE COMMAND: SEND USSD 1.7.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	44	81	03	01	12	00	82	02	81	83	8A
	39	F0	41	E1	90	5^8	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	B3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E5	60		

Expected Sequence 1.8 (SEND USSD, 7-bit data, successful, null length alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.8.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 1.8.1	

4	ME → USER	the ME should not give any information to the user on the fact that the ME is sending a USSD request	
5	ME → USS	REGISTER 1.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 1.1.1	

PROACTIVE COMMAND: SEND USSD 1.8.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: ""
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	46	81	03	01	12	00	82	02	81	83	85
	00	8A	39	F0	41	E1	90	5^8	34	1E	91	49
	E5	92	D9	74	3E	A1	51	E9	94	5A	B5	5E
	B1	59	6D	2B	2C	1E	93	CB	E6	33	3A	AD
	5E	B3	DB	EE	37	3C	2E	9F	D3	EB	F6	3B
	3E	AF	6F	C5	64	33	5A	CD	76	C3	E5	60

27.22.4.12.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 - 1.8.

27.22.4.12.2 SEND USSD (Icon support)

27.22.4.12.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.2.2 Conformance requirement

27.22.4.12.2.3 Test purpose

To verify that the ME displays the text contained in the SEND USSD proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

In addition to verify that if an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.12.2.4 Method of test

27.22.4.12.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and to the USS. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS

The elementary files are coded as Toolkit default.

27.22.4.12.2.4.2 Procedure

Expected Sequence 2.1A (SEND USSD, 7-bit data, successful, basic icon self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 2.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 2.1.1	[BASIC-ICON, self-explanatory]
4	ME → USER	Display BASIC ICON	
5	ME → USS	REGISTER 2.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 2.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 2.1.1A	[Command performed successfully]

PROACTIVE COMMAND: SEND USSD 2.1.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Basic Icon"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"
Icon Identifier:
Icon qualifier: icon is self-explanatory
Icon Identifier: record 1 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	54	81	03	01	12	00	82	02	81	83	85
	0A	42	61	73	69	63	20	49	63	6F	6E	8A
	39	F0	41	E1	90	5^8	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	B3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E^5	60	9E	02
	00	01										

REGISTER 2.1

Logically (only USSD argument)

ProcessUnstructuredSS-Request ARGUMENT
USSD-DataCodingScheme:
- 7-bit default, no message class
USSD string:
- "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV	30	3D	04	01	F0	04	38	41	E1	90	58	^{3}4

	1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB	E6
	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F	D3
	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD	76
	C3	E5	60									

RELEASE COMPLETE (SS RETURN RESULT) 2.1

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT
USSD-DataCodingScheme:
- 7-bit default, no message class
USSD string:
- "USSD string received from SS"

Coding:

BER-TLV	30	1E	04	01	F0	04	19	D5	E9	94	08	9A
	D3	E5	69	F7	19	24	2F	8F	CB	69	7B	99
	0C	32	CB	DF	6D	D0	74	0A				

TERMINAL RESPONSE: SEND USSD 2.1.1A

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Text String
Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

Expected Sequence 2.1B (SEND USSD, 7-bit data, successful, basic icon self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 2.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 2.1.1	[BASIC-ICON, self-explanatory]
4	ME → USER	Display "Basic Icon" without the icon	
5	ME → USS	REGISTER 2.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 2.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 2.1.1B	[Command performed but requested icon could not be displayed]

TERMINAL RESPONSE: SEND USSD 2.1.1B

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully, but requested icon could not be displayed
Text String
Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	04	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

Expected Sequence 2.2 (SEND USSD, 7-bit data, successful, colour icon self explanatory)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 2.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 2.2.1	[COLOUR-ICON, self-explanatory]
4	ME → USER	Display COLOUR-ICON or May give information to user concerning what is happening	
5	ME → USS	REGISTER 2.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 2.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 2.1.1A or TERMINAL RESPONSE: SEND USSD 2.1.1B	[Command performed successfully] or [Command performed but requested icon could not be displayed]

PROACTIVE COMMAND: SEND USSD 2.2.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Color Icon"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Icon Identifier:

Icon qualifier: icon is self-explanatory
Icon Identifier: record 2 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	54	81	03	01	12	00	82	02	81	83	85
	0A	43	6F	6C	6F	72	20	49	63	6F	6E	8A
	39	F0	41	E1	90	5^8	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	B3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E^5	60	9E	02
	00	02										

Expected Sequence 2.3A (SEND USSD, 7-bit data, successful, basic icon non self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 2.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 2.3.1	[BASIC-ICON, non self-explanatory]
4	ME → USER	Display "Basic Icon" and BASIC-ICON	
5	ME → USS	REGISTER 2.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 2.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 2.1.1A	[Command performed successfully]

PROACTIVE COMMAND: SEND USSD 2.3.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Basic Icon"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"
Icon Identifier
Icon qualifier: icon is non self-explanatory
Icon Identifier: record 1 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	54	81	03	01	12	00	82	02	81	83	85
	0A	42	61	73	69	63	20	49	63	6F	6E	8A
	39	F0	41	E1	90	58	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	B3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E^5	60	9E	02

01	01										

Expected Sequence 2.3B (SEND USSD, 7-bit data, successful, basic icon non self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 2.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 2.3.1	[BASIC-ICON, non self-explanatory]
4	ME → USER	Display "Basic Icon" without the icon	
5	ME → USS	REGISTER 2.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 2.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 2.1.1B	[Command performed but requested icon could not be displayed]

Expected Sequence 2.4 (SEND USSD, 7-bit data, basic icon non self-explanatory, no alpha identifier presented)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 2.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 2.4.1	[BASIC-ICON, non self-explanatory]
4	ME → UICC	TERMINAL RESPONSE: SEND USSD 2.4.1	[Command data not understood by ME]

PROACTIVE COMMAND: SEND USSD 2.4.1

Logically:

Command details
- Command number: 1
- Command type: SEND USSD
- Command qualifier: "00"

Device identities
- Source device: UICC
- Destination device: Network

USSD String
- Data coding scheme: 7-bit default, no message class
- USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-

Icon Identifier
- Icon qualifier: icon is non self-explanatory
- Icon Identifier: record 1 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	48	81	03	01	12	00	82	02	81	83	8A
	39	F0	41	E1	90	58	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	B3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E^5	60	9E	02
	01	01										

TERMINAL RESPONSE: SEND USSD 2.4.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command data not understood by ME

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01	32

27.22.4.12.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 - 2.4.

27.22.4.12.3 SEND USSD (UCS2 display in Cyrillic)

27.22.4.12.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.3.2 Conformance requirement

The ME shall support the Proactive UICC: Send USSD facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 8.12.7, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.17, clause 8.31 and clause 6.5.

- TS 23.038 [7] clause 5

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in: ISO/IEC 10646 [17].

27.22.4.12.3.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND USSD proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.12.3.4 Method of test

27.22.4.12.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.The elementary files are coded as USIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.12.3.4.2 Procedure

Expected Sequence 3.1 (SEND USSD, 7-bit data, successful, UCS2 text in Cyrillic)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 3.1.1	
2	ME → UICC	FETCH	

3	UICC → ME	PROACTIVE COMMAND: SEND USSD 3.1.1	
4	ME → USER	Display "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]
5	ME → USS	REGISTER 3.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 3.1	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 3.1.1	[Command performed successfully]

PROACTIVE COMMAND: SEND USSD 3.1.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha Identifier
Data coding scheme: UCS2 (16bit)
Text: "ЗДРАВСТВУЙТЕ"
USSD String
Data coding scheme: 7-bit default, no message class
USSD String: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-

Coding:

BER-TLV:	D0	5F	81	03	01	12	00	82	02	81	83	85
	19	80	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15	8A	39	F0	41	E1	90	58	34	1E	91
	49	E5	92	D9	74	3E	A1	51	E9	94	5A	B5
	5E	B1	59	6D	2B	2C	1E	93	CB	E6	33	3A
	AD	5E	B3	DB	EE	37	3C	2E	9F	D3	EB	F6
	3B	3E	AF	6F	C5	64	33	5A	CD	76	C3	E5
	60											

REGISTER 3.1

Logically (only USSD argument)

ProcessUnstructuredSS-Request ARGUMENT
USSD-DataCodingScheme:
- 7-bit default, no message class
USSD String:
- "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV	30	3D	04	01	F0	04	38	41	E1	90	58	34
	1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB	E6
	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F	D3
	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD	76
	C3	E5	60									

RELEASE COMPLETE (SS RETURN RESULT) 3.1

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT
USSD-DataCodingScheme:

- 7-bit default, no message class
USSD String:
- "USSD string received from SS"

Coding:

BER-TLV	30	1E	04	01	F0	04	19	D5	E9	94	08	9A
	D3	E5	69	F7	19	24	2F	8F	CB	69	7B	99
	0C	32	CB	DF	6D	D0	74	0A				

TERMINAL RESPONSE: SEND USSD 3.1.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Text String
Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

27.22.4.12.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1.

27.22.4.12.4 SEND USSD (support of Text Attribute)

27.22.4.12.4.1 SEND USSD (support of Text Attribute – Left Alignment)

27.22.4.12.4.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.4.1.2 Conformance requirement

The terminal shall support the Proactive UICC: Send USSD facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 8.12.7, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.17, clause 8.31 and clause 6.5.

27.22.4.12.4.1.3 Test purpose

To verify that the ME displays the alpha identifier according to the left alignment text attribute configuration in the SEND USSD proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.12.4.1.4 Method of test

27.22.4.12.4.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the terminal shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.12.4.1.4.2 Procedure

Expected Sequence 4.1 (SEND USSD, 7-bit data, successful, with Text Attribute – Left Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.1.1	
4	ME → USER	Display "Text Attribute 1"	[Alpha identifier is displayed with left alignment]
5	ME → USS	REGISTER 4.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.1.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.1.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.1.2	
11	ME → USER	Display "Text Attribute 2"	[Alpha identifier is displayed without left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/13, no alignment change will take place]
12	ME → USS	REGISTER 4.1	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
14	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.1.1	

PROACTIVE COMMAND: SEND USSD 4.1.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND USSD 4.1.2

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	56	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60								

REGISTER 4.1

Logically (only USSD argument)

ProcessUnstructuredSS-Request ARGUMENT
USSD-DataCodingScheme:
- 7-bit default, no message class
USSD string:
- "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

Coding	30	3D	04	01	F0	04	40	41	E1	90	58	[3]4
	1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB	E6
	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F	D3
	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD	76
	C3	E5	60									

RELEASE COMPLETE (SS RETURN RESULT) 4.1

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT

USSD-DataCodingScheme:
- 7-bit default, no message class
USSD string:
- "USSD string received from SS"

Coding:

BER-TLV	30	1E	04	01	F0	04	19	D5	E9	94	08	9A
	D3	E5	69	F7	19	24	2F	8F	CB	69	7B	99
	0C	32	CB	DF	6D	D0	74	0A				

TERMINAL RESPONSE: SEND USSD 4.1.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Text String
Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

27.22.4.12.4.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.1.

27.22.4.12.4.2 SEND USSD (support of Text Attribute – Center Alignment)

27.22.4.12.4.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.4.2.2 Conformance requirement

The terminal shall support the Proactive UICC: Send USSD facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 8.12.7, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.17, clause 8.31 and clause 6.5.

27.22.4.12.4.2.3 Test purpose

To verify that the ME displays the alpha identifier according to the center alignment text attribute configuration in the SEND USSD proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.12.4.2.4 Method of test

27.22.4.12.4.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the terminal shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.12.4.2.4.2 Procedure

Expected Sequence 4.2 (SEND USSD, 7-bit data, successful, with Text Attribute – Center Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.2.1	
4	ME → USER	Display "Text Attribute 1"	[Alpha identifier is displayed with center alignment]
5	ME → USS	REGISTER 4.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.2.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.2.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.2.2	
11	ME → USER	Display "Text Attribute 2"	[Alpha identifier is displayed without center alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/13, no alignment change will take place]
12	ME → USS	REGISTER 4.1	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
14	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.2.1	

PROACTIVE COMMAND: SEND USSD 4.2.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Center Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60	D0	04	00	10	01	B4		

PROACTIVE COMMAND: SEND USSD 4.2.2

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	56	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60								

TERMINAL RESPONSE: SEND USSD 4.2.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Text String
Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

27.22.4.12.4.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.2.

27.22.4.12.4.3 SEND USSD (support of Text Attribute – Right Alignment)

27.22.4.12.4.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.4.3.2 Conformance requirement

The terminal shall support the Proactive UICC: Send USSD facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 8.12.7, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.17, clause 8.31 and clause 6.5.

27.22.4.12.4.3.3 Test purpose

To verify that the ME displays the alpha identifier according to the right alignment text attribute configuration in the SEND USSD proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.12.4.3.4 Method of test

27.22.4.12.4.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the terminal shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.12.4.3.4.2 Procedure

Expected Sequence 4.3 (SEND USSD, 7-bit data, successful, with Text Attribute – Right Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.3.1	
4	ME → USER	Display "Text Attribute 1"	[Alpha identifier is displayed with right alignment]
5	ME → USS	REGISTER 4.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.3.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.3.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.3.2	
11	ME → USER	Display "Text Attribute 2"	[Alpha identifier is displayed without right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/13, no alignment change will take place]
12	ME → USS	REGISTER 4.1	

13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
14	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.3.1	

PROACTIVE COMMAND: SEND USSD 4.3.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Right Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60	D0	04	00	10	02	B4		

PROACTIVE COMMAND: SEND USSD 4.3.2

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	56	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB

E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
76	C3	E5	60								

TERMINAL RESPONSE: SEND USSD 4.3.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Text String
Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

27.22.4.12.4.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.3.

27.22.4.12.4.4 SEND USSD (support of Text Attribute – Large Font Size)

27.22.4.12.4.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.4.4.2 Conformance requirement

The terminal shall support the Proactive UICC: Send USSD facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 8.12.7, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.17, clause 8.31 and clause 6.5.

27.22.4.12.4.4.3 Test purpose

To verify that the ME displays the alpha identifier according to the large font size text attribute configuration in the SEND USSD proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.12.4.4.4 Method of test

27.22.4.12.4.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the terminal shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.12.4.4.4.2 Procedure

Expected Sequence 4.4 (SEND USSD, 7-bit data, successful, with Text Attribute – Large Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.4.1	
4	ME → USER	Display "Text Attribute 1"	[Alpha identifier is displayed with large font size]
5	ME → USS	REGISTER 4.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.4.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.4.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.4.2	
11	ME → USER	Display "Text Attribute 2"	[Alpha identifier is displayed with normal font size]
12	ME → USS	REGISTER 4.1	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
14	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.4.1	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.4.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.4.1	
18	ME → USER	Display "Text Attribute 1"	[Alpha identifier is displayed with large font size]
19	ME → USS	REGISTER 4.1	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
21	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.4.1	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.4.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.4.3	
25	ME → USER	Display "Text Attribute 3"	[Alpha identifier is displayed with normal font size]
26	ME → USS	REGISTER 4.1	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
28	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.4.1	

PROACTIVE COMMAND: SEND USSD 4.4.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"

USSD String

Data coding scheme: 7-bit default, no message class

USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Text Attribute

Formatting position: 0

Formatting length: 16

Formatting mode: Left Alignment, Large Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60	D0	04	00	10	04	B4		

PROACTIVE COMMAND: SEND USSD 4.4.2

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Text Attribute 2"

USSD String

Data coding scheme: 7-bit default, no message class

USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Text Attribute

Formatting position: 0

Formatting length: 16

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND USSD 4.4.3

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 3"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	56	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60								

TERMINAL RESPONSE: SEND USSD 4.4.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Text String
Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

27.22.4.12.4.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.4.

27.22.4.12.4.5 SEND USSD (support of Text Attribute – Small Font Size)

27.22.4.12.4.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.4.5.2 Conformance requirement

The terminal shall support the Proactive UICC: Send USSD facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 8.12.7, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.17, clause 8.31 and clause 6.5.

27.22.4.12.4.5.3 Test purpose

To verify that the ME displays the alpha identifier according to the small font size text attribute configuration in the SEND USSD proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.12.4.5.4 Method of test

27.22.4.12.4.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the terminal shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.12.4.5.4.2 Procedure

Expected Sequence 4.5 (SEND USSD, 7-bit data, successful, with Text Attribute – Small Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.5.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.5.1	
4	ME → USER	Display "Text Attribute 1"	[Alpha identifier is displayed with small font size]
5	ME → USS	REGISTER 4.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.5.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.5.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.5.2	
11	ME → USER	Display "Text Attribute 2"	[Alpha identifier is displayed with normal font size]
12	ME → USS	REGISTER 4.1	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
14	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.5.1	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.5.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.5.1	
18	ME → USER	Display "Text Attribute 1"	[Alpha identifier is displayed with small font size]
19	ME → USS	REGISTER 4.1	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
21	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.5.1	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.5.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.5.3	
25	ME → USER	Display "Text Attribute 3"	[Alpha identifier is displayed with normal font size]
26	ME → USS	REGISTER 4.1	

27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
28	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.5.1	

PROACTIVE COMMAND: SEND USSD 4.5.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Small Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60	D0	04	00	10	08	B4		

PROACTIVE COMMAND: SEND USSD 4.5.2

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND USSD 4.5.3

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 3"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	56	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60								

TERMINAL RESPONSE: SEND USSD 4.5.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Text String
Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

27.22.4.12.4.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.5.

27.22.4.12.4.6 SEND USSD (support of Text Attribute – Bold On)

27.22.4.12.4.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.4.6.2 Conformance requirement

The terminal shall support the Proactive UICC: Send USSD facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 8.12.7, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.17, clause 8.31 and clause 6.5.

27.22.4.12.4.6.3 Test purpose

To verify that the ME displays the alpha identifier according to the bold text attribute configuration in the SEND USSD proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.12.4.6.4 Method of test

27.22.4.12.4.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the terminal shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.12.4.6.4.2 Procedure

Expected Sequence 4.6 (SEND USSD, 7-bit data, successful, with Text Attribute – Bold On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.6.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.6.1	
4	ME → USER	Display "Text Attribute 1"	[Alpha identifier is displayed with bold on]
5	ME → USS	REGISTER 4.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.6.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.6.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.6.2	
11	ME → USER	Display "Text Attribute 2"	[Alpha identifier is displayed with bold off]
12	ME → USS	REGISTER 4.1	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
14	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.6.1	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.6.1	
16	ME → UICC	FETCH	

17	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.6.1	
18	ME → USER	Display "Text Attribute 1"	[Alpha identifier is displayed with bold on]
19	ME → USS	REGISTER 4.1	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
21	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.6.1	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.6.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.6.3	
25	ME → USER	Display "Text Attribute 3"	[Alpha identifier is displayed with bold off]
26	ME → USS	REGISTER 4.1	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
28	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.6.1	

PROACTIVE COMMAND: SEND USSD 4.6.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold On, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60	D0	04	00	10	10	B4		

PROACTIVE COMMAND: SEND USSD 4.6.2

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC

Destination device: Network
Alpha identifier: "Text Attribute 2"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND USSD 4.6.3

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 3"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	56	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60								

TERMINAL RESPONSE: SEND USSD 4.6.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Text String

Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

27.22.4.12.4.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.6.

27.22.4.12.4.7 SEND USSD (support of Text Attribute – Italic On)

27.22.4.12.4.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.4.7.2 Conformance requirement

The terminal shall support the Proactive UICC: Send USSD facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 8.12.7, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.17, clause 8.31 and clause 6.5.

27.22.4.12.4.7.3 Test purpose

To verify that the ME displays the alpha identifier according to the italic text attribute configuration in the SEND USSD proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.12.4.7.4 Method of test

27.22.4.12.4.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the terminal shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.12.4.7.4.2 Procedure

Expected Sequence 4.7 (SEND USSD, 7-bit data, successful, with Text Attribute – Italic On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.7.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.7.1	
4	ME → USER	Display "Text Attribute 1"	[Alpha identifier is displayed with italic on]
5	ME → USS	REGISTER 4.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.7.1	

8	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.7.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.7.2	
11	ME → USER	Display "Text Attribute 2"	[Alpha identifier is displayed with italic off]
12	ME → USS	REGISTER 4.1	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
14	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.7.1	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.7.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.7.1	
18	ME → USER	Display "Text Attribute 1"	[Alpha identifier is displayed with italic on]
19	ME → USS	REGISTER 4.1	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
21	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.7.1	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.7.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.7.3	
25	ME → USER	Display "Text Attribute 3"	[Alpha identifier is displayed with italic off]
26	ME → USS	REGISTER 4.1	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
28	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.7.1	

PROACTIVE COMMAND: SEND USSD 4.7.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F

D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
76	C3	E5	60	D0	04	00	10	20	B4		

PROACTIVE COMMAND: SEND USSD 4.7.2

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND USSD 4.7.3

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 3"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	56	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD

76	C3	E5	60								

TERMINAL RESPONSE: SEND USSD 4.7.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Text String
Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

27.22.4.12.4.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.7.

27.22.4.12.4.8 SEND USSD (support of Text Attribute – Underline On)

27.22.4.12.4.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.4.8.2 Conformance requirement

The terminal shall support the Proactive UICC: Send USSD facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 8.12.7, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.17, clause 8.31 and clause 6.5.

27.22.4.12.4.8.3 Test purpose

To verify that the ME displays the alpha identifier according to the underline text attribute configuration in the SEND USSD proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.12.4.8.4 Method of test

27.22.4.12.4.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the terminal shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.12.4.8.4.2 Procedure

Expected Sequence 4.8 (SEND USSD, 7-bit data, successful, with Text Attribute – Underline On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.8.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.8.1	
4	ME → USER	Display "Text Attribute 1"	[Alpha identifier is displayed with underline on]
5	ME → USS	REGISTER 4.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.8.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.8.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.8.2	
11	ME → USER	Display "Text Attribute 2"	[Alpha identifier is displayed with underline off]
12	ME → USS	REGISTER 4.1	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
14	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.8.1	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.8.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.8.1	
18	ME → USER	Display "Text Attribute 1"	[Alpha identifier is displayed with underline on]
19	ME → USS	REGISTER 4.1	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
21	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.8.1	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.8.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.8.3	
25	ME → USER	Display "Text Attribute 3"	[Alpha identifier is displayed with underline off]
26	ME → USS	REGISTER 4.1	
27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
28	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.8.1	

PROACTIVE COMMAND: SEND USSD 4.8.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"

USSD String

Data coding scheme: 7-bit default, no message class

USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Text Attribute

Formatting position: 0

Formatting length: 16

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline On, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60	D0	04	00	10	40	B4		

PROACTIVE COMMAND: SEND USSD 4.8.2

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Text Attribute 2"

USSD String

Data coding scheme: 7-bit default, no message class

USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Text Attribute

Formatting position: 0

Formatting length: 16

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND USSD 4.8.3

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 3"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	56	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60								

TERMINAL RESPONSE: SEND USSD 4.8.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Text String
Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

27.22.4.12.4.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.8.

27.22.4.12.4.9 SEND USSD (support of Text Attribute – Strikethrough On)

27.22.4.12.4.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.4.9.2 Conformance requirement

The terminal shall support the Proactive UICC: Send USSD facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 8.12.7, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.17, clause 8.31 and clause 6.5.

27.22.4.12.4.9.3 Test purpose

To verify that the ME displays the alpha identifier according to the strikethrough text attribute configuration in the SEND USSD proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.12.4.9.4 Method of test

27.22.4.12.4.9.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the terminal shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.12.4.9.4.2 Procedure

Expected Sequence 4.9 (SEND USSD, 7-bit data, successful, with Text Attribute – Strikethrough On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.9.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.9.1	
4	ME → USER	Display "Text Attribute 1"	[Alpha identifier is displayed with strikethrough on]
5	ME → USS	REGISTER 4.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.9.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.9.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.9.2	
11	ME → USER	Display "Text Attribute 2"	[Alpha identifier is displayed with strikethrough off]
12	ME → USS	REGISTER 4.1	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
14	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.9.1	
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.9.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.9.1	
18	ME → USER	Display "Text Attribute 1"	[Alpha identifier is displayed with strikethrough on]
19	ME → USS	REGISTER 4.1	
20	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
21	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.9.1	
22	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.9.3	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.9.3	
25	ME → USER	Display "Text Attribute 3"	[Alpha identifier is displayed with strikethrough off]
26	ME → USS	REGISTER 4.1	

27	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
28	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.9.1	

PROACTIVE COMMAND: SEND USSD 4.9.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough On
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60	D0	04	00	10	80	B4		

PROACTIVE COMMAND: SEND USSD 4.9.2

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND USSD 4.9.3

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 3"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	56	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	33	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60								

TERMINAL RESPONSE: SEND USSD 4.9.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Text String
Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

27.22.4.12.4.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.9.

27.22.4.12.4.10 SEND USSD (support of Text Attribute – Foreground and Background Colour)

27.22.4.12.4.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.4.10.2 Conformance requirement

The terminal shall support the Proactive UICC: Send USSD facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 8.12.7, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.17, clause 8.31 and clause 6.5.

27.22.4.12.4.10.3 Test purpose

To verify that the ME displays the alpha identifier according to the foreground and background colour text attribute configuration in the SEND USSD proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.12.4.10.4 Method of test

27.22.4.12.4.10.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.

The elementary files are coded as UICC default. Prior to this test the terminal shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.12.4.10.4.2 Procedure

Expected Sequence 4.10 (SEND USSD, 7-bit data, successful, with Text Attribute – Foreground and Background Colour)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.10.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.10.1	
4	ME → USER	Display "Text Attribute 1"	[Message shall be formatted with foreground and background colour according to text attribute configuration]
5	ME → USS	REGISTER 4.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.10.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 4.10.2	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND USSD 4.10.2	
11	ME → USER	Display "Text Attribute 2"	[Message shall be formatted with ME's default foreground and background colour]
12	ME → USS	REGISTER 4.1	
13	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 4.1	["USSD string received from SS"]

14	ME → UICC	TERMINAL RESPONSE: SEND USSD 4.10.1	

PROACTIVE COMMAND: SEND USSD 4.10.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 1"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	5C	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	31	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60	D0	04	00	10	00	B4		

PROACTIVE COMMAND: SEND USSD 4.10.2

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Text Attribute 2"
USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	56	81	03	01	12	00	82	02	81	83	85
	10	54	65	78	74	20	41	74	74	72	69	62
	75	74	65	20	32	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD

76	C3	E5	60								

TERMINAL RESPONSE: SEND USSD 4.10.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Text String
Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

27.22.4.12.4.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.10.

27.22.4.12.5 SEND USSD (UCS2 display in Chinese)

27.22.4.12.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.5.2 Conformance requirement

The ME shall support the Proactive UICC: Send USSD facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 8.12.7, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.17, clause 8.31 and clause 6.5.

- TS 23.038 [7] clause 5

Additionally the ME shall support the UCS2 facility for the coding of the Chinese characters, as defined in: ISO/IEC 10646 [17].

27.22.4.12.5.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND USSD proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.12.5.4 Method of test

27.22.4.12.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.The elementary files are coded as USIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.12.5.4.2 Procedure

Expected Sequence 5.1 (SEND USSD, 7-bit data, successful, UCS2 text in Chinese)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 5.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 5.1.1	
4	ME → USER	Display "你好"	["Hello" in Chinese]
5	ME → USS	REGISTER 5.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 5.1	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 5.1.1	[Command performed successfully]

PROACTIVE COMMAND: SEND USSD 5.1.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha Identifier
Data coding scheme: UCS2 (16bit)
Text: "你好"
USSD String
Data coding scheme: 7-bit default, no message class
USSD String: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	4B	81	03	01	12	00	82	02	81	83	85
	05	80	4F	60	59	7D	8A	39	F0	41	E1	90
	58	34	1E	91	49	E5	92	D9	74	3E	A1	51
	E9	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93
	CB	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E
	9F	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A
	CD	76	C3	E5	60							

REGISTER 5.1

Logically (only USSD argument)

ProcessUnstructuredSS-Request ARGUMENT
USSD-DataCodingScheme:
- 7-bit default, no message class
USSD String:
- "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

Coding	30	3D	04	01	F0	04	38	41	E1	90	58	34
	1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB	E6
	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F	D3
	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD	76
	C3	E5	60									

RELEASE COMPLETE (SS RETURN RESULT) 5.1

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT
USSD-DataCodingScheme:
- 7-bit default, no message class
USSD String:
- "USSD string received from SS"

Coding:

Coding	30	1E	04	01	00	04	19	D5	E9	94	08	9A
	D3	E5	69	F7	19	24	2F	8F	CB	69	7B	99
	0C	32	CB	DF	6D	D0	74	0A				

TERMINAL RESPONSE: SEND USSD 5.1.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Text String
Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

27.22.4.12.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 5.1.

27.22.4.12.6 SEND USSD (UCS2 display in Katakana)

27.22.4.12.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.6.2 Conformance requirement

The ME shall support the Proactive UICC: Send USSD facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 8.12.7, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.17, clause 8.31 and clause 6.5.

- TS 23.038 [7] clause 5

Additionally the ME shall support the UCS2 facility for the coding of the Katakana characters, as defined in: ISO/IEC 10646 [17].

27.22.4.12.6.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND USSD proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.12.6.4 Method of test

27.22.4.12.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.The elementary files are coded as USIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.12.6.4.2 Procedure

Expected Sequence 6.1 (SEND USSD, 7-bit data, successful, UCS2 text in Katakana)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND USSD 6.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND USSD 6.1.1	
4	ME → USER	Display "ﾙﾚ"	[Character " in Katakana]
5	ME → USS	REGISTER 6.1	
6	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 6.1	[Successful]
7	ME → UICC	TERMINAL RESPONSE: SEND USSD 6.1.1	[Command performed successfully]

PROACTIVE COMMAND: SEND USSD 6.1.1

Logically:

Command details
- Command number: 1
- Command type: SEND USSD
- Command qualifier: "00"

Device identities
- Source device: UICC
- Destination device: Network

Alpha Identifier
- Data coding scheme: UCS2 (16bit)
- Text: "ﾙﾚ"

USSD String
- Data coding scheme: 7-bit default, no message class
- USSD String: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	49	81	03	01	12	00	82	02	81	83	85
	03	80	30	EB	8A	39	F0	41	E1	90	58	34
	1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB	E6
	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F	D3
	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD	76
	C3	E5	60									

REGISTER 6.1

Logically (only USSD argument)

ProcessUnstructuredSS-Request ARGUMENT
USSD-DataCodingScheme:
- 7-bit default, no message class
USSD String:
- "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

Coding	30	3D	04	01	F0	04	38	41	E1	90	58	34
	1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB	E6
	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F	D3
	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD	76
	C3	E5	60									

RELEASE COMPLETE (SS RETURN RESULT) 6.1

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT
USSD-DataCodingScheme:
- 7-bit default, no message class
USSD String:
- "USSD string received from SS"

Coding:

Coding	30	1E	04	01	00	04	19	D5	E9	94	08	9A
	D3	E5	69	F7	19	24	2F	8F	CB	69	7B	99
	0C	32	CB	DF	6D	D0	74	0A				

TERMINAL RESPONSE: SEND USSD 6.1.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Text String
Data coding scheme: 7-bit default, no message class
String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

27.22.4.12.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1.

27.22.4.13 SET UP CALL

27.22.4.13.1 SET UP CALL (normal)

27.22.4.13.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.1.2 Conformance requirement

The ME shall support the Proactive UICC: Set Up Call facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 8.6, clause 8.7, clause 8.12, clause 8.12.3 and clause 5.2.

27.22.4.13.1.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.1.4 Method of test

27.22.4.13.1.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default, with the following exceptions for sequence 1.1 only:

- The Outgoing Call Information (OCI and OCT) service is available in the USIM Service Table.
- EF_{OCI} (Outgoing Call Information) is present with the following content:

Logically: Invalid

Byte:	B01	…	B41	B42	B43	B44	B45	B46	B47
Coding:	FF	…	FF	00	00	00	01	FF	FF

- EF_{OCT} (Outgoing Call Timer) is present with the following content:

Logically: Accumulated call timer value: 0

Byte:	B01	B02	B03
Coding:	00	00	00

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.13.1.4.2 Procedure

Expected Sequence 1.1 (SET UP CALL, call confirmed by the user and connected)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.1.1	

4	ME → USER	ME displays "Not busy" during user confirmation phase.	
5	USER → ME	The user confirms the call set up	[user confirmation]
6	ME → USS	The ME attempts to set up a call to "+012340123456"	
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 1.1.1	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s. The ME returns to idle mode.	
10	ME → UICC	The ME shall not have updated EF OCI or EF OCT with the call set-up details.	

PROACTIVE COMMAND: SET UP CALL 1.1.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "Not busy"

Address
- TON: International
- NPI: ISDN / telephone numbering plan
- Dialling number string "012340123456p1p2"

Coding:

BER-TLV:	D0	1E	81	03	01	10	00	82	02	81	83	85
	08	4E	6F	74	20	62	75	73	79	86	09	91
	10	32	04	21	43	65	1C	2C				

TERMINAL RESPONSE: SET UP CALL 1.1.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

Expected Sequence 1.2 (SET UP CALL, call rejected by the user)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.1.1	
2	ME → UICC	FETCH	

3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.1.1	
4	ME → USER	ME displays "Not busy" during the user confirmation phase	
5	USER → ME	The user rejects the set up call	[user rejects the call]
6	ME → UICC	TERMINAL RESPONSE 1.2.1	[User did not accept call set-up request]
7	ME → USER	The ME returns in idle mode.	

TERMINAL RESPONSE: SET UP CALL 1.2.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: User did not accept the proactive command

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	22

Expected Sequence 1.3 void

Expected Sequence 1.4 (SET UP CALL, putting all other calls on hold, ME busy)

ME is busy on a call

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.4.1	[putting all other calls on hold]
4	ME → USER	ME displays "On hold" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirms the call]
6	ME → USS	The active call is put on hold	
7	ME→USS	The ME attempts to set up a call to "+012340123456"	
8	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
9	ME → UICC	TERMINAL RESPONSE 1.4.1	[Command performed successfully]
10	USER → ME	The user ends the call after 10 s. The ME retrieves the previous call automatically or on request of the user.	

PROACTIVE COMMAND: SET UP CALL 1.4.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL

Command qualifier: putting all other calls on hold

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "On hold"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Coding:

BER-TLV:	D0	1D	81	03	01	10	02	82	02	81	83	85
	07	4F	6E	20	68	6F	6C	64	86	09	91	10
	32	04	21	43	65	1C	2C					

TERMINAL RESPONSE: SET UP CALL 1.4.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: putting all other calls on hold

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	02	82	02	82	81	83	01	00

Expected Sequence 1.5 (SET UP CALL, disconnecting all other calls, ME busy)

ME is busy on a call

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.5.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.5.1	[disconnecting all other calls]
4	ME → USER	ME displays "Disconnect" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirms the call]
6	ME → USS	The ME disconnects the active call	
7	ME→USS	The ME attempts to set up a call to "+012340123456"	
8	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
9	ME → UICC	TERMINAL RESPONSE 1.5.1	[Command performed successfully]
10	USER → ME	The user ends the call after 10 s.	

PROACTIVE COMMAND: SET UP CALL 1.5.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: disconnecting all other calls
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Disconnect"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"

Coding:

BER-TLV:	D0	20	81	03	01	10	04	82	02	81	83	85
	0A	44	69	73	6^3	6^F	6E	6E	65	63	74	86
	09	91	10	32	04	21	43	65	1C	2C		

TERMINAL RESPONSE: SET UP CALL 1.5.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: putting all other calls on hold
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	04	82	02	82	81	83	01	00

Expected Sequence 1.6 (SET UP CALL, only if not currently busy on another call, ME busy)

ME is busy on a call

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.1.1	[only if not currently busy on another call]
4	ME → UICC	TERMINAL RESPONSE 1.6.1	[ME currently unable to process command]

TERMINAL RESPONSE: SET UP CALL 1.6.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result

General Result: ME currently unable to process command
Additional Information: ME currently busy on call

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	02	20
	02											

Expected Sequence 1.7 (SET UP CALL, putting all other calls on hold, call hold is not allowed)

ME is busy on a call. The USS shall be configured to not allow Call Hold.

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.4.1	[putting all other calls on hold]
4	ME → USER	ME displays "On hold" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirms the call]
6	ME → USS	The ME attempts to put the active call on hold.	
7	USS->ME	The ME receives the HOLD REJECT message from the USS.	[USS sends "Facility Rejected" as cause value]
8	ME → UICC	TERMINAL RESPONSE 1.7.1A OR TERMINAL RESPONSE 1.7.1B	[Network currently unable to process command] [Option A shall apply only from R99 to Rel-6, whereas option B is applicable in all releases]

TERMINAL RESPONSE: SET UP CALL 1.7.1A

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: putting all other calls on hold
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Network currently unable to process command
Additional Information: No specific cause can be given

Coding:

BER-TLV:	81	03	01	10	02	82	02	82	81	83	02	21
	00											

TERMINAL RESPONSE: SET UP CALL 1.7.1B

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: putting all other calls on hold
Device identities
Source device: ME
Destination device: UICC
Result

General Result: Network currently unable to process command
Additional Information: Facility Rejected

Coding:

BER-TLV:	81	03	01	10	02	82	02	82	81	83	02	21
	9D											

Expected Sequence 1.8 (SET UP CALL, Capability configuration)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.8.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.8.1	[Capability configuration parameters: full rate support]
4	ME → USER	ME displays "Capability config" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME → USS	The ME attempts to set up a call to "+012340123456" using the capability configuration parameters supplied by UICC	
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 1.8.1	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 1.8.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: if not busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Capability config"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Capability configuration parameters
Information transfer cap: full rate support only MS

Coding:

BER-TLV:	D0	2B	81	03	01	10	00	82	02	81	83	85
	11	43	61	70	61	62	69	6C	69	74	79	20
	63	6F	6E	66	69	67	86	09	91	10	32	04
	21	43	65	1C	2C	87	02	01	A0			

TERMINAL RESPONSE: SET UP CALL 1.8.1

Logically:

Command details

Command number: 1
Command type: SET UP CALL
Command qualifier: if not busy on another call

Device identities
Source device: ME
Destination device: UICC

Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

Expected Sequence 1.9 (SET UP CALL, max dialling number string, no alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.9.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND SET UP CALL 1.9.1	[dialling number string, no alpha identifier]
4	USER → ME	The user confirms the set up call	[user confirmation]
5	ME→USS	The ME attempts to set up a call to "+012345678901234567890123456789012345678901"	
6	USS → ME	The ME receives the CONNECT message from the USS.	
7	ME → UICC	TERMINAL RESPONSE 1.9.1	[Command performed successfully]
8	USER → ME	The user ends the call The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 1.9.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call with redial

Device identities
Source device: UICC
Destination device: Network

Address
TON: International
NPI: ISDN / telephone numbering plan

Dialling number string: "012345678901234567890123456789012345678901"

Coding:

BER-TLV:	D0	1C	81	03	01	10	01	82	02	81	83	86
	11	91	10	32	54	76	98	10	32	54	76	98
	10	32	54	76	98	10						

TERMINAL RESPONSE: SET UP CALL 1.9.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	01	82	02	82	81	83	01	00

Expected Sequence 1.10 (SET UP CALL,256 octets length, long first alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.10.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.10.1	[alpha identifier]
4	ME → USER	ME displays "Three types are defined: - set up a call, but only if not currently busy on another call; - set up a call, putting all other calls (if any) on hold; - set up a call, disconnecting all other calls (if any) first. For each of these types, " during the user confirmation phase.	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME→USS	The ME attempts to set up a call to "+01"	
7	USS → ME	The ME receives the CONNECT message from the USS.	
8	ME → UICC	TERMINAL RESPONSE 1.10.1	[Command performed successfully]
9	USER → ME	The user ends the call The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 1.10.1

Logically:

Command details

Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: UICC
Destination device: Network
Alpha identifier: "Three types are defined: - set up a call, but only if not currently busy on another call; - set up a call, putting all other calls (if any) on hold; - set up a call, disconnecting all other calls (if any) first. For each of these types, "

Address

TON: International
NPI: ISDN / telephone numbering plan
Dialling number string: "01"

Coding:

BER-TLV:	D0	81	FD	81	03	01	10	01	82	02	81	83
	85	81	ED	54	68	72	65	65	20	74	79	70
	65	73	20	61	72	65	20	64	65	66	69	6E
	65	64	3A	20	2D	20	73	65	74	20	75	70
	20	61	20	63	61	6C	6C	2C	20	62	75	74
	20	6F	6E	6C	79	20	69	66	20	6E	6F	74
	20	63	75	72	72	65	6E	74	6C	79	20	62
	75	73	79	20	6F	6E	20	61	6E	6F	74	68
	65	72	20	63	61	6C	6C	3B	20	2D	20	73
	65	74	20	75	70	20	61	20	63	61	6C	6C

2C	20	70	75	74	74	69	6E	67	20	61	6C
6C	20	6F	74	68	65	72	20	63	61	6C	6C
73	20	28	69	66	20	61	6E	79	29	20	6F
6E	20	68	6F	6C	64	3B	20	2D	20	73	65
74	20	75	70	20	61	20	63	61	6C	6C	2C
20	64	69	73	6^3	6^F	6E	6E	65	63	74	^{6}9
6E	67	20	61	6C	6C	20	6F	74	68	65	72
20	63	61	6C	6C	73	20	28	69	66	20	^{6}1
6E	79	29	20	66	69	72	7^3	74	2E	20	46
6F	72	20	65	61	63	68	20	6F	66	20	74
68	65	73	65	20	74	79	70	65	73	2C	20
86	02	91	10								

TERMINAL RESPONSE: SET UP CALL 1.10.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call with redial

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	01	82	02	82	81	83	01	00

Expected Sequence 1.11A (SET UP CALL, Called party subaddress, command performed successfully)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.11.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.11.1	[set up a call with called party subaddress]
4	ME → USER	ME displays "Called party" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME→USS	The ME attempts to set up a call to "+012340123456" with the called party subaddress information	
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 1.11.1A	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s The ME returns in idle mode.	

Expected Sequence 1.11B (SET UP CALL, Called party subaddress, ME not supporting the called party subaddress)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.11.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.11.1	[set up a call with called party subaddress]

4	ME → UICC	TERMINAL RESPONSE 1.11.1B	[beyond ME's capabilities]

PROACTIVE COMMAND: SET UP CALL 1.11.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: if not busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Called party"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string: "012340123456p1p2"
Called party subaddress
Type of subaddress: NSAP (X.213 / ISO 8348 AD2)
Odd / even indicator: even number of address signals
Subaddress information: AFI, 95, 95, 95, 95, 95

Coding:

BER-TLV:	D0	2B	81	03	01	10	00	82	02	81	83	85
	0C	43	61	6C	6C	65	64	20	70	61	72	74
	79	86	09	91	10	32	04	21	43	65	1C	2C
	88	07	80	50	95	95	95	95	95			

TERMINAL RESPONSE: SET UP CALL 1.11.1A

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: if not busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

TERMINAL RESPONSE: SET UP CALL 1.11.1B

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: if not busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Beyond ME's capabilities

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	30

Expected Sequence 1.12 (SET UP CALL, maximum duration for the redial mechanism)

The USS shall be configured such that call set up requests will be rejected with cause "User Busy".

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.12.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.12.1	[only if not currently busy on another call with redial]
4	ME → USER	ME displays "Duration" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirms the call]
6	ME → USS	ME attempts to set up a call to "+012340123456" . It stops its attempts after 10 seconds.	[redial mechanism with maximum duration of 10 seconds]]
7	ME → UICC	TERMINAL RESPONSE 1.12.1	[network currently unable to process command]
8	ME → USER	The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 1.12.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call with redial

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "Duration"

Address
- TON: International
- NPI: ISDN / telephone numbering plan
- Dialling number string: "012340123456p1p2"

Duration
- Unit: Seconds
- Interval: 10

Coding:

BER-TLV:	D0	22	81	03	01	10	01	82	02	81	83	85
	08	44	75	72	61	74	69	6F	6E	86	09	91
	10	32	04	21	43	65	1C	2C	84	02	01	0A

TERMINAL RESPONSE: SET UP CALL 1.12.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call with redial

Device identities
- Source device: ME
- Destination device: UICC

Result

General Result: network currently unable to process command
Additional Information: User Busy

Coding:

BER-TLV:	81	03	01	10	01	82	02	82	81	83	02	21
	91											

27.22.4.13.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.12.

27.22.4.13.2 SET UP CALL (second alpha identifier)

27.22.4.13.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.2.2 Conformance requirement

Same as clause 27.22.4.13.2.1.

27.22.4.13.2.3 Test purpose

To verify that the ME accepts a Proactive Command - Set Up Call, displays the alpha identifiers to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.2.4 Method of test

27.22.4.13.2.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and is in updated idle mode on the USS.

27.22.4.13.2.4.2 Procedure

Expected Sequence 2.1 (SET UP CALL, two alpha identifiers)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 2.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 2.1.1	
4	ME → USER	ME displays "CONFIRMATION" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL"	[second alpha identifier]
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 2.1.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]

9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 2.1.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL"

Coding:

BER-TLV:	D0	28	81	03	01	10	00	82	02	81	83	85
	0C	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	86	09	91	10	32	04	21	43	65	1C	2C
	85	04	43	41	4C	4C						

TERMINAL RESPONSE: SET UP CALL 2.1.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

27.22.4.13.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

27.22.4.13.3 SET UP CALL (display of icons)

27.22.4.13.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.3.2 Conformance requirement

27.22.4.13.3.3 Test purpose

To verify that the ME accepts a Proactive Set Up Call , displays the message or icon to the user ,attempts to set up a call to the address, returns the result in the TERMINAL response.

27.22.4.13.3.4 Method of test

27.22.4.13.3.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and is in updated idle mode on the USS.

27.22.4.13.3.4.2 Procedure

Expected Sequence 3.1A (SET UP CALL, display of basic icon during confirmation phase, not self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 3.1.1	Including icon identifier, icon shall be displayed in addition of the first alpha identifier
4	ME → USER	ME displays "Set up call Icon 3.1.1" and the basic icon during a user confirmation phase.	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME→USS	The ME attempts to set up a call to "+012340123456"	
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 3.1.1A	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 3.1.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "Set up call Icon 3.1.1"

Address
- TON: International
- NPI: ISDN / telephone numbering plan
- Dialling number string "012340123456p1p2"

Icon identifier
- Icon qualifier: icon is not self-explanatory
- Icon identifier: <record 1 in EF IMG>

Coding:

BER-TLV:	D0	30	81	03	01	10	00	82	02	81	83	85
	16	53	65	74	20	75	70	20	63	61	6C	6C
	20	49	63	6F	6E	20	33	2E	31	2E	31	86
	09	91	10	32	04	21	43	65	1C	2C	9E	02
	01	01										

TERMINAL RESPONSE: SET UP CALL 3.1.1A

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

Expected Sequence 3.1B (SET UP CALL, display of basic icon during confirmation phase, not self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 3.1.1	Including icon identifier, icon shall be displayed in addition of the first alpha identifier
4	ME → USER	ME displays "Set up call Icon 3.1.1" without the basic icon during a user confirmation phase.	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME→USS	The ME attempts to set up a call to "+012340123456"	
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 3.1.1B	[Command performed successfully, but requested icon could not be displayed].
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

TERMINAL RESPONSE: SET UP CALL 3.1.1B

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	04

Expected Sequence 3.2A (SET UP CALL, display of basic icon during confirmation phase, self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 3.2.1	Including icon identifier, icon shall be displayed instead of the first alpha identifier
4	ME → USER	ME displays the basic icon during a user confirmation phase.	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME → USS	The ME attempts to set up a call to "+012340123456"	
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 3.2.1A	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 3.2.1

Logically:

Command details

Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call

Device identities

Source device: UICC
Destination device: Network
Alpha identifier: "Set up call Icon 3.2.1"

Address

TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"

Icon identifier

Icon qualifier: icon is self-explanatory
Icon identifier: <record 1 in EF IMG>

Coding:

BER-TLV:	D0	30	81	03	01	10	00	82	02	81	83	85
	16	53	65	74	20	75	70	20	63	61	6C	6C
	20	49	6^3	6F	6E	2^0	33	2^E	32	2E	31	86
	09	91	10	32	04	21	43	65	1C	2C	9E	02
	00	01										

TERMINAL RESPONSE: SET UP CALL 3.2.1A

Logically:

Command details

Command number: 1

Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

Expected Sequence 3.2B (SET UP CALL, display of basic icon during confirmation phase, self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 3.2.1	Including icon identifier, icon shall be displayed instead of the first alpha identifier
4	ME → USER	ME display "Set up call Icon 3.2.1" without the icon	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME→USS	The ME attempts to set up a call to "+012340123456"	
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 3.2.1B	[Command performed successfully, but requested icon could not be displayed].
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

TERMINAL RESPONSE: SET UP CALL 3.2.1B

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	04

Expected Sequence 3.3A (SET UP CALL, display of colour icon during confirmation phase, not self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 3.3.1	Including icon identifier, icon shall be displayed in addition of the first alpha identifier

4	ME → USER	ME displays "Set up call Icon 3.3.1" and the colour icon during a user confirmation phase.	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME→USS	The ME attempts to set up a call to "+012340123456"	
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 3.3.1A	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 3.3.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "Set up call Icon 3.3.1"

Address
- TON: International
- NPI: ISDN / telephone numbering plan
- Dialling number string "012340123456p1p2"

Icon identifier
- Icon qualifier: icon is not self-explanatory
- Icon identifier: <record 2 in EF IMG>

Coding:

BER-TLV:	D0	30	81	03	01	10	00	82	02	81	83	85
	16	53	65	74	20	75	70	20	63	61	6C	6C
	20	49	63	6F	6E	20	33	2E	33	2E	31	86
	09	91	10	32	04	21	43	65	1C	2C	9E	02
	01	02										

TERMINAL RESPONSE: SET UP CALL 3.3.1A

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

Expected Sequence 3.3B (SET UP CALL, display of colour icon during confirmation phase, not self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 3.3.1	Including icon identifier, icon shall be displayed in addition of the first alpha identifier
4	ME → USER	ME only display alpha string: " Set up call Icon 3.3.1"	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME → USS	The ME attempts to set up a call to "+012340123456"	
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 3.3.1B	[Command performed successfully, but requested icon could not be displayed].
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

TERMINAL RESPONSE: SET UP CALL 3.3.1B

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	04

Expected Sequence 3.4A (SET UP CALL, display of self explanatory basic icon during set up call, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 3.4.1	Including a second alpha identifier and two icons
4	ME → USER	ME displays the basic icon during a user confirmation phase.	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME→USS	The ME attempts to set up a call to "+012340123456". The ME displays the basic icon without the text during the set up call.	
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 3.4.1A	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 3.4.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Set up call Icon 3.4.1"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Icon identifier
Icon qualifier: icon is self-explanatory
Icon identifier: <record 1 in EF IMG>
Alpha identifier: "Set up call Icon 3.4.2"
Icon identifier
Icon qualifier: icon is self-explanatory
Icon identifier: <record 1 in EF IMG>

Coding:

BER-TLV:	D0	4C	81	03	01	10	00	82	02	81	83	85
	16	53	65	74	20	75	70	20	63	61	6C	6C
	20	49	63	6F	6E	20	33	2E	34	2E	31	86
	09	91	10	32	04	21	43	65	1C	2C	9E	02
	00	01	85	16	53	65	74	20	75	70	20	63
	61	6C	6C	20	49	63	6F	6E	20	33	2E	34
	2E	32	9E	02	00	01						

TERMINAL RESPONSE: SET UP CALL 3.4.1A

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

Expected Sequence 3.4B (SET UP CALL, display of self explanatory basic icon during set up call, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.4.1	
2	ME → UICC	FETCH	

3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 3.4.1	Including a second alpha identifier and two icons
4	ME → USER	ME displays "Set up call Icon 3.4.1" without the icon	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "Set up call Icon 3.4.2" without the icon during the set up call.	
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 3.4.1B	[Command performed successfully, but requested icon could not be displayed].
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

TERMINAL RESPONSE: SET UP CALL 3.4.1B

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	04

27.22.4.13.3.5 Test requirement

The ME shall operate in the manner defined in expected sequences 3.1A to 3.4B.

27.22.4.13.4 SET UP CALL (support of Text Attribute)

27.22.4.13.4.1 SET UP CALL (support of Text Attribute – Left Alignment)

27.22.4.13.4.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.4.1.2 Conformance requirement

The ME shall support the Proactive UICC: Set Up Call facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 8.6, clause 8.7, clause 8.12, clause 8.12.3, clause 8.70 and clause 5.2.

27.22.4.13.4.1.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier according to the left alignment text attribute configuration to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.4.1.4 Method of test

27.22.4.13.4.1.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and in the updated idle mode on the USS.

27.22.4.13.4.1.4.2 Procedure

Expected Sequence 4.1 (SET UP CALL, Text Attribute – Left Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.1.1	
4	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation is displayed with left alignment]
6	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with left alignment]
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 4.1.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
10	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.1.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.1.2	
13	ME → USER	ME displays "CONFIRMATION 2" during the user confirmation phase	
14	USER → ME	The user confirms the set up call	[User confirmation shall be formatted without left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/14, no alignment change will take place]
15	ME → □USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 2"	[Second alpha identifier shall be formatted without left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/14, no alignment change will take place]
16	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
17	ME → UICC	TERMINAL RESPONSE 4.1.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
18	USER → ME	The user ends the call after 18 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 4.1.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 1"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 1"
Text Attribute (user confirmation phase)
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background
Text Attribute (call set up phase)
Formatting position: 0
Formatting length: 6
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	31	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	31	D0	04
	00	0E	00	B4	D0	04	00	06	00	B4		

PROACTIVE COMMAND: SET UP CALL 4.1.2

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 2"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 2"

Coding:

BER-TLV:	D0	2C	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	32	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	32		

TERMINAL RESPONSE: SET UP CALL 4.1.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

27.22.4.13.4.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.1.

27.22.4.13.4.2 SET UP CALL (support of Text Attribute – Center Alignment)

27.22.4.13.4.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.4.2.2 Conformance requirement

The ME shall support the Proactive UICC: Set Up Call facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 8.6, clause 8.7, clause 8.12, clause 8.12.3, clause 8.70 and clause 5.2.

27.22.4.13.4.2.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier according to the center alignment text attribute configuration to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.4.2.4 Method of test

27.22.4.13.4.2.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and in the updated idle mode on the USS.

27.22.4.13.4.2.4.2 Procedure

Expected Sequence 4.2 (SET UP CALL, Text Attribute – Center Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.2.1	
2	ME → UICC	FETCH	

3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.2.1	
4	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation is displayed with center alignment]
6	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with center alignment]
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 4.2.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
10	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.2.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.2.2	
13	ME → USER	ME displays "CONFIRMATION 2" during the user confirmation phase	
14	USER → ME	The user confirms the set up call	[User confirmation shall be formatted without center alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/14, no alignment change will take place]
15	ME → □USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 2"	[Second alpha identifier shall be formatted without centert alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/14, no alignment change will take place]
16	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
17	ME → UICC	TERMINAL RESPONSE 4.2.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
18	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 4.2.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "CONFIRMATION 1"

Address
- TON: International
- NPI: ISDN / telephone numbering plan
- Dialling number string "012340123456p1p2"
- Alpha Identifier (call set up phase):"CALL 1"

Text Attribute (user confirmation phase)
- Formatting position: 0
- Formatting length: 14

Formatting mode: Center Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Text Attribute (call set up phase)
Formatting position: 0
Formatting length: 6
Formatting mode: Center Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	31	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	31	D0	04
	00	0E	01	B4	D0	04	00	06	01	B4		

PROACTIVE COMMAND: SET UP CALL 4.2.2

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 2"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 2"

Coding:

BER-TLV:	D0	2C	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	32	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	32		

TERMINAL RESPONSE: SET UP CALL 4.2.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

27.22.4.13.4.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.2.

27.22.4.13.4.3 SET UP CALL (support of Text Attribute – Right Alignment)

27.22.4.13.4.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.4.3.2 Conformance requirement

The ME shall support the Proactive UICC: Set Up Call facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 8.6, clause 8.7, clause 8.12, clause 8.12.3, clause 8.70 and clause 5.2.

27.22.4.13.4.3.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier according to the right alignment text attribute configuration to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.4.3.4 Method of test

27.22.4.13.4.3.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and in the updated idle mode on the USS.

27.22.4.13.4.3.4.2 Procedure

Expected Sequence 4.3 (SET UP CALL, Text Attribute – Right Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.3.1	
4	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation is displayed with right alignment]
6	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with right alignment]
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 4.3.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
10	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.3.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.3.2	

13	ME → USER	ME displays "CONFIRMATION 2" during the user confirmation phase	
14	USER → ME	The user confirms the set up call	[User confirmation shall be formatted without right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/14, no alignment change will take place]
15	ME → □USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 2"	[Second alpha identifier shall be formatted without right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/14, no alignment change will take place]
16	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
17	ME → UICC	TERMINAL RESPONSE 4.3.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
18	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 4.3.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "CONFIRMATION 1"

Address
- TON: International
- NPI: ISDN / telephone numbering plan
- Dialling number string "012340123456p1p2"
- Alpha Identifier (call set up phase):"CALL 1"

Text Attribute (user confirmation phase)
- Formatting position: 0
- Formatting length: 14
- Formatting mode: Right Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
- Colour: Dark Green Foreground, Bright Yellow Background

Text Attribute (call set up phase)
- Formatting position: 0
- Formatting length: 6
- Formatting mode: Right Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
- Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	31	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	31	D0	04
	00	0E	02	B4	D0	04	00	06	02	B4		

PROACTIVE COMMAND: SET UP CALL 4.3.2

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 2"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 2"

Coding:

BER-TLV:	D0	2C	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	32	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	32		

TERMINAL RESPONSE: SET UP CALL 4.3.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

27.22.4.13.4.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.3.

27.22.4.13.4.4 SET UP CALL (support of Text Attribute – Large Font Size)

27.22.4.13.4.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.4.4.2 Conformance requirement

The ME shall support the Proactive UICC: Set Up Call facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 8.6, clause 8.7, clause 8.12, clause 8.12.3, clause 8.70 and clause 5.2.

27.22.4.13.4.4.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier according to the large font size text attribute configuration to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.4.4.4 Method of test

27.22.4.13.4.4.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and in the updated idle mode on the USS.

27.22.4.13.4.4.4.2 Procedure

Expected Sequence 4.4 (SET UP CALL, Text Attribute – Large Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.4.1	
4	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation is displayed with large font size]
6	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with large font size]
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 4.4.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
10	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.4.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.4.2	
13	ME → USER	ME displays "CONFIRMATION 2" during the user confirmation phase	
14	USER → ME	The user confirms the set up call	[user confirmation is displayed with normal font size]
15	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 2"	[second alpha identifier is displayed with normal font size]
16	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
17	ME → UICC	TERMINAL RESPONSE 4.4.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
18	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
19	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.4.1	
20	ME → UICC	FETCH	

21	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.4.1	
22	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
23	USER → ME	The user confirms the set up call	[user confirmation is displayed with large font size]
24	ME □□USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with large font size]
25	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
26	ME → UICC	TERMINAL RESPONSE 4.4.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
27	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
28	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.4.3	
29	ME → UICC	FETCH	
30	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.4.3	
31	ME → USER	ME displays "CONFIRMATION 3" during the user confirmation phase	
32	USER → ME	The user confirms the set up call	[user confirmation is displayed with normal font size]
33	ME → □USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 3"	[second alpha identifier is displayed with normal font size]
34	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
35	ME → UICC	TERMINAL RESPONSE 4.4.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
36	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 4.4.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "CONFIRMATION 1"

Address
- TON: International
- NPI: ISDN / telephone numbering plan
- Dialling number string "012340123456p1p2"
- Alpha Identifier (call set up phase):"CALL 1"

Text Attribute (user confirmation phase)
- Formatting position: 0
- Formatting length: 14
- Formatting mode: Left Alignment, Large Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
- Colour: Dark Green Foreground, Bright Yellow Background

Text Attribute (call set up phase)
- Formatting position: 0
- Formatting length: 6

Formatting mode: Left Alignment, Large Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	31	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	31	D0	04
	00	0E	04	B4	D0	04	00	06	04	B4		

PROACTIVE COMMAND: SET UP CALL 4.4.2

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 2"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 2"
Text Attribute (user confirmation phase)
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background
Text Attribute (call set up phase)
Formatting position: 0
Formatting length: 6
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	32	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	32	D0	04
	00	0E	00	B4	D0	04	00	06	00	B4		

PROACTIVE COMMAND: SET UP CALL 4.4.3

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network

Alpha identifier: "CONFIRMATION 3"

Address

TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 3"

Coding:

BER-TLV:	D0	2C	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	33	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	33		

TERMINAL RESPONSE: SET UP CALL 4.4.1

Logically:

Command details

Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

27.22.4.13.4.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.4.

27.22.4.13.4.5 SET UP CALL (support of Text Attribute – Small Font Size)

27.22.4.13.4.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.4.5.2 Conformance requirement

The ME shall support the Proactive UICC: Set Up Call facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 8.6, clause 8.7, clause 8.12, clause 8.12.3, clause 8.70 and clause 5.2.

27.22.4.13.4.5.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier according to the small font size text attribute configuration to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.4.4.5 Method of test

27.22.4.13.4.4.5.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and in the updated idle mode on the USS.

27.22.4.13.4.4.5.2 Procedure

Expected Sequence 4.5 (SET UP CALL, Text Attribute – Small Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.5.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.5.1	
4	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation is displayed with small font size]
6	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with small font size]
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 4.5.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
10	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.5.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.5.2	
13	ME → USER	ME displays "CONFIRMATION 2" during the user confirmation phase	
14	USER → ME	The user confirms the set up call	[user confirmation is displayed with normal font size]
15	ME → □USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 2"	[second alpha identifier is displayed with normal font size]
16	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
17	ME → UICC	TERMINAL RESPONSE 4.5.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
18	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
19	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.5.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.5.1	
22	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
23	USER → ME	The user confirms the set up call	[user confirmation is displayed with small font size]
24	ME □□USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with small font size]
25	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]

26	ME → UICC	TERMINAL RESPONSE 4.5.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
27	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
28	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.5.3	
29	ME → UICC	FETCH	
30	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.5.3	
31	ME → USER	ME displays "CONFIRMATION 3" during the user confirmation phase	
32	USER → ME	The user confirms the set up call	[user confirmation is displayed with normal font size]
33	ME → □USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 3"	[second alpha identifier is displayed with normal font size]
34	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
35	ME → UICC	TERMINAL RESPONSE 4.5.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
36	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 4.5.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "CONFIRMATION 1"

Address
- TON: International
- NPI: ISDN / telephone numbering plan
- Dialling number string "012340123456p1p2"
- Alpha Identifier (call set up phase):"CALL 1"

Text Attribute (user confirmation phase)
- Formatting position: 0
- Formatting length: 14
- Formatting mode: Left Alignment, Small Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
- Colour: Dark Green Foreground, Bright Yellow Background

Text Attribute (call set up phase)
- Formatting position: 0
- Formatting length: 6
- Formatting mode: Left Alignment, Small Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
- Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	31	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	31	D0	04
	00	0E	08	B4	D0	04	00	06	08	B4		

PROACTIVE COMMAND: SET UP CALL 4.5.2

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 2"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 2"
Text Attribute (user confirmation phase)
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background
Text Attribute (call set up phase)
Formatting position: 0
Formatting length: 6
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	32	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	32	D0	04
	00	0E	00	B4	D0	04	00	06	00	B4		

PROACTIVE COMMAND: SET UP CALL 4.5.3

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 3"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 3"

Coding:

BER-TLV:	D0	2C	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	33	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	33		

TERMINAL RESPONSE: SET UP CALL 4.5.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

27.22.4.13.4.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.5.

27.22.4.13.4.6 SET UP CALL (support of Text Attribute – Bold On)

27.22.4.13.4.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.4.6.2 Conformance requirement

The ME shall support the Proactive UICC: Set Up Call facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 8.6, clause 8.7, clause 8.12, clause 8.12.3, clause 8.70 and clause 5.2.

27.22.4.13.4.6.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier according to the bold text attribute configuration to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.4.6.4 Method of test

27.22.4.13.4.6.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and in the updated idle mode on the USS.

27.22.4.13.4.6.4.2 Procedure

Expected Sequence 4.6 (SET UP CALL, Text Attribute – Bold On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.6.1	

2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.6.1	
4	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation is displayed with bold on]
6	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with bold on]
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 4.6.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
10	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.6.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.6.2	
13	ME → USER	ME displays "CONFIRMATION 2" during the user confirmation phase	
14	USER → ME	The user confirms the set up call	[user confirmation is displayed with bold off]
15	ME → □USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 2"	[second alpha identifier is displayed with bold off]
16	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
17	ME → UICC	TERMINAL RESPONSE 4.6.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
18	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
19	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.6.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.6.1	
22	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
23	USER → ME	The user confirms the set up call	[user confirmation is displayed with bold on]
24	ME □□USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with bold on]
25	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
26	ME → UICC	TERMINAL RESPONSE 4.6.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
27	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
28	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.6.3	
29	ME → UICC	FETCH	
30	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.6.3	
31	ME → USER	ME displays "CONFIRMATION 3" during the user confirmation phase	
32	USER → ME	The user confirms the set up call	[user confirmation is displayed with bold off]

33	ME → □USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 3"	[second alpha identifier is displayed with bold off]
34	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
35	ME → UICC	TERMINAL RESPONSE 4.6.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
36	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 4.6.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "CONFIRMATION 1"

Address
- TON: International
- NPI: ISDN / telephone numbering plan
- Dialling number string "012340123456p1p2"
- Alpha Identifier (call set up phase):"CALL 1"

Text Attribute (user confirmation phase)
- Formatting position: 0
- Formatting length: 14
- Formatting mode: Left Alignment, Normal Font, Bold On, Italic Off, Underline Off, Strikethrough Off
- Colour: Dark Green Foreground, Bright Yellow Background

Text Attribute (call set up phase)
- Formatting position: 0
- Formatting length: 6
- Formatting mode: Left Alignment, Normal Font, Bold On, Italic Off, Underline Off, Strikethrough Off
- Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	31	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	31	D0	04
	00	0E	10	B4	D0	04	00	06	10	B4		

PROACTIVE COMMAND: SET UP CALL 4.6.2

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "CONFIRMATION 2"

Address

TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 2"

Text Attribute (user confirmation phase)

Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Text Attribute (call set up phase)

Formatting position: 0
Formatting length: 6
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	32	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	32	D0	04
	00	0E	00	B4	D0	04	00	06	00	B4		

PROACTIVE COMMAND: SET UP CALL 4.6.3

Logically:

Command details

Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call

Device identities

Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 3"

Address

TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 3"

Coding:

BER-TLV:	D0	2C	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	33	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	33		

TERMINAL RESPONSE: SET UP CALL 4.6.1

Logically:

Command details

Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

27.22.4.13.4.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.6.

27.22.4.13.4.7 SET UP CALL (support of Text Attribute – Italic On)

27.22.4.13.4.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.4.7.2 Conformance requirement

The ME shall support the Proactive UICC: Set Up Call facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 8.6, clause 8.7, clause 8.12, clause 8.12.3, clause 8.70 and clause 5.2.

27.22.4.13.4.7.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier according to the italic text attribute configuration to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.4.7.4 Method of test

27.22.4.13.4.7.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and in the updated idle mode on the USS.

27.22.4.13.4.7.4.2 Procedure

Expected Sequence 4.7 (SET UP CALL, Text Attribute – Italic On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.7.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.7.1	
4	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation is displayed with italic on]
6	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with italic on]
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]

8	ME → UICC	TERMINAL RESPONSE 4.7.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
10	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.7.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.7.2	
13	ME → USER	ME displays "CONFIRMATION 2" during the user confirmation phase	
14	USER → ME	The user confirms the set up call	[user confirmation is displayed with italic off]
15	ME → □USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 2"	[second alpha identifier is displayed with italic off]
16	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
17	ME → UICC	TERMINAL RESPONSE 4.7.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
18	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
19	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.7.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.7.1	
22	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
23	USER → ME	The user confirms the set up call	[user confirmation is displayed with italic on]
24	ME □□USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with italic on]
25	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
26	ME → UICC	TERMINAL RESPONSE 4.7.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
27	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
28	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.7.3	
29	ME → UICC	FETCH	
30	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.7.3	
31	ME → USER	ME displays "CONFIRMATION 3" during the user confirmation phase	
32	USER → ME	The user confirms the set up call	[user confirmation is displayed with italic off]
33	ME → □USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 3"	[second alpha identifier is displayed with italic off]
34	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
35	ME → UICC	TERMINAL RESPONSE 4.7.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
36	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 4.7.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 1"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 1"
Text Attribute (user confirmation phase)
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background
Text Attribute (call set up phase)
Formatting position: 0
Formatting length: 6
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	31	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	31	D0	04
	00	0E	20	B4	D0	04	00	06	20	B4		

PROACTIVE COMMAND: SET UP CALL 4.7.2

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 2"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 2"
Text Attribute (user confirmation phase)
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background
Text Attribute (call set up phase)
Formatting position: 0
Formatting length: 6

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	32	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	32	D0	04
	00	0E	00	B4	D0	04	00	06	00	B4		

PROACTIVE COMMAND: SET UP CALL 4.7.3

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 3"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 3"

Coding:

BER-TLV:	D0	2C	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	33	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	33		

TERMINAL RESPONSE: SET UP CALL 4.7.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

27.22.4.13.4.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.7.

27.22.4.13.4.8 SET UP CALL (support of Text Attribute – Underline On)

27.22.4.13.4.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.4.8.2 Conformance requirement

The ME shall support the Proactive UICC: Set Up Call facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 8.6, clause 8.7, clause 8.12, clause 8.12.3, clause 8.70 and clause 5.2.

27.22.4.13.4.8.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier according to the underline text attribute configuration to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.4.8.4 Method of test

27.22.4.13.4.8.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and in the updated idle mode on the USS.

27.22.4.13.4.8.4.2 Procedure

Expected Sequence 4.8 (SET UP CALL, Text Attribute – Underline On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.8.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.8.1	
4	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation is displayed with underline on]
6	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with underline on]
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 4.8.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
10	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.8.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.8.2	
13	ME → USER	ME displays "CONFIRMATION 2" during the user confirmation phase	
14	USER → ME	The user confirms the set up call	[user confirmation is displayed with underline off]

15	ME → □USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 2"	[second alpha identifier is displayed with underline off]
16	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
17	ME → UICC	TERMINAL RESPONSE 4.8.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
18	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
19	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.8.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.8.1	
22	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
23	USER → ME	The user confirms the set up call	[user confirmation is displayed with underline on]
24	ME □□USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with underline on]
25	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
26	ME → UICC	TERMINAL RESPONSE 4.8.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
27	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
28	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.8.3	
29	ME → UICC	FETCH	
30	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.8.3	
31	ME → USER	ME displays "CONFIRMATION 3" during the user confirmation phase	
32	USER → ME	The user confirms the set up call	[user confirmation is displayed with underline off]
33	ME → □USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 3"	[second alpha identifier is displayed with Undeline off]
34	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
35	ME → UICC	TERMINAL RESPONSE 4.8.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
36	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 4.8.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "CONFIRMATION 1"

Address
- TON: International

NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 1"

Text Attribute (user confirmation phase)
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline On, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Text Attribute (call set up phase)
Formatting position: 0
Formatting length: 6
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline On, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	31	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	31	D0	04
	00	0E	40	B4	D0	04	00	06	40	B4		

PROACTIVE COMMAND: SET UP CALL 4.8.2

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call

Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 2"

Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 2"

Text Attribute (user confirmation phase)
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Text Attribute (call set up phase)
Formatting position: 0
Formatting length: 6
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	32	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	32	D0	04
	00	0E	00	B4	D0	04	00	06	00	B4		

PROACTIVE COMMAND: SET UP CALL 4.8.3

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 3"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 3"

Coding:

BER-TLV:	D0	2C	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	33	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	33		

TERMINAL RESPONSE: SET UP CALL 4.8.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

27.22.4.13.4.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.8.

27.22.4.13.4.9 SET UP CALL (support of Text Attribute – Strikethrough On)

27.22.4.13.4.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.4.9.2 Conformance requirement

The ME shall support the Proactive UICC: Set Up Call facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 8.6, clause 8.7, clause 8.12, clause 8.12.3, clause 8.70 and clause 5.2.

27.22.4.13.4.9.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier according to the strikethrough text attribute configuration to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.4.9.4 Method of test

27.22.4.13.4.9.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and in the updated idle mode on the USS.

27.22.4.13.4.9.4.2 Procedure

Expected Sequence 4.9 (SET UP CALL, Text Attribute – Strikethrough On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.9.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.9.1	
4	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation is displayed with strikethrough on]
6	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with strikethrough on]
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 4.9.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
10	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.9.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.9.2	
13	ME → USER	ME displays "CONFIRMATION 2" during the user confirmation phase	
14	USER → ME	The user confirms the set up call	[user confirmation is displayed with strikethrough off]
15	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 2"	[second alpha identifier is displayed with strikethrough off]
16	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
17	ME → UICC	TERMINAL RESPONSE 4.9.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
18	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
19	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.9.1	
20	ME → UICC	FETCH	

21	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.9.1	
22	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
23	USER → ME	The user confirms the set up call	[user confirmation is displayed with strikethrough on]
24	ME □□USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with strikethrough on]
25	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
26	ME → UICC	TERMINAL RESPONSE 4.9.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
27	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
28	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.9.3	
29	ME → UICC	FETCH	
30	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.9.3	
31	ME → USER	ME displays "CONFIRMATION 3" during the user confirmation phase	
32	USER → ME	The user confirms the set up call	[user confirmation is displayed with strikethrough off]
33	ME → □USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 3"	[second alpha identifier is displayed with strikethrough off]
34	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
35	ME → UICC	TERMINAL RESPONSE 4.9.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
36	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 4.9.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "CONFIRMATION 1"

Address
- TON: International
- NPI: ISDN / telephone numbering plan
- Dialling number string "012340123456p1p2"
- Alpha Identifier (call set up phase):"CALL 1"

Text Attribute (user confirmation phase)
- Formatting position: 0
- Formatting length: 14
- Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough On
- Colour: Dark Green Foreground, Bright Yellow Background

Text Attribute (call set up phase)
- Formatting position: 0
- Formatting length: 6

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough On
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	31	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	31	D0	04
	00	0E	80	B4	D0	04	00	06	80	B4		

PROACTIVE COMMAND: SET UP CALL 4.9.2

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 2"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 2"
Text Attribute (user confirmation phase)
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background
Text Attribute (call set up phase)
Formatting position: 0
Formatting length: 6
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	32	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	32	D0	04
	00	0E	00	B4	D0	04	00	06	00	B4		

PROACTIVE COMMAND: SET UP CALL 4.9.3

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network

Alpha identifier: "CONFIRMATION 3"

Address

TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 3"

Coding:

BER-TLV:	D0	2C	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	33	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	33		

TERMINAL RESPONSE: SET UP CALL 4.9.1

Logically:

Command details

Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

27.22.4.13.4.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.9.

27.22.4.13.4.10 SET UP CALL (support of Text Attribute – Foreground and Background Colour)

27.22.4.13.4.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.4.10.2 Conformance requirement

The ME shall support the Proactive UICC: Set Up Call facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 8.6, clause 8.7, clause 8.12, clause 8.12.3, clause 8.70 and clause 5.2.

27.22.4.13.4.10.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier according to the foreground and background colour text attribute configuration to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.4.10.4 Method of test

27.22.4.13.4.10.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and in the updated idle mode on the USS.

27.22.4.13.4.10.4.2 Procedure

Expected Sequence 4.10 (SET UP CALL, Text Attribute – Foreground and Background Colour)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.10.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.10.1	
4	ME → USER	ME displays "CONFIRMATION 1" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation is displayed with foreground and background colour according to Text Attribute configuration]
6	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 1"	[second alpha identifier is displayed with foreground and background colour according to Text Attribute configuration]
7	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	ME → UICC	TERMINAL RESPONSE 4.10.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	
10	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 4.10.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: SET UP CALL 4.10.2	
13	ME → USER	ME displays "CONFIRMATION 2" during the user confirmation phase	
14	USER → ME	The user confirms the set up call	[user confirmation is displayed with ME's default foreground and background colour]
15	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "CALL 2"	[second alpha identifier is displayed with ME's default foreground and background colour]
16	USS → ME	The ME receives the CONNECT message from the USS.	[The USS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
17	ME → UICC	TERMINAL RESPONSE 4.10.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
18	USER → ME	The user ends the call after 10 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 4.10.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 1"

Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 1"
Text Attribute (user confirmation phase)
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background
Text Attribute (call set up phase)
Formatting position: 0
Formatting length: 6
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Bright Yellow Foreground, Dark Green Background

Coding:

BER-TLV:	D0	38	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	31	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	31	D0	04
	00	0E	00	B4	D0	04	00	06	00	4B		

PROACTIVE COMMAND: SET UP CALL 4.10.2

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "CONFIRMATION 2"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"
Alpha Identifier (call set up phase):"CALL 2"

Coding:

BER-TLV:	D0	2C	81	03	01	10	00	82	02	81	83	85
	0E	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	20	32	86	09	91	10	32	04	21	43	65
	1C	2C	85	06	43	41	4C	4C	20	32		

TERMINAL RESPONSE: SET UP CALL 4.10.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

27.22.4.13.4.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.10.

27.22.4.13.5 SET UP CALL (UCS2 Display in ***Cyrillic***)

27.22.4.13.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.5.2 Conformance requirement

The ME shall support the Proactive UICC: Set Up Call facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 8.6, clause 8.7, clause 8.12, clause 8.12.3 and clause 5.2.

The ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in:

- ISO/IEC 10646 [17].

27.22.4.13.5.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier with UCS2 coding to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.5.4 Method of test

27.22.4.13.5.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.13.5.4.2 Procedure

Expected Sequence 5.1 (SET UP CALL with UCS2 – Cyrillic Characters, call confirmed by the user and connected)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 5.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 5.1.1	
4	ME → USER	ME displays "ЗДРАВСТВУЙТЕ" during user confirmation phase.	["ЗДРАВСТВУЙТЕ": "Hello" in Russian]
5	USER → ME	The user confirms the call set up	[user confirmation]
6	ME → USS	The ME attempts to set up a call to "+012340123456"	

7	USS → ME	The ME receives the CONNECT message from the USS.	
8	ME → UICC	TERMINAL RESPONSE 5.1.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 5 s. The ME returns to idle mode.	

PROACTIVE COMMAND: SET UP CALL 5.1.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "ЗДРАВСТВУЙТЕ"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456"

Coding:

BER-TLV:	D0	2D	81	03	01	10	00	82	02	81	83	85
	19	80	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15	86	07	91	10	32	04	21	43	65	

TERMINAL RESPONSE: SET UP CALL 5.1.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

Expected Sequence 5.2 (SET UP CALL, two alpha identifiers coded in UCS2 – Cyrillic Characters)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 5.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 5.2.1	
4	ME → USER	ME displays "ЗДРАВСТВУЙТЕ1" during the user confirmation phase	["ЗДРАВСТВУЙТЕ1": "Hello1" in Russian]
5	USER → ME	The user confirms the set up call	[user confirmation]

6	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "ЗДРАВСТВУЙТЕ2"	[second alpha identifier] ["ЗДРАВСТВУЙТЕ2": "Hello2" in Russian]
7	USS → ME	The ME receives the CONNECT message from the USS.	
8	ME → UICC	TERMINAL RESPONSE 5.2.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 5 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 5.2.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: UICC
- Destination device: Network

Alpha identifier: " ЗДРАВСТВУЙТЕ1"

Address
- TON: International
- NPI: ISDN / telephone numbering plan
- Dialling number string "012340123456"

Alpha Identifier (call set up phase):" ЗДРАВСТВУЙТЕ2"

Coding:

BER-TLV:	D0	4C	81	03	01	10	00	82	02	81	83	85
	1B	80	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15	00	31	86	07	91	10	32	04	21	43
	65	85	1B	80	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	00	32						

TERMINAL RESPONSE: SET UP CALL 5.2.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

27.22.4.13.5.5 Test requirement

The ME shall operate in the manner defined in expected sequences 5.1 to 5.2.

27.22.4.13.6 SET UP CALL (UCS2 Display in Chinese)

27.22.4.13.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.6.2 Conformance requirement

The ME shall support the Proactive UICC: Set Up Call facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 8.6, clause 8.7, clause 8.12, clause 8.12.3 and clause 5.2.

The ME shall support the UCS2 facility for the coding of the Chinese characters, as defined in:

- ISO/IEC 10646 [17].

27.22.4.13.6.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier with UCS2 coding to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.6.4 Method of test

27.22.4.13.6.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.13.6.4.2 Procedure

Expected Sequence 6.1 (SET UP CALL with UCS2 – Chinese characters, call confirmed by the user and connected)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 6.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 6.1.1	
4	ME → USER	ME displays "不忙" during user confirmation phase.	["不忙": "Not Busy" in Chinese]
5	USER → ME	The user confirms the call set up	[user confirmation]
6	ME → USS	The ME attempts to set up a call to "+012340123456"	
7	USS → ME	The ME receives the CONNECT message from the USS.	
8	ME → UICC	TERMINAL RESPONSE 6.1.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 5 s. The ME returns to idle mode.	

PROACTIVE COMMAND: SET UP CALL 6.1.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "不忙"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456"

Coding:

BER-TLV:	D0	19	81	03	01	10	00	82	02	81	83	85
	05	80	4E	0D	5F	D9	86	07	91	10	32	04
	21	43	65									

TERMINAL RESPONSE: SET UP CALL 6.1.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

Expected Sequence 6.2 (SET UP CALL, two alpha identifiers coded in UCS2 – Chinese characters)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 6.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 6.2.1	
4	ME → USER	ME displays "确定" during the user confirmation phase	["确定": "Confirmation" in Chinese]
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "打电话"	[second alpha identifier] ["打电话": "CALL" in Chinese]
7	USS → ME	The ME receives the CONNECT message from the USS.	
8	ME → UICC	TERMINAL RESPONSE 6.2.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 5 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 6.2.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "确定"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456"
Alpha Identifier (call set up phase):"打电话"

Coding:

BER-TLV:	D0	22	81	03	01	10	00	82	02	81	83	85
	05	80	78	6E	5B	9A	86	07	91	10	32	04
	21	43	65	85	07	80	62	53	75	35	8B	DD

TERMINAL RESPONSE: SET UP CALL 6.2.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

27.22.4.13.6.5 Test requirement

The ME shall operate in the manner defined in expected sequences 6.1 to 6.2.

27.22.4.13.7 SET UP CALL (UCS2 Display in Katakana)

27.22.4.13.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.7.2 Conformance requirement

The ME shall support the Proactive UICC: Set Up Call facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 8.6, clause 8.7, clause 8.12, clause 8.12.3 and clause 5.2.

The ME shall support the UCS2 facility for the coding of the Katakana characters, as defined in:

- ISO/IEC 10646 [17].

27.22.4.13.7.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier with UCS2 coding to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.7.4 Method of test

27.22.4.13.7.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.13.7.4.2 Procedure

Expected Sequence 7.1 (SET UP CALL with UCS2 – Katakana characters, call confirmed by the user and connected)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 7.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 7.1.1	
4	ME → USER	ME displays "ﾙ" during user confirmation phase.	[Character in Katakana]
5	USER → ME	The user confirms the call set up	[user confirmation]
6	ME → USS	The ME attempts to set up a call to "+012340123456"	
7	USS → ME	The ME receives the CONNECT message from the USS.	
8	ME → UICC	TERMINAL RESPONSE 7.1.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 5 s. The ME returns to idle mode.	

PROACTIVE COMMAND: SET UP CALL 7.1.1

Logically:

Command details
- Command number: 1
- Command type: SET UP CALL
- Command qualifier: only if not currently busy on another call

Device identities
- Source device: UICC
- Destination device: Network

Alpha identifier: "ﾙ"

Address
- TON: International
- NPI: ISDN / telephone numbering plan
- Dialling number string "012340123456"

Coding:

BER-TLV:	D0	17	81	03	01	10	00	82	02	81	83	85

	03	80	30	EB	86	07	91	10	32	04	21	43
	65											

TERMINAL RESPONSE: SET UP CALL 7.1.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

Expected Sequence 7.2 (SET UP CALL, two alpha identifiers coded in UCS2 – Katakana characters)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 7.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 7.2.1	
4	ME → USER	ME displays "ﾙﾚ1" during the user confirmation phase	[Character in Katakana]
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME → USS	The ME attempts to set up a call to "+012340123456". The ME displays "ﾙﾚ2".	[second alpha identifier] [Character in Katakana]
7	USS → ME	The ME receives the CONNECT message from the USS.	
8	ME → UICC	TERMINAL RESPONSE 7.2.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 5 s. The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 7.2.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "ﾙﾚ1"
Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456"
Alpha Identifier (call set up phase):"ﾙﾚ2"

Coding:

BER-TLV:	D0	20	81	03	01	10	00	82	02	81	83	85
	05	80	30	EB	00	31	86	07	91	10	32	04
	21	43	65	85	05	80	30	EB	00	32		

TERMINAL RESPONSE: SET UP CALL 7.2.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

27.22.4.13.7.5 Test requirement

The ME shall operate in the manner defined in expected sequences 7.1 to 7.2.

27.22.4.14 POLLING OFF

27.22.4.14.1 Definition and applicability

See clause 3.2.2.

27.22.4.14.2 Conformance requirement

The ME shall support the POLLING OFF as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.14, clause 6.8, clause 6.11, clause 8.6 and clause 8.7.

27.22.4.14.3 Test purpose

To verify that the ME cancels the effect of any previous POLL INTERVAL commands and does not effect UICC presence detection.

27.22.4.14.4 Method of test

27.22.4.14.4.1 Initial conditions

For sequence 1.1:

- The elementary files are coded as Toolkit default.
- The ME is connected to the USIM Simulator and to the USS.

For sequence 1.2:

- The default E-UTRAN/EPC UICC, the default E-UTRAN parameters are used.
- The ME is connected to the USIM Simulator and to the E-USS/NB-SS.

For sequence 1.3:

- The default NG-RAN UICC , the default NG-RAN parameters are used.
- The ME is connected to the USIM Simulator and to the NG-SS.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.14.4.2 Procedure

Expected Sequence 1.1 (POLLING OFF)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: POLL INTERVAL 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: POLL INTERVAL 1.1.1	Interval = 1 min
4	ME → UICC	TERMINAL RESPONSE: POLL INTERVAL 1.1.1 A or TERMINAL RESPONSE: POLL INTERVAL 1.1.1B	[command performed successfully, duration depends on the ME's capabilities]
5	UICC → ME	PROACTIVE COMMAND PENDING: POLLING OFF 1.1.2	
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: POLLING OFF 1.1.2	
8	ME → UICC	TERMINAL RESPONSE: POLLING OFF 1.1.2	[command performed successfully]
9	USER → ME	Call to be set up	A call shall be set up using the generic call setup for circuit switched call or to activate a PDP context.
10	ME → UICC	Periods of inactivity on the UICC-ME interfaceshall not exceed 30 seconds	In case of PDP context for a terminal that supports Rel-12 or later, exchange of data with the network may be required to guarantee the correct result of the test.
11	USER → ME	Call to be terminated 3 minutes after call setup	

PROACTIVE COMMAND: POLL INTERVAL 1.1.1

Logically:

Command details
Command number: 1
Command type: POLL INTERVAL
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Duration
Time unit: Minutes
Time interval: 1

Coding:

BER-TLV:	D0	0D	81	03	01	03	00	82	02	81	82	84
	02	00	01									

TERMINAL RESPONSE: POLL INTERVAL 1.1.1A

Logically:

Command details
Command number: 1
Command type: POLL INTERVAL
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Duration
Time unit: Minutes
Time interval: 1

Coding:

BER-TLV:	81	03	01	03	00	82	02	82	81	83	01	00
	84	02	00	01								

TERMINAL RESPONSE: POLL INTERVAL 1.1.1B

Logically:

Command details
Command number: 1
Command type: POLL INTERVAL
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Duration
Time unit: Seconds
Time interval: 60

Coding:

BER-TLV:	81	03	01	03	00	82	02	82	81	83	01	00
	84	02	01	3C								

Note: If the requested poll interval is not supported by the ME, the ME is allowed to use a different one as stated in TS 31.111 [15], clause 6.4.6.

PROACTIVE COMMAND: POLLING OFF 1.1.2

Logically:

Command details
Command number: 1
Command type: POLLING OFF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	04	00	82	02	81	82

TERMINAL RESPONSE: POLLING OFF 1.1.2

Logically:

Command details
Command number: 1
Command type: POLLING OFF
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	04	00	82	02	82	81	83	01	00

Expected Sequence 1.2 (POLLING OFF, E-UTRAN)

Step	Direction	MESSAGE / Action	Comments
1	ME → E-USS/NB-SS	The ME successfully performs EPS bearer context activation	
2	UICC → ME	PROACTIVE COMMAND PENDING: POLL INTERVAL 1.1.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: POLL INTERVAL 1.1.1	Interval = 1 min
5	ME → UICC	TERMINAL RESPONSE: POLL INTERVAL 1.1.1 A or TERMINAL RESPONSE: POLL INTERVAL 1.1.1B	[command performed successfully, duration depends on the ME's capabilities]
6	UICC → ME	PROACTIVE COMMAND PENDING: POLLING OFF 1.1.2	
7	ME → UICC	FETCH	
8	UICC → ME	PROACTIVE COMMAND: POLLING OFF 1.1.2	
9	ME → UICC	TERMINAL RESPONSE: POLLING OFF 1.1.2	[command performed successfully]
10	ME → UICC	Periods of inactivity on the UICC-ME interface shall not exceed 30 seconds	For a terminal that supports Rel-12 or later, exchange of data with the network is required to guarantee the correct result of the test.

Expected Sequence 1.3 (POLLING OFF, NG-RAN)

Step	Direction	MESSAGE / Action	Comments
1	ME → NG-SS	ME successfully REGISTER with NG-RAN cell, and an PDU Session is established successfully.	
2	UICC → ME	PROACTIVE COMMAND PENDING: POLL INTERVAL 1.1.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: POLL INTERVAL 1.1.1	Interval = 1 min

5	ME → UICC	TERMINAL RESPONSE: POLL INTERVAL 1.1.1 A or TERMINAL RESPONSE: POLL INTERVAL 1.1.1B	[command performed successfully, duration depends on the ME's capabilities]
6	UICC → ME	PROACTIVE COMMAND PENDING: POLLING OFF 1.1.2	
7	ME → UICC	FETCH	
8	UICC → ME	PROACTIVE COMMAND: POLLING OFF 1.1.2	
9	ME → UICC	TERMINAL RESPONSE: POLLING OFF 1.1.2	[command performed successfully]
10	ME → UICC	Periods of inactivity on the UICC-ME interface shall not exceed 30 seconds	Exchange of data with the network is required to guarantee the correct result of the test.

27.22.4.14.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 - 1.3.

27.22.4.15 PROVIDE LOCAL INFORMATION

27.22.4.15.1 Definition and applicability

See clause 3.2.2.

27.22.4.15.2 Conformance requirement

The ME shall support the PROVIDE LOCAL INFORMATION facility as defined in:

- TS 31.111 [15] clause 6.4.15.

27.22.4.15.3 Test purpose

To verify that the ME returns the following requested local information within a TERMINAL RESPONSE:

- location information:
  - Mobile Country Code (MCC);
  - Mobile Network Code (MNC);
  - Location Area Code (LAC); and
  - cell ID of the current serving cell;
- the IMEI of the ME;
- the Network Measurement Results and the BCCH channel list;
- the current date, time and time zone;
- the current ME language setting;
- the Timing Advance;
- the Access Technology;
- the IMEISV;
- the Search Mode change;
- the Battery charge State;

- the UTRAN intra- and inter-frequency measurements;
- the E-UTRAN intra- and inter-frequency measurements
- the CSG ID list and corresponding HNB names of surrounding CSG cells (if class "q" is supported);
- the list of slice(s) information;
- the CAG information list and the corresponding CAG Human-readable network name per CAG ID (if available in the broadcasted information to the ME) of detected CAG cells (if class "ag" is supported);
- the NG-RAN/Satellite NG-RAN Primary Timing Advance Information.

If the local information is stored in the ME; otherwise, sends the correct error code to the UICC in the TERMINAL RESPONSE.

To verify that the ME returns required error information in the TERMINAL RESPONSE in case requested information cannot be provided due to missing network coverage.

To verify that the E-UTRAN cell identifier is correctly transmitted when requesting the location information while accessing an E-UTRAN.

To verify that the NG-RAN cell identifier is correctly transmitted when requesting the location information while accessing an NG-RAN SA mode Cell.

To verify that the NG-RAN cell identifier is correctly transmitted when requesting the location information while accessing an NG-RAN Cell.

To verify that the SAT-NG-SS cell identifier is correctly transmitted when requesting the location information while accessing an SAT-NG-RAN Cell.

To verify that the Served S-NSSAIs are correctly transmitted in the TERMINAL RESPONSE when requesting the list of slice(s) information.

To verify that the ME reports available measurement information when requesting the Network Measurement Results while on an NG-RAN.

To verify that the ME reports available measurement information when requesting the Network Measurement Results while on an NG-RAN.

To verify that when the list of slice(s) information is requested, the Serving PLMN served S-NSSAIs list, along with Allowed S-NSSAIs list shall be returned. When Allowed S-NSSAI mapping information is available with slice(s) information, the list of PLMN Allowed S-NSSAIs with S-NSSAI mapping shall be returned. When Allowed S-NSSAI mapping information is not available with slice(s) information, the list of PLMN Allowed S-NSSAI shall be provided without S-NSSAI mapping information. When the S-NSSAI is supported only on a subset of Tracking Area(s) of the current Registration Area, the tracking area identity list where the S-NSSAI is supported shall be returned.

An S-NSSAI, as specified in 3GPP TS 23.003 [30], is comprised of:

- A Slice/Service type (SST)
- A Slice Differentiator (SD)

To verify that the CAG information list and the corresponding CAG Human-readable network name per CAG ID for specified PLMN are correctly transmitted in the TERMINAL RESPONSE when requesting the CAG information list and the corresponding CAG Human-readable network name per CAG ID of detected CAG cells when ME is camped on a CAG cell. When ME is not camped on a CAG cell, the TERMINAL RESPONSE shall contain 'ME currently not able to process command – no service' and optionally may return CAG cell selection status indicating ‘not camped on a CAG cell’ with additional information on the mode of selection.

To verify that ME provides the list of rejected slice(s) information in TERMINAL RESPONSE when the list of rejected slice(s) information is requested. When S-NSSAI mapping information is available for rejected slice(s), the list of rejected slice(s) with S-NSSAI mapping information shall be returned. When S-NSSAI mapping information is not available for rejected slice(s), the list of rejected slice(s) without S-NSSAI mapping shall be provided. When the S-NSSAI is rejected only on a subset of Tracking Area(s) of the current Registration Area, the tracking area identity list where the S-NSSAI is rejected shall be returned.

27.22.4.15.4 Method of tests

27.22.4.15.4.1 Initial conditions

The ME is connected to the USIM Simulator.

For sequences 1.1 to 1.7 and 1.9 to 1.13 the UICC shall contain elementary files coded as defined in the default values for USIM Application Toolkit testing from clause 27.22.2A.

To operate the sequences 1.14 to 1.18 the E-UTRAN/EPC UICC as defined in clause 27.22.2B.1 shall be used.

To operate the sequences 1.22 to 1.29, 1.31 and 1.32 the NG-RAN UICC as defined in clause 27.22.2D.1 shall be used.

Prior to these test sequences the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

To operate the sequence 1.30 the NG-RAN UICC supporting CAG, as defined in clause 27.22.2D.4 shall be used.

To operate the sequence 1.33 and 1.34 the NG-RAN UICC as defined in clause 27.22.2D.5 shall be used.

Sequences 1.2, 1.4, 1.5, 1.9 and 1.11 do not need any System Simulator connection.

For sequences 1.1, 1.7, 1.12 and 1.13 the ME is connected to a USS, for sequences 1.15, 1.16 and 1.18 the ME is connected to an E-USS only, for sequences 1.14 and 1.17 the ME is connected to an E-USS or NB-SS. In all listed sequences it has to perform the location update procedure or routing area update or combined update procedure.

For sequences 1.10 the ME is connected to an SS, a USS or an E-USS.

For sequences 1.22 to 1.34 the ME is connected to NG-SS. For all sequences but 1.30 it has to perform the Registration procedure.

The browser's cache shall have been cleared before execution of the test sequence. For sequence 1.24, 1.25, 1.26, 1.26A, 1.26B, 1.33 and 1.34 the URSP rules stored in the ME are:

URSP:

Rule Precedence =1

Traffic Descriptor:

- DNN=TestGp.rs

Route Selection Descriptor:

- Precedence=1
- Network Slice Selection, S-NSSAI: 01 01 01 03 (ST: eMBB, SD: 010103)
- SSC Mode Selection: SSC Mode 1
- Access Type preference: 3GPP access

Rule Precedence =2

Traffic Descriptor:

- DNN=Test12.rs

Route Selection Descriptor:

- Precedence=1
- Network Slice Selection, S-NSSAI: 01 01 01 02 (ST: eMBB, SD: 010102)
- SSC Mode Selection: SSC Mode 1
- Access Type preference: 3GPP access

Rule Precedence = <lowest priority>

Traffic Descriptor: *

Route Selection Descriptor:

- Precedence =1
- SSC Mode Selection: SSC Mode 1
- Access Type preference: 3GPP access

The NG-RAN parameters of the system simulator are:

- - Mobile Country Code (MCC) = 001;
- - Mobile Network Code (MNC) = 01;
- - Tracking Area Code (TAC) = 000001;
- - NG-RAN/Satellite NG-RAN Cell Identifier (NCI) = 0001 (36 bits);
- - Allowed S-NSSAIs = 01010103 (SST: eMBB, SD: 010103), 01010102 (SST: eMBB, SD: 010102);
- - NG-RAN/Satellite NG-RAN Primary Timing Advance = 0;

The NG-RAN parameters of the system simulator for sequence 1.26A is:

- - Mobile Country Code (MCC) = 001;
- - Mobile Network Code (MNC) = 02;
- - Tracking Area Code (TAC) = 000001;
- - NG-RAN/Satellite NG-RAN Cell Identifier (NCI) = 0001 (36 bits);
- - Allowed S-NSSAIs is configured to include mapping information =

  '01010103' (SST: eMBB, SD: 010103) '01010103' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010103)

  '01010102' (SST: eMBB, SD: 010102) '01010102' (Mapped HPLMN SST: eMBB, mapped HPLMN SD:010102);
- - NG-RAN/Satellite NG-RAN Primary Timing Advance = 0;

The NG-RAN parameters of the system simulator for sequence 1.26B is:

- - Mobile Country Code (MCC) = 001;
- - Mobile Network Code (MNC) = 02;
- - Tracking Area Code (TAC) = 000001;
- - NG-RAN/Satellite NG-RAN Cell Identifier (NCI) = 0001 (36 bits);
- - Allowed S-NSSAIs is configured to include mapping information:

  '01010106' (SST: eMBB, SD: 010106) '01010103' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010103)

  '01010104' (SST: eMBB, SD: 010104) '01010102' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010102);
- - NG-RAN/Satellite NG-RAN Primary Timing Advance = 0;

The NG-RAN parameters of the system simulator for sequence 1.33 is:

- - Mobile Country Code (MCC) = 001;

- - Mobile Network Code (MNC) = 01;
- - Tracking Area Code (TAC) = 000001;
- - NG-RAN/Satellite NG-RAN Cell Identifier (NCI) = 0001 (36 bits);
- - Allowed S-NSSAIs = 01010103 (SST: eMBB, SD: 010103);
- - Rejected S-NSSAIs = 01010102 (SST: eMBB, SD: 010102);
- - NG-RAN/Satellite NG-RAN Primary Timing Advance = 0;

The NG-RAN parameters of the system simulator for sequence 1.34 is:

- - Mobile Country Code (MCC) = 001;
- - Mobile Network Code (MNC) = 02;
- - Tracking Area Code (TAC) = 000001;
- - NG-RAN/Satellite NG-RAN Cell Identifier (NCI) = 0001 (36 bits);
- - Allowed S-NSSAIs with mapping information:

  '01010103' (SST: eMBB, SD: 010103) '01010103' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010103);
- - Rejected S-NSSAIs with mapping information:

  '01010102' (SST: eMBB, SD: 010102) '01010102' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010102);
- - NG-RAN/Satellite NG-RAN Primary Timing Advance = 0;

The E-UTRAN/NB-IoT parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 0001;
- E-UTRAN Cell Identity value = 0001 (28 bits);

The UTRAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001;

The GERAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001;
- Timing advance = 0;
- Neighbour allocations = 561, 565, 568, 569, 573, 575, 577, 581, 582 and 585.

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001;
- Timing advance = 0;
- Neighbour allocations = 561, 565, 568, 569, 573, 575, 577, 581, 582 and 585.

Expected sequence 1.3 and 1.6 shall be used on a USS setting up only a GERAN or PCS 1900 cell and expected sequences 1.7 and 1.12 shall be used on a USS setting up only a UTRAN cell.

Expected sequence 1.12 requires two UTRA cells on the same frequency and 1.13 requires two UTRA cells on different frequencies.

Expected sequences 1.14 and 1.17 shall be used on a E-USS/NB-SS setting up only a E-UTRAN/NB-IoT cell.

Expected sequence 1.22, 1.23, 1.24, 1.25, 1.26, 1.26A, 1.26B, 1.27, 1.33 and 1.34 shall be used on a NG-SS setting up only a NG-RAN cell.

Expected sequence 1.15 requires two E-UTRA cells on the same frequency and 1.16 requires two E-UTRA cells on different frequencies, with second cell having EARFCN less than maxEARFCN. For both sequences if the USIM request is triggered in the RRC_CONNECTED state, the system simulator shall configure the corresponding frequency measurement for a sufficient period before sending the USIM request.

Expected sequence 1.18 requires two E-UTRAN cells configured in CSG mode.

For sequence 1.18 the default E-UTRAN/EPC UICC is used and the E-USS transmits on two cells with the following parameters:

Network parameters for Cell 1:

- TAI (MCC/MNC/TAC): 001/01/0001.
- Access control: unrestricted.
- csg-Indication: TRUE
- csg-Identity: 01 (27 bits)
- Home (e)NB Name Home ONE

Network parameters for Cell 2:

- TAI (MCC/MNC/TAC): 001/01/0002.
- Access control: unrestricted.
- csg-Indication: TRUE
- csg-Identity: 02 (27 bits)
- Home (e)NB Name Home TWO

Expected sequences 1.28 and 1.29 require two NG-RAN cells on the same NR band.

For sequences 1.28 and 1.29, the default NG-RAN UICC is used and the two cells with the following parameters:

Network parameters for Cell 1:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 000001;

- NG-RAN/Satellite NG-RAN Cell Identifier (NCI) = 0001 (36 bits);
- Allowed S-NSSAIs = 01010103 (SST: eMBB, SD: 010103), 01010102 (SST: eMBB, SD: 010102);

Network parameters for Cell 2:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 000001;
- NG-RAN/Satellite NG-RAN Cell Identifier (NCI) = 0002 (36 bits);

For sequence 1.28, the Cell 1 is the serving cell, and Cell 2 is the intra-frequency neighbour cell.

Note – Cell 1 and Cell 2 are configured with proper cell reference power, as well as SIB1 and SIB2 cellReselection Thresholds and Priority values that ensure ME will not reselect to Cell 2.

For sequence 1.29, the Cell 1 is the serving cell, and Cell 2 is the inter-frequency neighbour cell.

Note – Cell 1 is configured with SIB4 *interFreqCarrierFreqList* includes *dl-CarrierFreq* of Cell 2 Downlink NR SSB ARFCN; Cell 1 and Cell 2 are configured with proper cell reference power, as well as SIB1 and SIB4 with the cellReselection Thresholds and Priority values that ensure ME will not reselect to Cell 2.

For sequences 1.28 and 1.29, the ME is connected to Cell 1 and it has performed the Registration procedure.

Expected sequence 1.30 requires two NR CAG cells.

For sequence 1.30, the NG-SS transmits two NR CAG cells with following configuration:

Cell 1:

- Mobile Country Code (MCC) = 244;
- Mobile Network Code (MNC) = 083;
- Tracking Area Code (TAC) = 000001;

Cell 2:

- Mobile Country Code (MCC) = 244;
- Mobile Network Code (MNC) = 084;
- Tracking Area Code (TAC) = 000002;

CAG cell 1 has the following parameters configured for NPN-Identity and corresponding HRNN in SIB1 and SIB 10 respectively:

Entry 1:

- Mobile Country Code (MCC) = 244;
- Mobile Network Code (MNC) = 083;
- CAG ID: 00 00 00 01
- No CAG human-readable network name broadcasted

Entry 2:

- Mobile Country Code (MCC) = 244;
- Mobile Network Code (MNC) = 084;
- CAG ID: 00 00 00 02
- CAG human-readable network name: ′CAG-00000002′

Expected sequence 1.31 shall be used on a SAT-NG-SS setting up only a Satellite NG-RAN cell with following configuration:

The Satellite NG-RAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 000001;
- NG-RAN/Satellite NG-RAN Cell Identifier (NCI) = 0001 (36 bits);

27.22.4.15.4.2 Procedure

Expected Sequence 1.1 (PROVIDE LOCAL INFORMATION, Local Info (MCC, MNC, LAC & Cell ID))

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.1.1A or TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.1.1B	[Command performed successfully, MCC MNC LAC and Cell Identity as USS, option A shall apply for 3GPP parameters] [Command performed successfully, MCC MNC LAC and Cell Identity as USS, option B shall apply for PCS1900 parameters]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.1.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "00" Location information (MCC MNC LAC and Cell Identity)
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	00	82	02	81	82

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.1.1A

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "00" Location information (MCC MNC LAC and Cell Identity)
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Location Information

MCC & MNC: MCC = 001, MNC = 01
Location Area Code: 0001
Cell Identity Value: 0001
Extended Cell Identity Value: RNC-id value (for Rel-4 onwards), see also Note 2

Coding:

BER-TLV:	81	03	01	26	00	82	02	82	81	83	01	00
	93	Note 1	00	F1	10	00	01	00	01	Note 2		

Note 1: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 2: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.1.1B

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "00" Location information (MCC MNC LAC and Cell Identity)
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Location Information
MCC & MNC: MCC = 001, MNC = 011
Location Area Code: 0001
Cell Identity Value: 0001

Coding:

BER-TLV:	81	03	01	26	00	82	02	82	81	83	01	00
	93	07	00	11	10	00	01	00	01			

Expected Sequence 1.2 (PROVIDE LOCAL INFORMATION, IMEI of the ME)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.2.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.2.1	[Command performed successfully, IMEI as declared in A.2/23, coded according to TS 24.008 [10], clause 10.5.1, but spare digit shall be zero when transmitted by the ME]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.2.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "01" IMEI of the ME

Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	01	82	02	81	82

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.2.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "01" IMEI of the ME
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
IMEI
IMEI of the ME: The IMEI of the ME

The result coding depends on the Mobile IMEI value as declared in table A.2/23.

Coding:

BER-TLV:	81	03	01	26	01	82	02	82	81	83	01	00
	94	08	XX	XX	XX	XX	XX	XX	XX	XX		

As an example, if the IMEI of the mobile is "123456789012345" then XX XX XX XX XX XX XX XX = 1A 32 54 76 98 10 32 04. For further details see also TS 24.008 [10], clause 10.5.1.

Expected Sequence 1.3 (PROVIDE LOCAL INFORMATION, Network Measurement Results (NMR))

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.3.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.3.1	[Command performed successfully, NMR as USS]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.3.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "02" Network Measurement Results
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	02	82	02	81	82

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.3.1

The actual values of the measurements are not tested.

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "02" Network Measurement Results
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Network Measurement Results RXLEV-FULL-SERVING-CELL=52, BA not used, DTX not used, as an example in the BER-TLV)
BCCH channel list 561, 565, 568, 569, 573, 575, 577, 581, 582 and 585

Coding:

BER-TLV:	81	03	01	26	02	82	02	82	81	83	01	00
	96	10	34	34	00	00	00	00	00	00	00	00
	00	00	00	00	00	00	9D	0D	8C	63	58	E2
	39	8F	63	F9	06	45	91	A4	90			

Expected Sequence 1.4 (PROVIDE LOCAL INFORMATION, Date, Time, Time Zone)

See ETSI TS 102 384 [26] in clause 27.22.4.15.4.2, Expected Sequence 1.4.

Expected Sequence 1.5 (PROVIDE LOCAL INFORMATION, Language setting)

See ETSI TS 102 384 [26] in clause 27.22.4.15.4.2, Expected Sequence 1.5.

Expected Sequence 1.6 (PROVIDE LOCAL INFORMATION, Timing advance)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.6.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.6.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.6.1	[Command performed successfully]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.6.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "05" Timing Advance
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	05	82	02	81	82

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.6.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "05" Timing Advance
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Timing Advance 2 bytes
ME status: "00" ME is in idle state
Timing Advance: 0

Coding:

BER-TLV:	81	03	01	26	05	82	02	82	81	83	01	00
	AE	02	00	00								

Expected Sequence 1.7 (PROVIDE LOCAL INFORMATION, Access Technology

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.7.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.7.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.7.1	[Command performed successfully]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.7.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "06" Access Technology
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	06	82	02	81	82

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.7.1

Logically:

Command details
Command number: 1

Command type: PROVIDE LOCAL INFORMATION
Qualifier: "06" Access Technology
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Access Technology
Technology: UTRAN

Coding:

BER-TLV:	81	03	01	26	06	82	02	82	81	83	01	00
	3F	01	03									

Expected Sequence 1.8 (Void)

Expected Sequence 1.9 (PROVIDE LOCAL INFORMATION, IMEISV of the terminal)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.9.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.9.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.9.1	[Command performed successfully, IMEISV as declared in A.2/24, coded as defined in TS 24.008 [10]]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.9.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "08" IMEISV of the ME
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	08	82	02	81	82

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.9.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "08" IMEISV of the ME
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
IMEISV

IMEISV of the ME: The IMEISV of the ME

The result coding depends on the ME IMEISV value as declared in table A.2/24.

Coding:

BER-TLV:	81	03	01	26	08	82	02	82	81	83	01	00
	E2	09	XX	XX	XX	XX	XX	XX	XX	XX	XX	

As an example, if the IMEISV of the ME is "1234567890123456" then XX XX XX XX XX XX XX XX XX= 13 32 54 76 98 10 32 54 F6. For further details see also TS 24.008 [10].

Expected Sequence 1.10 (PROVIDE LOCAL INFORMATION, Network Search Mode)

Step	Direction	MESSAGE / Action	Comments
1	User	The user sets the ME to manual network selection mode	
2	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.10.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.10.1	
5	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.10.1	[Command performed successfully]
6	User	The user selects automatic network selection mode	
7	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.10.2	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.10.2	
10	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.10.2	[Command performed successfully]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.10.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "09" Search Mode
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	09	82	02	81	82

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.10.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "09" Search Mode
Device identities
Source device: ME
Destination device: UICC
Result

General Result: Command performed successfully
Network Search Mode Manual mode

Coding:

BER-TLV:	81	03	01	26	09	82	02	82	81	83	01	00
	65	01	00									

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.10.2

same as PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.10.1

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.10.2

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "09" Search Mode
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Network Search Mode Automatic mode

Coding:

BER-TLV:	81	03	01	26	09	82	02	82	81	83	01	00
	65	01	01									

Expected Sequence 1.11 (PROVIDE LOCAL INFORMATION, charge state of the battery)

See ETSI TS 102 384 [26] in clause 27.22.4.15.4.2, Expected Sequence 1.11.

Expected Sequence 1.12 (PROVIDE LOCAL INFORMATION, Intra-Frequency UTRAN Measurements)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.12.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.12.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.12.1	[Command performed successfully]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.12.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "02" Network Measurement Results
Device identities

Source device: UICC
Destination device: ME
UTRAN/E-UTRAN Measurement Qualifier
UTRAN/E-UTRAN Measurement Qualifier: "01" Intra-frequency measurements

Coding:

BER-TLV:	D0	0C	81	03	01	26	02	82	02	81	82	69
	01	01										

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.12.1

The actual values of the measurements are not tested.

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "02" Network Measurement Results
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Network Measurement Results MEASUREMENT REPORT message
intraFreqMeasuredResultsList

Coding:

BER-TLV:	81	03	01	26	02	82	02	82	81	83	01	00
	96	Note 1	80	Note 2	Note 3	Note 4						

Note 1: This is the length indicator for the following bytes which represent the Measurement report coded in ASN.1 and therefore the length cannot be foreseen.

Note2: This byte shall be checked bitwise against pattern: 0000 xxxx (x – don't care).

Note 3: This byte shall be checked bitwise against pattern: x000 0111 (x – don't care).

Note 4: The remaining bytes shall not be verified.

The network measurement result indicated by the sequence of bytes above is:

MeasurementReport
measurementIdentity
measuredResults: intraFreqMeasuredResultsList (0)
intraFreqMeasuredResultsList
CellMeasuredResults
modeSpecificInfo: fdd (0)
fdd
primaryCPICH-Info
cpich-Ec-N0
cpich-RSCP
pathloss

Expected Sequence 1.13 (PROVIDE LOCAL INFORMATION, Inter-frequency UTRAN Measurements)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.13.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.13.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.13.1	[Command performed successfully]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.13.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "02" Network Measurement Results
Device identities
Source device: UICC
Destination device: ME
UTRAN/E-UTRAN Measurement Qualifier
UTRAN/E-UTRAN Measurement Qualifier: "02" Inter-frequency measurements

Coding:

BER-TLV:	D0	0C	81	03	01	26	02	82	02	81	82	69
	01	02										

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.13.1

The actual values of the measurements are not tested.

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "02" Network Measurement Results
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Network Measurement Results MEASUREMENT REPORT message
interFreqMeasuredResultsList

Coding:

BER-TLV:	81	03	01	26	02	82	02	82	81	83	01	00
	96	Note 1	80	Note 2	Note 3	Note 4	Note 4	Note 5	Note 6	Note 7		

Note 1: This is the length indicator for the following bytes which represent the Measurement report coded in ASN.1 and therefore the length cannot be foreseen.

Note2: This byte shall be checked bitwise against pattern: 0001 xxx1 (x – don't care).

Note 3: This byte shall be checked bitwise against pattern: 1100 xxxx (x – don't care).

Note 4: This byte shall not be verified.

Note 5: This byte shall be checked bitwise against pattern: xxxx xx00 (x – don't care).

Note 6: This byte shall be checked bitwise against pattern: 0011 1xxx (x – don't care).

Note 7: The remaining bytes shall not be verified.

The network measurement result indicated by the sequence of bytes above is:

MeasurementReport
measurementIdentity
MeasuredResults: interFreqMeasuredResultsList InterFreqMeasuredResultsList (1)
interFreqMeasuredResultsList
InterFreqMeasuredResults
frequencyInfo
utra-CarrierRSSI
interFreqCellMeasuredResultsList
CellMeasuredResults
modeSpecificInfo: fdd (0)
fdd
primaryCPICH-Info
cpich-Ec-N0
cpich-RSCP
pathloss

Expected Sequence 1.14 (PROVIDE LOCAL INFORMATION, Access Technology, E-UTRAN)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.14.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.14.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.14.1	[Command performed successfully]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.14.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "06" Access Technology
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	06	82	02	81	82

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.14.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "06" Access Technology
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Access Technology
Technology: E-UTRAN

Coding:

BER-TLV:	81	03	01	26	06	82	02	82	81	83	01	00
	3F	01	08									

Expected Sequence 1.15 (PROVIDE LOCAL INFORMATION, E-UTRAN Intra-Frequency Measurements)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.15.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.15.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.15.1	[Command performed successfully]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.15.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "02" Network Measurement Results
Device identities
Source device: UICC
Destination device: ME
UTRAN/E-UTRAN Measurement Qualifier
UTRAN/E-UTRAN Measurement Qualifier: "05" E-UTRAN Intra-frequency measurements

Coding:

BER-TLV:	D0	0C	81	03	01	26	02	82	02	81	82	69
	01	05										

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.15.1

The actual values of the measurements are not tested.

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION

Qualifier: "02" Network Measurement Results

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Network Measurement Results MEASUREMENT REPORT message measResultNeighCells

Coding:

BER-TLV:	81	03	01	26	02	82	02	82	81	83	01	00
	96	Note 1	02	Note 2	Note 3	Note 4	Note 5					

Note 1: This is the length indicator for the following bytes which represent the Measurement report coded in ASN.1 and therefore the length cannot be foreseen.

Note 2: This byte shall be checked bitwise against pattern: 0000 xxxx (x – don't care).

Note 3: This byte shall not be verified.

Note 4: This byte shall be checked bitwise against pattern: x000 xxxx (x – don't care).

Note 5: The remaining bytes shall not be verified.

The network measurement result indicated by the sequence of bytes above is:

Network Measurement results:
measurementReport
criticalExtensions: c1 (0)
c1: measurementReport-r8 (0)
measurementReport-r8
measResults
… *{Not Verified}*
measResultNeighCells:
… *{Not Verified}*

Expected Sequence 1.16 (PROVIDE LOCAL INFORMATION, E-UTRAN Inter-Frequency Measurements)

Step	Direction	MESSAGE / Action	Comments
1	ME	Terminal is in RRC idle state	
2	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.16.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.16.1	
5	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.16.1	[Command performed successfully, limited service]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.16.1

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "02" Network Measurement Results

Device identities
Source device: UICC
Destination device: ME
UTRAN/E-UTRAN Measurement Qualifier
UTRAN/E-UTRAN Measurement Qualifier: "06" E-UTRAN Inter-frequency measurements

Coding:

BER-TLV:	D0	0C	81	03	01	26	02	82	02	81	82	69
	01	06										

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.16.1

The actual values of the measurements are not tested.

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "02" Network Measurement Results
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Network Measurement Results Frequency value of inter-frequency E-UTRAN cell and MEASUREMENT REPORT message
measResultNeighCells

Coding:

BER-TLV:	81	03	01	26	02	82	02	82	81	83	01	00
	96	Note 1	Note 2	Note 2	02	Note 3	Note 4	Note 5	Note 6			

Note 1: This is the length indicator for the following bytes which contain 2 bytes with the frequency value coded as the ARFCN-ValueEUTRA followed by the Measurement report coded in ASN.1 and therefore the length cannot be foreseen.

Note 2: This is the frequency of the second E-UTRA cell, coded as ARFCN-ValueEUTRA. This byte shall not be verified.

Note 3: This byte shall be checked bitwise against pattern: 0000 xxxx (x – don't care).

Note 4: This byte shall not be verified.

Note 5: This byte shall be checked bitwise against pattern: x000 xxxx (x – don't care).

Note 6: The remaining bytes shall not be verified.

Expected Sequence 1.17 (PROVIDE LOCAL INFORMATION, E-UTRAN Local Info (MCC, MNC, TAC & E-UTRAN Cell ID))

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.1.1	
2	ME → UICC	FETCH	

3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.17.1	

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.1.1

Sames as PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.1.1 in expected sequence 1.1

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.17.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "00" Location information (MCC MNC TAC and E-UTRAN Cell Identity)
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Location Information
MCC & MNC: MCC = 001, MNC = 01
Tracking Area Code:0001
E-UTRAN Cell Identifier: 0001 (28 bits)

Coding:

BER-TLV:	81	03	01	26	00	82	02	82	81	83	01	00
	93	09	00	F1	10	00	01	00	00	00	1F	

Expected Sequence 1.18 (PROVIDE LOCAL INFORMATION, Discovery of surrounding CSG cells)

Step	Direction	MESSAGE / Action	Comments
1	E-USS	Cell 1 is enabled, with csg-indication set to TRUE Cell 2 disabled	
2	ME	A manual CSG cell selection is performed.	
3	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.18.1	
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.18.1	1 cell in the list
6	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.18.1	[Command performed successfully]
7	E-USS	Cell 2 is enabled, with csg-indication set to TRUE	
8	ME	A manual CSG cell selection is performed.	
9	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.18.1	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.18.1	2 cells in the list
12	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.18.2	[Command performed successfully]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.18.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "11" CSG ID list and corresponding HNB name
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	11	82	02	81	82	

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.18.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "11" CSG ID list and corresponding HNB name
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
CSG ID list Identifier
PLMN MCC = 001, MNC = 01
CSG ID and Name
CSG ID 01 (27 bits)
HNB name Home ONE

Coding:

BER-TLV:	81	03	01	26	11	82	02	82	81	83	01	00
	7E	1C	80	03	00	F1	10	81	15	00	00	00
	3F	80	00	48	00	6F	00	6D	00	65	00	20
	00	4F	00	4E	00	45						

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.18.2

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "11" CSG ID list and corresponding HNB name
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
CSG ID list Identifier
PLMNMCC = 001, MNC = 01
CSG ID and Name
CSG ID 01 (27 bits)
HNB name Home ONE
CSG ID and Name
CSG ID 02 (27 bits)
HNB name Home TWO

BER-TLV:	81	03	01	26	11	82	02	82	81	83	01	00
	7E	33	80	03	00	F1	10	81	15	00	00	00
	3F	80	00	48	00	6F	00	6D	00	65	00	20
	00	4F	00	4E	00	45	81	15	00	00	00	5F
	80	00	48	00	6F	00	6D	00	65	00	20	00
	54	00	57	00	4F							

Expected Sequence 1.19 (PROVIDE LOCAL INFORMATION, Location Information for Multiple Access Technologies)

TBD

Expected Sequence 1.20 (PROVIDE LOCAL INFORMATION, NMR for Multiple Access Technologies)

TBD

Expected Sequence 1.21 (PROVIDE LOCAL INFORMATION, current access technologies, Multiple Access Technologies)

TBD

NOTE: The above test sequences (1.19, 1.20, 1.21) on Multiple Access Technologies imply the support of one or more non-3GPP access technologies and therefore can not be tested within 3GPP.

Expected Sequence 1.22 (PROVIDE LOCAL INFORMATION, NG-RAN Local Info (MCC, MNC, TAC & NG-RAN Cell ID))

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.22.1	

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.1.1

Same as PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.1.1 in expected sequence 1.1

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.22.1

Logically:

Command details
- Command number: 1
- Command type: PROVIDE LOCAL INFORMATION
- Qualifier: "00" Location information (MCC MNC TAC and NG-RAN Cell Identity)

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully
- Location Information
- MCC & MNC: MCC = 001, MNC = 01
- Tracking Area Code: 000001
- NG-RAN Cell Identifier: 0001 (36 bits)

Coding:

BER-TLV:	81	03	01	26	00	82	02	82	81	83	01	00

	93	0B	00	F1	10	00	00	01	00	00	00	00
	1F											

Expected Sequence 1.23 (PROVIDE LOCAL INFORMATION, Access Technology, NG-RAN)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.14.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.14.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.23.1	[Command performed successfully]

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.23.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "06" Access Technology
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Access Technology
Technology: 3GPP NG-RAN

Coding:

BER-TLV:	81	03	01	26	06	82	02	82	81	83	01	00
	3F	01	0A									

Expected Sequence 1.24 (PROVIDE LOCAL INFORMATION, slice(s) information)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Internet PDU session using DNN "TestGp.rs" is configured in the terminal	DNN: "TestGp.rs" for internet PDU
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	DNN=TestGp.rs, S-NSSAI = 01010103
4	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.24.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.24.1	
7	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.24.1A or PROVIDE LOCAL INFORMATION 1.24.1B	[Command performed successfully] Option B only applies for ME implemented as per Rel18 and above.

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.24.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "15" slices information
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	15	82	02	81	82

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.24.1A

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "15" slices information
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Slices Information
Slices information (served)
Number of Served S-NSSAIs: 1
Served S-NSSAI: '01 01 01 03' (SST: eMBB, SD: 010103)

Coding:

BER-TLV:	81	03	01	26	15	82	02	82	81	83	01	00
	D6	05	01	01	01	01	03					

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.24.1B

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "15" slices information
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Slices Information
Slices information (served)
Number of Served S-NSSAIs: 1
Served S-NSSAI: '01 01 01 03' (SST: eMBB, SD: 010103)

Allowed Slices information:
Length of allowed S-NSSAI (n) elements (X=4n): 8
Allowed S-NSSAI: '01 01 01 03' (SST: eMBB, SD: 010103)
Allowed S-NSSAI: '01 01 01 02' (SST: eMBB, SD: 010102)

Allowed Slices information with S-NSSAI mapping: empty (zero length)

Coding:

BER-TLV:	81	03	01	26	15	82	02	82	81	83	01	00
	D6	05	01	01	01	01	03	78	08	01	01	01
	03	01	01	01	02	77	00					

Expected Sequence 1.25 (PROVIDE LOCAL INFORMATION, slice(s) information), no served slice

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Internet PDU session using DNN "TestGp.rs" is configured in the terminal	DNN: "TestGp.rs" for internet PDU
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	DNN=TestGp.rs, S-NSSAI = 01010103
4	NG-SS → ME	Request to release all established PDU sessions	PDU SESSION RELEASE COMMAND sent by NG-SS for all established PDU session
5	ME → NG-SS	All PDU Session are released.	PDU SESSION RELEASE COMPLETE received by NG-SS for all PDU SESSION RELEASE COMMAND
6	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.24.1	
7	ME → UICC	FETCH	
8	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.24.1	
9	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.25.1A or PROVIDE LOCAL INFORMATION 1.25.1B	[Command performed successfully] Option B only applies for ME implemented as per Rel18 and above.

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.25.1A

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "15" slices information
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Slices Information
Slices information (served)
Number of Served S-NSSAIs: 0

Coding:

BER-TLV:	81	03	01	26	15	82	02	82	81	83	01	00
	D6	01	00									

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.25.1B

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION

Qualifier: "15" slices information

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Slices Information

Slices information (served)

Number of Served S-NSSAIs: 0

Allowed Slices information:

Length of allowed S-NSSAI (n) elements (X=4n): 8

Allowed S-NSSAI: '01 01 01 03' (SST: eMBB, SD: 010103)

Allowed S-NSSAI: '01 01 01 02' (SST: eMBB, SD: 010102)

Allowed Slices information with S-NSSAI mapping: empty (zero length)

Coding:

BER-TLV:	81	03	01	26	15	82	02	82	81	83	01	00
	D6	01	00	78	08	01	01	01	03	01	01	01
	02	77	00									

Expected Sequence 1.26 (PROVIDE LOCAL INFORMATION, slice(s) information), several served slices

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Internet PDU session using DNN "TestGp.rs" is configured in the terminal. The second PDU session using DNN "Test12.rs" is configured in the terminal	DNN: "TestGp.rs" for internet PDU
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	Internet PDU Session is established successfully.	DNN=TestGp.rs, First Served S-NSSAI = 01010103
4	USER → ME	Initiate a data call using DNN=”Test12.rs”	
5	ME → NG-SS	Second PDU Session is established successfully.	DNN=Test12.rs, Second Served S-NSSAI = 01010102
6	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.24.1	
7	ME → UICC	FETCH	
8	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.24.1	
9	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.26.1A or PROVIDE LOCAL INFORMATION 1.26.1B	[Command performed successfully] Option B only applies for ME implemented as per Rel18 and above.

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.26.1A

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "15" slices information

Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Slices Information
Slices information (served)
Number of Served S-NSSAIs: 2
First Served S-NSSAI: '01 01 01 03' (SST: eMBB, SD: 010103)
Second Served S-NSSAI: '01 01 01 02' (SST: eMBB, SD: 010102)

Coding:

BER-TLV:	81	03	01	26	15	82	02	82	81	83	01	00
	D6	09	02	01	01	01	03	01	01	01	02	

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.26.1B

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "15" slices information
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Slice Information
Slices information (served)
Number of Served S-NSSAIs: 2
First Served S-NSSAI: '01 01 01 03' (SST: eMBB, SD: 010103)
Second Served S-NSSAI: '01 01 01 02' (SST: eMBB, SD: 010102)

Allowed Slices information:
Length of allowed S-NSSAI (n) elements (X=4n): 8
Allowed S-NSSAI: '01 01 01 03' (SST: eMBB, SD: 010103)
Allowed S-NSSAI: '01 01 01 02' (SST: eMBB, SD: 010102)

Allowed Slices information with S-NSSAI mapping: empty (zero length)

Coding:

BER-TLV:	81	03	01	26	15	82	02	82	81	83	01	00
	D6	09	02	01	01	01	03	01	01	01	02	78
	08	01	01	01	03	01	01	01	02	77	00	

Expected Sequence 1.26A (PROVIDE LOCAL INFORMATION, slice(s) information), several served slices, allowed slices with same mapping information

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Internet PDU session using DNN "TestGp.rs" is configured in the terminal. The second PDU session using DNN "Test12.rs" is configured in the terminal	DNN: "TestGp.rs" for internet PDU
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	

3	ME → NG-SS	Internet PDU Session is established successfully.	DNN=TestGp.rs, First Served S-NSSAI = 01010103
4	USER → ME	Initiate a data call using DNN="Test12.rs"	
5	ME → NG-SS	Second PDU Session is established successfully.	DNN=Test12.rs, Second Served S-NSSAI = 01010102
6	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.24.1	
7	ME → UICC	FETCH	
8	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.24.1	
9	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.26A.1	[Command performed successfully]

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.26A.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "15" slices information
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Slice Information
Slices information (served)
Number of Served S-NSSAIs: 2
First Served S-NSSAI: '01 01 01 03' (SST: eMBB, SD: 010103)
Second Served S-NSSAI: '01 01 01 02' (SST: eMBB, SD: 010102)

Allowed Slices information: empty (zero length)

Allowed Slices information with S-NSSAI mapping:
Length of allowed S-NSSAI with mapping information elements: 16
Allowed S-NSSAI with mapping information element 1: '01010103' (SST: eMBB, SD: 010103) '01010103' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010103)
Allowed S-NSSAI with mapping information element 2: '01010102' (SST: eMBB, SD: 010102) '01010102' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010102)

Coding:

BER-TLV:	81	03	01	26	15	82	02	82	81	83	01	00
	D6	09	02	01	01	01	03	01	01	01	02	78
	00	77	10	01	01	01	03	01	01	01	03	01
	01	01	01	02	01	01	01	02				

Expected Sequence 1.26B (PROVIDE LOCAL INFORMATION, slice(s) information), several served slices, allowed slices with different mapping information

Step	Direction	MESSAGE / Action	Comments

1	USER → ME	Internet PDU session using DNN "TestGp.rs" is configured in the terminal. The second PDU session using DNN "Test12.rs" is configured in the terminal	DNN: "TestGp.rs" for internet PDU
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	Internet PDU Session is established successfully.	DNN=TestGp.rs, First Served S-NSSAI = 01010106
4	USER → ME	Initiate a data call using DNN=”Test12.rs”	
5	ME → NG-SS	Second PDU Session is established successfully.	DNN=Test12.rs, Second Served S-NSSAI = 01010104
6	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.24.1	
7	ME → UICC	FETCH	
8	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.24.1	
9	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.26B.1	[Command performed successfully]

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.26B.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "15" slices information
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Slice Information
Slices information (served)
Number of Served S-NSSAIs: 2
First Served S-NSSAI: '01 01 01 06' (SST: eMBB, SD: 010106)
Second Served S-NSSAI: '01 01 01 04' (SST: eMBB, SD: 010104)

Allowed Slices information: empty (zero length)

Allowed Slices information with S-NSSAI mapping:
Length of allowed S-NSSAI with mapping information elements: 16
Allowed S-NSSAI with mapping information element 1: '01010106' (SST: eMBB, SD: 010106) '01010103' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010103)
Allowed S-NSSAI with mapping information element 2: '01010104' (SST: eMBB, SD: 010104) '01010102' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010102)

Coding:

BER-TLV:	81	03	01	26	15	82	02	82	81	83	01	00
	D6	09	02	01	01	01	06	01	01	01	04	78
	00	77	10	01	01	01	06	01	01	01	03	01
	01	01	01	04	01	01	01	02				

Expected Sequence 1.27 (PROVIDE LOCAL INFORMATION, Timing advance in NG-RAN)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.27.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.27.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.27.1	[Command performed successfully]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.27.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "05" Timing Advance
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	05	82	02	81	82

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.27.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "05" Timing Advance
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
NG-RAN Primary Timing Advance Information: 4 bytes
ME status: "00" ME is in idle state
NG-RAN Primary Timing Advance

Coding:

BER-TLV:	81	03	01	26	05	82	02	82	81	83	01	00
	B1	04	00	Note 1	Note 1	Note 1						

Note 1: This is the NG-RAN Primary Timing Advance value. This byte shall not be verified.

Expected Sequence 1.28 (PROVIDE LOCAL INFORMATION, NG-RAN Intra-Frequency Measurements)

Step	Direction	MESSAGE / Action	Comments

1	NG-SS → ME	*RRCReconfiguration* message including *MeasConfig* to setup NR measurement and reporting for intra-frequency event A4 (*measId* 1)	*measObject* 1 is configured with *ssbFrequency* IE equals the ARFCN for NR Cell 2; *reportConfigNR* 1 is configured with *a4-Threshold rsrp* IE value that A4 event is triggered at step 4.
2	ME → NG-SS	*RRCReconfigurationComplete*	
3	NG-SS	Cell 2 is enabled	
4	ME → NG-SS	*MeasurementReport* message to report event A4 (*measId* 1) with the measured RSRP value for NR Cell 2	
5	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.28.1	
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.28.1	
8	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.28.1	[Command performed successfully]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.28.1

Logically:

Command details
- Command number: 1
- Command type: PROVIDE LOCAL INFORMATION
- Qualifier: "02" Network Measurement Results

Device identities
- Source device: UICC
- Destination device: ME

NG-RAN Measurement Qualifier
- NG-RAN Measurement Qualifier: "0A"NG-RAN Intra-frequency measurements

Coding:

BER-TLV:	D0	0C	81	03	01	26	02	82	02	81	82	69
	01	0A										

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.28.1

The actual values of the measurements are not tested.

Logically:

Command details
- Command number: 1
- Command type: PROVIDE LOCAL INFORMATION
- Qualifier: "02" Network Measurement Results

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully
- Network Measurement Results MEASUREMENT REPORT message measResultNeighCells

Coding:

BER-TLV:	81	03	01	26	02	82	02	82	81	83	01	00

	96	Note 1	08	Note 2	Note 3	Note 4	Note 5					

Note 1: This is the length indicator for the following bytes which represent the Measurement report coded in ASN.1 and therefore the length cannot be foreseen.

Note 2: This byte shall be checked bitwise against pattern: 0000 xxxx (x – don't care).

Note 3: This byte shall not be verified.

Note 4: This byte shall be checked bitwise against pattern: x000 xxxx (x – don't care).

Note 5: The remaining bytes shall not be verified.

Expected Sequence 1.29 (PROVIDE LOCAL INFORMATION, NG-RAN Inter-Frequency Measurements)

Step	Direction	MESSAGE / Action	Comments
1	NG-SS → ME	*RRCReconfiguration* message including *MeasConfig* to setup NR measurement and reporting for inter-frequency event A4 (*measId* 1)	*measObject* 1 is configured with *ssbFrequency* IE equals the ARFCN for NR Cell 1 and measObject 2 is configured with ssbFrequency IE equals the ARFCN for NR Cell 2; *reportConfigNR* 1 is configured with *a4-Threshold rsrp* IE value that ensures A4 is triggered at step 4.
2	ME → NG-SS	*RRCReconfigurationComplete*	
3	NG-SS	Cell 2 is enabled	
4	ME → NG-SS	*MeasurementReport* message to report event A4 (*measId* 1) with the measured RSRP value for NR Cell 2	
5	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.29.1	
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.29.1	
8	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.29.1	[Command performed successfully, limited service]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.29.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "02" Network Measurement Results
Device identities
Source device: UICC
Destination device: ME
NG-RAN Measurement Qualifier
NG-RAN Measurement Qualifier: "0B" NG-RAN Inter-frequency measurements

Coding:

BER-TLV:	D0	0C	81	03	01	26	02	82	02	81	82	69
	01	0B										

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.29.1

The actual values of the measurements are not tested.

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "02" Network Measurement Results
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Network Measurement Results Frequency value of inter-frequency NG-RAN cell and MEASUREMENT REPORT message
measResultNeighCells

Coding:

BER-TLV:	81	03	01	26	02	82	02	82	81	83	01	00
	96	Note 1	Note 2	Note 2	Note 2	08	Note 3	Note 4	Note 5	Note 6		

Note 1: This is the length indicator for the following bytes which contain 3 bytes with the frequency value coded as the ARFCN-ValueNR followed by the Measurement report coded in ASN.1 and therefore the length cannot be foreseen.

Note 2: This is the frequency of the second NR cell, coded as ARFCN-ValueNR. This byte shall not be verified.

Note 3: This byte shall be checked bitwise against pattern: 0000 xxxx (x – don't care).

Note 4: This byte shall not be verified.

Note 5: This byte shall be checked bitwise against pattern: x000 xxxx (x – don't care).

Note 6: The remaining bytes shall not be verified.

Expected Sequence 1.30 (PROVIDE LOCAL INFORMATION, CAG information list)

Step	Direction	Message / Action	Comments
1	NG-SS	Cell 1 and Cell 2 are disabled.	
2	USER → ME	ME is switched on	ME does not register to any cell and remains in no service state.
3	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.30.1	
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.30.1	
6	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.30.1	[Command performed successfully]
7	NG-SS	Cell 1 is enabled.	
8	ME → NG-SS	The ME successfully registers to Cell 1	
9	NG-SS	Cell 2 is enabled.	Cell 2 is powered up at lower power level such that UE does not perform reselection to Cell 2.
10	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.30.1	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.30.1	

13	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.30.2	[Command performed successfully]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.30.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "16" CAG information list and the corresponding human-readable network name per PLMN
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	16	82	02	81	82

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.30.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "16" CAG information list and the corresponding human-readable network name per CAG ID
Device identities
Source device: ME
Destination device: UICC
Result
General result: ME currently unable to process command
Additional information on result: No service

Coding:

BER-TLV:	81	03	01	26	16	82	02	82	81	83	02	20
	04											

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.30.2

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "16" CAG information list and the corresponding human-readable network name per CAG ID
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
CAG Cell selection status
Byte 1, general information: '01' (camped on a CAG cell)
Byte 2, additional information: '81' (Result of another CAG selection type)
CAG information list
Two sets of CAG information in the list
1st CAG information

MCC = 244, MNC = 083
Ignore 'CAG only' bit = true
1st CAG ID
CAG ID: 00 00 00 01
2nd CAG information
MCC = 244, MNC = 084
Ignore 'CAG only' bit = true
2nd CAG ID
CAG ID: 00 00 00 02
CAG Human-readable network name list
Two CAG Human-readable network names in the list
1st CAG Human-readable network name: empty
2nd CAG Human-readable network name: 'CAG-00000002'

Coding:

BER-TLV:	81	03	01	26	16	82	02	82	81	83	01	00
	55	02	01	81	56	12	08	42	34	80	04	00
	00	00	01	08	42	44	80	04	00	00	00	02
	57	10	80	00	80	0C	43	41	47	2D	30	30
	30	30	30	30	30	32						

Expected Sequence 1.31 (PROVIDE LOCAL INFORMATION, Primary Timing advance in Satellite NG-RAN)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.27.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.27.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.31.1	[Command performed successfully]

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.31.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "05" Timing Advance
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
NG-RAN/Satellite NG-RAN Primary Timing Advance: 4 bytes
ME status: "00" ME is in idle state
NG-RAN/Satellite NG-RAN Primary Timing Advance

Coding:

BER-TLV:	81	03	01	26	05	82	02	82	81	83	01	00
	B1	04	00	Note 1	Note 1	Note 1						

Note 1: This is the NG-RAN/Satellite NG-RAN Primary Timing Advance value. This byte shall not be verified.

Expected Sequence 1.32 (PROVIDE LOCAL INFORMATION, Access Technology, Satellite NG-RAN)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.14.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.14.1	
4	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.32.1	[Command performed successfully]

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.32.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "06" Access Technology
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Access Technology
Technology: 3GPP Satellite NG-RAN

Coding:

BER-TLV:	81	03	01	26	06	82	02	82	81	83	01	00
	3F	01	0C									

Expected Sequence 1.33 (PROVIDE LOCAL INFORMATION, Rejected slice(s) information) - without S-NSSAI mapping

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Internet PDU session using DNN "TestGp.rs" is configured in the terminal	DNN: "TestGp.rs" for internet PDU
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	DNN=TestGp.rs, S-NSSAI = 01010103
4	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.33.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.33.1	
7	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.33.1	[Command performed successfully].

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.33.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION

Qualifier: "17" rejected slices information
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	17	82	02	81	82

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.33.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "17" rejected slices information
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Rejected slices information with S-NSSAI mapping: empty (zero length)
Rejected slices information:
Length of rejected S-NSSAI elements: 4
Rejected S-NSSAI: '01 01 01 01' (SST: eMBB, SD: 010101)

Coding:

BER-TLV:	81	03	01	26	17	82	02	82	81	83	01	00
	57	00	31	04	01	01	01	01				

Expected Sequence 1.34 (PROVIDE LOCAL INFORMATION, Rejected slice(s) information) - with S-NSSAI mapping

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Internet PDU session using DNN "TestGp.rs" is configured in the terminal	DNN: "TestGp.rs" for internet PDU
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	DNN=TestGp.rs, S-NSSAI = 01010103
4	UICC → ME	PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.34.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.34.1	
7	ME → UICC	TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.34.1	[Command performed successfully].

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.34.1

Same as PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.33.1 in expected sequence 1.33.1

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.34.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier: "17" rejected slices information
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Rejected Slice information with S-NSSAI mapping:
Length of allowed S-NSSAI with mapping information elements: 08
Rejected S-NSSAI with mapping information element 1: '01010102' (SST: eMBB, SD: 010102)
'01010102' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010102)
Rejected Slices information: empty (zero length)

Coding:

BER-TLV:	81	03	01	26	17	82	02	82	81	83	01	00
	57	08	01	01	01	02	01	01	01	02	31	00

27.22.4.15.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.32.

27.22.4.16 SET UP EVENT LIST

27.22.4.16.1 SET UP EVENT LIST (normal)

27.22.4.16.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.16.1.2 Conformance requirement

The ME shall support the Proactive UICC: Set Up Event List facility as defined in:

- TS 31.111 [15] clause 6.4.16 and clause 6.6.16.

Additionally the ME shall support the Event Download: Call Connect and the Event Download: Call Disconnected mechanism as defined in:

- TS 31.111 [15] clause 11.2, clause 11.2.1, clause 11.2.2, clause 11.3, clause 11.3.1 and clause 11.3.2.

27.22.4.16.1.3 Test purpose

To verify that the ME accepts a list of events that it shall monitor the current list of events supplied by the UICC, is able to have this current list of events replaced and is able to have the list of events removed.

To verify that when the ME has successfully accepted or removed the list of events, it shall send TERMINAL RESPONSE (OK) to the UICC and when the ME is not able to successfully accept or remove the list of events, it shall send TERMINAL RESPONSE (Command beyond ME's capabilities).

27.22.4.16.1.4 Method of test

27.22.4.16.1.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.16.1.4.2 Procedure

Expected Sequence 1.1 (SET UP EVENT LIST, Set Up Call Connect Event)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	UICC → ME	PROACTIVE UICC SESSION ENDED	
6	USS → ME	SETUP 1.1.1	[Incoming call alert]
7	USER → ME	User shall accept the incoming call	
8	ME → USS	CONNECT 1.1.1	
9	ME → UICC	ENVELOPE: EVENT DOWNLOAD CALL CONNECTED 1.1.1	[Call Connected Event]
10	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
- Command number: 1
- Command type: SET UP EVENT LIST
- Command qualifier: '00'

Device identities
- Source device: UICC
- Destination device: ME

Event list
- Event 1: Call Connected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	01										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details
- Command number: 1
- Command type: SET UP EVENT LIST
- Command qualifier: '00'

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

SET UP 1.1.1

Logically:

Transaction identifier
TI value: 0 (bit 5-7)
Address
TON: "Unknown"
NPI: "ISDN/ telephone numbering plan"
Dialling number string: "9876"

CONNECT 1.1.1

Logically:

Transaction identifier
TI value: 0 (bit 5-7)
TI flag: 1 (bit 8)

ENVELOPE: EVENT DOWNLOAD CALL CONNECTED 1.1.1

Logically

Event list
Event 1: Call Connected
Device identities
Source device: ME
Destination device: UICC
Transaction identifier
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 1 (bit 8)

Coding:

BER-TLV:	D6	0A	99	01	01	82	02	82	81	9C	01	80

Expected Sequence 1.2 (SET UP EVENT LIST, Replace Event)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1	[Call Connected and Call Disconnected Events]
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.2.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.2.2	
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.2.2	[Call Disconnected Event]
8	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.2.2	
9	UICC → ME	PROACTIVE UICC SESSION ENDED	
10	USS → ME	SETUP 1.2.2	[Incoming call alert]
11	USER → ME	User shall accept the incoming call	
12	ME → USS	CONNECT 1.2.2	
13	USS → ME	DISCONNECT 1.2.2	

14	ME → UICC	ENVELOPE: EVENT DOWNLOAD CALL DISCONNECT 1.2.2A or ENVELOPE: EVENT DOWNLOAD CALL DISCONNECT 1.2.2B	[Call Disconnect Event]
15	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: Call Connected
Event 2: Call Disconnected

Coding:

BER-TLV:	D0	0D	81	03	01	05	00	82	02	81	82	99
	02	01	02									

TERMINAL RESPONSE: SET UP EVENT LIST 1.2.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

PROACTIVE COMMAND: SET UP EVENT LIST 1.2.2

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: Call Disconnected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	02										

TERMINAL RESPONSE: SET UP EVENT LIST 1.2.2

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

SET UP 1.2.2

Logically:

Transaction identifier
TI value: 0 (bit 5-7)
TI flag: 0 (bit 8)
Address
TON: "Unknown"
NPI: "ISDN/ telephone numbering plan"
Dialling number string: "9876"

CONNECT 1.2.2

Logically:

Transaction identifier
TI value: 0 (bit 5-7)
TI flag: 1 (bit 8)

DISCONNECT 1.2.2

Logically:

Transaction identifier
TI value: 0 (bit 5-7)
TI flag: 0 (bit 8)
Cause
Value: Normal call clearing

ENVELOPE: EVENT DOWNLOAD CALL DISCONNECTED 1.2.2A

Logically:

Event list
Event 1: Call Disconnected
Device identities
Source device: Network
Destination device: UICC
Transaction identifier
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 0 (bit 8)

Cause

Value: Normal call clearing

Coding:

BER-TLV:	D6	0E	99	01	02	82	02	83	81	9C	01	00
	9A	02	60	90								

ENVELOPE: EVENT DOWNLOAD CALL DISCONNECTED 1.2.2B

Logically:

Event list

Event 1: Call Disconnected

Device identities

Source device: Network

Destination device: UICC

Transaction identifier

TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified

TI flag: 0 (bit 8)

Cause

Value: Normal call clearing

Coding:

BER-TLV:	D6	0E	99	01	02	82	02	83	81	9C	01	00
	9A	02	E0	90								

Expected Sequence 1.3 (SET UP EVENT LIST, Remove Event)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.3.1	[Call Connected Event]
	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.3.1	
4	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.3.2	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.3.2	[Remove Event]
7	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.3.2	
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
10	USS → ME	SETUP 1.3.2	[Incoming call alert]
11	USER → ME	User shall accept the incoming call	
12	ME → USS	CONNECT 1.3.2	
13	ME → UICC	No ENVELOPE: EVENT DOWNLOAD (call connected) sent	
14	USS → ME	DISCONNECT 1.3.2	

PROACTIVE COMMAND: SET UP EVENT LIST 1.3.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities

Source device: UICC
Destination device: ME

Event list

Event 1: Call Connected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	01										

TERMINAL RESPONSE: SET UP EVENT LIST 1.3.1

Logically:

Command details

Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

PROACTIVE COMMAND: SET UP EVENT LIST 1.3.2

Logically:

Command details

Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities

Source device: UICC
Destination device: ME
Event list: Empty

Coding:

BER-TLV:	D0	0B	81	03	01	05	00	82	02	81	82	99
	00											

TERMINAL RESPONSE: SET UP EVENT LIST 1.3.2

Logically:

Command details

Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

SET UP 1.3.2

Logically:

Transaction identifier
Ti value: 0 (bit 5-7)
Ti flag: 0 (bit 8)
Address
TON: "Unknown"
NPI: "ISDN/ telephone numbering plan"
Dialling number string: "9876"

CONNECT 1.3.2

Logically:

Transaction identifier
Ti value: 0 (bit 5-7)
Ti flag: 1 (bit 8)

DISCONNECT 1.3.2

Logically:

Transaction identifier
Ti value: 0 (bit 5-7)
Ti flag: 0 (bit 8)
Cause
Value: Normal call clearing

Expected Sequence 1.4 (SET UP EVENT LIST, Remove Event on ME Power Cycle)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.4.1	[Call Connected Event]
	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.4.1	
4	UICC → ME	PROACTIVE UICC SESSION ENDED	
5	User → ME	Power off ME	
6	User → ME	Power on ME	
7	USS → ME	SETUP 1.4.1	[Incoming call alert]
8	USER → ME	User shall accept the incoming call	
9	ME → USS	CONNECT 1.4.1	
10	ME → UICC	No ENVELOPE: EVENT DOWNLOAD (call connected) sent	
11	USS → ME	DISCONNECT 1.4.1	

PROACTIVE COMMAND: SET UP EVENT LIST 1.4.1

Logically:

Command details
Command number: 1

Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities

Source device: UICC
Destination device: ME

Event list

Event 1: Call Connected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	01										

TERMINAL RESPONSE: SET UP EVENT LIST 1.4.1

Logically:

Command details

Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

SET UP 1.4.1

Logically:

Transaction identifier

Ti value: 0 (bit 5-7)
Ti flag: 0 (bit 8)

Address

TON: "Unknown"
NPI: "ISDN/ telephone numbering plan"
Dialling number string: "9876"

CONNECT 1.4.1

Logically:

Transaction identifier

Ti value: 0 (bit 5-7)
Ti flag: 1 (bit 8)

DISCONNECT 1.4.1

Logically:

Transaction identifier

Ti value: 0 (bit 5-7)
Ti flag: 0 (bit 8)

Cause

Value: Normal call clearing

27.22.4.16.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.4.

27.22.4.17 PERFORM CARD APDU

27.22.4.17.1 PERFORM CARD APDU (normal)

27.22.4.17.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.17.1.2 Conformance requirement

The ME shall support the Proactive UICC: Perform Card APDU facility as defined in:

- TS 31.111 [15] clause 6.1, clause 5.2, clause 6.4.17, clause 6.6.17, clause 6.8, clause 8.6, clause 8.7, clause 8.35, clause 8.36 and clause 8.12.9.

Additionally the ME shall support multiple card operation as defined in:

- TS 31.111 [15] clause 6.4.19, clause 6.6.19, clause 6.4.18 and clause 6.6.18.

27.22.4.17.1.3 Test purpose

To verify that the ME sends an APDU command to the additional card identified in the PERFORM CARD APDU proactive UICC command, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the UICC.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

In this particular case a special Test-SIM (TestSIM) with T=0 protocol is chosen as additional card for the additional ME card reader (for coding of the TestSIM see annex A).

27.22.4.17.1.4 Method of test

27.22.4.17.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The TestSIM is inserted in the additional ME card reader.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

The elementary files of the TestSIM are coded as defined in annex A. Another card with different parameters may be used as TestSIM to execute these tests. In this case the USIM Simulator shall take into account the corresponding response data.

27.22.4.17.1.4.2 Procedure

Expected Sequence 1.1 (PERFORM CARD APDU, card reader 1, additional card inserted, Select MF and Get Response)

See ETSI TS 102 384 [26] in clause 27.22.4.17.1.4.2, Expected Sequence 1.1.

Expected Sequence 1.2 (PERFORM CARD APDU, card reader 1, additional card inserted, Select DF GSM, Select EF PLMN , Update Binary, Read Binary on EF PLMN)

See ETSI TS 102 384 [26] in clause 27.22.4.17.1.4.2, Expected Sequence 1.2.

Expected Sequence 1.3 (PERFORM CARD APDU, card reader 1, card inserted, card powered off)

See ETSI TS 102 384 [26] in clause 27.22.4.17.1.4.2, Expected Sequence 1.3.

Expected Sequence 1.4 (PERFORM CARD APDU, card reader 1, no card inserted)

See ETSI TS 102 384 [26] in clause 27.22.4.17.1.4.2, Expected Sequence 1.4.

Expected Sequence 1.5 (PERFORM CARD APDU, card reader 7 (which is not the valid card reader identifier of the additional ME card reader))

See ETSI TS 102 384 [26] in clause 27.22.4.17.1.4.2, Expected Sequence 1.5.

27.22.4.17.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.5.

27.22.4.17.2 PERFORM CARD APDU (detachable card reader)

27.22.4.17.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.17.2.2 Conformance requirement

27.22.4.17.2.3 Test purpose

To verify that the ME sends an APDU command to the additional card identified in the PERFORM CARD APDU proactive UICC command, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the UICC.

27.22.4.17.2.4 Method of test

27.22.4.17.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The card reader shall be detached from the ME.

27.22.4.17.2.4.2 Procedure

Expected Sequence 2.1 (PERFORM CARD APDU, card reader 1, card reader detached)

See ETSI TS 102 384 [26] in clause 27.22.4.17.2.4.2, Expected Sequence 2.1.

27.22.4.17.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

27.22.4.18 POWER OFF CARD

27.22.4.18.1 POWER OFF CARD (normal)

27.22.4.18.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.18.1.2 Conformance requirement

The ME shall support the Proactive UICC: Power Off Card facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.18, clause 6.6.18, clause 8.6, clause 8.7, clause 8.12, clause 8.12.9, clause 5.2 and annex H.

27.22.4.18.1.3 Test purpose

To verify that the ME closes a session with the additional card identified in the POWER OFF CARD proactive UICC command, and successfully returns result in the TERMINAL RESPONSE command send to the UICC.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

27.22.4.18.1.4 Method of test

27.22.4.18.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The ME card reader is connected to aSIM Simulator (SIM2). Instead of a SIM Simulator a card with different parameters may be used as SIM2 to execute these tests. In this case the USIM Simulator shall take into account the corresponding response data.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

Prior to this test the ME shall have powered on the SIM Simulator (SIM2).

27.22.4.18.1.4.2 Procedure

Expected Sequence 1.1 (POWER OFF CARD, card reader 1)

See ETSI TS 102 384 [26] in clause 27.22.4.18.1.4.2, Expected Sequence 1.1.

Expected Sequence 1.2 (POWER OFF CARD, card reader 1, no card inserted)

See ETSI TS 102 384 [26] in clause 27.22.4.18.1.4.2, Expected Sequence 1.2.

27.22.4.18.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.2.

27.22.4.18.2 POWER OFF CARD (detachable card reader)

27.22.4.18.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.18.2.2 Conformance requirement

Void.

27.22.4.18.2.3 Test purpose

To verify that the ME closes a session with the additional card identified in the POWER OFF CARD proactive UICC command, and successfully returns result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.18.2.4 Method of test

27.22.4.18.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The ME card reader is connected to a SIM Simulator (SIM2).

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to this test the ME shall have powered on the SIM Simulator (SIM2).

The card reader shall be detached from the ME.

27.22.4.18.2.4.2 Procedure

Expected Sequence 2.1 (POWER OFF CARD, card reader 1, no card reader attached)

See ETSI TS 102 384 [26] in clause 27.22.4.18.2.4.2, Expected Sequence 2.1.

27.22.4.18.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

27.22.4.19 POWER ON CARD

27.22.4.19.1 POWER ON CARD (normal)

27.22.4.19.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.19.1.2 Conformance requirement

The ME shall support the Proactive UICC: Power On Card facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.19, clause 6.6.19, clause 8.6, clause 8.7, clause 8.12, clause 8.12.9, clause 8.34, clause 5.2 and annex H.

27.22.4.19.1.3 Test purpose

To verify that the ME starts a session with the additional card identified in the POWER ON CARD proactive UICC command, and successfully returns the Answer To Reset within the TERMINAL RESPONSE command send to the UICC.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

27.22.4.19.1.4 Method of test

27.22.4.19.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The ME card reader is connected to a SIM Simulator (SIM2). Instead of the SIM Simulator a card with different parameters may be used as SIM2 to execute these tests. In this case the USIM Simulator shall take into account the corresponding response data.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

27.22.4.19.1.4.2 Procedure

Expected Sequence 1.1 (POWER ON CARD, card reader 1)

See ETSI TS 102 384 [26] in clause 27.22.4.19.1.4.2, Expected Sequence 1.1.

Expected Sequence 1.2 (POWER ON CARD, card reader 1, no ATR)

See ETSI TS 102 384 [26] in clause 27.22.4.19.1.4.2, Expected Sequence 1.2.

Expected Sequence 1.3 (POWER ON CARD, card reader 1, no card inserted)

See ETSI TS 102 384 [26] in clause 27.22.4.19.1.4.2, Expected Sequence 1.3.

27.22.4.19.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

27.22.4.19.2 POWER ON CARD (detachable card reader)

27.22.4.19.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.19.2.2 Conformance requirement

27.22.4.19.2.3 Test purpose

To verify that the ME starts a session with the additional card identified in the POWER ON CARD proactive UICC command, and successfully returns the Answer To Reset within the TERMINAL RESPONSE command send to the UICC.

27.22.4.19.2.4 Method of test

27.22.4.19.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The card reader shall be detached from the ME.

27.22.4.19.2.4.2 Procedure

Expected Sequence 2.1 (POWER ON CARD, card reader 1, no card reader attached)

See ETSI TS 102 384 [26] in clause 27.22.4.19.2.4.2, Expected Sequence 2.1.

27.22.4.19.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

27.22.4.20 GET READER STATUS

27.22.4.20.1 GET READER STATUS (normal)

27.22.4.20.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.20.1.2 Conformance requirement

The ME shall support the Proactive UICC: Get Card Reader Status facility as defined in:

- TS 31.111 [15] clause 6.1, clause 5.2, clause 6.4.20, clause 6.6.20, clause 6.8, clause 8.6, clause 8.7, clause 8.33, clause 8.57 and annex H.

Additionally the ME shall support multiple card operation as defined in:

- TS 31.111 [15] clause 6.4.19, clause 6.6.19, clause 6.4.18 and clause 6.6.18.

27.22.4.20.1.3 Test purpose

To verify that the ME sends starts a session with the additional card identified in the GET CARD READER STATUS proactive UICC command, and successfully returns information about all interfaces to additional card reader(s) in the TERMINAL RESPONSE command send to the UICC.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

In this test case the SIM-Simulator (SIM2) shall response with the ATR "3B 00".

27.22.4.20.1.4 Method of test

27.22.4.20.1.4.1 Initial conditions

The ME shall support the Proactive UICC: Get Card Reader Status (Card Reader Status) facility. The ME is connected to the USIM Simulator.

The ME card reader is connected to a SIM Simulator (SIM2). Instead of the SIM Simulator a card with different parameters may be used as SIM2 to execute these tests. In this case the USIM Simulator shall take into account the corresponding response data.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

Prior to this test the ME shall have powered on the SIM Simulator (SIM2).

27.22.4.20.1.4.2 Procedure

Expected Sequence 1.1 (GET CARD READER STATUS, card reader 1, card inserted, card powered)

See ETSI TS 102 384 [26] in clause 27.22.4.20.1.4.2, Expected Sequence 1.1.

Expected Sequence 1.2 (GET CARD READER STATUS, card reader 1, card inserted, card not powered)

See ETSI TS 102 384 [26] in clause 27.22.4.20.1.4.2, Expected Sequence 1.2.

Expected Sequence 1.3 (GET CARD READER STATUS, card reader 1, card not present)

See ETSI TS 102 384 [26] in clause 27.22.4.20.1.4.2, Expected Sequence 1.3.

27.22.4.20.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

27.22.4.20.2 GET CARD READER STATUS (detachable card reader)

27.22.4.20.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.20.2.2 Conformance requirement

Void.

27.22.4.20.2.3 Test purpose

To verify that the ME closes a session with the additional card identified in the GET CARD READER STATUS proactive UICC command, and successfully returns result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.20.2.4 Method of test

27.22.4.20.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to this test the ME shall have powered on the SIM Simulator (SIM2).

The card reader shall be detached from the ME.

27.22.4.20.2.4.2 Procedure

Expected Sequence 2.1 (GET CARD READER STATUS, no card reader attached)

See ETSI TS 102 384 [26] in clause 27.22.4.20.2.4.2, Expected Sequence 2.1.

27.22.4.20.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

27.22.4.21 TIMER MANAGEMENT and ENVELOPE TIMER EXPIRATION

27.22.4.21.1 TIMER MANAGEMENT (normal)

27.22.4.21.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.21.1.2 Conformance Requirement

The ME shall support the TIMER MANAGEMENT as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.21, clause 6.8, clause 8.6, clause 8.7, clause 8.37 and clause 8.38.

27.22.4.21.1.3 Test purpose

To verify that the ME manages correctly its internal timers, start a timer, deactivate a timer or return the current value of a timer according to the Timer Identifier defined in the TIMER MANAGEMENT proactive UICC command.

27.22.4.21.1.4 Method of Test

27.22.4.21.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.21.1.4.2 Procedure

Expected Sequence 1.1 (TIMER MANAGEMENT, start timer 1 several times, get the current value of the timer and deactivate the timer successfully)

See ETSI TS 102 384 [26] in clause 27.22.4.21.1.4.2, Expected Sequence 1.1.

Expected Sequence 1.2 (TIMER MANAGEMENT, start timer 2 several times, get the current value of the timer and deactivate the timer successfully)

See ETSI TS 102 384 [26] in clause 27.22.4.21.1.4.2, Expected Sequence 1.2.

Expected Sequence 1.3 (TIMER MANAGEMENT, start timer 8 several times, get the current value of the timer and deactivate the timer successfully)

See ETSI TS 102 384 [26] in clause 27.22.4.21.1.4.2, Expected Sequence 1.3.

Expected Sequence1.4 (TIMER MANAGEMENT, try to get the current value of a timer which is not started: action in contradiction with the current timer state)

See ETSI TS 102 384 [26] in clause 27.22.4.21.1.4.2, Expected Sequence 1.4.

Expected Sequence1.5 (TIMER MANAGEMENT, try to deactivate a timer which is not started: action in contradiction with the current timer state)

See ETSI TS 102 384 [26] in clause 27.22.4.21.1.4.2, Expected Sequence 1.5.

Expected Sequence 1.6 (TIMER MANAGEMENT, start 8 timers successfully)

See ETSI TS 102 384 [26] in clause 27.22.4.21.1.4.2, Expected Sequence 1.6.

27.22.4.21.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.6.

27.22.4.21.2 ENVELOPE TIMER EXPIRATION (normal)

27.22.4.21.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.21.2.2 Conformance requirement

The ME shall support the ENVELOPE (TIMER EXPIRATION) command as defined in the following technical specifications:

- TS 31.111 [15] clause 4.10, clause 7.4.1 and clause 7.4.2.

The ME shall support the TIMER MANAGEMENT as defined in the following technical specifications:

- TS 31.111 [15] clause 5.2, clause 6.4.21, clause 6.8, clause 8.6, clause 8.7, clause 8.37 and clause 8.38.

27.22.4.21.2.3 Test purpose

To verify that the ME shall pass the identifier of the timer that has expired and its value using the ENVELOPE (TIMER EXPIRATION) command, when a timer previously started in a TIMER MANAGEMENT proactive command expires.

27.22.4.21.2.4 Method of test

27.22.4.21.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The timer 1 is not started.

When the UICC is busy when the envelope TIMER EXPIRATION is sent, either the ME retries periodically to send the envelope or it waits for a status not indicating busy.

27.22.4.21.2.4.2 Procedure

Expected Sequence 2.1 (TIMER EXPIRATION, pending proactive UICC command)

See ETSI TS 102 384 [26] in clause 27.22.4.21.2.4.2, Expected Sequence 2.1.

Expected Sequence 2.2 (TIMER EXPIRATION, UICC application toolkit busy)

See ETSI TS 102 384 [26] in clause 27.22.4.21.2.4.2, Expected Sequence 2.2.

27.22.4.21.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.2.

27.22.4.22 SET UP IDLE MODE TEXT

27.22.4.22.1 SET UP IDLE MODE TEXT (normal)

27.22.4.22.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.1.2 Conformance requirement

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 7.5.6, clause 6.8, clause 7.5, clause 7.5.1, clause 8.25, clause 6.4.7 and clause 6.6.13.

Additionally the ME shall support the REFRESH proactive UICC facility as defined in:

- TS 31.111 [15] clause 5.2, clause 6.1, clause 6.4.7, clause 6.6.13, clause 6.11, clause 8.6, clause 8.7, clause 8.12, clause 9.4 and clause 10.

27.22.4.22.1.3 Test purpose

To verify that the text passed to the ME is displayed as idle mode text.

27.22.4.22.1.4 Method of test

27.22.4.22.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.22.1.4.2 Procedure

Expected Sequence 1.1 (SET UP IDLE MODE TEXT, display idle mode text)

See ETSI TS 102 384 [26] in clause 27.22.4.22.1.4.2, Expected Sequence 1.1.

Expected Sequence 1.2 (SET UP IDLE MODE TEXT, replace idle mode text)

See ETSI TS 102 384 [26] in clause 27.22.4.22.1.4.2, Expected Sequence 1.2.

Expected Sequence 1.3 (SET UP IDLE MODE TEXT, remove idle mode text)

See ETSI TS 102 384 [26] in clause 27.22.4.22.1.4.2, Expected Sequence 1.3.

Expected Sequence 1.4 (SET UP IDLE MODE TEXT, competing information on ME display)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.1.1	["Idle Mode Text"]
4	ME → UICC	TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.1.1	[Command performed successfully]
5	USER → ME	Select idle screen	Only if idle screen not already available
6	ME → USER	Display "Idle Mode Text"	
7	USS → ME	SMS PP 1.4.1	[Display immediate SMS]
8	ME → USER	Display "Test Message"	

9	USER → ME	Clear display and select idle screen	
10	ME → USER	Display "Idle Mode Text"	
11	UICC → ME	PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.4.1	
12	ME → UICC	FETCH	
13	UICC → ME	PROACTIVE COMMAND: DISPLAY TEXT 1.4.1	[Normal priority, wait for user to clear message, unpacked, 8 bit data]
14	ME → USER	Display "Toolkit Test 1"	
15	USER → ME	Clear Message	
16	ME → UICC	TERMINAL RESPONSE: DISPLAY TEXT 1.4.1	[Command performed successfully]
17	ME → USER	Display "Idle Mode Text"	
18	UICC → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.4.1	
19	ME → UICC	FETCH	
20	UICC → ME	PROACTIVE COMMAND: PLAY TONE 1.4.1	
21	ME → USER	Display "Dial Tone" Play a standard supervisory dial tone through the external ringer for a duration of 5 s	
22	ME → UICC	TERMINAL RESPONSE: PLAY TONE 1.4.1	[Command performed successfully]
23	UICC → ME	PROACTIVE UICC SESSION ENDED	
24	ME → USER	Display "Idle Mode Text"	

SMS-PP 1.4.1

Logically:

SMS TPDU
- TP-MTI SMS-DELIVER
- TP-MMS No more messages waiting for the MS in this SC
- TP-RP TP-Reply-Path is not set in this SMS-DELIVER
- TP-UDHI TP-UD field contains only the short message
- TP-SRI A status report will not be returned to the ME
- TP-OA
  - TON International number
  - NPI "ISDN / telephone numbering plan"
  - Address value "1234"
- TP-PID "00"
- TP-DCS
  - Coding Group General Data Coding
  - Compression Text is uncompressed
  - Message Class Class 0
  - Alphabet GSM 7 bit default alphabet
- TP-SCTS: 01/01/98 00:00:00 +0
- TP-UDL 12
- TP-UD "Test Message"

Coding:

Coding	04	04	91	21	43	00	10	89	10	10	00	00
	00	00	0C	D4	F2	9C	0E	6A	96	E7	F3	F0
	B9	0C										

PROACTIVE COMMAND: DISPLAY TEXT 1.4.1

Logically:

Command details

Command number: 1
Command type: DISPLAY TEXT
Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: UICC
Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data
Text: "Toolkit Test 1"

Coding:

BER-TLV:	D0	1A	81	03	01	21	80	82	02	81	02	8D
	0F	04	54	6F	6F	6C	6B	69	74	20	54	65
	73	74	20	31								

TERMINAL RESPONSE: DISPLAY TEXT 1.4.1

Logically:

Command details

Command number: 1
Command type: DISPLAY TEXT
Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	21	80	82	02	82	81	83	01	00

PROACTIVE COMMAND: PLAY TONE 1.4.1

Logically:

Command details

Command number: 1
Command type: PLAY TONE
Command qualifier: "00"

Device identities

Source device: UICC
Destination device: Earpiece
Alpha identifier: "Dial Tone"
TONe: Standard supervisory tones: dial tone

Duration

Time unit: Seconds
Time interval: 5

Coding:

BER-TLV:	D0	1B	81	03	01	20	00	82	02	81	03	85
	09	44	69	61	6C	20	54	6F	6E	65	8E	01
	01	84	02	01	05							

TERMINAL RESPONSE: PLAY TONE 1.4.1

Logically:

Command details
Command number: 1
Command type: PLAY TONE
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	20	00	82	02	82	81	83	01	00

Expected Sequence 1.5 (SET UP IDLE MODE TEXT, ME power cycled)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.1.1	["Idle Mode Text"]
4	ME → UICC	TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.1.1	[command performed successfully]
5	USER → ME	Select idle screen	Only if idle screen not already available
6	ME → USER	Display "Idle Mode Text"	
7	USER → ME	Power off ME	
8	ME ⇔ UICC	3G Session TERMINATION PROCEDURE	
9	USER → ME	Power on ME	
10	ME ⇔ UICC	3G Session ACTIVATION PROCEDURE	
11	ME ⇔ UICC	USIM INITIALIZATION	
12	USER → ME	Select idle screen	Only if idle screen not already available
13	ME → USER	Display idle screen / "Idle Mode Text" not to be displayed	

Expected Sequence 1.6 (SET UP IDLE MODE TEXT, REFRESH with USIM Initialization)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.1	[Idle Mode Text]
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.1.1	
5	USER → ME	Select idle screen	Only if idle screen not already available
6	ME → USER	Display "Idle Mode Text"	
7	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 1.6.1	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: REFRESH 1.6.1	[USIM Initialization]
10	ME ⇔ UICC	USIM INITIALIZATION	
11	USER → ME	Select idle screen	Only if idle screen not already available
12	ME → USER	Display idle screen / "Idle Mode Text" not to be displayed	

13	ME → UICC	TERMINAL RESPONSE: REFRESH 1.6.1A or TERMINAL RESPONSE: REFRESH 1.6.1B	[Command performed successfully] [Command performed successfully with additional files read]
14	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: REFRESH 1.6.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Initialization
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	03	82	02	81	82

TERMINAL RESPONSE: REFRESH 1.6.1A

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Initialization
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	03	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 1.6.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Initialization
Device identities
Source device: ME
Destination device: UICC
Result
General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	03	82	02	82	81	83	01	03

Expected Sequence 1.7 (SET UP IDLE MODE TEXT, large text string)

See ETSI TS 102 384 [26] in clause 27.22.4.22.1.4.2, Expected Sequence 1.7.

27.22.4.22.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.7.

27.22.4.22.2 SET UP IDLE MODE TEXT (Icon support)

27.22.4.22.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.2.2 Conformance requirement

27.22.4.22.2.3 Test purpose

To verify that the ME text and / or icon passed to the ME is displayed by the ME as an idle mode text.

To verify that the icon identifier provided with the text string can replace the text string or accompany it.

To verify that if both an alpha identifier or text string, and an icon are provided with a proactive command, and both are requested to be displayed, but the ME is not able to display both together on the screen, then the alpha identifier or text string takes precedence over the icon.

To verify that if the UICC provides an icon identifier with a proactive command, then the ME shall inform the UICC if the icon could not be displayed by sending the general result "Command performed successfully, but requested icon could not be displayed".

To verify that if the ME receives an icon identifier with a proactive command, and either an empty, or no alpha identifier / text string is given by the UICC, than the ME shall reject the command with general result "Command data not understood by ME".

27.22.4.22.2.4 Method of test

27.22.4.22.2.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in update idle mode on the System Simulator.

27.22.4.22.2.4.2 Procedure

Expected Sequence 2.1A (SET UP IDLE MODE TEXT, Icon is self-explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.22.2.4.2, Expected Sequence 2.1A.

Expected Sequence 2.1B (SET UP IDLE MODE TEXT, Icon is self-explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.22.2.4.2, Expected Sequence 2.1B.

Expected Sequence 2.2A (SET UP IDLE MODE TEXT, Icon is not self-explanatory, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.22.2.4.2, Expected Sequence 2.2A.

Expected Sequence 2.2B (SET UP IDLE MODE TEXT, Icon is not self-explanatory, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.22.2.4.2, Expected Sequence 2.2B.

Expected Sequence 2.3A (SET UP IDLE MODE TEXT, Icon is self-explanatory, colour icon, successful)

See ETSI TS 102 384 [26] in clause 27.22.4.22.2.4.2, Expected Sequence 2.3A.

Expected Sequence 2.3B (SET UP IDLE MODE TEXT, Icon is self-explanatory, colour icon, requested icon could not be displayed)

See ETSI TS 102 384 [26] in clause 27.22.4.22.2.4.2, Expected Sequence 2.3B.

Expected Sequence 2.4 (SET UP IDLE MODE TEXT, Icon is not self-explanatory, empty text string)

See ETSI TS 102 384 [26] in clause 27.22.4.22.2.4.2, Expected Sequence 2.4.

27.22.4.22.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1A to 2.4.

27.22.4.22.3 SET UP IDLE MODE TEXT (UCS2 support)

27.22.4.22.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.3.2 Conformance requirement

The ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in:

- ISO/IEC 10646 [17].

27.22.4.22.3.3 Test purpose

To verify that the UCS2 coded text string is displayed by the ME as an idle mode text.

27.22.4.22.3.4 Method of test

27.22.4.22.3.4.1 Initial conditions

The ME is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in update idle mode on the System Simulator..

27.22.4.22.3.4.2 Procedure

Expected Sequence 3.1 (SET UP IDLE MODE TEXT, UCS2 alphabet text)

See ETSI TS 102 384 [26] in clause 27.22.4.22.3.4.2, Expected Sequence 3.1.

27.22.4.22.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1.

27.22.4.22.4 SET UP IDLE MODE TEXT (support of Text Attribute)

27.22.4.22.4.1 SET UP IDLE MODE TEXT (support of Text Attribute – Left Alignment)

27.22.4.22.4.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.4.1.2 Conformance requirement

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 7.5.6, clause 6.8, clause 7.5, clause 7.5.1, clause 8.25, clause 8.70, clause 6.4.7 and clause 6.6.13.

27.22.4.22.4.1.3 Test purpose

To verify that the text passed to the ME is displayed as idle mode text according to the left alignment text attribute configuration.

27.22.4.22.4.1.4 Method of test

27.22.4.22.4.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.22.4.1.4.2 Procedure

Expected Sequence 4.1 (SET UP IDLE MODE TEXT, display idle mode text, Text Attribute – Left Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.22.4.1.4.2, Expected Sequence 4.1.

27.22.4.22.4.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.1.

27.22.4.22.4.2 SET UP IDLE MODE TEXT (support of Text Attribute – Center Alignment)

27.22.4.22.4.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.4.2.2 Conformance requirement

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 7.5.6, clause 6.8, clause 7.5, clause 7.5.1, clause 8.25, clause 8.70, clause 6.4.7 and clause 6.6.13.

27.22.4.22.4.2.3 Test purpose

To verify that the text passed to the ME is displayed as idle mode text according to the center alignment text attribute configuration.

27.22.4.22.4.2.4 Method of test

27.22.4.22.4.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.22.4.2.4.2 Procedure

Expected Sequence 4.2 (SET UP IDLE MODE TEXT, display idle mode text, Text Attribute – Center Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.22.4.2.4.2, Expected Sequence 4.2.

27.22.4.22.4.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.2.

27.22.4.22.4.3 SET UP IDLE MODE TEXT (support of Text Attribute – Right Alignment)

27.22.4.22.4.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.4.3.2 Conformance requirement

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 7.5.6, clause 6.8, clause 7.5, clause 7.5.1, clause 8.25, clause 8.70, clause 6.4.7 and clause 6.6.13.

27.22.4.22.4.3.3 Test purpose

To verify that the text passed to the ME is displayed as idle mode text according to the right alignment text attribute configuration.

27.22.4.22.4.3.4 Method of test

27.22.4.22.4.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.22.4.3.4.2 Procedure

Expected Sequence 4.3 (SET UP IDLE MODE TEXT, display idle mode text, Text Attribute – Right Alignment)

See ETSI TS 102 384 [26] in clause 27.22.4.22.4.3.4.2, Expected Sequence 4.3.

27.22.4.22.4.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.3.

27.22.4.22.4.4 SET UP IDLE MODE TEXT (support of Text Attribute – Large Font Size)

27.22.4.22.4.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.4.4.2 Conformance requirement

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 7.5.6, clause 6.8, clause 7.5, clause 7.5.1, clause 8.25, clause 8.70, clause 6.4.7 and clause 6.6.13.

27.22.4.22.4.4.3 Test purpose

To verify that the text passed to the ME is displayed as idle mode text according to the large font size text attribute configuration.

27.22.4.22.4.4.4 Method of test

27.22.4.22.4.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.22.4.4.4.2 Procedure

Expected Sequence 4.4 (SET UP IDLE MODE TEXT, display idle mode text, Text Attribute – Large Font Size)

See ETSI TS 102 384 [26] in clause 27.22.4.22.4.4.4.2, Expected Sequence 4.4.

27.22.4.22.4.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.4.

27.22.4.22.4.5 SET UP IDLE MODE TEXT (support of Text Attribute – Small Font Size)

27.22.4.22.4.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.4.5.2 Conformance requirement

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 7.5.6, clause 6.8, clause 7.5, clause 7.5.1, clause 8.25, clause 8.70, clause 6.4.7 and clause 6.6.13.

27.22.4.22.4.5.3 Test purpose

To verify that the text passed to the ME is displayed as idle mode text according to the small font size text attribute configuration.

27.22.4.22.4.5.4 Method of test

27.22.4.22.4.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.22.4.5.4.2 Procedure

Expected Sequence 4.5 (SET UP IDLE MODE TEXT, display idle mode text, Text Attribute – Small Font Size)

See ETSI TS 102 384 [26] in clause 27.22.4.22.4.5.4.2, Expected Sequence 4.5.

27.22.4.22.4.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.5.

27.22.4.22.4.6 SET UP IDLE MODE TEXT (support of Text Attribute – Bold On)

27.22.4.22.4.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.4.6.2 Conformance requirement

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 7.5.6, clause 6.8, clause 7.5, clause 7.5.1, clause 8.25, clause 8.70, clause 6.4.7 and clause 6.6.13.

27.22.4.22.4.6.3 Test purpose

To verify that the text passed to the ME is displayed as idle mode text according to the bold text attribute configuration.

27.22.4.22.4.6.4 Method of test

27.22.4.22.4.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.22.4.6.4.2 Procedure

Expected Sequence 4.6 (SET UP IDLE MODE TEXT, display idle mode text, Text Attribute – Bold On)

See ETSI TS 102 384 [26] in clause 27.22.4.22.4.6.4.2, Expected Sequence 4.6.

27.22.4.22.4.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.6.

27.22.4.22.4.7 SET UP IDLE MODE TEXT (support of Text Attribute – Italic On)

27.22.4.22.4.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.4.7.2 Conformance requirement

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 7.5.6, clause 6.8, clause 7.5, clause 7.5.1, clause 8.25, clause 8.70, clause 6.4.7 and clause 6.6.13.

27.22.4.22.4.7.3 Test purpose

To verify that the text passed to the ME is displayed as idle mode text according to the italic text attribute configuration.

27.22.4.22.4.7.4 Method of test

27.22.4.22.4.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.22.4.7.4.2 Procedure

Expected Sequence 4.7 (SET UP IDLE MODE TEXT, display idle mode text, Text Attribute – Italic On)

See ETSI TS 102 384 [26] in clause 27.22.4.22.4.7.4.2, Expected Sequence 4.7.

27.22.4.22.4.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.7.

27.22.4.22.4.8 SET UP IDLE MODE TEXT (support of Text Attribute – Underline On)

27.22.4.22.4.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.4.8.2 Conformance requirement

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 7.5.6, clause 6.8, clause 7.5, clause 7.5.1, clause 8.25, clause 8.70, clause 6.4.7 and clause 6.6.13.

27.22.4.22.4.8.3 Test purpose

To verify that the text passed to the ME is displayed as idle mode text according to the underline text attribute configuration.

27.22.4.22.4.8.4 Method of test

27.22.4.22.4.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.22.4.8.4.2 Procedure

Expected Sequence 4.8 (SET UP IDLE MODE TEXT, display idle mode text, Text Attribute – Underline On)

See ETSI TS 102 384 [26] in clause 27.22.4.22.4.8.4.2, Expected Sequence 4.8.

27.22.4.22.4.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.8.

27.22.4.22.4.9 SET UP IDLE MODE TEXT (support of Text Attribute – Strikethrough On)

27.22.4.22.4.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.4.9.2 Conformance requirement

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 7.5.6, clause 6.8, clause 7.5, clause 7.5.1, clause 8.25, clause 8.70, clause 6.4.7 and clause 6.6.13.

27.22.4.22.4.9.3 Test purpose

To verify that the text passed to the ME is displayed as idle mode text according to the strikethrough text attribute configuration.

27.22.4.22.4.9.4 Method of test

27.22.4.22.4.9.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.22.4.9.4.2 Procedure

Expected Sequence 4.9 (SET UP IDLE MODE TEXT, display idle mode text, Text Attribute – Strikethrough On)

See ETSI TS 102 384 [26] in clause 27.22.4.22.4.9.4.2, Expected Sequence 4.9.

27.22.4.22.4.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.9.

27.22.4.22.4.10 SET UP IDLE MODE TEXT (support of Text Attribute – Foreground and Background Colour)

27.22.4.22.4.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.4.10.2 Conformance requirement

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 7.5.6, clause 6.8, clause 7.5, clause 7.5.1, clause 8.25, clause 8.70, clause 6.4.7 and clause 6.6.13.

27.22.4.22.4.10.3 Test purpose

To verify that the text passed to the ME is displayed as idle mode text according to the foreground and background colour text attribute configuration.

27.22.4.22.4.10.4 Method of test

27.22.4.22.4.10.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.22.4.10.4.2 Procedure

Expected Sequence 4.10 (SET UP IDLE MODE TEXT, display idle mode text, Text Attribute – Foreground and Background Colour)

See ETSI TS 102 384 [26] in clause 27.22.4.22.4.10.4.2, Expected Sequence 4.10.

27.22.4.22.4.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.10.

27.22.4.22.5 SET UP IDLE MODE TEXT (UCS2 display in Chinese)

27.22.4.22.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.5.2 Conformance requirement

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 7.5.6, clause 6.8, clause 7.5, clause 7.5.1, clause 8.25, clause 8.70, clause 6.4.7 and clause 6.6.13.

The Terminal shall additionally support the UCS2 facility for the coding of the Chinese character, as defined in:

ISO/IEC 10646 [17a/17b].

27.22.4.22.5.3 Test purpose

To verify that the UCS2 coded text string is displayed by the ME as an idle mode text.

27.22.4.22.5.4 Method of test

27.22.4.22.5.4.1 Initial conditions

The Terminal is connected to both the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the Terminal shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.22.5.4.2 Procedure

Expected Sequence 5.1 (SET UP IDLE MODE TEXT, UCS2 alphabet text in Chinese)

See ETSI TS 102 384 [26] in clause 27.22.4.22.5.4.2, Expected Sequence 5.1.

27.22.4.22.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 5.1.

27.22.4.22.6 SET UP IDLE MODE TEXT (UCS2 display in Katakana)

27.22.4.22.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.6.2 Conformance requirement

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 7.5.6, clause 6.8, clause 7.5, clause 7.5.1, clause 8.25, clause 8.70, clause 6.4.7 and clause 6.6.13.

The ME shall additionally support the UCS2 facility for the coding of the Katakana character, as defined in:

ISO/IEC 10646 [17a/17b].

27.22.4.22.6.3 Test purpose

To verify that the UCS2 coded text string is displayed by the ME as an idle mode text.

27.22.4.22.6.4 Method of test

27.22.4.22.6.4.1 Initial conditions

The ME is connected to both the UICC Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.22.6.4.2 Procedure

Expected Sequence 6.1 (SET UP IDLE MODE TEXT, UCS2 alphabet text in Katakana)

See ETSI TS 102 384 [26] in clause 27.22.4.22.6.4.2, Expected Sequence 6.1.

27.22.4.22.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1.

27.22.4.23 RUN AT COMMAND

27.22.4.23.1 RUN AT COMMAND (normal)

27.22.4.23.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.1.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31 and clause 8.41.
- TS 27.007 [18].

27.22.4.23.1.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.1.4 Method of test

27.22.4.23.1.4.1 Initial conditions

The ME is connected to the USIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.1.4.2 Procedure

Expected Sequence 1.1(RUN AT COMMAND, no alpha identifier presented, request IMSI)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 1.1.1	[no alpha identifier, request IMSI]
4	ME (→ User)	The ME may give information to the user concerning what is happening	
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 1.1.1	[Command performed successfully, AT Response containing IMSI]

PROACTIVE COMMAND: RUN AT COMMAND 1.1.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC

Destination device: ME

AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

BER-TLV:	D0	13	81	03	01	34	00	82	02	81	82	A8
	08	41	54	2B	43	49	4D	49	0D			

TERMINAL RESPONSE: RUN AT COMMAND 1.1.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00
	A9	19	0D	0A	30	30	31	30	31	30	31	32
	33	34	35	36	37	38	39	0D	0A	0D	0A	4F
	4B	0D	0A									

Expected Sequence 1.2 (RUN AT COMMAND, null data alpha identifier presented, request IMSI)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 1.2.1	[null data alpha identifier, request IMSI]
4	ME	The ME should not give any information to user on the fact that the ME is performing an AT command	
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 1.1.1	[Command performed successfully, AT Response containing IMSI]

PROACTIVE COMMAND: RUN AT COMMAND 1.2.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier null data object

AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

BER-TLV:	D0	15	81	03	01	34	00	82	02	81	82	85
	00	A8	08	41	54	2B	43	49	4D	49	0D	

Expected Sequence 1.3 (RUN AT COMMAND, alpha identifier presented, request IMSI)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 1.3.1	[alpha identifier, request IMSI]
4	ME → USER	Display "Run AT Command"	
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 1.1.1	[Command performed successfully, AT Response containing IMSI]

PROACTIVE COMMAND: RUN AT COMMAND 1.3.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command"
AT Command
AT Command string: "AT+CIMI<CR>"

Coding:

BER-TLV:	D0	23	81	03	01	34	00	82	02	81	82	^{8}5
	0E	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	A8	08	41	54	2B	43	49	4D	49
	0D											

27.22.4.23.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

27.22.4.23.2 RUN AT COMMAND (Icon support)

27.22.4.23.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.2.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31 and clause 8.41.

- TS 27.007 [18].

27.22.4.23.2.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

In addition to verify that if an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.23.2.4 Method of test

27.22.4.23.2.4.1 Initial conditions

The ME is connected to the USIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

The ME screen shall be in its normal stand-by display.

27.22.4.23.2.4.2 Procedure

Expected Sequence 2.1A (RUN AT COMMAND, basic icon self explanatory, request IMSI, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.1.1	[BASIC-ICON, self-explanatory, request IMSI]
4	ME → USER	Display BASIC ICON without the alpha identifier	
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A	[Command performed successfully, AT response containing IMSI]

PROACTIVE COMMAND: RUN AT COMMAND 2.1.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha identifier: "Basic Icon"
AT Command
AT Command string: "AT+CIMI<CR>"
Icon identifier:
Icon qualifier: icon is self-explanatory
Icon identifier: record 1 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	23	81	03	01	34	00	82	02	81	82	85
	0A	42	61	73	69	63	20	49	63	6F	6E	A8
	08	41	54	2B	43	49	4D	49	0D	9E	02	00

01											

TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
AT Response
AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00
	A9	19	0D	0A	30	30	31	30	31	30	31	32
	33	34	35	36	37	38	39	0D	0A	0D	0A	4F
	4B	0D	0A									

Expected Sequence 2.1B (RUN AT COMMAND, basic icon self explanatory, request IMSI, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.1.1	[BASIC-ICON, self-explanatory, request IMSI]
4	ME → USER	Display "Basic Icon" without the BASIC-ICON	
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B	[Command performed but requested icon could not be displayed, AT response containing IMSI]

TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully, but requested icon could not be displayed
AT Response
AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	04
	A9	19	0D	0A	30	30	31	30	31	30	31	32

33	34	35	36	37	38	39	0D	0A	0D	0A	4F
4B	0D	0A									

Expected Sequence 2.2A (RUN AT COMMAND, colour icon self explanatory, request IMSI, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.2.1	[COLOUR-ICON, self-explanatory, request IMSI]
4	ME → USER	Display COLOUR-ICON without the alpha identifier	
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A	[Command performed successfully, AT response containing IMSI]

PROACTIVE COMMAND: RUN AT COMMAND 2.2.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha identifier: "Colour Icon"
AT Command
AT Command string: "AT+CIMI<CR>"
Icon identifier:
Icon qualifier: icon is self-explanatory
Icon identifier: record 2 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	24	81	03	01	34	00	82	02	81	82	A8
	0B	43	6F	6C	6F	75	72	20	49	63	6F	6E
	A8	08	41	54	2B	43	49	4D	49	0D	9E	02
	00	02										

Expected Sequence 2.2B (RUN AT COMMAND, colour icon self explanatory, request IMSI, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.2.1	[COLOUR-ICON, self-explanatory, request IMSI]
4	ME → USER	Display "Colour Icon" without the COLOUR-ICON	
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B	[Command performed but requested icon could not be displayed, AT response containing IMSI]

Expected Sequence 2.3A (RUN AT COMMAND, basic icon non self-explanatory, request IMSI, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.3.1	[BASIC-ICON, non self-explanatory, request IMSI]
4	ME → USER	Display "Basic Icon" and BASIC-ICON	
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A	[Command performed successfully, AT response containing IMSI]

PROACTIVE COMMAND: RUN AT COMMAND 2.3.1

Logically:

Command details
- Command number: 1
- Command type: RUN AT COMMAND
- Command qualifier: "00"

Device identities
- Source device: UICC
- Destination device: ME

Alpha Identifier
- Alpha identifier: "Basic Icon"

AT Command
- AT Command string: "AT+CIMI<CR>"

Icon identifier
- Icon qualifier: icon is non self-explanatory
- Icon identifier: record 1 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	23	81	03	01	34	00	82	02	81	82	85
	0A	42	61	73	69	63	20	49	63	6F	6E	A8
	08	41	54	2B	43	49	4D	49	0D	9E	02	01
	01											

Expected Sequence 2.3B (RUN AT COMMAND, basic icon non self-explanatory, request IMSI, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.3.1	[BASIC-ICON, non self-explanatory, request IMSI]
4	ME → USER	Display "Basic Icon" without BASIC-ICON	
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B	[Command performed but requested icon could not be displayed, AT response containing IMSI]

Expected Sequence 2.4A (RUN AT COMMAND, colour icon non self-explanatory, request IMSI, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.4.1	[COLOUR-ICON, non self-explanatory, request IMSI]
4	ME → USER	Display "Colour Icon" and COLOUR-ICON	
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A	[Command performed successfully, AT response containing IMSI]

PROACTIVE COMMAND: RUN AT COMMAND 2.4.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha identifier: "Colour Icon"
AT Command
AT Command string: "AT+CIMI<CR>"
Icon identifier:
Icon qualifier: icon is self-explanatory
Icon identifier: record 2 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	24	81	03	01	34	00	82	02	81	82	85
	0B	43	6F	6C	6F	75	72	20	49	63	6F	6E
	A8	08	41	54	2B	43	49	4D	49	0D	9E	02
	01	02										

Expected Sequence 2.4B (RUN AT COMMAND, colour icon non self-explanatory, request IMSI, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.4.1	[COLOUR-ICON, non self-explanatory, request IMSI]
4	ME → USER	Display "Colour Icon" without COLOUR-ICON	
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B	[Command performed but requested icon could not be displayed, AT response containing IMSI]

Expected Sequence 2.5 (RUN AT COMMAND, basic icon non self-explanatory, no alpha identifier presented)

Step	Direction	MESSAGE / Action	Comments

1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.5.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.5.1	[BASIC-ICON, non self-explanatory]
4	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 2.5.1	[Command data not understood by ME]

PROACTIVE COMMAND: RUN AT COMMAND 2.5.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
AT Command
AT Command string: "AT+CIMI<CR>"
Icon identifier
Icon qualifier: icon is non self-explanatory
Icon identifier: record 1 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	17	81	03	01	34	00	82	02	81	82	A8
	08	41	54	2B	43	49	4D	49	0D	9E	02	01
	01											

TERMINAL RESPONSE: RUN AT COMMAND 2.5.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Result
General Result: Command data not understood by ME

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	32

27.22.4.23.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.5.

27.22.4.23.3 RUN AT COMMAND (support of Text Attribute)

27.22.4.23.3.1 RUN AT COMMAND (support of Text Attribute – Left Alignment)

27.22.4.23.3.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.1.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.
- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.1.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with left alignment text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.1.4 Method of test

27.22.4.23.3.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.1.4.2 Procedure

Expected Sequence 3.1(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Left Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.1.1	
4	ME (→ USER)	Display "Run AT Command 1"	[alpha identifier is displayed with left alignment, request IMSI]
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.1.1	[Command performed successfully, AT Response containing IMSI]
6	UICC → ME	PROACTIVE UICC SESSION ENDED	
7	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.1.2	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.1.2	

10	ME (→ USER)	Display "Run AT Command 2"	[Message shall be formatted without left alignment, request IMSI. Remark: If left alignment is the ME's default alignment as declared in table A.2/16, no alignment change will take place]
11	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.1.1	[Command performed successfully, AT Response containing IMSI]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: RUN AT COMMAND 3.1.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 1"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Right Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2B	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	31	A8	07	41	54	2B	43	49
	4D	49	0D	D0	04	00	10	00	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.1.2

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 2"
AT Command
AT Command string: "AT+CIMI<CR>"

Coding:

BER-TLV:	D0	25	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	32	A8	08	41	54	2B	43	49
	4D	49	0D									

TERMINAL RESPONSE: RUN AT COMMAND 3.1.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
AT Response
AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00
	A9	19	0D	0A	30	30	31	30	31	30	31	32
	33	34	35	36	37	38	39	0D	0A	0D	0A	4F
	4B	0D	0A									

27.22.4.23.3.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1.

27.22.4.23.3.2 RUN AT COMMAND (support of Text Attribute – Center Alignment)

27.22.4.23.3.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.2.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.
- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.2.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with center alignment text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.2.4 Method of test

27.22.4.23.3.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.2.4.2 Procedure

Expected Sequence 3.2(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Center Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.2.1	
4	ME (→ USER)	Display "Run AT Command 1"	[alpha identifier is displayed with center alignment, request IMSI]
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.2.1	[Command performed successfully, AT Response containing IMSI]
6	UICC → ME	PROACTIVE UICC SESSION ENDED	
7	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.2.2	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.2.2	
10	ME (→ USER)	Display "Run AT Command 2"	[Message shall be formatted without center alignment, request IMSI. Remark: If center alignment is the ME's default alignment as declared in table A.2/16, no alignment change will take place]
11	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.2.1	[Command performed successfully, AT Response containing IMSI]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: RUN AT COMMAND 3.2.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 1"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Center Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2A	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	31	A8	07	41	54	2B	43	49
	4D	49	0D	D04	04	00	10	01	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.2.2

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 2"
AT Command
AT Command string: "AT+CIMI<CR>"

Coding:

BER-TLV:	D0	25	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	32	A8	08	41	54	2B	43	49
	4D	49	0D									

TERMINAL RESPONSE: RUN AT COMMAND 3.2.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
AT Response
AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00
	A9	19	0D	0A	30	30	31	30	31	30	31	32
	33	34	35	36	37	38	39	0D	0A	0D	0A	4F
	4B	0D	0A									

27.22.4.23.3.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.2.

27.22.4.23.3 RUN AT COMMAND (support of Text Attribute – Right Alignment)

27.22.4.23.3.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.3.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.

- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.3.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with right alignment text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.3.4 Method of test

27.22.4.23.3.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.3.4.2 Procedure

Expected Sequence 3.3(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Right Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.3.1	
4	ME (→ USER)	Display "Run AT Command 1"	[alpha identifier is displayed with right alignment, request IMSI]
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.3.1	[Command performed successfully, AT Response containing IMSI]
6	UICC → ME	PROACTIVE UICC SESSION ENDED	
7	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.3.2	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.3.2	
10	ME (→ USER)	Display "Run AT Command 2"	[Message shall be formatted without right alignment, request IMSI. Remark: If right alignment is the ME's default alignment as declared in table A.2/16, no alignment change will take place]
11	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.3.1	[Command performed successfully, AT Response containing IMSI]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: RUN AT COMMAND 3.3.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 1"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Right Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2B	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	31	A8	07	41	54	2B	43	49
	4D	49	0D	D0	04	00	10	02	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.3.2

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 2"
AT Command
AT Command string: "AT+CIMI<CR>"

Coding:

BER-TLV:	D0	25	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	32	A8	08	41	54	2B	43	49
	4D	49	0D									

TERMINAL RESPONSE: RUN AT COMMAND 3.3.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00
	A9	19	0D	0A	30	30	31	30	31	30	31	32
	33	34	35	36	37	38	39	0D	0A	0D	0A	4F
	4B	0D	0A									

27.22.4.23.3.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.3.

27.22.4.23.3.4 RUN AT COMMAND (support of Text Attribute – Large Font Size)

27.22.4.23.3.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.4.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.
- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.4.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with large font size as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.4.4 Method of test

27.22.4.23.3.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.4.4.2 Procedure

Expected Sequence 3.4(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Large Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.4.1	

4	ME (→ USER)	Display "Run AT Command 1"	[alpha identifier is displayed with large font size, request IMSI]
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.4.1	[Command performed successfully, AT Response containing IMSI]
6	UICC → ME	PROACTIVE UICC SESSION ENDED	
7	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.4.2	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.4.2	
10	ME (→ USER)	Display "Run AT Command 2"	[alpha identifier is displayed with normal font size, request IMSI]
11	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.4.1	[Command performed successfully, AT Response containing IMSI]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.4.1	
14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.4.1	
16	ME (→ USER)	Display "Run AT Command 1"	[alpha identifier is displayed with large font size, request IMSI]
17	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.4.1	[Command performed successfully, AT Response containing IMSI]
18	UICC → ME	PROACTIVE UICC SESSION ENDED	
19	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.4.3	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.4.3	
22	ME (→ USER)	Display "Run AT Command 3"	[alpha identifier is displayed with normal font size, request IMSI]
23	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.4.1	[Command performed successfully, AT Response containing IMSI]
24	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: RUN AT COMMAND 3.4.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 1"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Large Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2B	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	31	A8	08	41	54	2B	43	49
	4D	49	0D	D0	04	00	10	04	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.4.2

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 2"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2B	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	32	A8	08	41	54	2B	43	49
	4D	49	0D	D0	04	00	10	00	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.4.3

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 3"
AT Command
AT Command string: "AT+CIMI<CR>"

Coding:

BER-TLV:	D0	25	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	33	A8	08	41	54	2B	43	49
	4D	49	0D									

TERMINAL RESPONSE: RUN AT COMMAND 3.4.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
AT Response
AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00
	A9	19	0D	0A	30	30	31	30	31	30	31	32
	33	34	35	36	37	38	39	0D	0A	0D	0A	4F
	4B	0D	0A									

27.22.4.23.3.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.4.

27.22.4.23.3.5 RUN AT COMMAND (support of Text Attribute – Small Font Size)

27.22.4.23.3.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.5.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.
- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.5.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with small font size as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.5.4 Method of test

27.22.4.23.3.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.5.4.2 Procedure

Expected Sequence 3.5(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Small Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.5.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.5.1	
4	ME (→ USER)	Display "Run AT Command 1"	[alpha identifier is displayed with small font size, request IMSI]
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.5.1	[Command performed successfully, AT Response containing IMSI]
6	UICC → ME	PROACTIVE UICC SESSION ENDED	
7	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.5.2	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.5.2	
10	ME (→ USER)	Display "Run AT Command 2"	[alpha identifier is displayed with normal font size, request IMSI]
11	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.5.1	[Command performed successfully, AT Response containing IMSI]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.5.1	
14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.5.1	
16	ME (→ USER)	Display "Run AT Command 1"	[alpha identifier is displayed with small font size, request IMSI]
17	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.5.1	[Command performed successfully, AT Response containing IMSI]
18	UICC → ME	PROACTIVE UICC SESSION ENDED	
19	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.5.3	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.5.3	
22	ME (→ USER)	Display "Run AT Command 3"	[alpha identifier is displayed with normal font size, request IMSI]
23	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.5.1	[Command performed successfully, AT Response containing IMSI]
24	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: RUN AT COMMAND 3.5.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME

Alpha Identifier
Alpha Identifier "Run AT Command 1"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Small Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2B	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	31	A8	08	41	54	2B	43	49
	4D	49	0D	D0	04	00	10	08	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.5.2

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 2"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2B	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	32	A8	08	41	54	2B	43	49
	4D	49	0D	D0	04	00	10	00	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.5.3

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 3"
AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

BER-TLV:	D0	25	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	33	A8	08	41	54	2B	43	49
	4D	49	0D									

TERMINAL RESPONSE: RUN AT COMMAND 3.5.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
AT Response
AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00
	A9	19	0D	0A	30	30	31	30	31	30	31	32
	33	34	35	36	37	38	39	0D	0A	0D	0A	4F
	4B	0D	0A									

27.22.4.23.3.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.5.

27.22.4.23.3.6 RUN AT COMMAND (support of Text Attribute – Bold On)

27.22.4.23.3.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.6.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.
- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.6.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with bold text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.6.4 Method of test

27.22.4.23.3.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.6.4.2 Procedure

Expected Sequence 3.6(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Bold On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.6.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.6.1	
4	ME (→ USER)	Display "Run AT Command 1"	[alpha identifier is displayed with bold on, request IMSI]
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.6.1	[Command performed successfully, AT Response containing IMSI]
6	UICC → ME	PROACTIVE UICC SESSION ENDED	
7	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.6.2	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.6.2	
10	ME (→ USER)	Display "Run AT Command 2"	[alpha identifier is displayed with bold off, request IMSI]
11	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.6.1	[Command performed successfully, AT Response containing IMSI]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.6.1	
14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.6.1	
16	ME (→ USER)	Display "Run AT Command 1"	[alpha identifier is displayed with bold on, request IMSI]
17	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.6.1	[Command performed successfully, AT Response containing IMSI]
18	UICC → ME	PROACTIVE UICC SESSION ENDED	
19	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.6.3	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.6.3	
22	ME (→ USER)	Display "Run AT Command 3"	[alpha identifier is displayed with bold off, request IMSI]
23	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.6.1	[Command performed successfully, AT Response containing IMSI]

24	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: RUN AT COMMAND 3.6.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 1"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold On, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2B	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	31	A8	08	41	54	2B	43	49
	4D	49	0D	D0	04	00	10	10	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.6.2

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 2"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2B	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	32	A8	08	41	54	2B	43	49
	4D	49	0D	D0	04	00	10	00	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.6.3

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 3"
AT Command
AT Command string: "AT+CIMI<CR>"

Coding:

BER-TLV:	D0	25	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	33	A8	08	41	54	2B	43	49
	4D	49	0D									

TERMINAL RESPONSE: RUN AT COMMAND 3.6.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
AT Response
AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00
	A9	19	0D	0A	30	30	31	30	31	30	31	32
	33	34	35	36	37	38	39	0D	0A	0D	0A	4F
	4B	0D	0A									

27.22.4.23.3.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.6.

27.22.4.23.3.7 RUN AT COMMAND (support of Text Attribute – Italic On)

27.22.4.23.3.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.7.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.

- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.7.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with italic text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.7.4 Method of test

27.22.4.23.3.7.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.7.4.2 Procedure

Expected Sequence 3.7(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Italic On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.7.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.7.1	
4	ME (→ USER)	Display "Run AT Command 1"	[alpha identifier is displayed with italic on, request IMSI]
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.7.1	[Command performed successfully, AT Response containing IMSI]
6	UICC → ME	PROACTIVE UICC SESSION ENDED	
7	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.7.2	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.7.2	
10	ME (→ USER)	Display "Run AT Command 2"	[alpha identifier is displayed with italic off, request IMSI]
11	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.7.1	[Command performed successfully, AT Response containing IMSI]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.7.1	
14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.7.1	
16	ME (→ USER)	Display "Run AT Command 1"	[alpha identifier is displayed with italic on, request IMSI]

17	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.7.1	[Command performed successfully, AT Response containing IMSI]
18	UICC → ME	PROACTIVE UICC SESSION ENDED	
19	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.7.3	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.7.3	
22	ME (→ USER)	Display "Run AT Command 3"	[alpha identifier is displayed with italic off, request IMSI]
23	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.7.1	[Command performed successfully, AT Response containing IMSI]
24	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: RUN AT COMMAND 3.7.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 1"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2B	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	31	A8	08	41	54	2B	43	49
	4D	49	0D	D0	04	00	10	20	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.7.2

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 2"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0

Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2B	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	32	A8	08	41	54	2B	43	49
	4D	49	0D	D0	04	00	10	00	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.7.3

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 3"
AT Command
AT Command string: "AT+CIMI<CR>"

Coding:

BER-TLV:	BER-TLV:	D0	25	81	03	01	34	00	82	02	81	82
		10	52	75	6E	20	41	54	20	43	6F	6D
		61	6E	64	20	33	A8	08	41	54	2B	43
		4D	49	0D								

TERMINAL RESPONSE: RUN AT COMMAND 3.7.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
AT Response
AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00
	A9	19	0D	0A	30	30	31	30	31	30	31	32
	33	34	35	36	37	38	39	0D	0A	0D	0A	4F
	4B	0D	0A									

27.22.4.23.3.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.7.

27.22.4.23.3.8 RUN AT COMMAND (support of Text Attribute – Underline On)

27.22.4.23.3.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.8.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.
- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.8.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with underline text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.8.4 Method of test

27.22.4.23.3.8.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.8.4.2 Procedure

Expected Sequence 3.8(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Underline On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.8.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.8.1	
4	ME (→ USER)	Display "Run AT Command 1"	[alpha identifier is displayed with underline on, request IMSI]
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.8.1	[Command performed successfully, AT Response containing IMSI]
6	UICC → ME	PROACTIVE UICC SESSION ENDED	
7	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.8.2	
8	ME → UICC	FETCH	

9	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.8.2	
10	ME (→ USER)	Display "Run AT Command 2"	[alpha identifier is displayed with underline off, request IMSI]
11	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.8.1	[Command performed successfully, AT Response containing IMSI]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.8.1	
14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.8.1	
16	ME (→ USER)	Display "Run AT Command 1"	[alpha identifier is displayed with underline on, request IMSI]
17	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.8.1	[Command performed successfully, AT Response containing IMSI]
18	UICC → ME	PROACTIVE UICC SESSION ENDED	
19	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.8.3	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.8.3	
22	ME (→ USER)	Display "Run AT Command 3"	[alpha identifier is displayed with underline off, request IMSI]
23	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.8.1	[Command performed successfully, AT Response containing IMSI]
24	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: RUN AT COMMAND 3.8.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 1"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline On, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2B	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	31	A8	08	41	54	2B	43	49
	4D	49	0D	D0	04	00	10	40	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.8.2

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 2"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2B	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	32	A8	08	41	54	2B	43	49
	4D	49	0D	D0	04	00	10	00	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.8.3

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 3"
AT Command
AT Command string: "AT+CIMI<CR>"

Coding:

BER-TLV:	D0	25	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	33	A8	08	41	54	2B	43	49
	4D	49	0D									

TERMINAL RESPONSE: RUN AT COMMAND 3.8.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result

General Result: Command performed successfully

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00
	A9	19	0D	0A	30	30	31	30	31	30	31	32
	33	34	35	36	37	38	39	0D	0A	0D	0A	4F
	4B	0D	0A									

27.22.4.23.3.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.8.

27.22.4.23.3.9 RUN AT COMMAND (support of Text Attribute – Strikethrough On)

27.22.4.23.3.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.9.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.
- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.9.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with strikethrough text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.9.4 Method of test

27.22.4.23.3.9.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.9.4.2 Procedure

Expected Sequence 3.9(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Strikethrough On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.9.1	
2	ME → UICC	FETCH	

3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.9.1	
4	ME (→ USER)	Display "Run AT Command 1"	[alpha identifier is displayed with strikethrough on, request IMSI]
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.9.1	[Command performed successfully, AT Response containing IMSI]
6	UICC → ME	PROACTIVE UICC SESSION ENDED	
7	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.9.2	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.9.2	
10	ME (→ USER)	Display "Run AT Command 2"	[alpha identifier is displayed with strikethrough off, request IMSI]
11	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.9.1	[Command performed successfully, AT Response containing IMSI]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.9.1	
14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.9.1	
16	ME (→ USER)	Display " Run AT Command 1"	[alpha identifier is displayed with strikethrough on, request IMSI]
17	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.9.1	[Command performed successfully, AT Response containing IMSI]
18	UICC → ME	PROACTIVE UICC SESSION ENDED	
19	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.9.3	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.9.3	
22	ME (→ USER)	Display "Run AT Command 3"	[alpha identifier is displayed with strikethrough off, request IMSI]
23	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.9.1	[Command performed successfully, AT Response containing IMSI]
24	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: RUN AT COMMAND 3.9.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 1"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough On

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2B	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	31	A8	08	41	54	2B	43	49
	4D	49	0D	D0	04	00	10	80	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.9.2

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 2"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2B	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	32	A8	08	41	54	2B	43	49
	4D	49	0D	D0	04	00	10	00	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.9.3

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 3"
AT Command
AT Command string: "AT+CIMI<CR>"

Coding:

BER-TLV:	D0	25	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	33	A8	08	41	54	2B	43	49
	4D	49	0D									

TERMINAL RESPONSE: RUN AT COMMAND 3.9.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
AT Response
AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00
	A9	19	0D	0A	30	30	31	30	31	30	31	32
	33	34	35	36	37	38	39	0D	0A	0D	0A	4F
	4B	0D	0A									

27.22.4.23.3.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.9.

27.22.4.23.3.10 RUN AT COMMAND (support of Text Attribute – Foreground and Background Colour)

27.22.4.23.3.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.10.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.
- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.10.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with foreground and background colour text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.10.4 Method of test

27.22.4.23.3.10.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.10.4.2 Procedure

Expected Sequence 3.10(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Foreground and Background Colour)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.10.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.10.1	
4	ME (→ USER)	Display "Run AT Command 1"	[alpha identifier is displayed with foreground and background colour according to the text attribute configuration, request IMSI]
5	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.10.1	[Command performed successfully, AT Response containing IMSI]
6	UICC → ME	PROACTIVE UICC SESSION ENDED	
7	UICC → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.10.2	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: RUN AT COMMAND 3.10.2	
10	ME (→ USER)	Display "Run AT Command 2"	[alpha identifier is displayed with ME's default foreground and background colour, request IMSI]
11	ME → UICC	TERMINAL RESPONSE: RUN AT COMMAND 3.10.1	[Command performed successfully, AT Response containing IMSI]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	

PROACTIVE COMMAND: RUN AT COMMAND 3.10.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 1"
AT Command
AT Command string: "AT+CIMI<CR>"
Text Attribute
Formatting position: 0
Formatting length: 16
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	2B	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	31	A8	08	41	54	2B	43	49
	4D	49	0D	D0	04	00	10	00	B4			

PROACTIVE COMMAND: RUN AT COMMAND 3.10.2

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier
Alpha Identifier "Run AT Command 2"
AT Command
AT Command string: "AT+CIMI<CR>"

Coding:

BER-TLV:	D0	25	81	03	01	34	00	82	02	81	82	85
	10	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	20	32	A8	08	41	54	2B	43	49
	4D	49	0D									

TERMINAL RESPONSE: RUN AT COMMAND 3.10.1

Logically:

Command details
Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
AT Response
AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00
	A9	19	0D	0A	30	30	31	30	31	30	31	32
	33	34	35	36	37	38	39	0D	0A	0D	0A	4F
	4B	0D	0A									

27.22.4.23.3.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.10.

27.22.4.23.4 RUN AT COMMAND (UCS2 display in Cyrillic)

27.22.4.23.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.4.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.
- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.4.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with UCS2 alpha identifier as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.4.4 Method of test

27.22.4.23.4.4.1 Initial conditions

The ME is connected to the UICC Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.4.4.2 Procedure

Expected Sequence 4.1(RUN AT COMMAND, alpha identifier presented coded with UCS2 in Cyrillic, request ME Manufacturer ID)

See ETSI TS 102 384 [26] in clause 27.22.4.23.4.4.2, Expected Sequence 4.1.

27.22.4.23.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.1.

27.22.4.23.5 RUN AT COMMAND (UCS2 display in Chinese)

27.22.4.23.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.5.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.
- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.5.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with UCS2 alpha identifier as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.5.4 Method of test

27.22.4.23.5.4.1 Initial conditions

The ME is connected to the UICC Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.5.4.2 Procedure

Expected Sequence 5.1(RUN AT COMMAND, alpha identifier presented coded with UCS2 in Chinese, request ME Manufacturer ID)

See ETSI TS 102 384 [26] in clause 27.22.4.23.5.4.2, Expected Sequence 5.1.

27.22.4.23.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 5.1.

27.22.4.23.6 RUN AT COMMAND (UCS2 display in Katakana)

27.22.4.23.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.6.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.
- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.6.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with UCS2 alpha identifier as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.6.4 Method of test

27.22.4.23.6.4.1 Initial conditions

The ME is connected to the UICC Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.6.4.2 Procedure

Expected Sequence 6.1(RUN AT COMMAND, alpha identifier presented coded with UCS2 in Katakana, request ME Manufacturer ID)

See ETSI TS 102 384 [26] in clause 27.22.4.23.6.4.2, Expected Sequence 6.1.

27.22.4.23.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1.

27.22.4.24 SEND DTMF

27.22.4.24.1 SEND DTMF (Normal)

27.22.4.24.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.1.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2 and clause 8.44.

27.22.4.24.1.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that if an alpha identifier is provided by the UICC and is a null data object the ME does not give any information to the user on the fact that the ME is performing a SEND DTMF command.

27.22.4.24.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.1.4. 2 Procedure

Expected Sequence 1.1 (SEND DTMF, normal)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	

4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 1.1.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 1.1.1	
7	ME → USER	May give information to the user concerning what is happening. Do not locally generate audible DTMF tones and play them to the user.	
8	ME → USS	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	ME → USS	Start DTMF 1.2	["2"]
11	ME → UICC	TERMINAL RESPONSE: SEND DTMF 1.1.1	[Command performed successfully]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 1.1.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
DTMF String: "1" pause "2"

Coding:

BER-TLV:	D0	0D	81	03	01	14	00	82	02	81	83	AC
	02	C1	F2									

Start DTMF 1.1

Logically:

DTMF String: "1"

Start DTMF 1.2

Logically:

DTMF String: "2"

TERMINAL RESPONSE: SEND DTMF 1.1.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

Expected Sequence 1.2 (SEND DTMF, containing alpha identifier)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 1.2.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 1.2.1	
7	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	Alpha identifier
8	ME → USS	Start DTMF 1.1	["1"]
9	ME → USS	Start DTMF 1.2	["2"]
10	ME → USS	Start DTMF 1.3	["3"]
11	ME → USS	Start DTMF 1.4	["4"]
12	ME → USS	Start DTMF 1.5	["5"]
13	ME → USS	Start DTMF 1.6	["6"]
14	ME → USS	Start DTMF 1.7	["7"]
15	ME → USS	Start DTMF 1.8	["8"]
16	ME → USS	Start DTMF 1.9	["9"]
17	ME → USS	Start DTMF 1.10	["0"]
18	ME → UICC	TERMINAL RESPONSE: SEND DTMF 1.1.1	[Command performed successfully]
19	UICC → ME	PROACTIVE UICC SESSION ENDED	
20	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 1.2.1

Logically:

Command details
- Command number: 1
- Command type: SEND DTMF
- Command qualifier: "00"

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "Send DTMF"
- DTMF String: "1234567890"

Coding:

BER-TLV:	D0	1B	81	03	01	14	00	82	02	81	83	85
	09	53	65	6E	64	20	44	54	4D	46	AC	05
	21	43	65	87	09							

Start DTMF 1.3

Logically:

DTMF String: "3"

Start DTMF 1.4

Logically:

DTMF String: "4"

Start DTMF 1.5

Logically:

DTMF String: "5"

Start DTMF 1.6

Logically:

DTMF String: "6"

Start DTMF 1.7

Logically:

DTMF String: "7"

Start DTMF 1.8

Logically:

DTMF String: "8"

Start DTMF 1.9

Logically:

DTMF String: "9"

Start DTMF 1.10

Logically:

DTMF String: "0"

Expected Sequence 1.3 (SEND DTMF, containing alpha identifier with null data object)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 1.3.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 1.3.1	Alpha identifier with null data object
7	ME → USER	Do not give any information to the user on the fact that the ME is performing a SEND DTMF command. Do not locally generate audible DTMF tones and play them to the user.	
8	ME → USS	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 30 seconds ±20%
10	ME → USS	Start DTMF 1.2	["2"]

11	ME → UICC	TERMINAL RESPONSE: SEND DTMF 1.1.1	[Command performed successfully]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 1.3.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "" (null data object)
DTMF String: "1" pause pause pause pause pause pause pause pause pause pause "2"

Coding:

BER-TLV:	D0	13	81	03	01	14	00	82	02	81	83	85
	00	AC	06	C1	CC	CC	CC	CC	2C			

Expected Sequence 1.4 (SEND DTMF, mobile is not in a speech call)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 1.1.1	[Mobile is not in a speech call]
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND DTMF 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SEND DTMF 1.4.1	[ME currently unable to process command, not in speech call]
5	UICC → ME	PROACTIVE UICC SESSION ENDED	

TERMINAL RESPONSE: SEND DTMF 1.4.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: ME currently unable to process command
Additional information: Not in speech call

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	02	20
	07											

27.22.4.24.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.4.

27.22.4.24.2 SEND DTMF (Display of icons)

27.22.4.24.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.2.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44, clause 8.31 and clause 6.5.4.

27.22.4.24.2.3 Test purpose

To verify that after a call has been successfully established the ME send the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME do not locally generate audible DTMF tones and play them to the user.

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the icons which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.2.4 Method of test

27.22.4.24.2.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table.Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

The elementary files are coded as Toolkit default.

27.22.4.24.2.4.2 Procedure

Expected Sequence 2.1A (SEND DTMF, BASIC ICON self explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 2.1.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 2.1.1	[BASIC-ICON, self-explanatory]
7	ME → USER	Display the BASIC-ICON Do not locally generate audible DTMF tones and play them to the user.	
8	ME → USS	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%

10	ME → USS	Start DTMF 1.2	["2"]
11	ME → UICC	TERMINAL RESPONSE: SEND DTMF 2.1.1A	[Command performed successfully]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 2.1.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Basic Icon"
DTMF String: "1" pause "2"
Icon identifier
Icon qualifier: icon is self-explanatory
Icon identifier: record 1 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	1D	81	03	01	14	00	82	02	81	83	85
	0A	42	61	73	69	63	20	49	63	6F	6E	AC
	02	C1	F2	9E	02	00	01					

DTMF Request 2.1.1

Logically:

DTMF String: $DTMF_2.1$ = "C1 F2" (given as example)

TERMINAL RESPONSE: SEND DTMF 2.1.1A

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

Expected Sequence 2.1B (SEND DTMF, BASIC ICON self explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	

2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 2.1.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 2.1.1	[BASIC-ICON, self-explanatory]
7	ME → USER	Display "Basic Icon" without the icon Do not locally generate audible DTMF tones and play them to the user.	
8	ME → USS	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20 %
10	ME → USS	Start DTMF 1.2	["2"]
11	ME → UICC	TERMINAL RESPONSE: SEND DTMF 2.1.1B	[Command performed successfully, but requested icon could not be displayed]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	User → ME	End the call	

TERMINAL RESPONSE: SEND DTMF 2.1.1B

Logically:

Command details
- Command number: 1
- Command type: SEND DTMF
- Command qualifier: "00"

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	04

Expected Sequence 2.2A (SEND DTMF, COLOUR-ICON self explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 2.2.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 2.2.1	[COLOUR-ICON]
7	ME → USER	Display the COLOUR-ICON Do not locally generate audible DTMF tones and play them to the user.	
8	ME → USS	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	ME → USS	Start DTMF 1.2	["2"]

Step	Direction	MESSAGE / Action	Comments
11	ME → UICC	TERMINAL RESPONSE: SEND DTMF 2.1.1A	[Command performed successfully]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 2.2.1

Logically:

Command details
- Command number: 1
- Command type: SEND DTMF
- Command qualifier: "00"

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "Colour Icon"
- DTMF String: "1" pause "2"

Icon identifier:
- Icon qualifier: icon is self-explanatory
- Icon identifier: record 2 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	1E	81	03	01	14	00	82	02	81	83	85
	0B	43	6F	6C	6F	75	72	20	49	63	6F	6E
	AC	02	C1	F2	9E	02	00	02				

Expected Sequence 2.2B (SEND DTMF, COLOUR-ICON self explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 2.2.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 2.2.1	[COLOUR-ICON]
7	ME → USER	Display "Colour Icon" without the icon Do not locally generate audible DTMF tones and play them to the user.	
8	ME → USS	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	ME → USS	Start DTMF 1.2	["2"]
11	ME → UICC	TERMINAL RESPONSE: SEND DTMF 2.1.1B	[Command performed successfully, but requested icon could not be displayed]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	User → ME	End the call	

Expected Sequence 2.3A (SEND DTMF, Alpha identifier & BASIC-ICON, not self-explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 2.3.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 2.3.1	[Alpha identifier & BASIC-ICON, not self-explanatory]
7	ME → USER	Display "Send DTMF" and the BASIC-ICON Do not locally generate audible DTMF tones and play them to the user.	
8	ME → USS	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20 %
10	ME → USS	Start DTMF 1.2	["2"]
11	ME → UICC	TERMINAL RESPONSE: SEND DTMF 2.1.1A	[Command performed successfully]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 2.3.1

Logically:

Command details
- Command number: 1
- Command type: SEND DTMF
- Command qualifier: "00"

Device identities
- Source device: UICC
- Destination device: Network
- Alpha identifier: "Send DTMF"
- DTMF String: "1" pause "2"

Icon identifier:
- Icon qualifier: icon is not self-explanatory
- Icon identifier: record 1 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	1C	81	03	01	14	00	82	02	81	83	85
	09	53	65	6E	64	20	44	54	4D	46	AC	02
	C1	F2	9E	02	01	01						

Expected Sequence 2.3B (SEND DTMF, Alpha identifier & BASIC-ICON, not self-explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	

3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 2.3.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 2.3.1	[Alpha identifier & BASIC-ICON, not self-explanatory]
7	ME → USER	Display "Send DTMF" without the icon Do not locally generate audible DTMF tones and play them to the user.	
8	ME → USS	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	ME → USS	Start DTMF 1.2	["2"]
11	ME → UICC	TERMINAL RESPONSE: SEND DTMF 2.1.1B	[Command performed successfully, but requested icon could not be displayed]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	User → ME	End the call	

27.22.4.24.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.3.

27.22.4.24.3 SEND DTMF (UCS2 display in Cyrillic)

27.22.4.24.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.3.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2 and clause 8.44.

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in:

- ISO/IEC 10646. [17].

27.22.4.24.3.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND DTMF proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.24.3.4 Method of test

27.22.4.24.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.24.3.4.2 Procedure

Expected Sequence 3.1 (SEND DTMF, successful, UCS2 text in Cyrillic)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 3.1.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 3.1.1	
7	ME → USER	Display "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]
8	ME → USS	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	ME → USS	Start DTMF 1.2	["2"]
11	ME → UICC	TERMINAL RESPONSE: SEND DTMF 3.1.1	[Command performed successfully]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 3.1.1

Logically:

Command details
- Command number: 1
- Command type: SEND DTMF
- Command qualifier: "00"

Device identities
- Source device: UICC
- Destination device: Network

Alpha Identifier
- Text: "ЗДРАВСТВУЙТЕ"
- DTMF String: "1" pause "2"

Coding:

BER-TLV:	D0	28	81	03	01	14	00	82	02	81	83	85
	19	80	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15	AC	02	C1	F2						

TERMINAL RESPONSE: SEND DTMF 3.1.1

Logically:

Command details
- Command number: 1
- Command type: SEND DTMF
- Command qualifier: "00"

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successful

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

27.22.4.12.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1.

27.22.4.24.4 SEND DTMF (support of Text Attribute)

27.22.4.24.4.1 SEND DTMF (support of Text Attribute – Left Alignment)

27.22.4.24.4.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.1.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.1.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the left alignment text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.1.4 Method of test

27.22.4.24.4.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.1.4.2 Procedure

Expected Sequence 4.1 (SEND DTMF, with text attribute – Left Alignment)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.1.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.1.1	

7	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with left alignment]
8	ME → USS	Start DTMF 1.1	["1"]
9	ME → USS	Start DTMF 1.2	["2"]
10	ME → USS	Start DTMF 1.3	["3"]
11	ME → USS	Start DTMF 1.4	["4"]
12	ME → USS	Start DTMF 1.5	["5"]
13	ME → USS	Start DTMF 1.6	["6"]
14	ME → USS	Start DTMF 1.7	["7"]
15	ME → USS	Start DTMF 1.8	["8"]
16	ME → USS	Start DTMF 1.9	["9"]
17	ME → USS	Start DTMF 1.10	["0"]
18	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.1.1	[Command performed successfully]
19	UICC → ME	PROACTIVE UICC SESSION ENDED	
20	User → ME	End the call	
21	User → ME	Set up a call to "+0123456789"	
22	ME → USS	The ME attempts to set up a call to "+0123456789"	
23	USS → ME	The ME receives the CONNECT message from the USS.	
24	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.1.2	
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.1.2	
27	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Message shall be formatted without left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/17, no alignment change will take place]
28	ME → USS	Start DTMF 1.1	["1"]
29	ME → USS	Start DTMF 1.2	["2"]
30	ME → USS	Start DTMF 1.3	["3"]
31	ME → USS	Start DTMF 1.4	["4"]
32	ME → USS	Start DTMF 1.5	["5"]
33	ME → USS	Start DTMF 1.6	["6"]
34	ME → USS	Start DTMF 1.7	["7"]
35	ME → USS	Start DTMF 1.8	["8"]
36	ME → USS	Start DTMF 1.9	["9"]
37	ME → USS	Start DTMF 1.10	["0"]
38	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.1.1	[Command performed successfully]
39	UICC → ME	PROACTIVE UICC SESSION ENDED	
40	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 4.1.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 1"
DTMF String: "1234567890"
Text Attribute
Formatting position: 0
Formatting length: 11

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	31
	AC	05	21	43	65	87	09	D0	04	00	0B	00
	B4											

PROACTIVE COMMAND: SEND DTMF 4.1.2

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 2"
DTMF String: "1234567890"

Coding:

BER-TLV:	D0	1D	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	32
	AC	05	21	43	65	87	09					

TERMINAL RESPONSE: SEND DTMF 4.1.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

27.22.4.24.4.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.1.

27.22.4.24.4.2 SEND DTMF (support of Text Attribute – Center Alignment)

27.22.4.24.4.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.2.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.2.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the center alignment text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.2.4 Method of test

27.22.4.24.4.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.2.4.2 Procedure

Expected Sequence 4.2 (SEND DTMF, with text attribute – Center Alignment)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.2.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.2.1	
7	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with center alignment]
8	ME → USS	Start DTMF 1.1	["1"]
9	ME → USS	Start DTMF 1.2	["2"]
10	ME → USS	Start DTMF 1.3	["3"]
11	ME → USS	Start DTMF 1.4	["4"]
12	ME → USS	Start DTMF 1.5	["5"]
13	ME → USS	Start DTMF 1.6	["6"]
14	ME → USS	Start DTMF 1.7	["7"]
15	ME → USS	Start DTMF 1.8	["8"]
16	ME → USS	Start DTMF 1.9	["9"]

17	ME → USS	Start DTMF 1.10	["0"]
18	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.2.1	[Command performed successfully]
19	UICC → ME	PROACTIVE UICC SESSION ENDED	
20	User → ME	End the call	
21	User → ME	Set up a call to "+0123456789"	
22	ME → USS	The ME attempts to set up a call to "+0123456789"	
23	USS → ME	The ME receives the CONNECT message from the USS.	
24	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.2.2	
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.2.2	
27	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Message shall be formatted without center alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/17, no alignment change will take place]
28	ME → USS	Start DTMF 1.1	["1"]
29	ME → USS	Start DTMF 1.2	["2"]
30	ME → USS	Start DTMF 1.3	["3"]
31	ME → USS	Start DTMF 1.4	["4"]
32	ME → USS	Start DTMF 1.5	["5"]
33	ME → USS	Start DTMF 1.6	["6"]
34	ME → USS	Start DTMF 1.7	["7"]
35	ME → USS	Start DTMF 1.8	["8"]
36	ME → USS	Start DTMF 1.9	["9"]
37	ME → USS	Start DTMF 1.10	["0"]
38	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.2.1	[Command performed successfully]
39	UICC → ME	PROACTIVE UICC SESSION ENDED	
40	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 4.2.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 1"
DTMF String: "1234567890"
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Center Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	31
	AC	05	21	43	65	87	09	D0	04	00	0B	01
	B4											

PROACTIVE COMMAND: SEND DTMF 4.2.2

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 2"
DTMF String: "1234567890"

Coding:

BER-TLV:	D0	1D	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	32
	AC	05	21	43	65	87	09					

TERMINAL RESPONSE: SEND DTMF 4.2.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

27.22.4.24.4.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.2.

27.22.4.24.4.3 SEND DTMF (support of Text Attribute – Right Alignment)

27.22.4.24.4.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.3.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.3.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the right alignment text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.3.4 Method of test

27.22.4.24.4.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.3.4.2 Procedure

Expected Sequence 4.3 (SEND DTMF, with text attribute – Right Alignment)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.3.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.3.1	
7	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with right alignment]
8	ME → USS	Start DTMF 1.1	["1"]
9	ME → USS	Start DTMF 1.2	["2"]
10	ME → USS	Start DTMF 1.3	["3"]
11	ME → USS	Start DTMF 1.4	["4"]
12	ME → USS	Start DTMF 1.5	["5"]
13	ME → USS	Start DTMF 1.6	["6"]
14	ME → USS	Start DTMF 1.7	["7"]
15	ME → USS	Start DTMF 1.8	["8"]
16	ME → USS	Start DTMF 1.9	["9"]
17	ME → USS	Start DTMF 1.10	["0"]
18	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.3.1	[Command performed successfully]
19	UICC → ME	PROACTIVE UICC SESSION ENDED	
20	User → ME	End the call	
21	User → ME	Set up a call to "+0123456789"	
22	ME → USS	The ME attempts to set up a call to "+0123456789"	
23	USS → ME	The ME receives the CONNECT message from the USS.	
24	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.3.2	
25	ME → UICC	FETCH	

26	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.3.2	
27	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Message shall be formatted without right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/17, no alignment change will take place]
28	ME → USS	Start DTMF 1.1	["1"]
29	ME → USS	Start DTMF 1.2	["2"]
30	ME → USS	Start DTMF 1.3	["3"]
31	ME → USS	Start DTMF 1.4	["4"]
32	ME → USS	Start DTMF 1.5	["5"]
33	ME → USS	Start DTMF 1.6	["6"]
34	ME → USS	Start DTMF 1.7	["7"]
35	ME → USS	Start DTMF 1.8	["8"]
36	ME → USS	Start DTMF 1.9	["9"]
37	ME → USS	Start DTMF 1.10	["0"]
38	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.3.1	[Command performed successfully]
39	UICC → ME	PROACTIVE UICC SESSION ENDED	
40	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 4.3.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 1"
DTMF String: "1234567890"
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Right Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	31
	AC	05	21	43	65	87	09	D0	04	00	B0	02
	B4											

PROACTIVE COMMAND: SEND DTMF 4.3.2

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 2"
DTMF String: "1234567890"

Coding:

BER-TLV:	D0	1D	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	32
	AC	05	21	43	65	87	09					

TERMINAL RESPONSE: SEND DTMF 4.3.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

27.22.4.24.4.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.3.

27.22.4.24.4.4 SEND DTMF (support of Text Attribute – Large Font Size)

27.22.4.24.4.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.4.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.4.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the large font size text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.4.4 Method of test

27.22.4.24.4.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.4.4.2 Procedure

Expected Sequence 4.4 (SEND DTMF, with text attribute – Large Font Size)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.4.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.4.1	
7	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with large font size]
8	ME → USS	Start DTMF 1.1	["1"]
9	ME → USS	Start DTMF 1.2	["2"]
10	ME → USS	Start DTMF 1.3	["3"]
11	ME → USS	Start DTMF 1.4	["4"]
12	ME → USS	Start DTMF 1.5	["5"]
13	ME → USS	Start DTMF 1.6	["6"]
14	ME → USS	Start DTMF 1.7	["7"]
15	ME → USS	Start DTMF 1.8	["8"]
16	ME → USS	Start DTMF 1.9	["9"]
17	ME → USS	Start DTMF 1.10	["0"]
18	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.4.1	[Command performed successfully]
19	UICC → ME	PROACTIVE UICC SESSION ENDED	
20	User → ME	End the call	
21	User → ME	Set up a call to "+0123456789"	
22	ME → USS	The ME attempts to set up a call to "+0123456789"	
23	USS → ME	The ME receives the CONNECT message from the USS.	
24	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.4.2	
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.4.2	
27	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with normal font size]
28	ME → USS	Start DTMF 1.1	["1"]
29	ME → USS	Start DTMF 1.2	["2"]
30	ME → USS	Start DTMF 1.3	["3"]
31	ME → USS	Start DTMF 1.4	["4"]

32	ME → USS	Start DTMF 1.5	["5"]
33	ME → USS	Start DTMF 1.6	["6"]
34	ME → USS	Start DTMF 1.7	["7"]
35	ME → USS	Start DTMF 1.8	["8"]
36	ME → USS	Start DTMF 1.9	["9"]
37	ME → USS	Start DTMF 1.10	["0"]
38	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.4.1	[Command performed successfully]
39	UICC → ME	PROACTIVE UICC SESSION ENDED	
40	User → ME	End the call	
41	User → ME	Set up a call to "+0123456789"	
42	ME → USS	The ME attempts to set up a call to "+0123456789"	
43	USS → ME	The ME receives the CONNECT message from the USS.	
44	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.4.1	
45	ME → UICC	FETCH	
46	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.4.1	
47	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with large font size]
48	ME → USS	Start DTMF 1.1	["1"]
49	ME → USS	Start DTMF 1.2	["2"]
50	ME → USS	Start DTMF 1.3	["3"]
51	ME → USS	Start DTMF 1.4	["4"]
52	ME → USS	Start DTMF 1.5	["5"]
53	ME → USS	Start DTMF 1.6	["6"]
54	ME → USS	Start DTMF 1.7	["7"]
55	ME → USS	Start DTMF 1.8	["8"]
56	ME → USS	Start DTMF 1.9	["9"]
57	ME → USS	Start DTMF 1.10	["0"]
58	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.4.1	[Command performed successfully]
59	UICC → ME	PROACTIVE UICC SESSION ENDED	
60	User → ME	End the call	
61	User → ME	Set up a call to "+0123456789"	
62	ME → USS	The ME attempts to set up a call to "+0123456789"	
63	USS → ME	The ME receives the CONNECT message from the USS.	
64	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.4.3	
65	ME → UICC	FETCH	
66	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.4.3	
67	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with normal font size]
68	ME → USS	Start DTMF 1.1	["1"]
69	ME → USS	Start DTMF 1.2	["2"]
70	ME → USS	Start DTMF 1.3	["3"]
71	ME → USS	Start DTMF 1.4	["4"]
72	ME → USS	Start DTMF 1.5	["5"]
73	ME → USS	Start DTMF 1.6	["6"]
74	ME → USS	Start DTMF 1.7	["7"]
75	ME → USS	Start DTMF 1.8	["8"]
76	ME → USS	Start DTMF 1.9	["9"]
77	ME → USS	Start DTMF 1.10	["0"]
78	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.4.1	[Command performed successfully]

79	UICC → ME	PROACTIVE UICC SESSION ENDED	
80	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 4.4.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 1"
DTMF String: "1234567890"
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Large Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	31
	AC	05	21	43	65	87	09	D0	04	00	0B	04
	B4											

PROACTIVE COMMAND: SEND DTMF 4.4.2

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 2"
DTMF String: "1234567890"
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	32
	AC	05	21	43	65	87	09	D0	04	00	0B	00
	B4											

PROACTIVE COMMAND: SEND DTMF 4.4.3

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 3"
DTMF String: "1234567890"

Coding:

BER-TLV:	D0	1D	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	33
	AC	05	21	43	65	87	09					

TERMINAL RESPONSE: SEND DTMF 4.4.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

27.22.4.24.4.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.4.

27.22.4.24.4.5 SEND DTMF (support of Text Attribute – Small Font Size)

27.22.4.24.4.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.5.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.5.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the small font size text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.5.4 Method of test

27.22.4.24.4.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.5.4.2 Procedure

Expected Sequence 4.5 (SEND DTMF, with text attribute – Small Font Size)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.5.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.5.1	
7	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with small font size]
8	ME → USS	Start DTMF 1.1	["1"]
9	ME → USS	Start DTMF 1.2	["2"]
10	ME → USS	Start DTMF 1.3	["3"]
11	ME → USS	Start DTMF 1.4	["4"]
12	ME → USS	Start DTMF 1.5	["5"]
13	ME → USS	Start DTMF 1.6	["6"]
14	ME → USS	Start DTMF 1.7	["7"]
15	ME → USS	Start DTMF 1.8	["8"]
16	ME → USS	Start DTMF 1.9	["9"]
17	ME → USS	Start DTMF 1.10	["0"]
18	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.5.1	[Command performed successfully]
19	UICC → ME	PROACTIVE UICC SESSION ENDED	
20	User → ME	End the call	
21	User → ME	Set up a call to "+0123456789"	
22	ME → USS	The ME attempts to set up a call to "+0123456789"	
23	USS → ME	The ME receives the CONNECT message from the USS.	
24	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.5.2	
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.5.2	

27	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with normal font size]
28	ME → USS	Start DTMF 1.1	["1"]
29	ME → USS	Start DTMF 1.2	["2"]
30	ME → USS	Start DTMF 1.3	["3"]
31	ME → USS	Start DTMF 1.4	["4"]
32	ME → USS	Start DTMF 1.5	["5"]
33	ME → USS	Start DTMF 1.6	["6"]
34	ME → USS	Start DTMF 1.7	["7"]
35	ME → USS	Start DTMF 1.8	["8"]
36	ME → USS	Start DTMF 1.9	["9"]
37	ME → USS	Start DTMF 1.10	["0"]
38	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.5.1	[Command performed successfully]
39	UICC → ME	PROACTIVE UICC SESSION ENDED	
40	User → ME	End the call	
41	User → ME	Set up a call to "+0123456789"	
42	ME → USS	The ME attempts to set up a call to "+0123456789"	
43	USS → ME	The ME receives the CONNECT message from the USS.	
44	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.5.1	
45	ME → UICC	FETCH	
46	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.5.1	
47	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with small font size]
48	ME → USS	Start DTMF 1.1	["1"]
49	ME → USS	Start DTMF 1.2	["2"]
50	ME → USS	Start DTMF 1.3	["3"]
51	ME → USS	Start DTMF 1.4	["4"]
52	ME → USS	Start DTMF 1.5	["5"]
53	ME → USS	Start DTMF 1.6	["6"]
54	ME → USS	Start DTMF 1.7	["7"]
55	ME → USS	Start DTMF 1.8	["8"]
56	ME → USS	Start DTMF 1.9	["9"]
57	ME → USS	Start DTMF 1.10	["0"]
58	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.5.1	[Command performed successfully]
59	UICC → ME	PROACTIVE UICC SESSION ENDED	
60	User → ME	End the call	
61	User → ME	Set up a call to "+0123456789"	
62	ME → USS	The ME attempts to set up a call to "+0123456789"	
63	USS → ME	The ME receives the CONNECT message from the USS.	
64	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.5.3	
65	ME → UICC	FETCH	
66	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.5.3	
67	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with normal font size]
68	ME → USS	Start DTMF 1.1	["1"]
69	ME → USS	Start DTMF 1.2	["2"]
70	ME → USS	Start DTMF 1.3	["3"]
71	ME → USS	Start DTMF 1.4	["4"]
72	ME → USS	Start DTMF 1.5	["5"]

73	ME → USS	Start DTMF 1.6	["6"]
74	ME → USS	Start DTMF 1.7	["7"]
75	ME → USS	Start DTMF 1.8	["8"]
76	ME → USS	Start DTMF 1.9	["9"]
77	ME → USS	Start DTMF 1.10	["0"]
78	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.5.1	[Command performed successfully]
79	UICC → ME	PROACTIVE UICC SESSION ENDED	
80	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 4.5.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 1"
DTMF String: "1234567890"
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Small Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	31
	AC	05	21	43	65	87	09	D0	04	00	0B	08
	B4											

PROACTIVE COMMAND: SEND DTMF 4.5.2

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 2"
DTMF String: "1234567890"
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	32

AC	05	21	43	65	87	09	D0	04	00	0B	00
B4											

PROACTIVE COMMAND: SEND DTMF 4.5.3

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 3"
DTMF String: "1234567890"

Coding:

BER-TLV:	D0	1D	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	33
	AC	05	21	43	65	87	09					

TERMINAL RESPONSE: SEND DTMF 4.5.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

27.22.4.24.4.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.5.

27.22.4.24.4.6 SEND DTMF (support of Text Attribute – Bold On)

27.22.4.24.4.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.6.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.6.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the bold text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.6.4 Method of test

27.22.4.24.4.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.6.4.2 Procedure

Expected Sequence 4.6 (SEND DTMF, with text attribute – Bold On)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.6.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.6.1	
7	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with bold on]
8	ME → USS	Start DTMF 1.1	["1"]
9	ME → USS	Start DTMF 1.2	["2"]
10	ME → USS	Start DTMF 1.3	["3"]
11	ME → USS	Start DTMF 1.4	["4"]
12	ME → USS	Start DTMF 1.5	["5"]
13	ME → USS	Start DTMF 1.6	["6"]
14	ME → USS	Start DTMF 1.7	["7"]
15	ME → USS	Start DTMF 1.8	["8"]
16	ME → USS	Start DTMF 1.9	["9"]
17	ME → USS	Start DTMF 1.10	["0"]
18	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.6.1	[Command performed successfully]
19	UICC → ME	PROACTIVE UICC SESSION ENDED	
20	User → ME	End the call	
21	User → ME	Set up a call to "+0123456789"	

22	ME → USS	The ME attempts to set up a call to "+0123456789"	
23	USS → ME	The ME receives the CONNECT message from the USS.	
24	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.6.2	
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.6.2	
27	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with bold off]
28	ME → USS	Start DTMF 1.1	["1"]
29	ME → USS	Start DTMF 1.2	["2"]
30	ME → USS	Start DTMF 1.3	["3"]
31	ME → USS	Start DTMF 1.4	["4"]
32	ME → USS	Start DTMF 1.5	["5"]
33	ME → USS	Start DTMF 1.6	["6"]
34	ME → USS	Start DTMF 1.7	["7"]
35	ME → USS	Start DTMF 1.8	["8"]
36	ME → USS	Start DTMF 1.9	["9"]
37	ME → USS	Start DTMF 1.10	["0"]
38	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.6.1	[Command performed successfully]
39	UICC → ME	PROACTIVE UICC SESSION ENDED	
40	User → ME	End the call	
41	User → ME	Set up a call to "+0123456789"	
42	ME → USS	The ME attempts to set up a call to "+0123456789"	
43	USS → ME	The ME receives the CONNECT message from the USS.	
44	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.6.1	
45	ME → UICC	FETCH	
46	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.6.1	
47	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with bold on]
48	ME → USS	Start DTMF 1.1	["1"]
49	ME → USS	Start DTMF 1.2	["2"]
50	ME → USS	Start DTMF 1.3	["3"]
51	ME → USS	Start DTMF 1.4	["4"]
52	ME → USS	Start DTMF 1.5	["5"]
53	ME → USS	Start DTMF 1.6	["6"]
54	ME → USS	Start DTMF 1.7	["7"]
55	ME → USS	Start DTMF 1.8	["8"]
56	ME → USS	Start DTMF 1.9	["9"]
57	ME → USS	Start DTMF 1.10	["0"]
58	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.6.1	[Command performed successfully]
59	UICC → ME	PROACTIVE UICC SESSION ENDED	
60	User → ME	End the call	
61	User → ME	Set up a call to "+0123456789"	
62	ME → USS	The ME attempts to set up a call to "+0123456789"	
63	USS → ME	The ME receives the CONNECT message from the USS.	
64	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.6.3	
65	ME → UICC	FETCH	
66	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.6.3	

67	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with bold off]
68	ME → USS	Start DTMF 1.1	["1"]
69	ME → USS	Start DTMF 1.2	["2"]
70	ME → USS	Start DTMF 1.3	["3"]
71	ME → USS	Start DTMF 1.4	["4"]
72	ME → USS	Start DTMF 1.5	["5"]
73	ME → USS	Start DTMF 1.6	["6"]
74	ME → USS	Start DTMF 1.7	["7"]
75	ME → USS	Start DTMF 1.8	["8"]
76	ME → USS	Start DTMF 1.9	["9"]
77	ME → USS	Start DTMF 1.10	["0"]
78	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.6.1	[Command performed successfully]
79	UICC → ME	PROACTIVE UICC SESSION ENDED	
80	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 4.6.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 1"
DTMF String: "1234567890"
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold On, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	31
	AC	05	21	43	65	87	09	D0	04	00	0B	10
	B4	00										

PROACTIVE COMMAND: SEND DTMF 4.6.2

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 2"
DTMF String: "1234567890"
Text Attribute
Formatting position: 0

Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	32
	AC	05	21	43	65	87	09	D0	04	00	0B	00
	B4											

PROACTIVE COMMAND: SEND DTMF 4.6.3

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 3"
DTMF String: "1234567890"

Coding:

BER-TLV:	D0	1D	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	33
	AC	05	21	43	65	87	09					

TERMINAL RESPONSE: SEND DTMF 4.6.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

27.22.4.24.4.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.6.

27.22.4.24.4.7 SEND DTMF (support of Text Attribute – Italic On)

27.22.4.24.4.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.7.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.7.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the italic text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.7.4 Method of test

27.22.4.24.4.7.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.7.4.2 Procedure

Expected Sequence 4.7 (SEND DTMF, with text attribute – Italic On)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.7.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.7.1	
7	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with italic on]
8	ME → USS	Start DTMF 1.1	["1"]
9	ME → USS	Start DTMF 1.2	["2"]
10	ME → USS	Start DTMF 1.3	["3"]
11	ME → USS	Start DTMF 1.4	["4"]
12	ME → USS	Start DTMF 1.5	["5"]
13	ME → USS	Start DTMF 1.6	["6"]
14	ME → USS	Start DTMF 1.7	["7"]
15	ME → USS	Start DTMF 1.8	["8"]
16	ME → USS	Start DTMF 1.9	["9"]

17	ME → USS	Start DTMF 1.10	["0"]
18	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.7.1	[Command performed successfully]
19	UICC → ME	PROACTIVE UICC SESSION ENDED	
20	User → ME	End the call	
21	User → ME	Set up a call to "+0123456789"	
22	ME → USS	The ME attempts to set up a call to "+0123456789"	
23	USS → ME	The ME receives the CONNECT message from the USS.	
24	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.7.2	
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.7.2	
27	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with italic off]
28	ME → USS	Start DTMF 1.1	["1"]
29	ME → USS	Start DTMF 1.2	["2"]
30	ME → USS	Start DTMF 1.3	["3"]
31	ME → USS	Start DTMF 1.4	["4"]
32	ME → USS	Start DTMF 1.5	["5"]
33	ME → USS	Start DTMF 1.6	["6"]
34	ME → USS	Start DTMF 1.7	["7"]
35	ME → USS	Start DTMF 1.8	["8"]
36	ME → USS	Start DTMF 1.9	["9"]
37	ME → USS	Start DTMF 1.10	["0"]
38	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.7.1	[Command performed successfully]
39	UICC → ME	PROACTIVE UICC SESSION ENDED	
40	User → ME	End the call	
41	User → ME	Set up a call to "+0123456789"	
42	ME → USS	The ME attempts to set up a call to "+0123456789"	
43	USS → ME	The ME receives the CONNECT message from the USS.	
44	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.7.1	
45	ME → UICC	FETCH	
46	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.7.1	
47	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with italic on]
48	ME → USS	Start DTMF 1.1	["1"]
49	ME → USS	Start DTMF 1.2	["2"]
50	ME → USS	Start DTMF 1.3	["3"]
51	ME → USS	Start DTMF 1.4	["4"]
52	ME → USS	Start DTMF 1.5	["5"]
53	ME → USS	Start DTMF 1.6	["6"]
54	ME → USS	Start DTMF 1.7	["7"]
55	ME → USS	Start DTMF 1.8	["8"]
56	ME → USS	Start DTMF 1.9	["9"]
57	ME → USS	Start DTMF 1.10	["0"]
58	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.7.1	[Command performed successfully]
59	UICC → ME	PROACTIVE UICC SESSION ENDED	
60	User → ME	End the call	
61	User → ME	Set up a call to "+0123456789"	
62	ME → USS	The ME attempts to set up a call to "+0123456789"	

63	USS → ME	The ME receives the CONNECT message from the USS.	
64	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.7.3	
65	ME → UICC	FETCH	
66	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.7.3	
67	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with italic off]
68	ME → USS	Start DTMF 1.1	["1"]
69	ME → USS	Start DTMF 1.2	["2"]
70	ME → USS	Start DTMF 1.3	["3"]
71	ME → USS	Start DTMF 1.4	["4"]
72	ME → USS	Start DTMF 1.5	["5"]
73	ME → USS	Start DTMF 1.6	["6"]
74	ME → USS	Start DTMF 1.7	["7"]
75	ME → USS	Start DTMF 1.8	["8"]
76	ME → USS	Start DTMF 1.9	["9"]
77	ME → USS	Start DTMF 1.10	["0"]
78	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.7.1	[Command performed successfully]
79	UICC → ME	PROACTIVE UICC SESSION ENDED	
80	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 4.7.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 1"
DTMF String: "1234567890"
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	31
	AC	05	21	43	65	87	09	D0	04	00	0B	20
	B4											

PROACTIVE COMMAND: SEND DTMF 4.7.2

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities

Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 2"
DTMF String: "1234567890"
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	32
	AC	05	21	43	65	87	09	D0	04	00	0B	00
	B4											

PROACTIVE COMMAND: SEND DTMF 4.7.3

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 3"
DTMF String: "1234567890"

Coding:

BER-TLV:	D0	1D	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	33
	AC	05	21	43	65	87	09					

TERMINAL RESPONSE: SEND DTMF 4.7.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

27.22.4.24.4.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.7.

27.22.4.24.4.8 SEND DTMF (support of Text Attribute – Underline On)

27.22.4.24.4.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.8.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.8.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the underline text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.8.4 Method of test

27.22.4.24.4.8.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.8.4.2 Procedure

Expected Sequence 4.8 (SEND DTMF, with text attribute – Underline On)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.8.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.8.1	
7	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with underline on]
8	ME → USS	Start DTMF 1.1	["1"]
9	ME → USS	Start DTMF 1.2	["2"]
10	ME → USS	Start DTMF 1.3	["3"]

11	ME → USS	Start DTMF 1.4	["4"]
12	ME → USS	Start DTMF 1.5	["5"]
13	ME → USS	Start DTMF 1.6	["6"]
14	ME → USS	Start DTMF 1.7	["7"]
15	ME → USS	Start DTMF 1.8	["8"]
16	ME → USS	Start DTMF 1.9	["9"]
17	ME → USS	Start DTMF 1.10	["0"]
18	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.8.1	[Command performed successfully]
19	UICC → ME	PROACTIVE UICC SESSION ENDED	
20	User → ME	End the call	
21	User → ME	Set up a call to "+0123456789"	
22	ME → USS	The ME attempts to set up a call to "+0123456789"	
23	USS → ME	The ME receives the CONNECT message from the USS.	
24	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.8.2	
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.8.2	
27	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with underline off]
28	ME → USS	Start DTMF 1.1	["1"]
29	ME → USS	Start DTMF 1.2	["2"]
30	ME → USS	Start DTMF 1.3	["3"]
31	ME → USS	Start DTMF 1.4	["4"]
32	ME → USS	Start DTMF 1.5	["5"]
33	ME → USS	Start DTMF 1.6	["6"]
34	ME → USS	Start DTMF 1.7	["7"]
35	ME → USS	Start DTMF 1.8	["8"]
36	ME → USS	Start DTMF 1.9	["9"]
37	ME → USS	Start DTMF 1.10	["0"]
38	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.8.1	[Command performed successfully]
39	UICC → ME	PROACTIVE UICC SESSION ENDED	
40	User → ME	End the call	
41	User → ME	Set up a call to "+0123456789"	
42	ME → USS	The ME attempts to set up a call to "+0123456789"	
43	USS → ME	The ME receives the CONNECT message from the USS.	
44	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.8.1	
45	ME → UICC	FETCH	
46	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.8.1	
47	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with underline on]
48	ME → USS	Start DTMF 1.1	["1"]
49	ME → USS	Start DTMF 1.2	["2"]
50	ME → USS	Start DTMF 1.3	["3"]
51	ME → USS	Start DTMF 1.4	["4"]
52	ME → USS	Start DTMF 1.5	["5"]
53	ME → USS	Start DTMF 1.6	["6"]
54	ME → USS	Start DTMF 1.7	["7"]
55	ME → USS	Start DTMF 1.8	["8"]
56	ME → USS	Start DTMF 1.9	["9"]
57	ME → USS	Start DTMF 1.10	["0"]

58	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.8.1	[Command performed successfully]
59	UICC → ME	PROACTIVE UICC SESSION ENDED	
60	User → ME	End the call	
61	User → ME	Set up a call to "+0123456789"	
62	ME → USS	The ME attempts to set up a call to "+0123456789"	
63	USS → ME	The ME receives the CONNECT message from the USS.	
64	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.8.3	
65	ME → UICC	FETCH	
66	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.8.3	
67	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with underline off]
68	ME → USS	Start DTMF 1.1	["1"]
69	ME → USS	Start DTMF 1.2	["2"]
70	ME → USS	Start DTMF 1.3	["3"]
71	ME → USS	Start DTMF 1.4	["4"]
72	ME → USS	Start DTMF 1.5	["5"]
73	ME → USS	Start DTMF 1.6	["6"]
74	ME → USS	Start DTMF 1.7	["7"]
75	ME → USS	Start DTMF 1.8	["8"]
76	ME → USS	Start DTMF 1.9	["9"]
77	ME → USS	Start DTMF 1.10	["0"]
78	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.8.1	[Command performed successfully]
79	UICC → ME	PROACTIVE UICC SESSION ENDED	
80	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 4.8.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 1"
DTMF String: "1234567890"
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline On, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	31
	AC	05	21	43	65	87	09	D0	04	00	0B	40
	B4											

PROACTIVE COMMAND: SEND DTMF 4.8.2

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 2"
DTMF String: "1234567890"
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	32
	AC	05	21	43	65	87	09	D0	04	00	0B	00
	B4											

PROACTIVE COMMAND: SEND DTMF 4.8.3

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 3"
DTMF String: "1234567890"

Coding:

BER-TLV:	D0	1D	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	33
	AC	05	21	43	65	87	09					

TERMINAL RESPONSE: SEND DTMF 4.8.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

27.22.4.24.4.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.8.

27.22.4.24.4.9 SEND DTMF (support of Text Attribute – Strikethrough On)

27.22.4.24.4.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.9.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.9.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the strikethrough text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.9.4 Method of test

27.22.4.24.4.9.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.9.4.2 Procedure

Expected Sequence 4.9 (SEND DTMF, with text attribute – Strikethrough On)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.9.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.9.1	

7	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with strikethrough on]
8	ME → USS	Start DTMF 1.1	["1"]
9	ME → USS	Start DTMF 1.2	["2"]
10	ME → USS	Start DTMF 1.3	["3"]
11	ME → USS	Start DTMF 1.4	["4"]
12	ME → USS	Start DTMF 1.5	["5"]
13	ME → USS	Start DTMF 1.6	["6"]
14	ME → USS	Start DTMF 1.7	["7"]
15	ME → USS	Start DTMF 1.8	["8"]
16	ME → USS	Start DTMF 1.9	["9"]
17	ME → USS	Start DTMF 1.10	["0"]
18	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.9.1	[Command performed successfully]
19	UICC → ME	PROACTIVE UICC SESSION ENDED	
20	User → ME	End the call	
21	User → ME	Set up a call to "+0123456789"	
22	ME → USS	The ME attempts to set up a call to "+0123456789"	
23	USS → ME	The ME receives the CONNECT message from the USS.	
24	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.9.2	
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.9.2	
27	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with strikethrough off]
28	ME → USS	Start DTMF 1.1	["1"]
29	ME → USS	Start DTMF 1.2	["2"]
30	ME → USS	Start DTMF 1.3	["3"]
31	ME → USS	Start DTMF 1.4	["4"]
32	ME → USS	Start DTMF 1.5	["5"]
33	ME → USS	Start DTMF 1.6	["6"]
34	ME → USS	Start DTMF 1.7	["7"]
35	ME → USS	Start DTMF 1.8	["8"]
36	ME → USS	Start DTMF 1.9	["9"]
37	ME → USS	Start DTMF 1.10	["0"]
38	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.9.1	[Command performed successfully]
39	UICC → ME	PROACTIVE UICC SESSION ENDED	
40	User → ME	End the call	
41	User → ME	Set up a call to "+0123456789"	
42	ME → USS	The ME attempts to set up a call to "+0123456789"	
43	USS → ME	The ME receives the CONNECT message from the USS.	
44	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.9.1	
45	ME → UICC	FETCH	
46	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.9.1	
47	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with strikethrough on]
48	ME → USS	Start DTMF 1.1	["1"]
49	ME → USS	Start DTMF 1.2	["2"]
50	ME → USS	Start DTMF 1.3	["3"]
51	ME → USS	Start DTMF 1.4	["4"]
52	ME → USS	Start DTMF 1.5	["5"]

53	ME → USS	Start DTMF 1.6	["6"]
54	ME → USS	Start DTMF 1.7	["7"]
55	ME → USS	Start DTMF 1.8	["8"]
56	ME → USS	Start DTMF 1.9	["9"]
57	ME → USS	Start DTMF 1.10	["0"]
58	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.9.1	[Command performed successfully]
59	UICC → ME	PROACTIVE UICC SESSION ENDED	
60	User → ME	End the call	
61	User → ME	Set up a call to "+0123456789"	
62	ME → USS	The ME attempts to set up a call to "+0123456789"	
63	USS → ME	The ME receives the CONNECT message from the USS.	
64	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.9.3	
65	ME → UICC	FETCH	
66	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.9.3	
67	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with strikethrough off]
68	ME → USS	Start DTMF 1.1	["1"]
69	ME → USS	Start DTMF 1.2	["2"]
70	ME → USS	Start DTMF 1.3	["3"]
71	ME → USS	Start DTMF 1.4	["4"]
72	ME → USS	Start DTMF 1.5	["5"]
73	ME → USS	Start DTMF 1.6	["6"]
74	ME → USS	Start DTMF 1.7	["7"]
75	ME → USS	Start DTMF 1.8	["8"]
76	ME → USS	Start DTMF 1.9	["9"]
77	ME → USS	Start DTMF 1.10	["0"]
78	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.9.1	[Command performed successfully]
79	UICC → ME	PROACTIVE UICC SESSION ENDED	
80	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 4.9.1

Logically:

Command details
- Command number: 1
- Command type: SEND DTMF
- Command qualifier: "00"

Device identities
- Source device: UICC
- Destination device: Network

Alpha identifier: "Send DTMF 1"

DTMF String: "1234567890"

Text Attribute
- Formatting position: 0
- Formatting length: 11
- Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough On
- Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	31

AC	05	21	43	65	87	09	D0	04	00	0B	80B
B4											

PROACTIVE COMMAND: SEND DTMF 4.9.2

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 2"
DTMF String: "1234567890"
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	32
	AC	05	21	43	65	87	09	D0	04	00	0B	00
	B4											

PROACTIVE COMMAND: SEND DTMF 4.9.3

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 3"
DTMF String: "1234567890"

Coding:

BER-TLV:	D0	1D	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	33
	AC	05	21	43	65	87	09					

TERMINAL RESPONSE: SEND DTMF 4.9.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

27.22.4.24.4.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.9.

27.22.4.24.4.10 SEND DTMF (support of Text Attribute – Foreground and Background Colour)

27.22.4.24.4.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.10.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.10.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the foreground and background colour text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.10.4 Method of test

27.22.4.24.4.10.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.10.4.2 Procedure

Expected Sequence 4.10 (SEND DTMF, with text attribute – Foreground and Background Colour)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	

3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.10.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.10.1	
7	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with foreground and background colour according to the text attribute configuration]
8	ME → USS	Start DTMF 1.1	["1"]
9	ME → USS	Start DTMF 1.2	["2"]
10	ME → USS	Start DTMF 1.3	["3"]
11	ME → USS	Start DTMF 1.4	["4"]
12	ME → USS	Start DTMF 1.5	["5"]
13	ME → USS	Start DTMF 1.6	["6"]
14	ME → USS	Start DTMF 1.7	["7"]
15	ME → USS	Start DTMF 1.8	["8"]
16	ME → USS	Start DTMF 1.9	["9"]
17	ME → USS	Start DTMF 1.10	["0"]
18	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.10.1	[Command performed successfully]
19	UICC → ME	PROACTIVE UICC SESSION ENDED	
20	User → ME	End the call	
21	User → ME	Set up a call to "+0123456789"	
22	ME → USS	The ME attempts to set up a call to "+0123456789"	
23	USS → ME	The ME receives the CONNECT message from the USS.	
24	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 4.10.2	
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: SEND DTMF 4.10.2	
27	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	[Alpha identifier is displayed with ME's default foreground and background colour]
28	ME → USS	Start DTMF 1.1	["1"]
29	ME → USS	Start DTMF 1.2	["2"]
30	ME → USS	Start DTMF 1.3	["3"]
31	ME → USS	Start DTMF 1.4	["4"]
32	ME → USS	Start DTMF 1.5	["5"]
33	ME → USS	Start DTMF 1.6	["6"]
34	ME → USS	Start DTMF 1.7	["7"]
35	ME → USS	Start DTMF 1.8	["8"]
36	ME → USS	Start DTMF 1.9	["9"]
37	ME → USS	Start DTMF 1.10	["0"]
38	ME → UICC	TERMINAL RESPONSE: SEND DTMF 4.10.1	[Command performed successfully]
39	UICC → ME	PROACTIVE UICC SESSION ENDED	
40	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 4.10.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities

Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 1"
DTMF String: "1234567890"
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	23	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	31
	AC	05	21	43	65	87	09	D0	04	00	0B	00
	B4											

PROACTIVE COMMAND: SEND DTMF 4.10.2

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send DTMF 2"
DTMF String: "1234567890"

Coding:

BER-TLV:	D0	1D	81	03	01	14	00	82	02	81	83	85
	0B	53	65	6E	64	20	44	54	4D	46	20	32
	AC	05	21	43	65	87	09					

TERMINAL RESPONSE: SEND DTMF 4.10.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

27.22.4.24.4.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.10.

27.22.4.24.5 SEND DTMF (UCS2 Display in Chinese)

27.22.4.24.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.5.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2 and clause 8.44.

Additionally the ME shall support the UCS2 facility for the coding of the Chinese characters , as defined in:

- ISO/IEC 10646. [17].

27.22.4.24.5.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND DTMF proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.24.5.4 Method of test

27.22.4.24.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table. The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.24.5.4.2 Procedure

Expected Sequence 5.1 (SEND DTMF, successful, UCS2 text in Chinese)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 5.1.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 5.1.1	
7	ME → USER	Display "你好"	["Hello" in Chinese]
8	ME → USS	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	ME → USS	Start DTMF 1.2	["2"]
11	ME → UICC	TERMINAL RESPONSE: SEND DTMF 5.1.1	[Command performed successfully]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 5.1.1

Logically:

Command details

Command number: 1
Command type: SEND DTMF
Command qualifier: "00"

Device identities

Source device: UICC
Destination device: Network

Alpha Identifier

Text: "你好"
DTMF String: "1" pause "2"

Coding:

BER-TLV:	D0	14	81	03	01	14	00	82	02	81	83	85
	05	80	4F	60	59	7D	AC	02	C1	F2		

TERMINAL RESPONSE: SEND DTMF 5.1.1

Logically:

Command details

Command number: 1
Command type: SEND DTMF
Command qualifier: "00"

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successful

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

27.22.4.24.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 5.1.

27.22.4.24.6 SEND DTMF (UCS2 Display in Katakana)

27.22.4.24.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.6.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2 and clause 8.44.

Additionally the ME shall support the UCS2 facility for the coding of the Katakana characters , as defined in:

- ISO/IEC 10646. [17].

27.22.4.24.6.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND DTMF proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.24.6.4 Method of test

27.22.4.24.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table. The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.24.6.4.2 Procedure

Expected Sequence 6.1 (SEND DTMF, successful, UCS2 text)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	User → ME	Set up a call to "+0123456789"	
2	ME → USS	The ME attempts to set up a call to "+0123456789"	
3	USS → ME	The ME receives the CONNECT message from the USS.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SEND DTMF 6.1.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SEND DTMF 6.1.1	
7	ME → USER	Display "ﾙ"	[Character in Katakana]
8	ME → USS	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	ME → USS	Start DTMF 1.2	["2"]
11	ME → UICC	TERMINAL RESPONSE: SEND DTMF 6.1.1	[Command performed successfully]
12	UICC → ME	PROACTIVE UICC SESSION ENDED	
13	User → ME	End the call	

PROACTIVE COMMAND: SEND DTMF 6.1.1

Logically:

Command details
Command number: 1
Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: Network
Alpha Identifier
Text: "ﾙ"
DTMF String: "1" pause "2"

Coding:

BER-TLV:	D0	12	81	03	01	14	00	82	02	81	83	85
	03	80	30	EB	AC	02	C1	F2				

TERMINAL RESPONSE: SEND DTMF 6.1.1

Logically:

Command details
Command number: 1

Command type: SEND DTMF
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successful

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

27.22.4.24.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1.

27.22.4.25 LANGUAGE NOTIFICATION

27.22.4.25.1 Definition and applicability

See clause 3.2.2.

27.22.4.25.2 Conformance Requirement

The ME shall conclude the command by sending TERMINAL RESPONSE (OK) to the UICC, as soon as possible after receiving the LANGUAGE NOTIFICATION proactive UICC command.

- TS 31.111 [15] clause 6.4.25 and clause 6.6.25.

27.22.4.25.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (OK) to the UICC after the ME receives the LANGUAGE NOTIFICATION proactive UICC command.

27.22.4.25.4 Method of Test

27.22.4.25.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.25.4.2 Procedure

Expected Sequence 1.1 (LANGUAGE NOTIFICATION)

See ETSI TS 102 384 [26] in clause 27.22.4.25.4.2, Expected Sequence 1.1.

Expected Sequence 1.2 (LANGUAGE NOTIFICATION)

See ETSI TS 102 384 [26] in clause 27.22.4.25.4.2, Expected Sequence 1.2.

27.22.4.25.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 and 1.2.

27.22.4.26 LAUNCH BROWSER

27.22.4.26.1 LAUNCH BROWSER (No session already launched)

27.22.4.26.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.1.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15 and clause 8.31.

27.22.4.26.1.3 Test purpose

To verify that when the ME is in idle state, it launches properly the browser session required in LAUNCH BROWSER, and returns a successful result in the TERMINAL RESPONSE command.

27.22.4.26.1.4 Method of test

27.22.4.26.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default browser parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

  With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default browser parameters.

The mobile is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

Bearer Parameters

Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

GPRS Parameters

Network access name: TestGp.rs
User login: UserLog
User password: UserPwd

UICC/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01 (as an example)
Note: If a data destination address different to 01.01.01.01 is used then the network simulator setup and related UE settings might require a corresponding adaptation.

27.22.4.26.1.4.2 Procedure

Expected Sequence 1.1 (LAUNCH BROWSER, connect to the default URL)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in idle mode and the browser's cache shall have been cleared. The ME supports Launch Browser with Default URL]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 1.1.1	[connect to the default URL, "launch browser, if not already launched", no null alpha id.]
4	ME → USER	ME displays the alpha identifier	
5	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 1.1.1	[Command performed successfully]
7	ME→USS	If command was performed successfully, the ME attempts to launch the session with the default browser parameters and the default URL.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the browser session to defined URL is properly established.	

PROACTIVE COMMAND: LAUNCH BROWSER 1.1.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL empty
Alpha Identifier "Default URL"

Coding:

BER-TLV:	D0	18	81	03	01	15	00	82	02	81	82	31
	00	05	0B	44	65	66	61	75	6C	74	20	55
	52	4C										

TERMINAL RESPONSE: LAUNCH BROWSER 1.1.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

Expected Sequence 1.2 (LAUNCH BROWSER, connect to the specified URL, alpha identifier length=0)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in idle mode and the browser's cache shall have been cleared.]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 1.2.1	[connect to defined URL, "launch browser, if not already launched, alpha identifier length=0]
4	ME → USER	No information should be displayed.	
5	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 1.2.1	[Command performed successfully]
7	ME→USS	The ME attempts to connect the URL specified in the LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the URL is properly connected.	

PROACTIVE COMMAND: LAUNCH BROWSER 1.2.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier empty

Coding:

BER-TLV:	D0	1F	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	00			

TERMINAL RESPONSE: LAUNCH BROWSER 1.2.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

Expected Sequence 1.3 (LAUNCH BROWSER, Browser identity, no alpha identifier)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in idle mode and the browser's cache shall have been cleared.]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 1.3.1	[connect to the defined URL, "launch browser, if not already launched, browser identity]
4	ME → USER	ME may display a default message of its own.	
5	USER → ME	The user may confirm the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 1.3.1	[Command performed successfully]
7	ME→USS	The ME attempts to connect the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the default browser session is properly established.	

PROACTIVE COMMAND: LAUNCH BROWSER 1.3.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
Browser Identity default
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Coding::

BER-TLV:	D0	20	81	03	01	15	00	82	02	81	82	30
	01	00	31	12	68	74	74	70	3A	2F	2F	78

	78	78	2E	79	79	79	2E	7A	7A	7A

TERMINAL RESPONSE: LAUNCH BROWSER 1.3.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

Expected Sequence 1.4 (LAUNCH BROWSER, only GPRS bearer specified and gateway/proxy identity, GPRS supported by USS)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in idle mode, GPRS supported by USS, GPRS supported by the ME and activated, the terminal might need to be configured with an entry linking the Gateway/Proxy Identity in the proactive command with the corresponding connectivity parameters in the mobile. The browser's cache shall have been cleared.]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 1.4.1	[connect to the defined URL, "launch browser, if not already launched, 1 bearer specified, gateway/proxy id specified]
4	ME → USER	ME may display a default message	
5	USER → ME	The user may confirm the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 1.4.1	[Command performed successfully]
7	ME→USS	The ME attempts to connect the URL specified in LAUNCH BROWSER command using the requested bearer and proxy identity	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the browser session is properly established with the required bearer.	

PROACTIVE COMMAND: LAUNCH BROWSER 1.4.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Bearer GPRS

Gateway/Proxy id

DCSunpacked, 8 bits data
Text string abc.def.ghi.jkl (different from the default IP address)

Coding::

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	32	01	03	0D	10
	04	61	62	63	2E	64	65	66	2E	67	68	69
	2E	6A	6B	6C								

TERMINAL RESPONSE: LAUNCH BROWSER 1.4.1

Logically:

Command details

Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

Expected Sequence 1.5 Void

Expected Sequence 1.6 (LAUNCH BROWSER, ME does not support Launch Browser with Default URL)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in idle mode and the browser's cache shall have been cleared. The ME does not support Launch Browser with Default URL]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 1.1.1	[connect to the default URL, "launch browser, if not already launched", no null alpha id.]
4	ME → USER	The ME may display the alpha identifier	
5	USER → ME	If the ME displays the alpha identifier then the user confirms the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 1.6.1)	[ME unable to process command - Default URL unavailable]
7	UICC → ME	PROACTIVE UICC SESSION ENDED	

TERMINAL RESPONSE: LAUNCH BROWSER 1.6.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Launch browser generic error code
Additional data Default URL unavailable

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	02	26
	04											

27.22.4.26.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.6..

27.22.4.26.2 LAUNCH BROWSER (Interaction with current session)

27.22.4.26.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.2.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 82.2, clause 8.47, optional clause 8.49, optional clause 8.50, clause 8.15 and clause 8.31.

27.22.4.26.2.3 Test purpose

To verify that when the ME is already busy in a browser session, it launches properly the browser session required in LAUNCH BROWSER, and returns a successful result in the TERMINAL RESPONSE.

27.22.4.26.2.4 Method of test

27.22.4.26.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to a Wap gateway is required. The default browser parameters (IP address, gateway/proxy identity, called number…) of the tested mobile shall be properly filled to access that gateway.

The mobile is busy in a browser session, the user navigates in pages different from the URL defined in the test sequence.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match

the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.The browser's cache shall have been cleared before execution of each sequence.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

27.22.4.26.2.4.2 Procedure

Expected Sequence 2.1 (LAUNCH BROWSER, use the existing browser, connect to the specified URL)

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a browser session (not theURL defined in the test sequence).	[Browser is in use, the current session is not secured]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 2.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 2.1.1	[connect to the defined URL, "use the existing browser", no null alpha id.]
4	ME → USER	ME displays the alpha identifier	
5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 2.1.1	[Command performed successfully]
7	ME→USS	The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause] Usage of a new active tab in the browser is a valid behaviour (see note)
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the URL specified in LAUNCH BROWSER command is connected; and the previous URL can be retrieved.	
NOTE: Active tab indicates that web page is visible to the user.			

PROACTIVE COMMAND: LAUNCH BROWSER 2.1.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL"

Coding:

BER-TLV:	D0	2A	81	03	01	15	02	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0B	44	65	66
	69	6E	65	64	20	55	52	4C				

TERMINAL RESPONSE: LAUNCH BROWSER 2.1.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	00

Expected Sequence 2.2 (LAUNCH BROWSER, close the existing browser session and launch new browser session, connect to the specified URL)

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a browser session (not the URL defined in the test sequence).	[Browser is in use, the current session is not secured]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 2.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 2.2.1	[connect to the defined URL, "close the existing browser session and launch new browser session", no null alpha id.]
4	ME → USER	ME displays the alpha identifier	
5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 2.2.1	[Command performed successfully]
7	ME→USS	The ME closes the existing session and attempts to launch the session with the default browser parameters and the URL specified in LAUNCH BROWSER command. IF A.1/155_THEN it is a valid behaviour to keep other sessions/tabs open and start the session in a new active tab (see note).	[The UE has the option of maintaining the currently active PDP Context. The USS shall handle the request of additional URLs as defined in the initial conditions clause.]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the URL specified in LAUNCH BROWSER command is connected.	
NOTE: Active tab indicates that web page is visible to the user.			

PROACTIVE COMMAND: LAUNCH BROWSER 2.2.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: close the existing browser session and launch new browser session
Device identities
Source device: UICC
Destination device: ME

URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL"

Coding:

BER-TLV:	D0	2A	81	03	01	15	03	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0B	44	65	66
	69	6E	65	64	20	55	52	4C				

TERMINAL RESPONSE: LAUNCH BROWSER 2.2.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: close the existing browser session and launch new browser session

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	03	82	02	82	81	83	01	00

Expected Sequence 2.3 (LAUNCH BROWSER, if not already launched)

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a browser session (not the URL defined in the test sequence).	[Browser is in use, the current session is not secured]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 2.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 2.3.1	[connect to the defined URL, "launch browser, if not already launched]
4	ME → UICC	IF (NOT A.1/155)_THEN TERMINAL RESPONSE: LAUNCH BROWSER 2.3.1 ELSE IF (A.1/155) THEN TERMINAL RESPONSE:LAUNCH BROWSER 2.3.2	[ME unable to process command - browser unavailable] If browser supports multiple sessions/tabs, it is valid behaviour to open the session in a new active tab that does not interfere with other sessions (see note).
5	UICC → ME	PROACTIVE UICC SESSION ENDED	
6	USER → ME	IF (NOT A.1/155)_THEN the user verifies that the URL specified in LAUNCH BROWSER command has not been connected.	
NOTE: Active tab indicates that web page is visible to the user.			

PROACTIVE COMMAND: LAUNCH BROWSER 2.3.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Coding:

BER-TLV:	D0	1D	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A					

TERMINAL RESPONSE: LAUNCH BROWSER 2.3.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Launch browser generic error code

Additional data Browser unavailable

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	02	26
	02											

TERMINAL RESPONSE: LAUNCH BROWSER 2.3.2

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

27.22.4.26.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.3.

27.22.4.26.3 LAUNCH BROWSER (UCS2 display in Cyrillic)

27.22.4.26.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.3.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, optional clause 8.49, optional clause 8.50, clause 8.15 and clause 8.31.

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in:

- ISO/IEC 10646 [17].

27.22.4.26.3.3 Test purpose

To verify that the ME performs a proper user confirmation with an USC2 alpha identifier, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.3.4 Method of test

27.22.4.26.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default browser parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway").

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default browser parameters.

The mobile is busy in a browser session, the user navigates in pages different from the URL defined by default in Wap parameters.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

The browser's cache shall have been cleared before execution of each sequence.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

27.22.4.26.3.4.2 Procedure

Expected Sequence 3.1 (LAUNCH BROWSER, use the existing browser, connect to the specified URL, UCS2 in Cyrillic)

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a browser session (not the URL defined in the test sequence).	[Browser is in use, the current session is not secured]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 3.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 3.1.1	[connect to the defined URL, "use the existing browser", alpha id. In UCS2]
4	ME → USER	ME displays the alpha identifier "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]

5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 3.1.1	[Command performed successfully]
7	ME→USS	The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the URL is connected; and the previous URL can be retrieved.	

PROACTIVE COMMAND: LAUNCH BROWSER 3.1.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier
Data coding scheme: UCS2 (16 bits)
Text: "ЗДРАВСТВУЙТЕ"

Coding:

BER-TLV:	D0	38	81	03	01	15	02	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	19	80	04	17
	04	14	04	20	04	10	04	12	04	21	04	22
	04	12	04	23	04	19	04	22	04	15		

TERMINAL RESPONSE: LAUNCH BROWSER 3.1.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	00

27.22.4.26.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 3.1.

27.22.4.26.4 LAUNCH BROWSER (icons support)

27.22.4.26.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.4.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, optional clause 8.49, optional clause 8.50, clause 8.15 and clause 8.31.

27.22.4.26.4.3 Test purpose

To verify that the ME performs a proper user confirmation with an icon identifier, launches the browser session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.4.4 Method of test

27.22.4.26.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default browser parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway").

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default browser parameters.

The mobile is busy in a browser session, the user navigates in pages different from the URL defined by default in browser parameters.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.The browser's cache shall have been cleared before execution of each sequence.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

27.22.4.26.4.4.2 Procedure

Expected Sequence 4.1A (LAUNCH BROWSER, use the existing browser, icon not self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.1.1	[Browser is in use, the current session is not secured]
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 4.1.1	[connect to the defined URL, "use the existing browser", no null alpha id.]
4	ME → USER	ME displays the alpha identifier and the icon	["Not self explan."]

5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 4.1.1 A	[Command performed successfully]
7	ME→USS	The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the URL specified in LAUNCH BROWSER command is connected; and the previous URL can be retrieved.	

PROACTIVE COMMAND: LAUNCH BROWSER 4.1.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Not self explan."
Icon identifier:
Icon qualifier: not self-explanatory
Icon identifier: record 1 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	33	81	03	01	15	02	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	10	4E	6F	74
	20	73	65	6C	66	20	65	78	70	6C	61	6E
	2E	1E	02	01	01							

TERMINAL RESPONSE: LAUNCH BROWSER 4.1.1 A

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	00

Expected Sequence 4.1B (LAUNCH BROWSER, use the existing browser, icon not self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.1.1	[Browser is in use, the current session is not secured]
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 4.1.1	[connect to the defined URL, "use the existing browser", no null alpha id.]
4	ME → USER	ME displays the alpha identifier Without the icon	["Not self explan."]
5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 4.1.1 B	[Command performed successfully but requested icon could not be displayed]
7	ME→USS	The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the URL specified in LAUNCH BROWSER command is connected; and the previous URL can be retrieved.	

TERMINAL RESPONSE: LAUNCH BROWSER 4.1.1 B

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully but requested icon could not be displayed

Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	04

Expected Sequence 4.2A (LAUNCH BROWSER, use the existing browser, icon self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.2.1	[Browser is in use, the current session is not secured]
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 4.2.1	[connect to the defined URL, "use the existing browser", alpha id. In UCS2]
4	ME → USER	ME displays only the icon	["Self explan."]
5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 4.2.1 A	[Command performed successfully]
7	ME→USS	The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]

8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the URL specified in LAUNCH BROWSER command is connected; and the previous URL can be retrieved.	

PROACTIVE COMMAND: LAUNCH BROWSER 4.2.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Self explan."
Icon identifier:
Icon qualifier: self-explanatory
Icon identifier: record 1 in $EF_{(IMG)}$

Coding:

BER-TLV:	D0	2F	81	03	01	15	02	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0C	53	65	6C
	66	20	65	78	70	6C	61	6E	2E	1E	02	00
	01											

TERMINAL RESPONSE: LAUNCH BROWSER 4.2.1 A

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	00

Expected Sequence 4.2B (LAUNCH BROWSER, use the existing browser, icon self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.2.1	[Browser is in use, the current session is not secured]
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 4.2.1	[connect to the defined URL, "use the existing browser", alpha id. In UCS2]

4	ME → USER	ME displays only the alpha identifier	["Self explan."]
5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 4.2.1 B	[Command performed successfully] [Command performed successfully but requested icon could not be displayed]
7	ME→USS	The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the URL specified in LAUNCH BROWSER command is connected; and the previous URL can be retrieved.	

TERMINAL RESPONSE: LAUNCH BROWSER 4.2.1 B

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully but requested icon could not be displayed

Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	04

27.22.4.26.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.1A to 4.2B.

27.22.4.26.5 LAUNCH BROWSER (support of Text Attribute)

27.22.4.26.5.1 LAUNCH BROWSER (support of Text Attribute – Left Alignment)

27.22.4.26.5.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.1.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111[15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.1.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the left alignment text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.1.4 Method of test

27.22.4.26.5.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.1.4.2 Procedure

Expected Sequence 5.1 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Left Alignment)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in idle mode and the browser's cache shall have been cleared.]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.1.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
4	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with left alignment]
5	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.1.1	[Command performed successfully]
7	ME→USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
10	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.1.2	
11	ME → UICC	FETCH	

12	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.1.2	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
13	ME → USER	ME displays the alpha identifier	[Message shall be formatted without left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/18, no alignment change will take place]
14	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
15	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.1.1	[Command performed successfully]
16	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
17	UICC → ME	PROACTIVE UICC SESSION ENDED	
18	USER → ME	The user verifies that the default Wap session is properly established.	

PROACTIVE COMMAND: LAUNCH BROWSER 5.1.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 1"
Text Attribute
Formatting position: 0
Formatting length: 13
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	31	D0	04
	00	0D	00	B4								

PROACTIVE COMMAND: LAUNCH BROWSER 5.1.2

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 2"

Coding:

BER-TLV:	D0	2C	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	32		

TERMINAL RESPONSE: LAUNCH BROWSER 5.1.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

27.22.4.26.5.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.1.

27.22.4.26.5.2 LAUNCH BROWSER (support of Text Attribute – Center Alignment)

27.22.4.26.5.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.2.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.2.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the center alignment text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.2.4 Method of test

27.22.4.26.5.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.2.4.2 Procedure

Expected Sequence 5.2 (LAUNCH BROWSER, connect to the default URL with Text Attribute – Center Alignment)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in idle mode and the browser's cache shall have been cleared.]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.2.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
4	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with center alignment]
5	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.2.1	[Command performed successfully]
7	ME→USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
10	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.2.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.2.2	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
13	ME → USER	ME displays the alpha identifier	[Message shall be formatted without center alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/18, no alignment change will take place]
14	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
15	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.2.1	[Command performed successfully]

16	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
17	UICC → ME	PROACTIVE UICC SESSION ENDED	
18	USER → ME	The user verifies that the default Wap session is properly established.	

PROACTIVE COMMAND: LAUNCH BROWSER 5.2.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 1"
Text Attribute
Formatting position: 0
Formatting length: 13
Formatting mode: Center Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	31	D0	04
	00	0D	01	B4								

PROACTIVE COMMAND: LAUNCH BROWSER 5.2.2

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 2"

Coding:

BER-TLV:	D0	2C	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	32		

TERMINAL RESPONSE: LAUNCH BROWSER 5.2.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

27.22.4.26.5.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.2.

27.22.4.26.5.3 LAUNCH BROWSER (support of Text Attribute – Right Alignment)

27.22.4.26.5.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.3.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.3.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the right alignment text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.3.4 Method of test

27.22.4.26.5.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

Before execution of each sequence the browser's cache shall be cleared.

27.22.4.26.5.3.4.2 Procedure

Expected Sequence 5.3 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Right Alignment)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in idle mode and the browser's cache shall have been cleared.]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.3.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
4	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with right alignment]
5	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.3.1	[Command performed successfully]
7	ME→USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
10	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.3.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.3.2	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
13	ME → USER	ME displays the alpha identifier	[Message shall be formatted without right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/18, no alignment change will take place]
14	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
15	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.3.1	[Command performed successfully]
16	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
17	UICC → ME	PROACTIVE UICC SESSION ENDED	
18	USER → ME	The user verifies that the default Wap session is properly established.	

PROACTIVE COMMAND: LAUNCH BROWSER 5.3.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 1"
Text Attribute
Formatting position: 0
Formatting length: 13
Formatting mode: Right Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	31	D0	04
	00	0D	02	B4								

PROACTIVE COMMAND: LAUNCH BROWSER 5.3.2

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 2"

Coding:

BER-TLV:	D0	2C	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	32		

TERMINAL RESPONSE: LAUNCH BROWSER 5.3.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

27.22.4.26.5.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.3.

27.22.4.26.5.4 LAUNCH BROWSER (support of Text Attribute – Large Font Size)

27.22.4.26.5.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.4.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.4.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the large font size text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.4.4 Method of test

27.22.4.26.5.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

Before execution of each sequence the browser's cache shall be cleared.

27.22.4.26.5.4.4.2 Procedure

Expected Sequence 5.4 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Large Font Size)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in idle mode and the browser's cache shall have been cleared.]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.4.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
4	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with large font size]
5	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.4.1	[Command performed successfully]
7	ME→USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
10	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.4.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.4.2	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
13	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with normal font size]
14	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
15	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.4.1	[Command performed successfully]
16	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
17	UICC → ME	PROACTIVE UICC SESSION ENDED	
18	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
19	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.4.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.4.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
22	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with large font size]

23	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
24	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.4.1	[Command performed successfully]
25	ME→USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
26	UICC → ME	PROACTIVE UICC SESSION ENDED	
27	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
28	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.4.3	
29	ME → UICC	FETCH	
30	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.4.3	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
31	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with normal font size]
32	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
33	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.4.1	[Command performed successfully]
34	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
35	UICC → ME	PROACTIVE UICC SESSION ENDED	
36	USER → ME	The user verifies that the default Wap session is properly established.	

PROACTIVE COMMAND: LAUNCH BROWSER 5.4.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 1"
Text Attribute
Formatting position: 0
Formatting length: 13
Formatting mode: Left Alignment, Large Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	31	D0	04

00	0D	04	B4

PROACTIVE COMMAND: LAUNCH BROWSER 5.4.2

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 2"
Text Attribute
Formatting position: 0
Formatting length: 13
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	32	D0	04
	00	0D	00	B4								

PROACTIVE COMMAND: LAUNCH BROWSER 5.4.3

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 3"

Coding:

BER-TLV:	D0	2C	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	33		

TERMINAL RESPONSE: LAUNCH BROWSER 5.4.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched

Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

27.22.4.26.5.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.4.

27.22.4.26.5.5 LAUNCH BROWSER (support of Text Attribute – Small Font Size)

27.22.4.26.5.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.5.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.5.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the small font size text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.5.4 Method of test

27.22.4.26.5.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.5.4.2 Procedure

Expected Sequence 5.5 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Small Font Size)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in idle mode and the browser's cache shall have been cleared.]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.5.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.5.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
4	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with small font size]
5	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.5.1	[Command performed successfully]
7	ME→USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
10	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.5.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.5.2	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
13	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with normal font size]
14	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
15	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.5.1	[Command performed successfully]
16	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
17	UICC → ME	PROACTIVE UICC SESSION ENDED	
18	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
19	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.5.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.5.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
22	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with small font size]
23	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
24	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.5.1	[Command performed successfully]

25	ME→USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
26	UICC → ME	PROACTIVE UICC SESSION ENDED	
27	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
28	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.5.3	
29	ME → UICC	FETCH	
30	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.5.3	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
31	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with normal font size]
32	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
33	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.5.1	[Command performed successfully]
34	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
35	UICC → ME	PROACTIVE UICC SESSION ENDED	
36	USER → ME	The user verifies that the default Wap session is properly established.	

PROACTIVE COMMAND: LAUNCH BROWSER 5.5.1

Logically:

Command details
- Command number: 1
- Command type: LAUNCH BROWSER
- Command qualifier: launch browser, if not already launched

Device identities
- Source device: UICC
- Destination device: ME
- URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 1"

Text Attribute
- Formatting position: 0
- Formatting length: 13
- Formatting mode: Left Alignment, Small Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	31	D0	04
	00	0D	08	B4								

PROACTIVE COMMAND: LAUNCH BROWSER 5.5.2

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 2"
Text Attribute
Formatting position: 0
Formatting length: 13
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	32	D0	04
	00	0D	00	B4								

PROACTIVE COMMAND: LAUNCH BROWSER 5.5.3

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 3"

Coding:

BER-TLV:	D0	2C	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	33		

TERMINAL RESPONSE: LAUNCH BROWSER 5.5.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

27.22.4.26.5.5.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.5.

27.22.4.26.5.6 LAUNCH BROWSER (support of Text Attribute – Bold on)

27.22.4.26.5.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.6.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.6.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the bold text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.6.4 Method of test

27.22.4.26.5.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

  With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.6.4.2 Procedure

Expected Sequence 5.6 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Bold On)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in idle mode and the browser's cache shall have been cleared.]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.6.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.6.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
4	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with bold on]
5	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.6.1	[Command performed successfully]
7	ME→USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
10	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.6.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.6.2	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
13	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with bold off]
14	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
15	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.6.1	[Command performed successfully]
16	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
17	UICC → ME	PROACTIVE UICC SESSION ENDED	
18	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
19	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.6.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.6.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
22	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with bold on]
23	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
24	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.6.1	[Command performed successfully]

25	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
26	UICC → ME	PROACTIVE UICC SESSION ENDED	
27	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
28	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.6.3	
29	ME → UICC	FETCH	
30	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.6.3	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
31	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with bold off]
32	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
33	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.6.1	[Command performed successfully]
34	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
35	UICC → ME	PROACTIVE UICC SESSION ENDED	
36	USER → ME	The user verifies that the default Wap session is properly established.	

PROACTIVE COMMAND: LAUNCH BROWSER 5.6.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 1"
Text Attribute
Formatting position: 0
Formatting length: 13
Formatting mode: Left Alignment, Normal Font, Bold On, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	31	D0	04
	00	0D	10	B4								

PROACTIVE COMMAND: LAUNCH BROWSER 5.6.2

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 2"
Text Attribute
Formatting position: 0
Formatting length: 13
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	32	D0	04
	00	0D	00	B4								

PROACTIVE COMMAND: LAUNCH BROWSER 5.6.3

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 3"

Coding:

BER-TLV:	D0	2C	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	33		

TERMINAL RESPONSE: LAUNCH BROWSER 5.6.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

27.22.4.26.5.6.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.6.

27.22.4.26.5.7 LAUNCH BROWSER (support of Text Attribute – Italic On)

27.22.4.26.5.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.7.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.7.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the italic text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.7.4 Method of test

27.22.4.26.5.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

  With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.7.4.2 Procedure

Expected Sequence 5.7 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Italic On)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in idle mode and the browser's cache shall have been cleared.]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.7.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.7.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
4	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with italic on]
5	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.7.1	[Command performed successfully]
7	ME→USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
10	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.7.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.7.2	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
13	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with italic off]
14	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
15	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.7.1	[Command performed successfully]
16	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
17	UICC → ME	PROACTIVE UICC SESSION ENDED	
18	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
19	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.7.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.7.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
22	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with italic on]
23	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
24	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.7.1	[Command performed successfully]

25	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
26	UICC → ME	PROACTIVE UICC SESSION ENDED	
27	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
28	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.7.3	
29	ME → UICC	FETCH	
30	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.7.3	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
31	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with italic off]
32	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
33	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.7.1	[Command performed successfully]
34	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
35	UICC → ME	PROACTIVE UICC SESSION ENDED	
36	USER → ME	The user verifies that the default Wap session is properly established.	

PROACTIVE COMMAND: LAUNCH BROWSER 5.7.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 1"
Text Attribute
Formatting position: 0
Formatting length: 13
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	31	D0	04
	00	0D	20	B4								

PROACTIVE COMMAND: LAUNCH BROWSER 5.7.2

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 2"
Text Attribute
Formatting position: 0
Formatting length: 13
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	32	D0	04
	00	0D	00	B4								

PROACTIVE COMMAND: LAUNCH BROWSER 5.7.3

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 3"

Coding:

BER-TLV:	D0	2C	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	33		

TERMINAL RESPONSE: LAUNCH BROWSER 5.7.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

27.22.4.26.5.7.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.7.

27.22.4.26.5.8 LAUNCH BROWSER (support of Text Attribute – Underline On)

27.22.4.26.5.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.8.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.8.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the underline text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.8.4 Method of test

27.22.4.26.5.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

  With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.8.4.2 Procedure

Expected Sequence 5.8 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Underline On)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in idle mode and the browser's cache shall have been cleared.]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.8.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.8.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
4	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with underline on]
5	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.8.1	[Command performed successfully]
7	ME→USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
10	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.8.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.8.2	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
13	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with underline off]
14	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
15	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.8.1	[Command performed successfully]
16	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
17	UICC → ME	PROACTIVE UICC SESSION ENDED	
18	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
19	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.8.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.8.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
22	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with underline on]
23	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
24	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.8.1	[Command performed successfully]

25	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
26	UICC → ME	PROACTIVE UICC SESSION ENDED	
27	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
28	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.8.3	
29	ME → UICC	FETCH	
30	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.8.3	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
31	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with underline off]
32	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
33	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.8.1	[Command performed successfully]
34	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
35	UICC → ME	PROACTIVE UICC SESSION ENDED	
36	USER → ME	The user verifies that the default Wap session is properly established.	

PROACTIVE COMMAND: LAUNCH BROWSER 5.8.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 1"
Text Attribute
Formatting position: 0
Formatting length: 13
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline On, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	31	D0	04
	00	0D	40	B4								

PROACTIVE COMMAND: LAUNCH BROWSER 5.8.2

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 2"
Text Attribute
Formatting position: 0
Formatting length: 13
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	32	D0	04
	00	0D	00	B4								

PROACTIVE COMMAND: LAUNCH BROWSER 5.8.3

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 3"

Coding:

BER-TLV:	D0	2C	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	33		

TERMINAL RESPONSE: LAUNCH BROWSER 5.8.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

27.22.4.26.5.8.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.8.

27.22.4.26.5.9 LAUNCH BROWSER (support of Text Attribute – Strikethrough On)

27.22.4.26.5.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.9.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.9.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the strikethrough text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.9.4 Method of test

27.22.4.26.5.9.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.9.4.2 Procedure

Expected Sequence 5.9 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Strikethrough On)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in idle mode and the browser's cache shall have been cleared.]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.9.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.9.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
4	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with strikethrough on]
5	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.9.1	[Command performed successfully]
7	ME→USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
10	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.9.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.9.2	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
13	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with strikethrough off]
14	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
15	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.9.1	[Command performed successfully]
16	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
17	UICC → ME	PROACTIVE UICC SESSION ENDED	
18	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
19	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.9.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.9.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
22	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with strikethrough on]
23	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
24	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.9.1	[Command performed successfully]

25	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
26	UICC → ME	PROACTIVE UICC SESSION ENDED	
27	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
28	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.9.3	
29	ME → UICC	FETCH	
30	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.9.3	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
31	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with strikethrough off]
32	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
33	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.9.1	[Command performed successfully]
34	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
35	UICC → ME	PROACTIVE UICC SESSION ENDED	
36	USER → ME	The user verifies that the default Wap session is properly established.	

PROACTIVE COMMAND: LAUNCH BROWSER 5.9.1

Logically:

Command details
- Command number: 1
- Command type: LAUNCH BROWSER
- Command qualifier: launch browser, if not already launched

Device identities
- Source device: UICC
- Destination device: ME
- URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 1"

Text Attribute
- Formatting position: 0
- Formatting length: 13
- Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough On

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	31	D0	04
	00	0D	80	B4								

PROACTIVE COMMAND: LAUNCH BROWSER 5.9.2

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 2"
Text Attribute
Formatting position: 0
Formatting length: 13
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	32	D0	04
	00	0D	00	B4								

PROACTIVE COMMAND: LAUNCH BROWSER 5.9.3

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier "Defined URL 3"

Coding:

BER-TLV:	D0	2C	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	33		

TERMINAL RESPONSE: LAUNCH BROWSER 5.9.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

27.22.4.26.5.9.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.9.

27.22.4.26.5.10 LAUNCH BROWSER (support of Text Attribute – Foreground and Background Colour)

27.22.4.26.5.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.10.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.10.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the foreground and background colour text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.10.4 Method of test

27.22.4.26.5.10.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

  With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.10.4.2 Procedure

Expected Sequence 5.10 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Foreground and Background Colour)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in idle mode and the browser's cache shall have been cleared.]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.10.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.10.1	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
4	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with foreground and background colour according to the text attribute configuration]
5	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.10.1	[Command performed successfully]
7	ME→USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen.	
10	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.10.2	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 5.10.2	[connect to the defined URL, "launch browser, if not already launched", no null alpha id]
13	ME → USER	ME displays the alpha identifier	[alpha identifier is displayed with ME's default foreground and background colour]
14	USER → ME	The user may have to confirm the launch browser.	[option: user confirmation]
15	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 5.10.1	[Command performed successfully]
16	ME → USS	The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
17	UICC → ME	PROACTIVE UICC SESSION ENDED	
18	USER → ME	The user verifies that the default Wap session is properly established.	

PROACTIVE COMMAND: LAUNCH BROWSER 5.10.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME

URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 1"

Text Attribute

Formatting position: 0
Formatting length: 13
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	31	D0	04
	00	0D	00	B4								

PROACTIVE COMMAND: LAUNCH BROWSER 5.10.2

Logically:

Command details

Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 2"

Coding:

BER-TLV:	D0	2C	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	0D	44	65	66
	69	6E	65	64	20	55	52	4C	20	32		

TERMINAL RESPONSE: LAUNCH BROWSER 5.10.1

Logically:

Command details

Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

27.22.4.26.5.10.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.10.

27.22.4.26.6 LAUNCH BROWSER (UCS2 Display in Chinese)

27.22.4.26.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.6.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, optional clause 8.49, optional clause 8.50, clause 8.15 and clause 8.31.

Additionally the ME shall support the UCS2 facility for the coding of the Chinese characters, as defined in:

- ISO/IEC 10646 [17].

27.22.4.26.6.3 Test purpose

To verify that the ME performs a proper user confirmation with an USC2 alpha identifier, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.6.4 Method of test

27.22.4.26.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway").

  With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The mobile is busy in a Wap session, the user navigates in pages different from the URL defined by default in Wap parameters.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

The browser's cache shall have been cleared before execution of the test sequence.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

27.22.4.26.6.4.2 Procedure

Expected Sequence 6.1 (LAUNCH BROWSER, use the existing browser, connect to the specified URL, UCS2 in Chinese)

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a Wap session (not the URL specified in the test sequence).	[Browser is in use, the current session is not secured]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 6.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 6.1.1	[connect to the defined URL, "use the existing browser", alpha id. In UCS2]
4	ME → USER	ME displays the alpha identifier "你好"	["Hello" in Chinese]
5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 6.1.1	[Command performed successfully]
7	ME→USS	The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the URL is connected; and the previous URL can be retrieved.	

PROACTIVE COMMAND: LAUNCH BROWSER 6.1.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier
Data coding scheme: UCS2 (16 bits)
Text: "你好"

Coding:

BER-TLV:	D0	24	81	03	01	15	02	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	05	80	4F	60
	59	7D										

TERMINAL RESPONSE: LAUNCH BROWSER 6.1.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	00

27.22.4.26.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1.

27.22.4.26.7 LAUNCH BROWSER (UCS2 Display in Katakana)

27.22.4.26.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.7.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, optional clause 8.49, optional clause 8.50, clause 8.15 and clause 8.31.

Additionally the ME shall support the UCS2 facility for the coding of the Katakana characters, as defined in:

- ISO/IEC 10646 [17].

27.22.4.26.7.3 Test purpose

To verify that the ME performs a proper user confirmation with an USC2 alpha identifier, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.7.4 Method of test

27.22.4.26.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway").

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The mobile is busy in a Wap session, the user navigates in pages different from the URL defined by default in Wap parameters.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match

the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

The browser's cache shall have been cleared before execution of the test sequence.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

27.22.4.26.7.4.2 Procedure

Expected Sequence 7.1 (LAUNCH BROWSER, use the existing browser, connect to the specified URL, UCS2 in Katakana)

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a Wap session (not the URL defined in the test sequence).	[Browser is in use, the current session is not secured]]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 7.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 7.1.1	[connect to the defined URL, "use the existing browser", alpha id. In UCS2]
4	ME → USER	ME displays the alpha identifier "ﾙ"	[Character in Katakana]
5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 7.1.1	[Command performed successfully]
7	ME→USS	The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command.	[The USS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the URL is connected; and the previous URL can be retrieved.	

PROACTIVE COMMAND: LAUNCH BROWSER 7.1.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Alpha Identifier
Data coding scheme: UCS2 (16 bits)
Text: "ﾙ"

Coding:

BER-TLV:	D0	22	81	03	01	15	02	82	02	81	82	31
	00	05	03	80	30	EB						
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	03	80	30	EB

TERMINAL RESPONSE: LAUNCH BROWSER 7.1.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	00

27.22.4.26.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 7.1.

27.22.4.26.8 LAUNCH BROWSER (NG-RAN bearer)

27.22.4.26.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.8.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15 and clause 8.31.

27.22.4.26.8.3 Test purpose

To verify that when the ME is in connected state, it launches properly the browser session required in LAUNCH BROWSER, and returns a successful result in the TERMINAL RESPONSE command.

27.22.4.26.8.4 Method of test

27.22.4.26.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and the NG-SS. NG-SS is configured with the IMSI within the USIM application, the home domain name, public and private user identities together with the shared secret key of IMS AKA algorithm, related to the IMS private user identity (IMPI) that is configured on the UICC card equipped into the ME. NG-SS is able to perform IMS AKA authentication for the IMPI, according to 3GPP TS 33.203 [45] clause 6.1.

The NG-RAN parameters of the NG-SS are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 000001.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For sequence 8.1 the default NG-RAN UICC is used. Sequences 8.2, 8.3, 8.4 and 8.5 use the default NG-RAN ISIM-UICC. The default NG-RAN parameters are used.

The Allowed S-NSSAI list is configured in NG-SS as '01 01 01 01'.

The browser's cache shall have been cleared before execution of the test sequence.

For Expected Sequence 8.2, Service n°30 "Call Control by USIM" shall be available in **EF**$_{UST}$.

27.22.4.26.8.4.2 Procedure

Expected Sequence 8.1 (LAUNCH BROWSER, only NG-RAN bearer specified and gateway proxy identity)

Step	Direction	MESSAGE / Action	Comments
0	ME		[The ME is in connected mode, NG-RAN supported by the ME and activated, the terminal might need to be configured with an entry linking the Gateway/Proxy Identity in the proactive command with the corresponding connectivity parameters in the mobile. The browser's cache shall have been cleared.]
1	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 8.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 8.1.1	[connect to the defined URL, "launch browser, if not already launched, 1 bearer specified, gateway/proxy id specified]
4	ME → USER	ME may display a default message	
5	USER → ME	The user may confirm the launch browser.	[option: user confirmation]
6	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 8.1.1	[Command performed successfully]
7	ME→ NG-SS	The ME attempts to connect the URL specified in LAUNCH BROWSER command using the requested bearer and proxy identity	[The NG-SS shall handle the request of additional URLs as defined in the initial conditions clause]
8	UICC → ME	PROACTIVE UICC SESSION ENDED	
9	USER → ME	The user verifies that the browser session is properly established with the required bearer.	

PROACTIVE COMMAND: LAUNCH BROWSER 8.1.1

Logically:

Command details
- Command number: 1
- Command type: LAUNCH BROWSER
- Command qualifier: launch browser, if not already launched

Device identities
- Source device: UICC
- Destination device: ME
- URL: http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
- Bearer: NG-RAN

Gateway/Proxy id: DCSunpacked, 8 bits data
- Text string: abc.def.ghi.jkl (different from the default IP address)

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	32	01	03	0D	10

04	61	62	63	2E	64	65	66	2E	67	68	69
2E	6A	6B	6C								

TERMINAL RESPONSE: LAUNCH BROWSER 8.1.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

Expected Sequence 8.2 (LAUNCH BROWSER, Trigger LAUNCH BROWSER by CALL CONTROL)

Step	Direction	MESSAGE / Action	Comments
0	ME	The ME is configured to register for IMS after switch on.	[The terminal might need to be configured with an entry linking the Gateway/Proxy Identity in the proactive command with the corresponding connectivity parameters in the mobile. The browser's cache shall have been cleared.]
1	User → ME	The ME is made to attempt an IMS voice call to "+01234567890123456789"	
2	ME → UICC	ENVELOPE CALL CONTROL 8.2.1	
3	UICC → ME	CALL CONTROL RESULT 8.2.1	not Allowed
4	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 8.2.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 8.2.1	[connect to the defined URL, "launch browser, if not already launched, 1 bearer specified, gateway/proxy id specified]
7	ME → USER	ME may display a default message	
8	USER → ME	The user may confirm the launch browser.	[option: user confirmation]
9	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 8.2.1	[Command performed successfully]
10	ME→ NG-SS	The ME attempts to connect the URL specified in LAUNCH BROWSER command using the requested bearer and proxy identity	[The NG-SS shall handle the request of additional URLs as defined in the initial conditions clause]
11	UICC → ME	PROACTIVE UICC SESSION ENDED	
12	USER → ME	The user verifies that the browser session is properly established with the required bearer.	

ENVELOPE CALL CONTROL 8.2.1

Logically:

Device identities

Source device: ME
Destination device: UICC

Address

TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "+01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

Mobile Country Codes (MCC): 001
Mobile Network Codes (MNC): 01
Tracking Area Code (TAC) = 000001;
NG-RAN Cell Identifier (NCI): 0001 (36 bits);

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	0B	00
	F1	10	00	00	01	00	00	00	00	1F		

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

CALL CONTROL RESULT 8.2.1

Logically:

Call control result: '01' = not Allowed

Coding:

BER-TLV:	01	00

PROACTIVE COMMAND: LAUNCH BROWSER 8.2.1

Logically:

Command details

Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC
Destination device: ME

URL: http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Bearer: NG-RAN

Gateway/Proxy id: DCS unpacked, 8 bits data

Text string: abc.def.ghi.jkl (different from the default IP address)

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	32	01	03	0D	10
	04	61	62	63	2E	64	65	66	2E	67	68	69
	2E	6A	6B	6C								

TERMINAL RESPONSE: LAUNCH BROWSER 8.2.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

Expected Sequence 8.3 (LAUNCH BROWSER, LAUNCH BROWSER, Trigger LAUNCH BROWSER by MT Call event)

Step	Direction	MESSAGE / Action	Comments
0	ME	The ME is configured to register for IMS after switch on.	[The terminal might need to be configured with an entry linking the Gateway/Proxy Identity in the proactive command with the corresponding connectivity parameters in the mobile. The browser's cache shall have been cleared.]
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 8.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 8.3.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 8.3.1	
5	NG-SS→ME	CALL SET UP	VoNR call shall be set up with the P-Asserted-Identity in the SIP INVITE message matched with Address in the EVENT DOWNLOAD - MT CALL 8.3.1
6	ME → UICC	ENVELOPE: EVENT DOWNLOAD - MT Call 8.3.1	
7	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 8.3.1	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 8.3.1	[connect to the defined URL, "launch browser, if not already launched, 1 bearer specified, gateway/proxy id specified]
10	ME → USER	ME may display a default message	
11	USER → ME	The user may confirm the launch browser.	[option: user confirmation]
12	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 8.3.1	[Command performed successfully]
13	ME→ NG-SS	The ME attempts to connect the URL specified in LAUNCH BROWSER command using the requested bearer and proxy identity	[The NG-SS shall handle the request of additional URLs as defined in the initial conditions clause]
14	UICC → ME	PROACTIVE UICC SESSION ENDED	
15	USER → ME	The user verifies that the browser session is properly established with the required bearer.	

PROACTIVE COMMAND: SET UP EVENT LIST 8.3.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: MT call

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	00										

TERMINAL RESPONSE: SET UP EVENT LIST 8.3.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

EVENT DOWNLOAD - MT CALL 8.3.1

Logically:

Event list: MT call event
Device identities
Source device: Network
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 0 (bit 8)
Address:
TON - not verified
NPI - not verified
Dialling number string "9876"

Coding:

BER-TLV:	D6	0F	19	01	00	82	02	83	81	1C	01	00
	86	03	xx	89	67							

PROACTIVE COMMAND: LAUNCH BROWSER 8.3.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: UICC
Destination device: ME
URL http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
Bearer NG-RAN
Gateway/Proxy id DCSunpacked, 8 bits data
Text string abc.def.ghi.jkl (different from the default IP address)

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	32	01	03	0D	10
	04	61	62	63	2E	64	65	66	2E	67	68	69
	2E	6A	6B	6C								

TERMINAL RESPONSE: LAUNCH BROWSER 8.3.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already launched
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

Expected Sequence 8.4 (LAUNCH BROWSER, Trigger LAUNCH BROWSER during mobile originated call)

Step	Direction	MESSAGE / Action	Comments
0	ME	The ME is configured to register for IMS after switch on.	[The terminal might need to be configured with an entry linking the Gateway/Proxy Identity in the proactive command with the corresponding connectivity parameters in the mobile. The browser's cache shall have been cleared.]
1	User → ME	Set up an IMS voice call to "+01234567890123456789"	Call needs to be connected
2	ME → NG-SS	Establish IMS voice call	The established IMS voice call needs to be held
3	UICC →ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 8.4.1	
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 8.4.1	[connect to the defined URL, "launch browser, if not already launched, 1 bearer specified, gateway/proxy id specified]
6	ME → USER	ME may display a default message	
7	USER → ME	The user may confirm the launch browser.	[option: user confirmation]

8	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 8.4.1	[Command performed successfully]
9	ME → NG-SS	The ME attempts to connect the URL specified in LAUNCH BROWSER command using the requested bearer and proxy identity	[The NG-SS shall handle the request of additional URLs as defined in the initial conditions clause]
10	UICC → ME	PROACTIVE UICC SESSION ENDED	
11	USER → ME	The user verifies that the browser session is properly established with the required bearer.	The IMS voice call can be ended

PROACTIVE COMMAND: LAUNCH BROWSER 8.4.1

Logically:

Command details
- Command number: 1
- Command type: LAUNCH BROWSER
- Command qualifier: launch browser, if not already launched

Device identities
- Source device: UICC
- Destination device: ME
- URL: http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
- Bearer: NG-RAN

Gateway/Proxy id: DCSunpacked, 8 bits data
- Text string: abc.def.ghi.jkl (different from the default IP address)

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	32	01	03	0D	10
	04	61	62	63	2E	64	65	66	2E	67	68	69
	2E	6A	6B	6C								

TERMINAL RESPONSE: LAUNCH BROWSER 8.4.1

Logically:

Command details
- Command number: 1
- Command type: LAUNCH BROWSER
- Command qualifier: launch browser, if not already launched

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

Expected Sequence 8.5 (LAUNCH BROWSER, Trigger LAUNCH BROWSER during mobile terminated call)

Step	Direction	MESSAGE / Action	Comments

0	ME	The ME is configured to register for IMS after switch on.	[The terminal might need to be configured with an entry linking the Gateway/Proxy Identity in the proactive command with the corresponding connectivity parameters in the mobile. The browser's cache shall have been cleared.]
1	NG-SS → ME	CALL SET UP	
2	USER → ME	Accept Call Set Up	Call needs to be connected and held
3	UICC → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 8.5.1	
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: LAUNCH BROWSER 8.5.1	[connect to the defined URL, "launch browser, if not already launched, 1 bearer specified, gateway/proxy id specified]
6	ME → USER	ME may display a default message	
7	USER → ME	The user may confirm the launch browser.	[option: user confirmation]
8	ME → UICC	TERMINAL RESPONSE: LAUNCH BROWSER 8.5.1	[Command performed successfully]
9	ME → NG-SS	The ME attempts to connect the URL specified in LAUNCH BROWSER command using the requested bearer and proxy identity	[The NG-SS shall handle the request of additional URLs as defined in the initial conditions clause]
10	UICC → ME	PROACTIVE UICC SESSION ENDED	
11	USER → ME	The user verifies that the browser session is properly established with the required bearer.	Call can be ended

PROACTIVE COMMAND: LAUNCH BROWSER 8.5.1

Logically:

Command details
- Command number: 1
- Command type: LAUNCH BROWSER
- Command qualifier: launch browser, if not already launched

Device identities
- Source device: UICC
- Destination device: ME
- URL: http://xxx.yyy.zzz (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)
- Bearer: NG-RAN

Gateway/Proxy id: DCSunpacked, 8 bits data
- Text string: abc.def.ghi.jkl (different from the default IP address)

Coding:

BER-TLV:	D0	32	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	32	01	03	0D	10
	04	61	62	63	2E	64	65	66	2E	67	68	69
	2E	6A	6B	6C								

TERMINAL RESPONSE: LAUNCH BROWSER 8.5.1

Logically:

Command details
- Command number: 1
- Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

27.22.4.26.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.1 to 8.5.

27.22.4.27 OPEN CHANNEL

27.22.4.27.1 Void

27.22.4.27.2 Open Channel (related to GPRS)

27.22.4.27.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.2.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111[15] clause 5.2, clauses 6.4.27 and 6.6.27, clause 8.6, clause 8.7, clause 9.2, clause 8.2, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.27.2.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (OK); or
- TERMINAL RESPONSE (Command performed with modification); or
- TERMINAL RESPONSE (User did not accept the proactive command);
- TERMINAL RESPONSE (ME currently unable to process command);

to the UICC after the ME receives the OPEN CHANNEL proactive command. The TERMINAL RESPONSE sent back to the UICC is the result of the ME and the network capabilities against requested parameters by the UICC.

27.22.4.27.2.4 Method of test

27.22.4.27.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The following Bearer Parameters used are those defined in the default Test PDP context for test cases using packet services:

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP ContextDch, as specified in TS 34.123-3 [27], clause 8.10 for test cases using packet services:

Bearer Parameters

Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

GPRS Parameters

Network access name: TestGp.rs

User login: UserLog
User password: UserPwd

UICC/ME interface transport level

Transport format: UDP or TCP mode
Port number: 44444
Data destination address 01.01.01.01 (as an example)
Note: If a data destination address different to 01.01.01.01 is used then the same value is used in the content of the affected Open Channel commands and the network simulator setup and related UE settings might require a corresponding adaptation.

Prior to test case execution the apparatus supplier shall have provided the "Preferred buffer size supported by the terminal for Open Channel command" as requested in table A.2/29.

Pre-condition for successful execution of expected sequence 2.1:

If the terminal does not support the execution of an Open Channel (GPRS) command when no Network Access Name TLV is present in the proactive command and when no default Access Point Name is set in the terminal configuration (s.a. table A.1/48), then "TestGp.rs" shall be set and activated as default Access Point Name in the terminal configuration prior to execution of the proactive command in expected sequence 2.1.

27.22.4.27.2.4.2 Procedure

Expected Sequence 2.1 void

NOTE: The above sequence has been made void, however the messages defined below are still required for further test sequences.

PROACTIVE COMMAND: OPEN CHANNEL 2.1.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	36	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	03	04	1F	02	39	02	05	78
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 2.1.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 2.1.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	05	78							

Expected Sequence 2.2 (OPEN CHANNEL, immediate link establishment GPRS, no alpha identifier, with network access name)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 2.2.1	
4	ME → user	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 2.2.1A or TERMINAL RESPONSE: OPEN CHANNEL 2.2.1B	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 2.2.1

Logically:

Command details

Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment

Device identities

Source device: UICC
Destination device: ME

Bearer

Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level

Transport format: UDP
Port number: 44444

Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	03	04	1F	02	39	02	05	78
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08

F4	55	73	65	72	50	77	64	3C	03	01	AD
9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 2.2.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer Description:
Bearer Type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 2.2.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer Description:
Bearer Type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	05	78							

Expected Sequence 2.3 (OPEN CHANNEL, immediate link establishment, GPRS, with alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 2.3.1	
4	ME → user	Confirmation phase with alpha ID	"Open ID"
5	user → ME	The user confirms	
6	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
7	USS → ME	PDP context activation accept	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 2.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 2.1.1B	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 2.3.1

Logically:

Command details
- Command number: 1
- Command type: OPEN CHANNEL
- Command qualifier: immediate link establishment

Device identities
- Source device: UICC
- Destination device: ME

Alpha Identifier Open ID

Bearer
- Bearer type: GPRS
- Bearer parameter:
- Precedence Class: 03
- Delay Class: 04
- Reliability Class: 03
- Peak throughput class: 04
- Mean throughput class: 31
- Packet data protocol: 02 (IP)

Buffer
- Buffer size: 1400

Network access name: TestGp.rs

Text String: UserLog (User login)

Text String: UserPwd (User password)

UICC/ME interface transport level
- Transport format: UDP
- Port number: 44444

Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	4B	81	03	01	40	01	82	02	81	82	05
	07	4F	70	65	6E	20	49	44	35	07	02	03
	04	03	04	1F	02	39	02	05	78	47	0A	06
	54	65	73	74	47	70	02	72	73	0D	08	F4
	55	73	65	72	4C	6F	67	0D	08	F4	55	73
	65	72	50	77	64	3C	03	01	AD	9C	3E	05

21	01	01	01	01							

Expected Sequence 2.4 (OPEN CHANNEL, immediate link establishment, GPRS, with null alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 2.4.1	
4	ME → user	Confirmation phase	[The ME should not give any information]
5	user → ME	The user confirms	[Only if the ME asks for user confirmation]
6	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
7	USS → ME	PDP context activation accept	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 2.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 2.1.1B	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 2.4.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Alpha Identifier Null
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	44	81	03	01	40	01	82	02	81	82	05
	00	35	07	02	03	04	03	04	1F	02	39	02
	05	78	47	0A	06	54	65	73	74	47	70	02
	72	73	0D	08	F4	55	73	65	72	4C	6F	67
	0D	08	F4	55	73	65	72	50	77	64	3C	03
	01	AD	9C	3E	05	21	01	01	01	01		

Expected Sequence 2.5 (OPEN CHANNEL, immediate link establishment, GPRS, command performed with modifications (buffer size))

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.5.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 2.5.1	
4	ME → user	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 2.5.1A or TERMINAL RESPONSE: OPEN CHANNEL 2.5.1B	[Command performed with modification]

PROACTIVE COMMAND: OPEN CHANNEL 2.5.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 65535
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	03	04	1F	02	39	02	FF	FF
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 2.5.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed with modifications (07)
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: The buffer size TLV shall be attached and contain the value stated in table A.2/29 "Preferred buffer size supported by the terminal for Open Channel command".

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	07
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	Note 1										

Note1: The buffer size TLV shall be attached and contain the value stated in table A.2/29 "Preferred buffer size supported by the terminal for Open Channel command".

TERMINAL RESPONSE: OPEN CHANNEL 2.5.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed with modifications (07)
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: The buffer size TLV shall be attached and contain the value stated in table A.2/29 "Preferred buffer size supported by the terminal for Open Channel command".

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	07
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	Note 1										

Note1: The buffer size TLV shall be attached and contain the value stated in table A.2/29 "Preferred buffer size supported by the terminal for Open Channel command".

Expected Sequence 2.6 Void

Expected Sequence 2.7A (OPEN CHANNEL, immediate link establishment, GPRS, open command with alpha identifier, User did not accept the proactive command)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.7.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 2.7.1	
4	ME → user	Confirmation phase with alpha ID	[The ME shall display "Open ID"]
5	user → ME	The user rejects	
6	ME → USS	No PDP context activation request is sent to the USS	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 2.7.1A or TERMINAL RESPONSE: OPEN CHANNEL 2.7.1B	[User did not accept the proactive command]

Expected Sequence 2.7B (OPEN CHANNEL, immediate link establishment, GPRS, open command with alpha identifier, User did not accept the proactive command)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.7.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 2.7.1	
4	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
5	USS → ME	PDP context activation accept	
6	ME → user	Confirmation phase with alpha ID	[The ME shall display "Open ID"]
7	user → ME	The user rejects	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 2.7.1A or TERMINAL RESPONSE: OPEN CHANNEL 2.7.1B	[User did not accept the proactive command]

PROACTIVE COMMAND: OPEN CHANNEL 2.7.1

Logically:

Command details

Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment

Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	4B	81	03	01	40	01	82	02	81	82	05
	07	4F	70	65	6E	20	49	44	35	07	02	03
	04	03	04	1F	02	39	02	05	78	47	0A	06
	54	65	73	74	47	70	02	72	73	0D	08	F4
	55	73	65	72	4C	6F	67	0D	08	F4	55	73
	65	72	50	77	64	3C	03	01	AD	9C	3E	05
	21	01	01	01	01							

TERMINAL RESPONSE: OPEN CHANNEL 2.7.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: User did not accept the proactive command
Channel status The presence and content of this TLV shall not be verified
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: Because the value depends in this case on the terminal's implementation, it shall be ignored.

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	22
	Note 1	35	07	02	03	04	03	04	1 F	02	Note 2	

Note1: The presence and content of the Channel Status TLV shall not be verified.
Note2: The buffer size TLV shall be present and because the value depends in this case on the terminal's implementation, the value shall be ignored.

TERMINAL RESPONSE: OPEN CHANNEL 2.7.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: User did not accept the proactive command
Channel status The presence and content of this TLV shall not be verifiedBearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: Because the value depends in this case on the terminal's implementation, it shall be ignored.

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	22
	Note 1	35	07	02	00	04	03	04	1 F	02	Note 2	

Note1: The presence and content of the Channel Status TLV shall not be verified.
Note2: The buffer size TLV shall be present and because the value depends in this case on the terminal's implementation, the value shall be ignored.

Expected Sequence 2.8 Void

Expected Sequence 2.9 (OPEN CHANNEL, immediate link establishment, no alpha identifier, with network access name)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.9.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 2.9.1	
4	ME → user	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 2.9.1A or TERMINAL RESPONSE: OPEN CHANNEL 2.9.1B	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 2.9.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: TCP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	03	04	1F	02	39	02	05	78
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	02	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 2.9.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer Description:
Bearer Type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 2.9.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer Description:
Bearer Type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	05	78							

Expected Sequence 2.10 (OPEN CHANNEL, multi Open Channel, one in TCP Server mode and one in TCP Client mode)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.10.1	TCP server mode
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 2.10.1	
4	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 2.10.1	[Command performed successfully] TCP in LISTEN state
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.10.2	TCP Client mode
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 2.10.2	
8	ME → user	The ME may display channel opening information	
9	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
10	USS → ME	PDP context activation accept	
11	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 2.10.2A or TERMINAL RESPONSE: OPEN CHANNEL 2.10.2B	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 2.10.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: RFU

Device identities
Source device: UICC
Destination device: ME

Alpha Identifier Null

Buffer
Buffer size: 1400

UICC/terminal interface transport level
Transport format:TCP, UICC in server mode
Port number: 3516

Coding:

BER-TLV:	D0	14	81	03	01	40	00	82	02	81	82	05
	00	39	02	05	78	3C	03	03	0D	BC		

TERMINAL RESPONSE: OPEN CHANNEL 2.10.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: RFU

Device identities
Source device: ME
Destination device: UICC

Result
General Result: Command performed successfully

Channel status Channel identifier 1 and TCP in LISTEN state

Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	00	82	02	82	81	83	01	00
	38	02	41	00	39	02	05	78				

PROACTIVE COMMAND: OPEN CHANNEL 2.10.2

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities

Source device: UICC
Destination device: ME
Bearer
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: TCP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	03	04	1F	02	39	02	05	78
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	02	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 2.10.2A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 2 and link established or PDP context activated
Bearer Description:
Bearer Type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	82	00	35	07	02	03	04	03	04	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 2.10.2B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 2 and link established or PDP context activated
Bearer Description:
Bearer Type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	82	00	35	07	02	00	04	03	04	1F
	02	39	02	05	78							

27.22.4.27.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.2 to 2.10.

27.22.4.27.3 Open Channel (default bearer)

27.22.4.27.3.1 Open Channel (default bearer, E-UTRAN)

Open Channel for Default (network) Bearer for E-UTRAN is tested in clause 27.22.4.27.6, expected sequences 6.4 and 6.5.

27.22.4.27.3.2 Open Channel (Default bearer, GERAN/UTRAN)

27.22.4.27.3.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.3.2.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111[15] clause 5.2, clauses 6.4.27 and 6.6.27, clause 8.2, clause 8.6, clause 8.7, clause 8.52, clause 8.55, 8.59 and clause 9.2,

27.22.4.27.3.2.3 Test purpose

To verify that the ME allocates the buffer, activates the PDP context and reports the Channel status using TERMINAL RESPONSE (Command performed successfully) to the UICC after the ME receives the OPEN CHANNEL proactive command.

27.22.4.27.3.2.4 Method of test

27.22.4.27.3.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The following Bearer Parameters used are those defined in the default Test PDP context for test cases using packet services:

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP ContextDch, as specified in TS 34.123-3 [27], clause 8.10 for test cases using packet services:

Bearer Parameters

Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

GPRS Parameters

Network access name: TestGp.rs
User login: UserLog
User password: UserPwd

UICC/ME interface transport level

Transport format: TCP mode
Port number: 44444
Data destination address 01.01.01.01 (as an example)
Note: If a data destination address different to 01.01.01.01 is used then the same value is used in the content of the affected Open Channel commands and the network simulator setup and related UE settings might require a corresponding adaptation.

Pre-condition for successful execution of expected sequence x.1:

If the terminal does not support the execution of an Open Channel (GPRS) command when no Network Access Name TLV is present in the proactive command and when no default Access Point Name is set in the terminal configuration (s.a. table A.1/48), then "TestGp.rs" shall be set and activated as default Access Point Name in the terminal configuration prior to execution of the proactive command in expected sequence x.1.

27.22.4.27.3.2.4.2 Procedure

Expected Sequence 3.1 (OPEN CHANNEL, Default Bearer, GPRS, with null alpha identifier)

Step	Direction	MESSAGE / Action	Comments

1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 3.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 3.1.1	
4	ME → User	[The ME should not give any information]	[If the ME ask for user confirmation, then the user shall confirm the Open Channel request]
5	ME → USS	PDP context activation request	[The ME may have activated a PDP context at earlier stage. In this case a PDP context activation at this point might not be required if the existing PDP context is reused.] [The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 3.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 3.1.1B	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 3.1.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment, automatic reconnection
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier Null
Bearer
Bearer type: Default bearer for requested transport layer
Buffer
Buffer size: 1400
UICC/ME interface transport level
Transport format:TCP, UICC in client mode, remote connection
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	1E	81	03	01	40	03	82	02	81	82	85
	00	35	01	03	39	02	05	78	3C	03	02	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 3.1.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment, automatic reconnection
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated

Bearer

Bearer type: Default bearer for requested transport layer

Buffer

Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	03	82	02	82	81	83	01	00
	38	02	81	00	35	01	03	39	02	05	78	

TERMINAL RESPONSE: OPEN CHANNEL 3.1.1B

Logically:

Command details

Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment, automatic reconnection

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	03	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	05	78							

27.22.4.27.3.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1.

27.22.4.27.4 Open Channel (Local Bearer)

TBD

27.22.4.27.5 Open Channel (GPRS, support of Text Attribute)

27.22.4.27.5.1 Open Channel (GPRS, support of Text Attribute – Left Alignment)

27.22.4.27.5.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.5.1.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.27.5.1.3 Test purpose

To verify that the ME displays an alpha identifier according to the left alignment text attribute configuration in OPEN CHANNEL and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.27.5.1.4 Method of test

27.22.4.27.5.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.27.5.1.4.2 Procedure

Expected Sequence 5.1 (OPEN CHANNEL, immediate link establishment, GPRS, Text Attribute – Left Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.1.1	
4	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with left alignment]
5	USER → ME	The user confirms	
6	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
7	USS → ME	PDP context activation accept	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.1.1B	[Command performed successfully]
9	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
12	ME → USS	PDP context deactivation request	
13	USS → ME	PDP context deactivation accept	

14	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
15	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.1.2	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.1.2	
18	ME → USER	Confirmation phase with alpha ID	[Message shall be formatted without left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/19, no alignment change will take place]
19	USER → ME	The user confirms	
20	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
21	USS → ME	PDP context activation accept	
22	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.1.1B	[Command performed successfully]
23	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
26	ME → USS	PDP context deactivation request	
27	USS → ME	PDP context deactivation accept	
28	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 5.1.1

Logically:

Command details
- Command number: 1
- Command type: OPEN CHANNEL
- Command qualifier: immediate link establishment

Device identities
- Source device: UICC
- Destination device: ME

Alpha Identifier "Open ID 1"

Bearer
- Bearer type: GPRS
- Bearer parameter:
- Precedence Class: 03
- Delay Class: 04
- Reliability Class: 03
- Peak throughput class: 04
- Mean throughput class: 31
- Packet data protocol: 02 (IP)

Buffer
- Buffer size: 1400

Network access name: TestGp.rs

Text String: UserLog (User login)

Text String: UserPwd (User password)

UICC/ME interface transport level
- Transport format: UDP
- Port number: 44444

Data destination address 01.01.01.01

Text Attribute
- Formatting position: 0
- Formatting length: 9

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	31	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01	D0	04	00	09	00
	B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.1.2

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 2"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	4D	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	32	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01					

PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1

Logically:

Command details
Command number: 1

Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel
Alpha Identifier "Close ID"

Coding:

BER-TLV:	D0	14	81	03	01	41	00	82	02	81	21
	85	08	43	6C	6F	73	65	20	49	44	

TERMINAL RESPONSE: OPEN CHANNEL 5.1.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 5.1.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:

Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	05	78							

TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1

Logically:

Command details

Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

27.22.4.27.5.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.1.

27.22.4.27.5.2 Open Channel (GPRS, support of Text Attribute – Center Alignment)

27.22.4.27.5.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.5.2.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.27.5.2.3 Test purpose

To verify that the ME displays an alpha identifier according to the center alignment text attribute configuration in OPEN CHANNEL and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.27.5.2.4 Method of test

27.22.4.27.5.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.27.5.2.4.2 Procedure

Expected Sequence 5.2 (OPEN CHANNEL, immediate link establishment, GPRS, Text Attribute – Center Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.2.1	
4	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with center alignment]
5	USER → ME	The user confirms	
6	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
7	USS → ME	PDP context activation accept	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.2.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.2.1B	[Command performed successfully]
9	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
12	ME → USS	PDP context deactivation request	
13	USS → ME	PDP context deactivation accept	
14	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
15	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.2.2	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.2.2	
18	ME → USER	Confirmation phase with alpha ID	[Message shall be formatted without center alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/19, no alignment change will take place]
19	USER → ME	The user confirms	
20	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
21	USS → ME	PDP context activation accept	
22	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.2.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.2.1B	[Command performed successfully]

23	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
26	ME → USS	PDP context deactivation request	
27	USS → ME	PDP context deactivation accept	
28	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 5.2.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 1"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01
Text Attribute
Formatting position: 0
Formatting length: 9
Formatting mode: Center Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	31	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01	D0	04	00	09	01
	B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.2.2

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 2"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	4D	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	32	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01					

TERMINAL RESPONSE: OPEN CHANNEL 5.2.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 5.2.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	05	78							

27.22.4.27.5.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.2.

27.22.4.27.5.3 Open Channel (GPRS, support of Text Attribute – Right Alignment)

27.22.4.27.5.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.5.3.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.27.5.3.3 Test purpose

To verify that the ME displays an alpha identifier according to the right alignment text attribute configuration in OPEN CHANNEL and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.27.5.3.4 Method of test

27.22.4.27.5.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.27.5.3.4.2 Procedure

Expected Sequence 5.3 (OPEN CHANNEL, immediate link establishment, GPRS, Text Attribute – Right Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.3.1	
4	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with right alignment]
5	USER → ME	The user confirms	
6	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
7	USS → ME	PDP context activation accept	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.3.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.3.1B	[Command performed successfully]
9	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
12	ME → USS	PDP context deactivation request	
13	USS → ME	PDP context deactivation accept	
14	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
15	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.3.2	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.3.2	
18	ME → USER	Confirmation phase with alpha ID	[Message shall be formatted without right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/19, no alignment change will take place]
19	USER → ME	The user confirms	

20	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
21	USS → ME	PDP context activation accept	
22	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.3.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.3.1B	[Command performed successfully]
23	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
26	ME → USS	PDP context deactivation request	
27	USS → ME	PDP context deactivation accept	
28	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 5.3.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 1"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01
Text Attribute
Formatting position: 0
Formatting length: 9
Formatting mode: Right Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	31	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C

3E	05	21	01	01	01	01	D0	04	00	09	02
B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.3.2

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 2"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	4D	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	32	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01					

TERMINAL RESPONSE: OPEN CHANNEL 5.3.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:

Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 5.3.1B

Logically:

Command details

Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	05	78							

27.22.4.27.5.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.3.

27.22.4.27.5.4 Open Channel (GPRS, support of Text Attribute – Large Font Size)

27.22.4.27.5.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.5.4.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.27.5.4.3 Test purpose

To verify that the ME displays an alpha identifier according to the large font size text attribute configuration in OPEN CHANNEL and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.27.5.4.4 Method of test

27.22.4.27.5.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.27.5.4.4.2 Procedure

Expected Sequence 5.4 (OPEN CHANNEL, immediate link establishment, GPRS, Text Attribute – Large Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.4.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.4.1	
4	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with large font size]
5	USER → ME	The user confirms	
6	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
7	USS → ME	PDP context activation accept	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.4.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.4.1B	[Command performed successfully]
9	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
12	ME → USS	PDP context deactivation request	
13	USS → ME	PDP context deactivation accept	
14	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
15	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.4.2	
16	ME → UICC	FETCH	

17	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.4.2	
18	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with normal font size]
19	USER → ME	The user confirms	
20	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
21	USS → ME	PDP context activation accept	
22	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.4.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.4.1B	[Command performed successfully]
23	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
26	ME → USS	PDP context deactivation request	
27	USS → ME	PDP context deactivation accept	
28	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
29	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.4.1	
30	ME → UICC	FETCH	
31	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.4.1	
32	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with large font size]
33	USER → ME	The user confirms	
34	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
35	USS → ME	PDP context activation accept	
36	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.4.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.4.1B	[Command performed successfully]
37	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
38	ME → UICC	FETCH	
39	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
40	ME → USS	PDP context deactivation request	
41	USS → ME	PDP context deactivation accept	
42	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
43	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.4.3	
44	ME → UICC	FETCH	
45	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.4.3	
46	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with normal font size]
47	USER → ME	The user confirms	
48	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
49	USS → ME	PDP context activation accept	
50	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.4.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.4.1B	[Command performed successfully]
51	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
52	ME → UICC	FETCH	
53	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
54	ME → USS	PDP context deactivation request	
55	USS → ME	PDP context deactivation accept	

56	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 5.4.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 1"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01
Text Attribute
Formatting position: 0
Formatting length: 9
Formatting mode: Left Alignment, Large Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	31	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01	D0	04	00	09	04
	B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.4.2

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME

Alpha Identifier "Open ID 2"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01
Text Attribute
Formatting position: 0
Formatting length: 9
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	32	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01	D0	04	00	09	00
	B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.4.3

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 3"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)

Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	4D	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	33	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01					

TERMINAL RESPONSE: OPEN CHANNEL 5.4.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 5.4.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	05	78							

27.22.4.27.5.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.4.

27.22.4.27.5.5 Open Channel (GPRS, support of Text Attribute – Small Font Size)

27.22.4.27.5.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.5.5.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.27.5.5.3 Test purpose

To verify that the ME displays an alpha identifier according to the small font size text attribute configuration in OPEN CHANNEL and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.27.5.5.4 Method of test

27.22.4.27.5.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.27.5.5.4.2 Procedure

Expected Sequence 5.5 (OPEN CHANNEL, immediate link establishment, GPRS, Text Attribute – Small Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.5.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.5.1	
4	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with small font size]
5	USER → ME	The user confirms	
6	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
7	USS → ME	PDP context activation accept	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.5.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.5.1B	[Command performed successfully]
9	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
12	ME → USS	PDP context deactivation request	
13	USS → ME	PDP context deactivation accept	
14	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
15	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.5.2	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.5.2	
18	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with normal font size]
19	USER → ME	The user confirms	
20	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
21	USS → ME	PDP context activation accept	
22	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.5.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.5.1B	[Command performed successfully]
23	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
26	ME → USS	PDP context deactivation request	
27	USS → ME	PDP context deactivation accept	
28	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
29	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.5.1	
30	ME → UICC	FETCH	
31	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.5.1	
32	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with small font size]
33	USER → ME	The user confirms	
34	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
35	USS → ME	PDP context activation accept	

36	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.5.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.5.1B	[Command performed successfully]
37	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
38	ME → UICC	FETCH	
39	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
40	ME → USS	PDP context deactivation request	
41	USS → ME	PDP context deactivation accept	
42	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
43	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.5.3	
44	ME → UICC	FETCH	
45	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.5.3	
46	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with normal font size]
47	USER → ME	The user confirms	
48	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
49	USS → ME	PDP context activation accept	
50	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.5.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.5.1B	[Command performed successfully]
51	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
52	ME → UICC	FETCH	
53	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
54	ME → USS	PDP context deactivation request	
55	USS → ME	PDP context deactivation accept	
46	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 5.5.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 1"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)

Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01
Text Attribute
Formatting position: 0
Formatting length: 9
Formatting mode: Left Alignment, Small Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	31	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01	D0	04	00	09	08
	B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.5.2

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 2"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01
Text Attribute
Formatting position: 0
Formatting length: 9
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	32	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01	D0	04	00	09	00
	B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.5.3

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 3"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	4D	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	33	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01					

TERMINAL RESPONSE: OPEN CHANNEL 5.5.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC

Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 5.5.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	05	78							

27.22.4.27.5.5.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.5.

27.22.4.27.5.6 Open Channel (GPRS, support of Text Attribute – Bold On)

27.22.4.27.5.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.5.6.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.27.5.6.3 Test purpose

To verify that the ME displays an alpha identifier according to the bold text attribute configuration in OPEN CHANNEL and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.27.5.6.4 Method of test

27.22.4.27.5.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.27.5.6.4.2 Procedure

Expected Sequence 5.6 (OPEN CHANNEL, immediate link establishment, GPRS, Text Attribute – Bold On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.6.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.6.1	
4	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with bold on]
5	USER → ME	The user confirms	
6	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
7	USS → ME	PDP context activation accept	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.6.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.6.1B	[Command performed successfully]

9	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
12	ME → USS	PDP context deactivation request	
13	USS → ME	PDP context deactivation accept	
14	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
15	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.6.2	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.6.2	
18	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with bold off]
19	USER → ME	The user confirms	
20	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
21	USS → ME	PDP context activation accept	
22	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.6.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.6.1B	[Command performed successfully]
23	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
26	ME → USS	PDP context deactivation request	
27	USS → ME	PDP context deactivation accept	
28	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
29	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.6.1	
30	ME → UICC	FETCH	
31	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.6.1	
32	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with bold on]
33	USER → ME	The user confirms	
34	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
35	USS → ME	PDP context activation accept	
36	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.6.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.6.1B	[Command performed successfully]
37	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
38	ME → UICC	FETCH	
39	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
40	ME → USS	PDP context deactivation request	
41	USS → ME	PDP context deactivation accept	
42	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
43	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.6.3	
44	ME → UICC	FETCH	
45	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.6.3	
46	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with bold off]
47	USER → ME	The user confirms	
48	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
49	USS → ME	PDP context activation accept	

50	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.6.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.6.1B	[Command performed successfully]
51	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
52	ME → UICC	FETCH	
53	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
54	ME → USS	PDP context deactivation request	
55	USS → ME	PDP context deactivation accept	
56	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 5.6.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 1"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01
Text Attribute
Formatting position: 0
Formatting length: 9
Formatting mode: Left Alignment, Normal Font, Bold On, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	31	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01	D0	04	00	09	10
	B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.6.2

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 2"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01
Text Attribute
Formatting position: 0
Formatting length: 9
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	32	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01	D0	04	00	09	00
	B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.6.3

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 3"
Bearer
Bearer type: GPRS

Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer
Buffer size: 1400

Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	4D	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	33	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01					

TERMINAL RESPONSE: OPEN CHANNEL 5.6.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 5.6.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	05	78							

27.22.4.27.5.6.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.6.

27.22.4.27.5.7 Open Channel (GPRS, support of Text Attribute – Italic On)

27.22.4.27.5.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.5.7.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.27.5.7.3 Test purpose

To verify that the ME displays an alpha identifier according to the italic text attribute configuration in OPEN CHANNEL and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.27.5.7.4 Method of test

27.22.4.27.5.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.27.5.7.4.2 Procedure

Expected Sequence 5.7 (OPEN CHANNEL, immediate link establishment, GPRS, Text Attribute – Italic On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.7.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.7.1	
4	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with italic on]
5	USER → ME	The user confirms	
6	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
7	USS → ME	PDP context activation accept	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.7.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.7.1B	[Command performed successfully]
9	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
12	ME → USS	PDP context deactivation request	
13	USS → ME	PDP context deactivation accept	
14	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
15	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.7.2	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.7.2	
18	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with italic off]
19	USER → ME	The user confirms	
20	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
21	USS → ME	PDP context activation accept	
22	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.7.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.7.1B	[Command performed successfully]
23	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
26	ME → USS	PDP context deactivation request	
27	USS → ME	PDP context deactivation accept	

28	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
29	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.7.1	
30	ME → UICC	FETCH	
31	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.7.1	
32	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with italic on]
33	USER → ME	The user confirms	
34	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
35	USS → ME	PDP context activation accept	
36	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.7.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.7.1B	[Command performed successfully]
37	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
38	ME → UICC	FETCH	
39	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
40	ME → USS	PDP context deactivation request	
41	USS → ME	PDP context deactivation accept	
42	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
43	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.7.3	
44	ME → UICC	FETCH	
45	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.7.3	
46	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with italic off]
47	USER → ME	The user confirms	
48	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
49	USS → ME	PDP context activation accept	
50	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.7.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.7.1B	[Command performed successfully]
51	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
52	ME → UICC	FETCH	
53	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
54	ME → USS	PDP context deactivation request	
55	USS → ME	PDP context deactivation accept	
56	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 5.7.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 1"
Bearer
Bearer type: GPRS

Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01
Text Attribute
Formatting position: 0
Formatting length: 9
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	31	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01	D0	04	00	09	20
	B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.7.2

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 2"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP

Port number: 44444
Data destination address 01.01.01.01
Text Attribute
Formatting position: 0
Formatting length: 9
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	32	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01	D0	04	00	09	00
	B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.7.3

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 3"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	4D	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	33	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01					

TERMINAL RESPONSE: OPEN CHANNEL 5.7.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 5.7.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F

02	39	02	05	78							

27.22.4.27.5.7.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.7.

27.22.4.27.5.8 Open Channel (GPRS, support of Text Attribute – Underline On)

27.22.4.27.5.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.5.8.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.27.5.8.3 Test purpose

To verify that the ME displays an alpha identifier according to the underline text attribute configuration in OPEN CHANNEL and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.27.5.8.4 Method of test

27.22.4.27.5.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.27.5.8.4.2 Procedure

Expected Sequence 5.8 (OPEN CHANNEL, immediate link establishment, GPRS, Text Attribute – Underline On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.8.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.8.1	
4	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with underline on]
5	USER → ME	The user confirms	

6	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
7	USS → ME	PDP context activation accept	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.8.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.8.1B	[Command performed successfully]
9	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
12	ME → USS	PDP context deactivation request	
13	USS → ME	PDP context deactivation accept	
14	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
15	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.8.2	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.8.2	
18	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with underline off]
19	USER → ME	The user confirms	
20	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
21	USS → ME	PDP context activation accept	
22	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.8.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.8.1B	[Command performed successfully]
23	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
26	ME → USS	PDP context deactivation request	
27	USS → ME	PDP context deactivation accept	
28	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
29	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.8.1	
30	ME → UICC	FETCH	
31	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.8.1	
32	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with underline on]
33	USER → ME	The user confirms	
34	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
35	USS → ME	PDP context activation accept	
36	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.8.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.8.1B	[Command performed successfully]
37	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
38	ME → UICC	FETCH	
39	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
40	ME → USS	PDP context deactivation request	
41	USS → ME	PDP context deactivation accept	
42	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
43	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.8.3	

44	ME → UICC	FETCH	
45	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.8.3	
46	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with underline off]
47	USER → ME	The user confirms	
48	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
49	USS → ME	PDP context activation accept	
50	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.8.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.8.1B	[Command performed successfully]
51	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
52	ME → UICC	FETCH	
53	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
54	ME → USS	PDP context deactivation request	
55	USS → ME	PDP context deactivation accept	
56	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 5.8.1

Logically:

Command details
- Command number: 1
- Command type: OPEN CHANNEL
- Command qualifier: immediate link establishment

Device identities
- Source device: UICC
- Destination device: ME

Alpha Identifier "Open ID 1"

Bearer
- Bearer type: GPRS
- Bearer parameter:
- Precedence Class: 03
- Delay Class: 04
- Reliability Class: 03
- Peak throughput class: 04
- Mean throughput class: 31
- Packet data protocol: 02 (IP)

Buffer
- Buffer size: 1400

Network access name: TestGp.rs

Text String: UserLog (User login)

Text String: UserPwd (User password)

UICC/ME interface transport level
- Transport format: UDP
- Port number: 44444

Data destination address 01.01.01.01

Text Attribute
- Formatting position: 0
- Formatting length: 9
- Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline On, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05

	09	4F	70	65	6E	20	49	44	20	31	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01	D0	04	00	09	40
	B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.8.2

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 2"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01
Text Attribute
Formatting position: 0
Formatting length: 9
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	32	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01	D0	04	00	09	00
	B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.8.3

Logically:

Command details
Command number: 1

Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 3"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	4D	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	33	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01					

TERMINAL RESPONSE: OPEN CHANNEL 5.8.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 5.8.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	05	78							

27.22.4.27.5.8.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.8.

27.22.4.27.5.9 Open Channel (GPRS, support of Text Attribute – Strikethrough On)

27.22.4.27.5.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.5.9.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.27.5.9.3 Test purpose

To verify that the ME displays an alpha identifier according to the strikethrough text attribute configuration in OPEN CHANNEL and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.27.5.9.4 Method of test

27.22.4.27.5.9.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.27.5.9.4.2 Procedure

Expected Sequence 5.9 (OPEN CHANNEL, immediate link establishment, GPRS, Text Attribute – Strikethrough On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.9.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.9.1	
4	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with strikethrough on]
5	USER → ME	The user confirms	
6	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
7	USS → ME	PDP context activation accept	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.9.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.9.1B	[Command performed successfully]
9	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
12	ME → USS	PDP context deactivation request	
13	USS → ME	PDP context deactivation accept	
14	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
15	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.9.2	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.9.2	
18	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with strikethrough off]
19	USER → ME	The user confirms	
20	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
21	USS → ME	PDP context activation accept	

22	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.9.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.9.1B	[Command performed successfully]
23	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
26	ME → USS	PDP context deactivation request	
27	USS → ME	PDP context deactivation accept	
28	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
29	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.9.1	
30	ME → UICC	FETCH	
31	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.9.1	
32	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with strikethrough on]
33	USER → ME	The user confirms	
34	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
35	USS → ME	PDP context activation accept	
36	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.9.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.9.1B	[Command performed successfully]
37	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
38	ME → UICC	FETCH	
39	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
40	ME → USS	PDP context deactivation request	
41	USS → ME	PDP context deactivation accept	
42	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
43	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.9.3	
44	ME → UICC	FETCH	
45	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.9.3	
46	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with strikethrough off]
47	USER → ME	The user confirms	
48	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
49	USS → ME	PDP context activation accept	
50	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.9.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.9.1B	[Command performed successfully]
51	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
52	ME → UICC	FETCH	
53	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
54	ME → USS	PDP context deactivation request	
55	USS → ME	PDP context deactivation accept	
56	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 5.9.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 1"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01
Text Attribute
Formatting position: 0
Formatting length: 9
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough On
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	31	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01	D0	04	00	09	80
	B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.9.2

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 2"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03

Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer
Buffer size: 1400

Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444

Data destination address 01.01.01.01
Text Attribute
Formatting position: 0
Formatting length: 9
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	32	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01	D0	04	00	09	00
	B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.9.3

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment

Device identities
Source device: UICC
Destination device: ME

Alpha Identifier "Open ID 3"

Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer
Buffer size: 1400

Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444

Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	4D	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	33	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01					

TERMINAL RESPONSE: OPEN CHANNEL 5.9.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 5.9.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04

Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	05	78							

27.22.4.27.5.9.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.9.

27.22.4.27.5.10 Open Channel (GPRS, support of Text Attribute – Foreground and Background Colour)

27.22.4.27.5.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.5.10.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.27.5.10.3 Test purpose

To verify that the ME displays an alpha identifier according to the foreground and background colour text attribute configuration in OPEN CHANNEL and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.27.5.10.4 Method of test

27.22.4.27.5.10.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.27.5.10.4.2 Procedure

Expected Sequence 5.10 (OPEN CHANNEL, immediate link establishment, GPRS, Text Attribute – Foreground and Background Colour)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.10.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.10.1	
4	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with foreground and background colour according to the text attribute]
5	USER → ME	The user confirms	
6	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
7	USS → ME	PDP context activation accept	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.10.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.10.1B	[Command performed successfully]
9	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
12	ME → USS	PDP context deactivation request	
13	USS → ME	PDP context deactivation accept	
14	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]
15	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 5.10.2	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 5.10.2	
18	ME → USER	Confirmation phase with alpha ID	[alpha identifier is displayed with ME's default foreground and background colour]
19	USER → ME	The user confirms	
20	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
21	USS → ME	PDP context activation accept	
22	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 5.10.1A or TERMINAL RESPONSE: OPEN CHANNEL 5.10.1B	[Command performed successfully]
23	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 5.1.1	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 5.1.1	
26	ME → USS	PDP context deactivation request	
27	USS → ME	PDP context deactivation accept	
28	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 5.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 5.10.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities

Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 1"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01
Text Attribute
Formatting position: 0
Formatting length: 9
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	53	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	31	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01	D0	04	00	09	00
	B4											

PROACTIVE COMMAND: OPEN CHANNEL 5.10.2

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier "Open ID 2"
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	4D	81	03	01	40	01	82	02	81	82	05
	09	4F	70	65	6E	20	49	44	20	32	35	07
	02	03	04	03	04	1F	02	39	02	05	78	47
	0A	06	54	65	73	74	47	70	02	72	73	0D
	08	F4	55	73	65	72	4C	6F	67	0D	08	F4
	55	73	65	72	50	77	64	3C	03	01	AD	9C
	3E	05	21	01	01	01	01					

TERMINAL RESPONSE: OPEN CHANNEL 5.10.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 5.10.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC

Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	05	78							

27.22.4.27.5.10.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.10.

27.22.4.27.6 Open Channel (related to E-UTRAN)

27.22.4.27.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.6.2 Conformance requirements

The ME shall support the class "e" commands and E-UTRAN as defined in:

- TS 31.111[15] clause 5.2, clauses 6.4.27 and 6.6.27, clause 8.6, clause 8.7, clause 9.2, clause 8.2, clause 8.15, clause 8.52, clause 8.59, clause 8.61 and Annex S
- TS 23.107 [30], cl 9.1.2.2, clause 9.1.2.3,
- TS 23.203 [31], cl 6.1.7.2,
- TS 24.301 [32], cl 9.9.4.3,
- TS 36.508 [33], cl 6.6.1.
- TS 24.011 [11], cl 10.
- TS 31.102 [14], cl 4.2.109

27.22.4.27.6.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (OK); or
- TERMINAL RESPONSE (Command performed with modification); or
- TERMINAL RESPONSE (User did not accept the proactive command);
- TERMINAL RESPONSE (ME currently unable to process command);

to the UICC after the ME receives the OPEN CHANNEL proactive command while accessing E-UTRAN/EPC. The TERMINAL RESPONSE sent back to the UICC is the result of the ME and the network capabilities against requested parameters by the UICC.

To verify that the ME sets up a PDN connection with the Access Point Name (APN) indicated in the Open Channel command which differs from the default APN.

To verify that the ME uses the Default EPS bearer when Bearer Type 3 is indicated in the Open Channel command.

To verify that the ME does not disconnect the Deafult EPS bearer when the user rejects the user confirmation of the Open Channel command.

To verify that the ME sends the TERMINAL RESPONSE (ME currently unable to process command) if the 3GPP PS data off status is "active" and the UE is not configured with indication that Bearer Independent Protocol is a 3GPP PS data off exempt service.

To verify that the ME sends the TERMINAL RESPONSE (OK) if the 3GPP PS data off status is "active" and the UE is configured with indication that Bearer Independent Protocol is a 3GPP PS data off exempt service.

To verify that the maximum number of 7 OPEN CHANNEL commands should be handled by the ME.

27.22.4.27.6.4 Method of test

27.22.4.27.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and the E-USS/NB-SS. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The default E-UTRAN/EPC UICC, the default E-UTRAN parameters and the following parameters are used:

Network access name: Any value other than TestGp.rs or Test12.rs
User login: UserLog
User password: UserPwd

UICC/ME interface transport level
Transport format:TCP
Port number: 44444
Data destination address: 01.01.01.01 (as an example)
Note: If a data destination address different to 01.01.01.01 is used then the same value is used in the content of the affected Open Channel commands and the network simulator setup and related UE settings might require a corresponding adaptation.

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

Prior to test case execution the apparatus supplier shall have provided the "Preferred buffer size supported by the terminal for Open Channel command" as requested in table A.2/29.

For sequence 6.1, 6.2 and 6.3 the E-USS shall be able to support 2 active PDN connections at the same time.

In case the ME supports A.1/173 AND A.1/174 AND A.1/178, for sequence 6.1 and 6.3 the NB-SS shall be able to support 2 active PDN connections at the same time.

For sequence 6.6 service n°117 is "available" in EF_{UST} and the Bearer Independent Protocol is not marked in $EF_{3GPPPSDATAOFF}$ as a 3GPP PS data off exempt service. Also SMS over SGs is used to send and receive short messages.

For sequence 6.7 service n°117 is "available" in EF_{UST} and the Bearer Independent Protocol is marked in $EF_{3GPPPSDATAOFF}$ as a 3GPP PS data off exempt service. Also SMS over SGs is used to send and receive short messages.

27.22.4.27.6.4.2 Method of test

Expected Sequence 6.1 (OPEN CHANNEL, immediate link establishment, E-UTRAN, bearer type '02')

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required	[see initial conditions] If the ME supports A.1/173 AND NOT A.1/174 only one APN will be activated in step 7.
2	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.1.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.1.1	
5	ME → USER	The ME may display channel opening information	
6	ME → E-USS/NB-SS	PDN CONNECTIVITY REQUEST	[The UE may request IPv4 or IPv4v6 address as PDP type.]
7	E-USS/NB-SS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
8	ME → E-USS/NB-SS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
9	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A OR TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B	[Command performed successfully OR Command performed with modifications]

PROACTIVE COMMAND: OPEN CHANNEL 6.1.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: "UserLog" (User login)
Text String: "UserPwd" (User password)
UICC/ME interface transport level
Transport format: TCP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	02	09	1F	02	39	02	05	78
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	02	AD

9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed with modifications
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	07
	38	02	81	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

Expected Sequence 6.2 (OPEN CHANNEL, immediate link establishment, E-UTRAN, bearer type '0B')

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure APN "TestGp.rs" and "Test12.rs"in the terminal configuration if required	[see initial conditions]
2	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.2.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.2.1	The "TestGp.rs" APN is requested
5	ME → USER	The ME may display channel opening information	
6	ME → E-USS	PDN CONNECTIVITY REQUEST	The PDN CONNECTIVITY REQUEST shall contain APN value "TestGp.rs" [The UE may request IPv4 or IPv4v6 address as PDP type.]
7	E-USS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used with the exception that the "EPS Quality of Service" information element contains QCI = 9 and the maximum and guaranteed bit rates for uplink and downlink shall all be set to 64kbps. The bytes for the extened bit rate values shall not be present in the "EPS Quality of Service" IE]
8	ME → E-USS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
9	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.2.1A OR TERMINAL RESPONSE: OPEN CHANNEL 6.2.1B	[Command performed successfully OR Command performed with modifications]
10	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 3.1.1	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 3.1.1	The ME can deactivate the EPS bearer
13	ME → UICC	TERMINAL RESPONSE: CLOSE CHANNEL 3.1.1	
14	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.2.2	The "Test12.rs" APN is requested
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.2.2	
17	ME → USER	The ME may display channel opening information	
18	ME → E-USS	PDN CONNECTIVITY REQUEST	The PDN CONNECTIVITY REQUEST shall contain APN value "Test12.rs" [The UE may request IPv4 or IPv4v6 address as PDP type.]
19	E-USS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used with the exception that the "EPS Quality of Service" information element contains only the QCI which shall be set to "9"] [second PDN context activated]
20	ME → E-USS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	

21	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.2.2A OR TERMINAL RESPONSE: OPEN CHANNEL 6.2.2B	[Command performed successfully OR Command performed with modifications]

PROACTIVE COMMAND: OPEN CHANNEL 6.2.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: E-UTRAN / mapped UTRAN packet service
QCI 9
Maximum bit rate for uplink: 0 (Subscribed maximum bit rate for uplink)
Maximum bit rate for downlink: 0 (Subscribed maximum bit rate for downlink)
Guaranteed bit rate for uplink: 0 (Use the value indicated by the maximum bit rate for uplink)
Guaranteed bit rate for downlink: 0 (Use the value indicated by the maximum bit rate for downlink)
Maximum bit rate for uplink (extended): 0
Maximum bit rate for downlink (extended): 0
Guaranteed bit rate for uplink (extended): 0
Guaranteed bit rate for downlink (extended): 0
PDN Type: IP
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: "UserLog" (User login)
Text String: "UserPwd" (User password)
UICC/ME interface transport level
Transport format:TCP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	46	81	03	01	40	01	82	02	81	82	35
	0B	0B	09	00	00	00	00	00	00	00	00	02
	39	02	05	78	47	0A	06	54	65	73	74	47
	70	02	72	73	0D	08	F4	55	73	65	72	4C
	6F	67	0D	08	F4	55	73	65	72	50	77	64
	3C	03	02	AD	9C	3E	05	21	01	01	01	01

TERMINAL RESPONSE: OPEN CHANNEL 6.2.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated
Bearer
Bearer type: E-UTRAN / mapped UTRAN packet service
QCI 9
PDN Type: IP

Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	03	0B	09	02	39	02	05
	78											

TERMINAL RESPONSE: OPEN CHANNEL 6.2.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed with modifications
Channel status Channel identifier 1 and link established or PDP context activated
Bearer
Bearer type: E-UTRAN / mapped UTRAN packet service
QCI 9
PDN Type: IP

Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	07
	38	02	81	00	35	03	0B	09	02	39	02	05
	78											

PROACTIVE COMMAND: CLOSE CHANNEL 3.1.1

Same as PROACTIVE COMMAND: CLOSE CHANNEL 3.1.1 in clause 27.22.4.28.3

TERMINAL RESPONSE: CLOSE CHANNEL 3.1.1

Same as TERMINAL RESPONSE: CLOSE CHANNEL 3.1.1 in clause 27.22.4.28.3

PROACTIVE COMMAND: OPEN CHANNEL 6.2.2

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment

Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: E-UTRAN / mapped UTRAN packet service
QCI 9
Maximum bit rate for uplink: 0 (Subscribed maximum bit rate for uplink)
Maximum bit rate for downlink: 0 (Subscribed maximum bit rate for downlink)
Guaranteed bit rate for uplink: 0 (Use the value indicated by the maximum bit rate for uplink)
Guaranteed bit rate for downlink: 0 (Use the value indicated by the maximum bit rate for downlink)
Maximum bit rate for uplink (extended): 0
Maximum bit rate for downlink (extended): 0
Guaranteed bit rate for uplink (extended): 0
Guaranteed bit rate for downlink (extended): 0
PDN Type: IP
Buffer
Buffer size: 1400
Network access name: Test12.rs
Text String: "UserLog" (User login)
Text String: "UserPwd" (User password)
UICC/ME interface transport level
Transport format:TCP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	46	81	03	01	40	01	82	02	81	82	35
	0B	0B	09	00	00	00	00	00	00	00	00	02
	39	02	05	78	47	0A	06	54	65	73	74	31
	32	02	72	73	0D	08	F4	55	73	65	72	4C
	6F	67	0D	08	F4	55	73	65	72	50	77	64
	3C	03	02	AD	9C	3E	05	21	01	01	01	01

TERMINAL RESPONSE: OPEN CHANNEL 6.2.2A

same as TERMINAL RESPONSE: OPEN CHANNEL 6.2.1A

TERMINAL RESPONSE: OPEN CHANNEL 6.2.2B

same as TERMINAL RESPONSE: OPEN CHANNEL 6.2.1B

Expected Sequence 6.3 (OPEN CHANNEL, immediate link establishment, E-UTRAN, bearer type '02', with Network Access Name, with alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure APN "Test12.rs" in the terminal configuration if required	[see initial conditions] If the ME supports A.1/173 AND NOT A.1/174 only one APN will be activated in step 7.
2	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.3.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.3.1	
5	ME → USER	The terminal shall display the alpha identifier "Open Channel for UICC?" during the confirmation phase	[IF NOT A.1/84 (No display) THEN the terminal shall ignore the alpha identifier]
6	USER → ME	The user confirms	[IF NOT A.1/85 (No keypad) THEN the terminal may open the channel without explicit confirmation by the user]

7	ME → E-USS/NB-SS	PDN CONNECTIVITY REQUEST	[The PDN CONNECTIVITY REQUEST shall contain the APN "Test12.rs"] [The UE may request IPv4 or IPv4v6 address as PDP type.]
8	USS/NB-SS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
9	ME → E-USS/NB-SS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
10	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A OR TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B	[Command performed successfully OR Command performed with modifications]

PROACTIVE COMMAND: OPEN CHANNEL 6.3.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier: "Open Channel for UICC?"
Bearer
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: Test12.rs
Text String: "UserLog" (User login)
Text String: "UserPwd" (User password)
UICC/ME interface transport level
Transport format: TCP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	5A	81	03	01	40	01	82	02	81	82	85
	16	4F	70	65	6E	20	43	68	61	6E	6E	65
	6C	20	66	6F	72	20	55	49	43	43	3F	35
	07	02	03	04	02	09	1F	02	39	02	05	78
	47	0A	06	54	65	73	74	31	32	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	02	AD
	9C	3E	05	21	01	01	01	01				

Expected Sequence 6.4 (OPEN CHANNEL, immediate link establishment, E-UTRAN, bearer type '03', with alpha identifier, user did not accept the proactive command)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required	[see initial conditions] If the ME supports A.1/173 AND NOT A.1/174 no APN will be activated in this step.
2	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.4.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.4.1	
5	ME → USER	The terminal shall display the alpha identifier "Open Channel for UICC?" during the confirmation phase	
6	USER → ME	The user rejects	
7	ME → E-USS/NB-SS	The terminal shall not send a PDN CONNECTIVITY REQUEST to the network	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.4.1	[User did not accept proactive command]
9	ME → E-USS/NB-SS	The ME shall not send a PDN CONNECTIVITY DISCONNECT REQUEST to the network which would disconnect the default EPS bearer which has been established after the terminal has been powered up.	[Within this period the terminal shall not be switched off]

PROACTIVE COMMAND: OPEN CHANNEL 6.4.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier: "Open Channel for UICC?"
Bearer
Bearer type: Default bearer for requested transport layer
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: "UserLog" (User login)
Text String: "UserPwd" (User password)
UICC/ME interface transport level
Transport format:TCP, UICC in client mode, remote connection
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	54	81	03	01	40	01	82	02	81	82	85
	16	4F	70	65	6E	20	43	68	61	6E	6E	65
	6C	20	66	6F	72	20	55	49	43	43	3F	35
	01	03	39	02	05	78	47	0A	06	54	65	73
	74	47	70	02	72	73	0D	08	F4	55	73	65
	72	4C	6F	67	0D	08	F4	55	73	65	72	50
	77	64	3C	03	02	AD	9C	3E	05	21	01	01
	01	01										

TERMINAL RESPONSE: OPEN CHANNEL 6.4.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: User did not accept the proactive command
Channel status The presence and content of this TLV shall not be verified
Bearer description
Bearer type: Default bearer for requested transport layer
Buffer
Buffer size: Because the value depends in this case on the terminal's implementation, it shall be ignored.

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	22
	Note 1	35	01	03		Note 2						

Note1: The presence and content of the Channel Status TLV shall not be verified.
Note 2: The buffer size TLV shall be present and because the value depends in this case on the terminal's implementation, the value shall be ignored.

Expected Sequence 6.5 (OPEN CHANNEL, immediate link establishment, E-UTRAN, bearer type '03' – Default EPS bearer)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required	[see initial conditions] If the ME supports A.1/173 AND NOT A.1/174 no APN will be activated in this step.
2	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.5.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.5.1	
5	ME → USER	The ME may display channel opening information	
6	ME → E-USS/NB-SS	The terminal shall not send a PDN CONNECTIVITY REQUEST to the network Exception: If the ME supports A.1/173 AND NOT A.1/174 PDN CONNECTIVITY REQUEST should be sent by the ME in this step.	[The UE may request IPv4 or IPv4v6 address as PDP type.]
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.5.1A or TERMINAL RESPONSE: OPEN CHANNEL 6.5.1B	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 6.5.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL

Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: Default bearer for requested transport layer
Buffer
Buffer size: 1400
UICC/ME interface transport level
Transport format:TCP, UICC in client mode, remote connection
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	1C	81	03	01	40	01	82	02	81	82	35
	01	03	39	02	05	78	3C	03	02	AD	9C	3E
	05	21	01	01	01	01						

TERMINAL RESPONSE: OPEN CHANNEL 6.5.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer
Bearer type: Default bearer for requested transport layer
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	01	03	39	02	05	78	

TERMINAL RESPONSE: OPEN CHANNEL 6.5.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer
Bearer type: E-UTRAN / mapped UTRAN packet service
QCI 9
Maximum bit rate for uplink: 64 kbps

Maximum bit rate for downlink: 64 kbps
Guaranteed bit rate for uplink: 64 kbps
Guaranteed bit rate for downlink: 64 kbps
Maximum bit rate for uplink (extended): 0
Maximum bit rate for downlink (extended): 0
Guaranteed bit rate for uplink (extended): 0
Guaranteed bit rate for downlink (extended): 0
PDN Type: IP

Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	0B	0B	09	40	40	40	40
	00	00	00	00	02	39	02	05	78			

Expected Sequence 6.6 (OPEN CHANNEL, BIP is not a 3GPP PS data off exempt service)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required	[see initial conditions]
2	USER → ME	Set 3GPP PS data off status is "active"	
3	ME → E-USS	Send a Request Bearer Resource Modification message	The ME indicates the change of 3GPP PS Data Off Status to the PDN GW via the PCO (Protocol Configuration Options)
4	E-USS → ME	SMS-PP Data Download 6.6.1	Send SMS over SGs
5	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 6.6.1	
6	UICC → ME	SMS-PP Data Download UICC Acknowledgement	[SW '90 00']
7	ME → E-USS	SMS-PP Data Download UICC acknowledgement (RP-ACK) message.	
8	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.1.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.1.1	
11	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.6.1	[ME currently unable to process command]

SMS-PP (Data Download) Message 6.6.1

Logically:

SMS TPDU
TP-MTI SMS-DELIVER
TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME
TP-OA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "1234"
TP-PID (U)SIM Data download
TP-DCS
Coding Group General Data Coding
Compression Text is uncompressed
Message Class Class 2 (U)SIM Specific Message
Alphabet 8 bit data

TP-SCTS: 01/01/98 00:00:00 +0
TP-UDL 13
TP-UD "Short Message"

Coding:

Coding	04	04	91	21	43	7F	16	89	10	10	00	00
	00	00	0D	53	68	6F	72	74	20	4D	65	73
	73	61	67	65								

ENVELOPE: SMS-PP DOWNLOAD 6.6.1

Logically:

SMS-PP Download
Device identities
Source device: Network
Destination device: UICC
Address
TON International number
NPI "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-DELIVER
TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME
TP-OA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "1234"
TP-PID (U)SIM Data download
TP-DCS
Coding Group General Data Coding
Compression Text is uncompressed
Message Class Class 2 (U)SIM Specific Message
Alphabet 8 bit data
TP-SCTS: 01/01/98 00:00:00 +0
TP-UDL 13
TP-UD "Short Message"

Coding:

BER-TLV:	D1	2D	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1C	04	04	91	21	43
	7F	16	89	10	10	00	00	00	00	0D	53	68
	6F	72	74	20	4D	65	73	73	61	67	65	

TERMINAL RESPONSE: OPEN CHANNEL 6.6.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result

General Result: ME currently unable to process command
Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	20

Expected Sequence 6.7 (OPEN CHANNEL, BIP is a 3GPP PS data off exempt service)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required	[see initial conditions]
2	USER → ME	Set 3GPP PS data off status is "active"	
3	ME → E-USS	Send a Request Bearer Resource Modification message	The ME indicates the change of 3GPP PS Data Off Status to the PDN GW via the PCO (Protocol Configuration Options)
4	E-USS → ME	SMS-PP Data Download 6.6.1	Send SMS over SGs
5	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 6.6.1	
6	UICC → ME	SMS-PP Data Download UICC Acknowledgement	[SW '90 00']
7	ME → E-USS	SMS-PP Data Download UICC acknowledgement (RP-ACK) message.	
8	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.1.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.1.1	
11	ME → USER	The ME may display channel opening information	
12	ME → E-USS/NB-SS	PDN CONNECTIVITY REQUEST	[The UE may request IPv4 or IPv4v6 address as PDP type.]
13	E-USS/NB-SS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
14	ME → E-USS/NB-SS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
15	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A OR TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B	[Command performed successfully OR Command performed with modifications]

Expected Sequence 6.8 (OPEN CHANNEL, Maximum number of open channel requests)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.8.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.8.1	
4	ME → USER	The ME may display channel opening information	
5	ME → E-USS/NB-SS	PDN CONNECTIVITY REQUEST	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	E-USS/NB-SS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
7	ME → E-USS/NB-SS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.8.1A	[Command performed successfully]
9	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.8.1	
10	ME → UICC	FETCH	

11	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.8.1	
12	ME → USER	The ME may display channel opening information	
13	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.8.1B	[Command performed successfully].It shall re-use same PDN for Current Proactive Command
14	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.8.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.8.1	
17	ME → USER	The ME may display channel opening information	
18	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.8.1C	[Command performed successfully].It shall re-use same PDN for Current Proactive Command
19	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.8.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.8.1	
22	ME → USER	The ME may display channel opening information	
23	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.8.1D	[Command performed successfully].It shall re-use same PDN for Current Proactive Command
24	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.8.1	
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.8.1	
27	ME → USER	The ME may display channel opening information	
28	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.8.1E	[Command performed successfully].It shall re-use same PDN for Current Proactive Command
29	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.8.1	
30	ME → UICC	FETCH	
31	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.8.1	
32	ME → USER	The ME may display channel opening information	
33	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.8.1F	[Command performed successfully].It shall re-use same PDN for Current Proactive Command
34	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.8.1	
35	ME → UICC	FETCH	
36	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.8.1	
37	ME → USER	The ME may display channel opening information	
38	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.8.1G	[Command performed successfully].It shall re-use same PDN for Current Proactive Command
39	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.8.1	
40	ME → UICC	FETCH	
41	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.8.1	
42	ME → USER	The ME may display channel opening information	

43	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.8.1H	[Command performed successfully]. No channel Available

PROACTIVE COMMAND: OPEN CHANNEL 6.8.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Buffer
Buffer size: 1000
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV												
	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	02	09	1F	02	39	02	05	78
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 6.8.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Buffer
Buffer size: 1000

Coding:

BER-TLV:												
	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 6.8.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 2 and link established or PDP context activated
Buffer
Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	82	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 6.8.1C

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 3 and link established or PDP context activated
Buffer
Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	83	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 6.8.1D

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 4 and link established or PDP context activated
Buffer
Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	84	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 6.8.1E

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 5 and link established or PDP context activated
Buffer
Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	85	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 6.8.1F

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 6 and link established or PDP context activated
Buffer
Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	86	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 6.8.1G

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC

Result
General Result: Command performed successfully
Channel status Channel identifier 7 and link established or PDP context activated
Buffer
Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	87	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL6.8.1H

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Bearer Independent Protocol Error – No channel Available

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	02	3A
	01	35	07	02	03	04	02	09	1F	02	39	02
	05	78										

27.22.4.27.6.5 Test requirement

The ME shall operate in the manner defined in expected sequences 6.1 to 6.8.

27.22.4.27.7 Open Channel (UICC Access to IMS)

27.22.4.27.7.1 Open Channel UICC Access to IMS (UICC IARI on USIM)

27.22.4.27.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.7.2 Conformance requirements

The ME shall support the Open Channel for IMS and Event Download – IMS Registration Event commands as defined in:

- TS 31.111[15] clauses 5.2, clauses 6.4.27 and 6.6.27, clause 8.6, clause 8.7, clause 8.55, clause 8.110
- TS 31.102 [14] clauses 4.2.8, 4.2.95

The ME shall support the $EF_{UICCIARI}$ reading procedure as defined in:

- TS 31.102 [14] clause 5.3.42

The ME shall support the EVENT: IMS registration as defined in:

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 7.5, clause 8.7, clause 8.25, clause 8.111, clause 8.112.-TS 34.229-1 [36] Annex C.2

Additionally the ME shall be able to carry out the IMS registration procedure according to TS 34.229-1 [36], Annex C.2.

27.22.4.27.7.3 Test purpose

To verify that the ME shall

- open a channel to communicate with the IMS and
- send a TERMINAL RESPONSE (OK) upon successful command execution

to the UICC after the ME receives the OPEN CHANNEL for IMS proactive command.

To verify that when the no ISIM is available the ME reads and uses the IARI stored in the UICC IARI list stored on the USIM if service n°95 is "available" in the USIM service table.

To verify that the ME informs the UICC that an Event: IMS registration has occurred using the ENVELOPE (EVENT DOWNLOAD – IMS registration) command when the ME received a SIP message with Registration information and that it includes the list of active IMPUs.

Note: Verification of correct Open Channel for IMS support in combination with the UICC IARI list stored on the ISIM is verified in clause 27.22.7.20.

27.22.4.27.7.4 Method of test

27.22.4.27.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and the Network Simulator (NWS).

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

The channel identifier value used for these tests is set to 1 as an example. This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

Prior to test case execution the apparatus supplier shall have provided the "preferred buffer size supported by the terminal for Open Channel command" as requested in table A.2/29.

The USIM contains an IMS subscription, with following IMPU registered in the IM CN subsystem:

sip:uicctest@ims.3gpp.org

The default USIM with the following execptions is used:

EF_{UST} (USIM Service Table)

EF_{UST} shall be configured as defined in 27.22.2A with the exception that Service 95 "support of UICC access to IMS" is available.

$EF_{UICCIARI}$ (UICC IARI list)

Record 1:

Logically: urn:ur-7:3gpp-application.ims.iari.uicctest

Byte:	B01	B02	B03	B04	B05	B06	B07	B08	B09	B10
Coding:	80	2B	75	72	6E	3A	75	72	2D	37
	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
	3A	33	67	70	70	2D	61	70	70	6C
	B21	B22	B23	B24	B25	B26	B27	B28	B29	B30
	69	63	61	74	69	6F	6E	2E	69	6D
	B31	B32	B33	B34	B35	B36	B37	B38	B39	B40

73	2E	69	61	72	69	2E	75	69	63
B41	B42	B43	B44	B45	B46	B47	B48	B49	B50
63	74	65	73	74	FF	FF	FF	FF	FF

27.22.4.27.7.4.2 Procedure

Expected Sequence 7.1 (OPEN CHANNEL for IMS, IARI list stored on the USIM)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 7.1.1	[As response to the TERMINAL PROFILE command]
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 7.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 7.1.1	[The ME will read the USIM Service Table and the UICC IARI list on the USIM before it will attempt the initial registration to the IMS network]
5	ME →NWS	ME attempts the intial registration to the IMS network.	[The SIP REGISTER for the intial registration may not contain the UICC IARI from the USIM]
6	NWS →ME	IMS network sends SIP message with error code 504 (Server-Time-Out)	[IMS registration failed]
7	ME → UICC	ENVELOPE: EVENT DOWNLOAD – IMS registration 7.1.1	[Contains IMS status code 504]
8	USER → ME	Try to initiate another initial IMS registration, e.g. deactivate and reactivate the radio interface	[To trigger an IMS registration attempt. If no option exists to deactivate and reactivate the radio interface separately, the ME could also be switched off and then on again]
9	ME → NWS NWS → ME	ME attempts to register to IMS services with values derived from the USIM and additionally registers the IARI from $EF_{UICCIARI}$ during the intial registration or subsequent registration to IMS services.	[Initial registration to the IMS network is performed according to TS 34.229-1 [36], Annex C.2. The ME will have read the USIM Service Table and the UICC IARI list on the USIM before it will attempt the initial registration to the IMS network]
10	ME → UICC	ENVELOPE: EVENT DOWNLOAD – IMS registration 7.1.2	[After the IARI "urn:ur-7:3gpp-application.ims.iari.uicctest" has been successfully registered during the intial or a subsequent SIP REGISTER message containing this IARI. If the IARI "urn:ur-7:3gpp-application.ims.iari.uicctest" is not registered during the intial registration to the IMS network further Envelopes – Event Download – IMS Registration without the IARI might have been received. These shall be ignored by the USIM Simulator.]
11	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 7.1.1	
12	ME → UICC	FETCH	
13	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL for IMS 7.1.1	
14	ME	Channel id, buffer assigned	
15	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL for IMS 7.1.1	[Command performed successfully]

PROACTIVE COMMAND: SET UP EVENT LIST 7.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: IMS Registration Event

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	17										

TERMINAL RESPONSE: SET UP EVENT LIST 7.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

EVENT DOWNLOAD - IMS Registration 7.1.1

Logically:

Event list
Event 1: IMS Registration
Device identities
Source device: Network
Destination device: UICC
IMS status code: 504 (Server-Time-Out)

Coding:

BER-TLV:	D6	0C	19	01	17	82	02	83	81	78	03	35
	30	34										

EVENT DOWNLOAD - IMS Registration 7.1.2

Logically:

Event list
Event 1: IMS Registration
Device identities
Source device: Network

Destination device: UICC
IMPU list: At least one IMPU containing "urn:ur-7:3gpp-application.ims.iari.uicctest"

Coding:

BER-TLV:	D6	Note 1	19	01	17	82	02	83	81	77	Note 2	Note 3

Note 1: The TLV length depends on the IMPU list content
Note 2: The IMPU TLV length depends on the IMPU list entries.
Note 3: The IMPU list shall contain the IMPU "urn:ur-7:3gpp-application.ims.iari.uicctest" and might contain further IMPUs

PROACTIVE COMMAND: OPEN CHANNEL for IMS 7.1.1

Logically:

Command details
Command number: 01
Command type: OPEN CHANNEL
Command qualifier: 00 (RFU)
Device identities
Source device: UICC
Destination device: ME
Buffer
Buffer size: 1400
IARI urn:ur-7:3gpp-application.ims.iari.uicctest

Coding:

BER-TLV:	D0	3A	81	03	01	40	00	82	02	81	82	39
	02	05	78	76	2B	75	72	6E	3A	75	72	2D
	37	3A	33	67	70	70	2D	61	70	70	6C	69
	63	61	74	69	6F	6E	2E	69	6D	73	2E	69
	61	72	69	2E	75	69	63	63	74	65	73	74

TERMINAL RESPONSE: OPEN CHANNEL 7.1.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: 00 (RFU)
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1, link established.
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	00	82	02	82	81	83	01	00
	38	02	81	00	39	02	05	78				

27.22.4.27.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 7.1.

27.22.4.27.8 Open Channel (related to NG-RAN)

27.22.4.27.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.8.2 Conformance requirements

The ME shall support the class "e" commands and NG-RAN as defined in:

- TS 31.111[15] clause 5.2, clauses 6.4.27 and 6.6.27, clause 8.6, clause 8.7, clause 9.2, clause 8.2, clause 8.15, clause 8.52, clause 8.59, clause 8.61,
- TS 24.501 [40], clauses 6.2.2 and 6.2.3,
- TS 23.501 [41], clauses 5.15.5.2 and 5.15.5.3,
- TS 23.503 [42], clause 6.6.2,
- TS 24.526 [43], clause 4.1, 4.2.2, 5.2 and 5.15.5.3,
- TS 23.003 [44], clause 9A,

27.22.4.27.8.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (OK); or
- TERMINAL RESPONSE (Command performed with modification); or
- TERMINAL RESPONSE (User did not accept the proactive command);
- TERMINAL RESPONSE (ME currently unable to process command);

to the UICC after the ME receives the OPEN CHANNEL proactive command while accessing NG-RAN/5GC. The TERMINAL RESPONSE sent back to the UICC is the result of the ME and the network capabilities against requested parameters by the UICC.

To verify that the ME establishes a PDU session with the parameters indicated in the Open Channel command and additional parameters from matching URSP rule when Bearer Types 0x02, 0x0B or 0x0C is indicated in the Open Channel command.

To verify the pre-configured policy is applied by the UE only when the UE has not received the same type of policy from the Network (PCF).

To verify that the ME does not setup a new PDU session and uses the existing PDU session when Bearer Type 3 is indicated in the Open Channel command.

To verify that the ME does not disconnect the existing PDU session when the user rejects the user confirmation of the Open Channel command.

27.22.4.27.8.4 Method of test

27.22.4.27.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and the NG-SS. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The default NG-RAN UICC, the default NG-RAN parameters and the following URSP rules stored in the ME are used:

URSP:

Rule Precedence =1

Traffic Descriptor:

DNN=TestGp.rs

Route Selection Descriptor:

Precedence=1

Network Slice Selection, S-NSSAI: 01 01 01 02 (ST: MBB, SD: 010102)

SSC Mode Selection: SSC Mode 1

Access Type preference: 3GPP access

Rule Precedence = <lowest priority>

Traffic Descriptor: *

Route Selection Descriptor:

Precedence =1

Network Slice Selection, S-NSSAI: 01 01 01 01 (ST: MBB, SD: 010101)

SSC Mode Selection: SSC Mode 1

DNN Selection: internet

The Allowed S-NSSAI list is configured in NG-SS as '01 01 01 01', '01 01 01 02' and '01 01 01 03'.

For sequence 8.2, 8.3, 8.5 and 8.6 the NG-SS shall be able to support 2 active PDU sessions at the same time.

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

Prior to test case execution the apparatus supplier shall have provided the "Preferred buffer size supported by the terminal for Open Channel command" as requested in table A.2/29.

27.22.4.27.8.4.2 Procedure

Expected Sequence 8.1 (OPEN CHANNEL, immediate link establishment, NG-RAN, bearer type '03' – Default PDU Session)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 8.1.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 8.1.1	
7	ME → USER	The ME may display channel opening information.	

8	ME → NG-SS	The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network.	
9	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 8.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 8.1.1

Same as in PROACTIVE COMMAND: OPEN CHANNEL 6.5.1 in sequence 6.5

TERMINAL RESPONSE: OPEN CHANNEL 8.1.1

Same as in TERMINAL RESPONSE: OPEN CHANNEL 6.5.1A in sequence 6.5

Expected Sequence 8.2 (OPEN CHANNEL, immediate link establishment, NG-RAN, bearer type '0C')

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 8.2.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 8.2.1	
7	ME → USER	The ME may display channel opening information.	
8	ME → NG-SS	PDU SESSION ESTABLISHMENT REQUEST within UL NAS TRANSPORT is sent to the network.	DNN=TestGp.rs, S-NSSAI='01 01 01 02', SSC mode=1.
9	NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
10	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 8.2.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 8.2.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: UICC

Destination device: ME

Bearer description

Bearer type: NG-RAN

Bearer parameter:

PDU Session Type: IPv4v6

Buffer

Buffer size: 1400

Network access name: TestGp.rs

Text String: "UserLog" (User login)

Text String: "UserPwd" (User password)

UICC/ME interface transport level

Transport format:TCP

Port number: 44444

Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	3D	81	03	01	40	01	82	02	81	82	35
	02	0C	93	39	02	05	78	47	0A	06	54	65
	73	74	47	70	02	72	73	0D	08	F4	55	73
	65	72	4C	6F	67	0D	08	F4	55	73	65	72
	50	77	64	3C	03	02	AD	9C	3E	05	21	01
	01	01	01									

TERMINAL RESPONSE: OPEN CHANNEL 8.2.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status established: Channel identifier 1 and link established or PDP context activated or PDU Session

Bearer description

Bearer type: NG-RAN

Bearer parameter:

PDU Session Type: IPv4v6

Buffer

Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	02	0C	93	39	02	05	78

Expected Sequence 8.3 (OPEN CHANNEL, NG-RAN, bearer type '0C', after receiving policy update for URSP from network)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	
4	NG-SS -> ME	MANAGE UE POLICY COMMAND to update URSP rule for DNN: "TestGp.rs"	• Traffic Descriptor: DNN: 'TestGp.rs' Route Selection Descriptor: S-NSSAI: '01 01 01 03', SSC Mode 1 • Traffic Descriptor: * (Match-All) Same as the Match-All rule defined in Initial Conditions for the UE. • MCC/MNC in UE policy section management sublist : 001/01
5	ME -> NG-SS	MANAGE UE POLICY COMPLETE	
6	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 8.3.1	
7	ME → UICC	FETCH	
8	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 8.3.1	
9	ME → USER	The ME may display channel opening information.	
10	ME → NG-SS	PDU SESSION ESTABLISHMENT REQUEST within UL NAS TRANSPORT is sent to the network.	DNN=TestGp.rs, S-NSSAI='01 01 01 03', SSC mode=1.
11	NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
12	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 8.3.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 8.3.1

Same as PROACTIVE COMMAND: OPEN CHANNEL 8.2.1 in sequence 8.2

TERMINAL RESPONSE: OPEN CHANNEL 8.3.1

Same as TERMINAL RESPONSE: OPEN CHANNEL 8.2.1 in sequence 8.2

Expected Sequence 8.4 (OPEN CHANNEL, NG-RAN, bearer type '0C', PDU Session is already available for the same DNN)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "TestGp.rs" is configured in the terminal.	[see initial conditions] DNN: "TestGp.rs" for internet PDU
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	

4	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 8.4.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 8.4.1	
7	ME → USER	The ME may display channel opening information.	
8	ME → NG-SS	The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network.	
9	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 8.4.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 8.4.1

Same as PROACTIVE COMMAND: OPEN CHANNEL 8.2.1 in sequence 8.2

TERMINAL RESPONSE: OPEN CHANNEL 8.4.1

Same as TERMINAL RESPONSE: OPEN CHANNEL 8.2.1 in sequence 8.2

Expected Sequence 8.5 (OPEN CHANNEL, immediate link establishment, NG-RAN, bearer type '02')

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 8.5.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 8.5.1	
7	ME → USER	The ME may display channel opening information.	
8	ME → NG-SS	PDU SESSION ESTABLISHMENT REQUEST within UL NAS TRANSPORT is sent to the network.	DNN=TestGp.rs, S-NSSAI='01 01 01 02', SSC mode=1.
9	NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
10	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 8.5.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 8.5.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: GPRS / UTRAN Packet Service / E-UTRAN / Satellite E-UTRAN / NG-RAN / Satellite NG-RAN
Quality of Service (QoS) parameters: *not applicable for NG-RAN*
PDP type: 02 (IP)
Buffer
Buffer size: 1400

Network access name: TestGp.rs
Text String: "UserLog" (User login)
Text String: "UserPwd" (User password)
UICC/ME interface transport level
Transport format:TCP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	xx	xx	xx	xx	xx	02	39	02	05	78
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	02	AD
	9C	3E	05	21	01	01	01	01				

With xx representing Quality of Service (QoS) parameters that are not applicable for NG-RAN.

TERMINAL RESPONSE: OPEN CHANNEL 8.5.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS / UTRAN Packet Service / E-UTRAN / Satellite E-UTRAN / NG-RAN / Satellite NG-RAN
Quality of Service (QoS) parameters: *not applicable for NG-RAN*
PDP type: (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	xx	xx	xx	xx	xx
	02	39	02	05	78							

With xx representing Quality of Service (QoS) parameters that are not applicable for NG-RAN.

Expected Sequence 8.6 (OPEN CHANNEL, immediate link establishment, NG-RAN, bearer type '0B')

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 8.6.1	

5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 8.6.1	
7	ME → USER	The ME may display channel opening information.	
8	ME → NG-SS	PDU SESSION ESTABLISHMENT REQUEST within UL NAS TRANSPORT is sent to the network.	DNN=TestGp.rs, S-NSSAI='01 01 01 02', SSC mode=1.
9	NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
10	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 8.6.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 8.6.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer description
Bearer type: E-UTRAN / Satellite E-UTRAN / NG-RAN / Satellite NG-RAN / mapped UTRAN packet service
Quality of Service (QoS) parameters: *not applicable for NG-RAN*
PDP type: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: "UserLog" (User login)
Text String: "UserPwd" (User password)
UICC/ME interface transport level
Transport format:TCP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	46	81	03	01	40	01	82	02	81	82	35
	0B	0B	xx	xx	xx	xx	xx	xx	xx	xx	xx	02
	39	02	05	78	47	0A	06	54	65	73	74	47
	70	02	72	73	0D	08	F4	55	73	65	72	4C
	6F	67	0D	08	F4	55	73	65	72	50	77	64
	3C	03	02	AD	9C	3E	05	21	01	01	01	01

With xx representing Quality of Service (QoS) parameters that are not applicable for NG-RAN.

TERMINAL RESPONSE: OPEN CHANNEL 8.6.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer

Bearer type: E-UTRAN / Satellite E-UTRAN / NG-RAN / Satellite NG-RAN / mapped UTRAN packet service
Quality of Service (QoS) parameters: *not applicable for NG-RAN*
PDP type: 02 (IP)

Buffer

Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	03	0B	xx	02	39	02	05
	78											

With xx representing Quality of Service (QoS) parameters that are not applicable for NG-RAN.

27.22.4.27.8.5 Test requirement

The ME shall operate in the manner defined in expected sequences 8.1 to 8.69

27.22.4.27.9 Open Channel (related to Satellite NG-RAN)

27.22.4.27.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.9.2 Conformance requirements

The ME shall support the class "e" commands and Satellite NG-RAN as defined in:

- TS 31.111[15] clause 5.2, clauses 6.4.27 and 6.6.27, clauses 8.2, 8.6, 8.7, 8.15, 8.52, 8.59 and 8.61, clause 9.2.
- TS 24.501 [40], clauses 6.2.2 and 6.2.3,
- TS 23.501 [41], clauses 5.15.5.2 and 5.15.5.3,
- TS 23.503 [42], clause 6.6.2,
- TS 24.526 [43], clause 4.1, 4.2.2, 5.2 and 5.15.5.3,
- TS 23.003 [44], clause 9A,

27.22.4.27.9.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (OK); or
- TERMINAL RESPONSE (Command performed with modification); or
- TERMINAL RESPONSE (User did not accept the proactive command);
- TERMINAL RESPONSE (ME currently unable to process command);

to the UICC after the ME receives the OPEN CHANNEL proactive command while accessing Satellite NG-RAN/5GC. The TERMINAL RESPONSE sent back to the UICC is the result of the ME and the network capabilities against requested parameters by the UICC.

To verify that the ME establishes a PDU session with the parameters indicated in the Open Channel command and additional parameters from matching URSP rule when Bearer Types 0x02, 0x0B or 0x0C is indicated in the Open Channel command.

To verify the pre-configured policy is applied by the UE only when the UE has not received the same type of policy from the Network (PCF).

To verify that the ME does not setup a new PDU session and uses the existing PDU session when Bearer Type 0x03 is indicated in the Open Channel command.

To verify that the ME does not disconnect the existing PDU session when the user rejects the user confirmation of the Open Channel command.

27.22.4.27.9.4 Method of test

27.22.4.27.9.4.1 Initial conditions

The ME is connected to the USIM Simulator and the SAT-NG-SS. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The default NG-RAN UICC, the default NG-RAN parameters and the following URSP rules stored in the ME are used:

URSP:

Rule Precedence =1

Traffic Descriptor:

DNN=TestGp.rs

Route Selection Descriptor:

Precedence=1

Network Slice Selection, S-NSSAI: 01 02 01 02 (ST: MBB, SD: 020102)

SSC Mode Selection: SSC Mode 1

Access Type preference: 3GPP access

Rule Precedence = <lowest priority>

Traffic Descriptor: *

Route Selection Descriptor:

Precedence =1

Network Slice Selection, S-NSSAI: 01 02 01 01 (ST: MBB, SD: 020101)

SSC Mode Selection: SSC Mode 1

DNN Selection: internet

The Allowed S-NSSAI list is configured in SAT-NG-SS as '01 02 01 01', '01 02 01 02' and '01 02 01 03'.

For sequences 9.2, 9.3, 9.5 and 9.6 the SAT-NG-SS shall be able to support 2 active PDU sessions at the same time.

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

Prior to test case execution the apparatus supplier shall have provided the "Preferred buffer size supported by the terminal for Open Channel command" as requested in table A.2/29.

27.22.4.27.9.4.2 Procedure

Expected Sequence 9.1 (OPEN CHANNEL, immediate link establishment, Satellite NG-RAN, bearer type '03' – Default PDU Session)

Step	Direction	MESSAGE / Action	Comments

1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → SAT-NG-SS	ME successfully REGISTER with satellite NG-RAN cell.	
3	ME → SAT-NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 9.1.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 9.1.1	
7	ME → USER	The ME may display channel opening information.	
8	ME → SAT-NG-SS	The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network.	
9	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 9.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 9.1.1

Same as in PROACTIVE COMMAND: OPEN CHANNEL 6.5.1 in sequence 6.5

TERMINAL RESPONSE: OPEN CHANNEL 9.1.1

Same as in TERMINAL RESPONSE: OPEN CHANNEL 6.5.1A in sequence 6.5

Expected Sequence 9.2 (OPEN CHANNEL, immediate link establishment, Satellite NG-RAN, bearer type '0C')

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → SAT-NG-SS	ME successfully REGISTER with Satellite NG-RAN cell.	
3	ME → SAT-NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 9.2.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 9.2.1	
7	ME → USER	The ME may display channel opening information.	
8	ME → SAT-NG-SS	PDU SESSION ESTABLISHMENT REQUEST within UL NAS TRANSPORT is sent to the network.	DNN=TestGp.rs, S-NSSAI='01 02 01 02', SSC mode=1.
9	SAT-NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
10	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 9.2.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 9.2.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: UICC

Destination device: ME

Bearer description

Bearer type: NG-RAN / Satellite NG-RAN

Bearer parameter:

PDU Session Type: IPv4v6

Buffer

Buffer size: 1400

Network access name: TestGp.rs

Text String: "UserLog" (User login)

Text String: "UserPwd" (User password)

UICC/ME interface transport level

Transport format:TCP

Port number: 44444

Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	3D	81	03	01	40	01	82	02	81	82	35
	02	0C	93	39	02	05	78	47	0A	06	54	65
	73	74	47	70	02	72	73	0D	08	F4	55	73
	65	72	4C	6F	67	0D	08	F4	55	73	65	72
	50	77	64	3C	03	02	AD	9C	3E	05	21	01
	01	01	01									

TERMINAL RESPONSE: OPEN CHANNEL 9.2.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status established: Channel identifier 1 and link established or PDP context activated or PDU Session

Bearer description

Bearer type: NG-RAN / Satellite NG-RAN

Bearer parameter:

PDU Session Type: IPv4v6

Buffer

Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	02	0C	93	39	02	05	78

Expected Sequence 9.3 (OPEN CHANNEL, Satellite NG-RAN, bearer type '0C', after receiving policy update for URSP from network)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → SAT-NG-SS	ME successfully REGISTER with Satellite NG-RAN cell.	
3	ME → SAT-NG-SS	An Internet PDU Session is established successfully.	
4	SAT-NG-SS → ME	MANAGE UE POLICY COMMAND to update URSP rule for DNN: "TestGp.rs"	• Traffic Descriptor: DNN: 'TestGp.rs' Route Selection Descriptor: S-NSSAI: '01 02 01 03', SSC Mode 1 • Traffic Descriptor: * (Match-All) Same as the Match-All rule defined in Initial Conditions for the UE. • MCC/MNC in UE policy section management sublist : 001/01
5	ME -> SAT-NG-SS	MANAGE UE POLICY COMPLETE	
6	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 9.3.1	
7	ME → UICC	FETCH	
8	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL9.3.1	
9	ME → USER	The ME may display channel opening information.	
10	ME → SAT-NG-SS	PDU SESSION ESTABLISHMENT REQUEST within UL NAS TRANSPORT is sent to the network.	DNN=TestGp.rs, S-NSSAI='01 02 01 03', SSC mode=1.
11	SAT-NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
12	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 9.3.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 9.3.1

Same as PROACTIVE COMMAND: OPEN CHANNEL 9.2.1 in sequence 9.2

TERMINAL RESPONSE: OPEN CHANNEL 9.3.1

Same as TERMINAL RESPONSE: OPEN CHANNEL 9.2.1 in sequence 9.2

Expected Sequence 9.4 (OPEN CHANNEL, Satellite NG-RAN, bearer type '0C', PDU Session is already available for the same DNN)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "TestGp.rs" is configured in the terminal.	[see initial conditions] DNN: "TestGp.rs" for internet PDU
2	ME → SAT-NG-SS	ME successfully REGISTER with Satellite NG-RAN cell.	
3	ME → SAT-NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 9.4.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 9.4.1	
7	ME → USER	The ME may display channel opening information.	
8	ME → SAT-NG-SS	The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network.	
9	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 9.4.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 9.4.1

Same as PROACTIVE COMMAND: OPEN CHANNEL 9.2.1 in sequence 9.2

TERMINAL RESPONSE: OPEN CHANNEL 9.4.1

Same as TERMINAL RESPONSE: OPEN CHANNEL 9.2.1 in sequence 9.2

Expected Sequence 9.5 (OPEN CHANNEL, immediate link establishment, Satellite NG-RAN, bearer type '02')

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → SAT-NG-SS	ME successfully REGISTER with Satellite NG-RAN cell.	
3	ME → SAT-NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 9.5.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 9.5.1	
7	ME → USER	The ME may display channel opening information.	
8	ME → SAT-NG-SS	PDU SESSION ESTABLISHMENT REQUEST within UL NAS TRANSPORT is sent to the network.	DNN=TestGp.rs, S-NSSAI='01 02 01 02', SSC mode=1.
9	SAT-NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
10	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 9.5.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 9.5.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer description
Bearer type: GPRS / UTRAN Packet Service / E-UTRAN / Satellite E-UTRAN / NG-RAN / Satellite NG-RAN
Quality of Service (QoS) parameters: *not applicable for* Satellite *NG-RAN*
PDP type: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: "UserLog" (User login)
Text String: "UserPwd" (User password)
UICC/ME interface transport level
Transport format:TCP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	xx	xx	xx	xx	xx	02	39	02	05	78
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	02	AD
	9C	3E	05	21	01	01	01	01				

With xx representing Quality of Service (QoS) parameters that are not applicable for Satellite NG-RAN.

TERMINAL RESPONSE: OPEN CHANNEL 9.5.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS / UTRAN Packet Service / E-UTRAN / Satellite E-UTRAN / NG-RAN / Satellite NG-RAN
Quality of Service (QoS) parameters: *not applicable for Satellite NG-RAN*
PDP type: (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	xx	xx	xx	xx	xx
	02	39	02	05	78							

With xx representing Quality of Service (QoS) parameters that are not applicable for Satellite NG-RAN.

Expected Sequence 9.6 (OPEN CHANNEL, immediate link establishment, Satellite, bearer type '0B')

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → SAT-NG-SS	ME successfully REGISTER with Satellite NG-RAN cell.	
3	ME → SAT-NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 9.6.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 9.6.1	
7	ME → USER	The ME may display channel opening information.	
8	ME → SAT-NG-SS	PDU SESSION ESTABLISHMENT REQUEST within UL NAS TRANSPORT is sent to the network.	DNN=TestGp.rs, S-NSSAI='01 02 01 02', SSC mode=1.
9	SAT-NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
10	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 9.6.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 9.6.1

Logically:

Command details
- Command number: 1
- Command type: OPEN CHANNEL
- Command qualifier: immediate link establishment

Device identities
- Source device: UICC
- Destination device: ME

Bearer description
- Bearer type: E-UTRAN / Satellite E-UTRAN / NG-RAN / Satellite NG-RAN / mapped UTRAN packet service
- Quality of Service (QoS) parameters: *not applicable for Satellite NG-RAN*
- PDP type: 02 (IP)

Buffer
- Buffer size: 1400

Network access name: TestGp.rs

Text String: "UserLog" (User login)

Text String: "UserPwd" (User password)

UICC/ME interface transport level
- Transport format:TCP
- Port number: 44444

Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	46	81	03	01	40	01	82	02	81	82	35
	0B	0B	xx	xx	xx	xx	xx	xx	xx	xx	xx	02

39	02	05	78	47	0A	06	54	65	73	74	47
70	02	72	73	0D	08	F4	55	73	65	72	4C
6F	67	0D	08	F4	55	73	65	72	50	77	64
3C	03	02	AD	9C	3E	05	21	01	01	01	01

With xx representing Quality of Service (QoS) parameters that are not applicable for Satellite NG-RAN.

TERMINAL RESPONSE: OPEN CHANNEL 9.6.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer
Bearer type: E-UTRAN / Satellite E-UTRAN / NG-RAN / Satellite NG-RAN / mapped UTRAN packet service
Quality of Service (QoS) parameters: *not applicable for Satellite NG-RAN*
PDP type: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	03	0B	xx	02	39	02	05
	78											

With xx representing Quality of Service (QoS) parameters that are not applicable for Satellite NG-RAN.

27.22.4.27.9.5 Test requirement

The ME shall operate in the manner defined in expected sequences 9.1 to 9.6.

27.22.4.28 CLOSE CHANNEL

27.22.4.28.1 CLOSE CHANNEL(normal)

27.22.4.28.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.28.1.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.28.1.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (Command Performed Successfully); or
- TERMINAL RESPONSE (Bearer Independent Protocol Error);

to the UICC after the ME receives the CLOSE CHANNEL proactive command. The TERMINAL RESPONSE sent back to the UICC is function of the ME and the network capabilities against asked parameters by the UICC.

27.22.4.28.1.4 Method of Test

27.22.4.28.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27

The following Bearer Parameters used are those defined in the default Test PDP context for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.28.1.4.2 Procedure

Expected sequence 1.1 (CLOSE CHANNEL, successful)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.1.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 1.1.1	
11	ME → USS	PDP context deactivation request	
12	USS → ME	PDP context deactivation accept	
13	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 1.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1000
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	03	04	1F	02	39	02	03	E8
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	03	E8							

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 00

Delay Class: 04

Reliability Class: 03

Peak throughput class: 04

Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	03	E8							

PROACTIVE COMMAND: CLOSE CHANNEL 1.1.1

Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Coding:

BER-TLV:	D0	09	81	03	01	41	00	82	02	81	21

TERMINAL RESPONSE: CLOSE CHANNEL 1.1.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

Expected sequence 1.2 (CLOSE CHANNEL, with an invalid channel identifier)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.2.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 1.2.1	
11	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 1.2.1	[Invalid channel number]

PROACTIVE COMMAND: CLOSE CHANNEL 1.2.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 2

Coding:

BER-TLV:	D0	09	81	03	01	41	00	82	02	81	22

TERMINAL RESPONSE: CLOSE CHANNEL 1.2.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Bearer Independent Protocol error
Additional Result: Channel identifier not valid

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	02	3A
	03											

Expected sequence 1.3 (CLOSE CHANNEL, on an already closed channel)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.1.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 1.1.1	
11	ME → USS	PDP context deactivation request	
12	USS → ME	PDP context deactivation accept	
13	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 1.1.1	[Command performed successfully]
14	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.3.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 1.3.1	
17	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 1.3.1A or TERMINAL RESPONSE CLOSE CHANNEL 1.3.1B	[Channel closed] [Channel identifier invalid]

PROACTIVE COMMAND: CLOSE CHANNEL 1.3.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Coding:

BER-TLV:	D0	09	81	03	01	41	00	82	02	81	21

TERMINAL RESPONSE: CLOSE CHANNEL 1.3.1A

Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Bearer Independent Protocol error

Additional Result: Channel closed

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	02	3A
	02											

TERMINAL RESPONSE: CLOSE CHANNEL 1.3.1B

Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Bearer Independent Protocol error

Additional Result: Channel identifier invalid

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	02	3A
	03											

27.22.4.28.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

27.22.4.28.2 CLOSE CHANNEL (support of Text Attribute)

27.22.4.28.2.1 CLOSE CHANNEL (support of Text Attribute – Left Alignment)

27.22.4.28.2.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.28.2.1.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.28.2.1.3 Test purpose

To verify that the ME shall display the alpha identifier according to the left alignment text attribute configuration in the CLOSE CHANNEL proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.28.2.1.4 Method of Test

27.22.4.28.2.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.28.2.1.4.2 Procedure

Expected sequence 2.1 (CLOSE CHANNEL, with Text Attribute – Left Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	

5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.1.1A	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.1.1	[alpha identifier is displayed with left alignment]
11	ME → USS	PDP context deactivation request	
12	USS → ME	PDP context deactivation accept	
13	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.1.1	[Command performed successfully]
14	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
17	ME → USER	The ME may display channel opening information	
18	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
19	USS → ME	PDP context activation accept	
20	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
21	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.1.2	
22	ME → UICC	FETCH	
23	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.1.2	[Message shall be formatted without left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/20, no alignment change will take place]
24	ME → USS	PDP context deactivation request	
25	USS → ME	PDP context deactivation accept	
26	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.1.1	[Command performed successfully]

PROACTIVE COMMAND: CLOSE CHANNEL 2.1.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 1"
Text Attribute
Formatting position: 0
Formatting length: 10

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	31	D0	04	00	0A	00	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.1.2

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 2"

Coding:

BER-TLV:	D0	15	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	32										

TERMINAL RESPONSE: CLOSE CHANNEL 2.1.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

27.22.4.28.2.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.1.

27.22.4.28.2.2 CLOSE CHANNEL (support of Text Attribute – Center Alignment)

27.22.4.28.2.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.28.2.2.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.28.2.2.3 Test purpose

To verify that the ME shall display the alpha identifier according to the center alignment text attribute configuration in the CLOSE CHANNEL proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.28.2.2.4 Method of Test

27.22.4.28.2.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.28.2.2.4.2 Procedure

Expected sequence 2.2 (CLOSE CHANNEL, with Text Attribute – Center Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.2.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.2.1	[alpha identifier is displayed with center alignment]

11	ME → USS	PDP context deactivation request	
12	USS → ME	PDP context deactivation accept	
13	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.2.1	[Command performed successfully]
14	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
17	ME → USER	The ME may display channel opening information	
18	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
19	USS → ME	PDP context activation accept	
20	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
21	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.2.2	
22	ME → UICC	FETCH	
23	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.2.2	[Message shall be formatted without center alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/20, no alignment change will take place]
24	ME → USS	PDP context deactivation request	
25	USS → ME	PDP context deactivation accept	
26	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.2.1	[Command performed successfully]

PROACTIVE COMMAND: CLOSE CHANNEL 2.2.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 1"
Text Attribute
Formatting position: 0
Formatting length: 10
Formatting mode: Center Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	31	D0	04	00	0A	01	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.2.2

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 2"

Coding:

BER-TLV:	D0	15	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	32										

TERMINAL RESPONSE: CLOSE CHANNEL 2.2.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

27.22.4.28.2.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.2.

27.22.4.28.2.3 CLOSE CHANNEL (support of Text Attribute – Right Alignment)

27.22.4.28.2.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.28.2.3.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.28.2.3.3 Test purpose

To verify that the ME shall display the alpha identifier according to the right alignment text attribute configuration in the CLOSE CHANNEL proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.28.2.3.4 Method of Test

27.22.4.28.2.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.28.2.3.4.2 Procedure

Expected sequence 2.3 (CLOSE CHANNEL, with Text Attribute – Right Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.3.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.3.1	[alpha identifier is displayed with right alignment]
11	ME → USS	PDP context deactivation request	
12	USS → ME	PDP context deactivation accept	
13	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.3.1	[Command performed successfully]
14	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
17	ME → USER	The ME may display channel opening information	
18	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
19	USS → ME	PDP context activation accept	

20	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
21	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.3.2	
22	ME → UICC	FETCH	
23	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.3.2	[Message shall be formatted without right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/20, no alignment change will take place]
24	ME → USS	PDP context deactivation request	
25	USS → ME	PDP context deactivation accept	
26	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.3.1	[Command performed successfully]

PROACTIVE COMMAND: CLOSE CHANNEL 2.3.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 1"
Text Attribute
Formatting position: 0
Formatting length: 10
Formatting mode: Right Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	31	D0	04	00	0A	02	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.3.2

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 2"

Coding:

BER-TLV:	D0	15	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	32										

TERMINAL RESPONSE: CLOSE CHANNEL 2.3.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

27.22.4.28.2.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.3.

27.22.4.28.2.4 CLOSE CHANNEL (support of Text Attribute – Large Font Size)

27.22.4.28.2.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.28.2.4.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.28.2.4.3 Test purpose

To verify that the ME shall display the alpha identifier according to the large font size text attribute configuration in the CLOSE CHANNEL proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.28.2.4.4 Method of Test

27.22.4.28.2.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.28.2.4.4.2 Procedure

Expected sequence 2.4 (CLOSE CHANNEL, with Text Attribute – Large Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.4.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.4.1	[alpha identifier is displayed with large font size]
11	ME → USS	PDP context deactivation request	
12	USS → ME	PDP context deactivation accept	
13	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.4.1	[Command performed successfully]
14	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
17	ME → USER	The ME may display channel opening information	
18	ME → USS	PDP context deactivation request	
19	USS → ME	PDP context deactivation accept	
20	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
21	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.4.2	
22	ME → UICC	FETCH	
23	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.4.2	[alpha identifier is displayed with normal font size]
24	ME → USS	PDP context deactivation request	
25	USS → ME	PDP context deactivation accept	
26	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.4.1	[Command performed successfully]
27	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
28	ME → UICC	FETCH	
29	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	

30	ME → USER	The ME may display channel opening information	
31	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
32	USS → ME	PDP context activation accept	
33	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
34	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.4.1	
35	ME → UICC	FETCH	
36	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.4.1	[alpha identifier is displayed with large font size]
37	ME → USS	PDP context deactivation request	
38	USS → ME	PDP context deactivation accept	
39	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.4.1	[Command performed successfully]
40	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
41	ME → UICC	FETCH	
42	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
43	ME → USER	The ME may display channel opening information	
44	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
45	USS → ME	PDP context activation accept	
46	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
47	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.4.3	
48	ME → UICC	FETCH	
49	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.4.3	[alpha identifier is displayed with normal font size]
50	ME → USS	PDP context deactivation request	
51	USS → ME	PDP context deactivation accept	
52	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.4.1	[Command performed successfully]

PROACTIVE COMMAND: CLOSE CHANNEL 2.4.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 1"
Text Attribute
Formatting position: 0
Formatting length: 10
Formatting mode: Left Alignment, Large Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	31	D0	04	00	0A	04	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.4.2

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 2"
Text Attribute
Formatting position: 0
Formatting length: 10
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	32	D0	04	00	0A	00	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.4.3

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 3"

Coding:

BER-TLV:	D0	15	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	33										

TERMINAL RESPONSE: CLOSE CHANNEL 2.4.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

27.22.4.28.2.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.4.

27.22.4.28.2.5 CLOSE CHANNEL (support of Text Attribute – Small Font Size)

27.22.4.28.2.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.28.2.5.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.28.2.5.3 Test purpose

To verify that the ME shall display the alpha identifier according to the small font size text attribute configuration in the CLOSE CHANNEL proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.28.2.5.4 Method of Test

27.22.4.28.2.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.28.2.5.4.2 Procedure

Expected sequence 2.5 (CLOSE CHANNEL, with Text Attribute – Small Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.5.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.5.1	[alpha identifier is displayed with small font size]
11	ME → USS	PDP context deactivation request	
12	USS → ME	PDP context deactivation accept	
13	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.5.1	[Command performed successfully]
14	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
17	ME → USER	The ME may display channel opening information	
18	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
19	USS → ME	PDP context activation accept	
20	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
21	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.5.2	
22	ME → UICC	FETCH	
23	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.5.2	[alpha identifier is displayed with normal font size]
24	ME → USS	PDP context deactivation request	
25	USS → ME	PDP context deactivation accept	
26	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.5.1	[Command performed successfully]
27	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
28	ME → UICC	FETCH	
29	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
30	ME → USER	The ME may display channel opening information	
31	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
32	USS → ME	PDP context activation accept	

33	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
34	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.5.1	
35	ME → UICC	FETCH	
36	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.5.1	[alpha identifier is displayed with small font size]
37	ME → USS	PDP context deactivation request	
38	USS → ME	PDP context deactivation accept	
39	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.5.1	[Command performed successfully]
40	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
41	ME → UICC	FETCH	
42	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
43	ME → USER	The ME may display channel opening information	
44	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
45	USS → ME	PDP context activation accept	
46	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
47	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.5.3	
48	ME → UICC	FETCH	
49	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.5.3	[alpha identifier is displayed with normal font size]
50	ME → USS	PDP context deactivation request	
51	USS → ME	PDP context deactivation accept	
52	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.5.1	[Command performed successfully]

PROACTIVE COMMAND: CLOSE CHANNEL 2.5.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 1"
Text Attribute
Formatting position: 0
Formatting length: 10
Formatting mode: Left Alignment, Small Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	31	D0	04	00	0A	08	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.5.2

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 2"
Text Attribute
Formatting position: 0
Formatting length: 10
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	32	D0	04	00	0A	00	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.5.3

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 3"

Coding:

BER-TLV:	D0	15	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	33										

TERMINAL RESPONSE: CLOSE CHANNEL 2.5.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

27.22.4.28.2.5.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.5.

27.22.4.28.2.6 CLOSE CHANNEL (support of Text Attribute – Bold On)

27.22.4.28.2.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.28.2.6.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.28.2.6.3 Test purpose

To verify that the ME shall display the alpha identifier according to the bold text attribute configuration in the CLOSE CHANNEL proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.28.2.6.4 Method of Test

27.22.4.28.2.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.28.2.6.4.2 Procedure

Expected sequence 2.6 (CLOSE CHANNEL, with Text Attribute – Bold On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	

3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.6.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.6.1	[alpha identifier is displayed with bold on]
11	ME → USS	PDP context deactivation request	
12	USS → ME	PDP context deactivation accept	
13	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.6.1	[Command performed successfully]
14	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
17	ME → USER	The ME may display channel opening information	
18	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
19	USS → ME	PDP context activation accept	
20	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
21	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.6.2	
22	ME → UICC	FETCH	
23	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.6.2	[alpha identifier is displayed with bold off]
24	ME → USS	PDP context deactivation request	
25	USS → ME	PDP context deactivation accept	
26	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.6.1	[Command performed successfully]
27	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
28	ME → UICC	FETCH	
29	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
30	ME → USER	The ME may display channel opening information	
31	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
32	USS → ME	PDP context activation accept	
33	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
34	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.6.1	
35	ME → UICC	FETCH	
36	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.6.1	[alpha identifier is displayed with bold on]

37	ME → USS	PDP context deactivation request	
38	USS → ME	PDP context deactivation accept	
39	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.6.1	[Command performed successfully]
40	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
41	ME → UICC	FETCH	
42	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
43	ME → USER	The ME may display channel opening information	
44	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
45	USS → ME	PDP context activation accept	
46	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
47	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.6.3	
48	ME → UICC	FETCH	
49	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.6.3	[alpha identifier is displayed with bold off]
50	ME → USS	PDP context deactivation request	
51	USS → ME	PDP context deactivation accept	
52	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.6.1	[Command performed successfully]

PROACTIVE COMMAND: CLOSE CHANNEL 2.6.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 1"
Text Attribute
Formatting position: 0
Formatting length: 10
Formatting mode: Left Alignment, Normal Font, Bold On, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	31	D0	04	00	0A	10	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.6.2

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities

Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 2"
Text Attribute
Formatting position: 0
Formatting length: 10
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	32	D0	04	00	0A	00	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.6.3

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 3"

Coding:

BER-TLV:	D0	15	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	33										

TERMINAL RESPONSE: CLOSE CHANNEL 2.6.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

27.22.4.28.2.6.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.6.

27.22.4.28.2.7 CLOSE CHANNEL (support of Text Attribute – Italic On)

27.22.4.28.2.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.28.2.7.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.28.2.7.3 Test purpose

To verify that the ME shall display the alpha identifier according to the italic text attribute configuration in the CLOSE CHANNEL proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.28.2.7.4 Method of Test

27.22.4.28.2.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.28.2.7.4.2 Procedure

Expected sequence 2.7 (CLOSE CHANNEL, with Text Attribute – Italic On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	

7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.7.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.7.1	[alpha identifier is displayed with bold on]
11	ME → USS	PDP context deactivation request	
12	USS → ME	PDP context deactivation accept	
13	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.7.1	[Command performed successfully]
14	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
17	ME → USER	The ME may display channel opening information	
18	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
19	USS → ME	PDP context activation accept	
20	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
21	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.6.2	
22	ME → UICC	FETCH	
23	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.7.2	[alpha identifier is displayed with bold off]
24	ME → USS	PDP context deactivation request	
25	USS → ME	PDP context deactivation accept	
26	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.7.1	[Command performed successfully]
27	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
28	ME → UICC	FETCH	
29	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
30	ME → USER	The ME may display channel opening information	
31	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
32	USS → ME	PDP context activation accept	
33	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
34	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.7.1	
35	ME → UICC	FETCH	
36	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.7.1	[alpha identifier is displayed with bold on]
37	ME → USS	PDP context deactivation request	
38	USS → ME	PDP context deactivation accept	
39	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.7.1	[Command performed successfully]
40	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
41	ME → UICC	FETCH	

42	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
43	ME → USER	The ME may display channel opening information	
44	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
45	USS → ME	PDP context activation accept	
46	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
47	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.7.3	
48	ME → UICC	FETCH	
49	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.7.3	[alpha identifier is displayed with bold off]
50	ME → USS	PDP context deactivation request	
51	USS → ME	PDP context deactivation accept	
52	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.7.1	[Command performed successfully]

PROACTIVE COMMAND: CLOSE CHANNEL 2.7.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 1"
Text Attribute
Formatting position: 0
Formatting length: 10
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	31	D0	04	00	0A	20	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.7.2

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 2"
Text Attribute
Formatting position: 0
Formatting length: 10

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	32	D0	04	00	0A	00	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.7.3

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 3"

Coding:

BER-TLV:	D0	15	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	33										

TERMINAL RESPONSE: CLOSE CHANNEL 2.7.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

27.22.4.28.2.7.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.7.

27.22.4.28.2.8 CLOSE CHANNEL (support of Text Attribute – Underline On)

27.22.4.28.2.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.28.2.8.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.28.2.8.3 Test purpose

To verify that the ME shall display the alpha identifier according to the underline text attribute configuration in the CLOSE CHANNEL proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.28.2.8.4 Method of Test

27.22.4.28.2.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.28.2.8.4.2 Procedure

Expected sequence 2.8 (CLOSE CHANNEL, with Text Attribute – Underline On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.8.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.8.1	[alpha identifier is displayed with underline on]

11	ME → USS	PDP context deactivation request	
12	USS → ME	PDP context deactivation accept	
13	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.8.1	[Command performed successfully]
14	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
17	ME → USER	The ME may display channel opening information	
18	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
19	USS → ME	PDP context activation accept	
20	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
21	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.8.2	
22	ME → UICC	FETCH	
23	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.8.2	[alpha identifier is displayed with underline off]
24	ME → USS	PDP context deactivation request	
25	USS → ME	PDP context deactivation accept	
26	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.8.1	[Command performed successfully]
27	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
28	ME → UICC	FETCH	
29	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
30	ME → USER	The ME may display channel opening information	
31	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
32	USS → ME	PDP context activation accept	
33	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
34	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.8.1	
35	ME → UICC	FETCH	
36	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.8.1	[alpha identifier is displayed with underline on]
37	ME → USS	PDP context deactivation request	
38	USS → ME	PDP context deactivation accept	
39	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.8.1	[Command performed successfully]
40	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
41	ME → UICC	FETCH	
42	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
43	ME → USER	The ME may display channel opening information	
44	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
45	USS → ME	PDP context activation accept	

46	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
47	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.8.3	
48	ME → UICC	FETCH	
49	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.8.3	[alpha identifier is displayed with underline off]
50	ME → USS	PDP context deactivation request	
51	USS → ME	PDP context deactivation accept	
52	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.8.1	[Command performed successfully]

PROACTIVE COMMAND: CLOSE CHANNEL 2.8.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 1"
Text Attribute
Formatting position: 0
Formatting length: 10
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline On, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	31	D0	04	00	0A	40	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.8.2

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 2"
Text Attribute
Formatting position: 0
Formatting length: 10
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	32	D0	04	00	0A	00	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.8.3

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 3"

Coding:

BER-TLV:	D0	15	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	33										

TERMINAL RESPONSE: CLOSE CHANNEL 2.8.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

27.22.4.28.2.8.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.8.

27.22.4.28.2.9 CLOSE CHANNEL (support of Text Attribute – Strikethrough On)

27.22.4.28.2.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.28.2.9.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.28.2.9.3 Test purpose

To verify that the ME shall display the alpha identifier according to the strikethrough text attribute configuration in the CLOSE CHANNEL proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.28.2.9.4 Method of Test

27.22.4.28.2.9.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.28.2.9.4.2 Procedure

Expected sequence 2.9 (CLOSE CHANNEL, with Text Attribute – Strikethrough On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.9.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.9.1	[alpha identifier is displayed with strikethrough on]
11	ME → USS	PDP context deactivation request	
12	USS → ME	PDP context deactivation accept	
13	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.9.1	[Command performed successfully]

14	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
17	ME → USER	The ME may display channel opening information	
18	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
19	USS → ME	PDP context activation accept	
20	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
21	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.9.2	
22	ME → UICC	FETCH	
23	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.9.2	[alpha identifier is displayed with strikethrough off]
24	ME → USS	PDP context deactivation request	
25	USS → ME	PDP context deactivation accept	
26	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.9.1	[Command performed successfully]
27	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
28	ME → UICC	FETCH	
29	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
30	ME → USER	The ME may display channel opening information	
31	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
32	USS → ME	PDP context activation accept	
33	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
34	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.9.1	
35	ME → UICC	FETCH	
36	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.9.1	[alpha identifier is displayed with strikethrough on]
37	ME → USS	PDP context deactivation request	
38	USS → ME	PDP context deactivation accept	
39	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.9.1	[Command performed successfully]
40	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
41	ME → UICC	FETCH	
42	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
43	ME → USER	The ME may display channel opening information	
44	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
45	USS → ME	PDP context activation accept	
46	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
47	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.9.3	

48	ME → UICC	FETCH	
49	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.9.3	[alpha identifier is displayed with strikethrough off]
50	ME → USS	PDP context deactivation request	
51	USS → ME	PDP context deactivation accept	
52	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.9.1	[Command performed successfully]

PROACTIVE COMMAND: CLOSE CHANNEL 2.9.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 1"
Text Attribute
Formatting position: 0
Formatting length: 10
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough On
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	31	D0	04	00	0A	80	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.9.2

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 2"
Text Attribute
Formatting position: 0
Formatting length: 10
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	32	D0	04	00	0A	00	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.9.3

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 3"

Coding:

BER-TLV:	D0	15	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	33										

TERMINAL RESPONSE: CLOSE CHANNEL 2.9.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

27.22.4.28.2.9.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.9.

27.22.4.28.2.10 CLOSE CHANNEL (support of Text Attribute – Foreground and Background Colour)

27.22.4.28.2.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.28.2.10.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.28.2.10.3 Test purpose

To verify that the ME shall display the alpha identifier according to the foreground and background colour text attribute configuration in the CLOSE CHANNEL proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.28.2.10.4 Method of Test

27.22.4.28.2.10.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.28.2.10.4.2 Procedure

Expected sequence 2.10 (CLOSE CHANNEL, with Text Attribute – Foreground and Background Colour)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.10.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.10.1	[alpha identifier is displayed with foreground and background colour according to the text attribute configuration]
11	ME → USS	PDP context deactivation request	
12	USS → ME	PDP context deactivation accept	
13	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.10.1	[Command performed successfully]
14	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
17	ME → USER	The ME may display channel opening information	
18	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
19	USS → ME	PDP context activation accept	

20	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
21	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 2.10.2	
22	ME → UICC	FETCH	
23	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 2.10.2	[alpha identifier is displayed with ME's default foreground and background colour]
24	ME → USS	PDP context deactivation request	
25	USS → ME	PDP context deactivation accept	
26	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 2.10.1	[Command performed successfully]

PROACTIVE COMMAND: CLOSE CHANNEL 2.10.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 1"
Text Attribute
Formatting position: 0
Formatting length: 10
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	1B	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	31	D0	04	00	0A	00	B4				

PROACTIVE COMMAND: CLOSE CHANNEL 2.10.2

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Close ID 2"

Coding:

BER-TLV:	D0	15	81	03	01	41	00	82	02	81	21
	85	0A	43	6C	6F	73	65	20	49	44	20
	32										

TERMINAL RESPONSE: CLOSE CHANNEL 2.10.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

27.22.4.28.2.10.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.10.

27.22.4.28.3 CLOSE CHANNEL(E-UTRAN/EPC)

27.22.4.28.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.28.3.2 Conformance requirements

The ME shall support the class "e" commands and E-UTRAN as defined in:

- TS 31.111 [15].

27.22.4.28.3.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (Command Performed Successfully); or
- TERMINAL RESPONSE (Bearer Independent Protocol Error, invalid channel identifier);

to the UICC after the ME receives the CLOSE CHANNEL proactive command. The TERMINAL RESPONSE sent back to the UICC is function of the ME and the network capabilities against asked parameters by the UICC.

To verify that upon reception of CLOSE CHANNEL proactive command with command qualifier set to 1, the same PDN connection can be re-used for next OPEN CHANNEL command by the ME.

27.22.4.28.3.4 Method of Test

27.22.4.28.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the E-USS/NB-SS. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The default E-UTRAN/EPC UICC, the default E-UTRAN parameters and the following parameters are used:

Network access name: TestGp.rs
User login: UserLog
User password: UserPwd

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.6.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.6.4.1.

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

27.22.4.28.3.4.2 Procedure

Expected sequence 3.1 (CLOSE CHANNEL, Default EPS bearer, successful)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required	[see initial conditions] If the ME supports A.1/173 AND NOT A.1/174 only one APN will be activated in step 6.
2	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.6.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.6.1	
5	ME → USER	The ME may display channel opening information	
6	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.6.1A or TERMINAL RESPONSE: OPEN CHANNEL 6.6.1B	[Command performed successfully]
7	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 3.1.1	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 3.1.1	
10	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 3.1.1	[Command performed successfully]
11	USER → ME	Wait 30 seconds, then switch off the terminal	

PROACTIVE COMMAND: OPEN CHANNEL 6.6.1

Same as PROACTIVE COMMAND: OPEN CHANNEL 6.5.1 in clause 27.22.4.27.6.4.

TERMINAL RESPONSE: OPEN CHANNEL 6.6.1A

Same as TERMINAL RESPONSE: OPEN CHANNEL 6.5.1A in clause 27.22.4.27.6.4.

TERMINAL RESPONSE: OPEN CHANNEL 6.6.1B

Same as TERMINAL RESPONSE: OPEN CHANNEL 6.5.1B in clause 27.22.4.27.6.4.

PROACTIVE COMMAND: CLOSE CHANNEL 3.1.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1

Coding:

BER-TLV:	D0	09	81	03	01	41	00	82	02	81	21

TERMINAL RESPONSE: CLOSE CHANNEL 3.1.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

Expected sequence 3.2 (CLOSE CHANNEL, EPS bearer with APN different from default APN, successful)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure APN "Test12.rs" in the terminal configuration if required	[see initial conditions] If the ME supports A.1/173 AND NOT A.1/174 only one APN will be activated in step 7.
2	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.3.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.3.1	
5	ME → USER	The terminal shall display the alpha identifier "Open Channel for UICC?" during the confirmation phase	[IF NOT A.1/84 (No display) THEN the terminal shall ignore the alpha identifier]
6	USER → ME	The user confirms	[IF NOT A.1/85 (No keypad) THEN the terminal may open the channel without explicit confirmation by the user]
7	ME → E-USS/NB-SS	PDN CONNECTIVITY REQUEST	[The UE may request IPv4 or IPv4v6 address as PDP type.]
8	E-USS/NB-SS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	
9	ME → E-USS/NB-SS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
10	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A OR TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B	[Command performed successfully OR Command performed with modifications]
11	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 3.2.1	
12	ME → UICC	FETCH	
13	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 3.2.1	
14	ME → E-USS/NB-SS	The ME shall send a PDN CONNECTIVITY DISCONNECT REQUEST to the network disconnect only the EPS bearer which has been established with the Open Channel command	If the ME supports A.1/173 this step is optional.
15	E-USS/NB-SS → ME	DEACTIVATE EPS BEARER CONTEXT REQUEST	

16	ME → E-USS/NB-SS	DEACTIVATE EPS BEARER CONTEXT ACCEPT	
17	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 3.2.1	[Command performed successfully]
18	USER → ME	Wait 30 seconds then switch off the terminal	

PROACTIVE COMMAND: OPEN CHANNEL 6.3.1

Same as PROACTIVE COMMAND: OPEN CHANNEL 6.3.1 in clause 27.22.4.27.6.4.

TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A

Same as TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A in clause 27.22.4.27.6.4.

TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B

Same as TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B in clause 27.22.4.27.6.4.

PROACTIVE COMMAND: CLOSE CHANNEL 3.2.1

Same as TERMINAL RESPONSE: CLOSE CHANNEL 3.1.1 as used in sequence 3.1

TERMINAL RESPONSE: CLOSE CHANNEL 3.2.1

Same as TERMINAL RESPONSE: CLOSE CHANNEL 3.1.1 as used in sequence 3.1

Expected sequence 3.3 (CLOSE CHANNEL, Command qualifier set to 1)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 3.3.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 3.3.1	
4	ME → USER	The ME may display channel opening information	
5	ME → E-USS/NB-SS	PDN CONNECTIVITY REQUEST	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	E-USS/NB-SS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
7	ME → E-USS/NB-SS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 3.3.1A or TERMINAL RESPONSE: OPEN CHANNEL 3.3.1B	[Command performed successfully]
9	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 3.3.1.1	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 3.3.1.1	
12	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 3.3.1.1A	[Command performed successfully] No PDP Deactivation expected
13	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 3.3.1	
14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 3.3.1	
16	ME → USER	The ME may display channel opening information	

17	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 3.3.1A or TERMINAL RESPONSE: OPEN CHANNEL 3.3.1B	[Command performed successfully].It shall re-use same PDN for Current Proactive Command
18	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 3.2.1	
19	ME → UICC	FETCH	
20	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 3.2.1	
21	ME → E-USS/NB-SS	The ME shall send a PDN CONNECTIVITY DISCONNECT REQUEST to the network disconnect only the EPS bearer which has been established with the Open Channel command	If the ME supports A.1/173 this step is optional.
22	E-USS/NB-SS → ME	DEACTIVATE EPS BEARER CONTEXT REQUEST	
23	ME → E-USS/NB-SS	DEACTIVATE EPS BEARER CONTEXT ACCEPT	
24	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 3.2.1	[Command performed successfully]
25	USER → ME	Wait 30 seconds then switch off the terminal	

PROACTIVE COMMAND: OPEN CHANNEL 3.3.1.

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1000
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	03	04	1F	02	39	02	03	E8
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD

9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 3.3.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	03	E8							

TERMINAL RESPONSE: OPEN CHANNEL 3.3.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	03	E8							

PROACTIVE COMMAND: CLOSE CHANNEL 3.3.1.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1

Coding:

BER-TLV:	D0	09	81	03	01	41	01	82	02	81	21

TERMINAL RESPONSE: CLOSE CHANNEL 3.3.1.1A

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	01	82	02	82	81	83	01	00

27.22.4.28.3.10.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 3.1 to 3.3.

27.22.4.28.4 CLOSE CHANNEL(NG-RAN)

27.22.4.28.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.28.4.2 Conformance requirements

The ME shall support the class "e" commands and NG-RAN as defined in:

- TS 31.111[15] clause 5.2, clauses 6.4.27 and 6.6.27, clause 8.6, clause 8.7, clause 9.2, clause 8.2, clause 8.15, clause 8.52, clause 8.59, clause 8.61,
- TS 24.501 [40], clauses 6.2.2 and 6.2.3,
- TS 23.501 [41], clauses 5.15.5.2 and 5.15.5.3,
- TS 23.503 [42], clause 6.6.2,

- TS 24.526 [43], clause 4.1, 4.2.2, 5.2 and 5.15.5.3,
- TS 23.003 [44], clause 9A,

27.22.4.28.4.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (Command Performed Successfully); or
- TERMINAL RESPONSE (Bearer Independent Protocol Error, invalid channel identifier);

to the UICC after the ME receives the CLOSE CHANNEL proactive command. The TERMINAL RESPONSE sent back to the UICC is function of the ME and the network capabilities against asked parameters by the UICC.

27.22.4.28.4.4 Method of Test

27.22.4.28.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and the NG-SS. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The default NG-RAN UICC, the default NG-RAN parameters and the URSP rules stored in the ME are same as defined in clause 27.22.4.27.8.4.1.

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

Prior to test case execution the apparatus supplier shall have provided the "Preferred buffer size supported by the terminal for Open Channel command" as requested in table A.2/29.

27.22.4.28.4.4.2 Procedure

Expected sequence 4.1 (CLOSE CHANNEL, NG-RAN, bearer type '03' – Default PDU Session, successful)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 4.1.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 4.1.1	
7	ME → USER	The ME may display channel opening information.	
8	ME → NG-SS	The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network.	
9	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 4.1.1	[Command performed successfully]
10	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 4.1.1	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 4.1.1	

13	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 4.1.1	[Command performed successfully]
14	USER → ME	Wait 30 seconds, then switch off the terminal	

PROACTIVE COMMAND: OPEN CHANNEL 4.1.1

Same as in PROACTIVE COMMAND: OPEN CHANNEL 6.5.1 in sequence 6.5

TERMINAL RESPONSE: OPEN CHANNEL 4.1.1

Same as in TERMINAL RESPONSE: OPEN CHANNEL 6.5.1A in sequence 6.5

PROACTIVE COMMAND: CLOSE CHANNEL 4.1.1

Logically:

Command details
- Command number: 1
- Command type: CLOSE CHANNEL
- Command qualifier: RFU

Device identities
- Source device: UICC
- Destination device: Channel 1

Coding:

BER-TLV:	D0	09	81	03	01	41	00	82	02	81	21

TERMINAL RESPONSE: CLOSE CHANNEL 4.1.1

Logically:

Command details
- Command number: 1
- Command type: CLOSE CHANNEL
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

Expected Sequence 4.2 (CLOSE CHANNEL, NG-RAN, bearer type '0C', successful)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 4.2.1	
5	ME → UICC	FETCH	

6	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 4.2.1	
7	ME → USER	The ME may display channel opening information.	
8	ME → NG-SS	PDU SESSION ESTABLISHMENT REQUEST within UL NAS TRANSPORT is sent to the network.	DNN=TestGp.rs, S-NSSAI='01 01 01 02', SSC mode=1.
9	NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
10	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 4.2.1	[Command performed successfully]
11	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 4.2.1	
12	ME → UICC	FETCH	
13	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 4.2.1	
14	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 4.2.1	[Command performed successfully]
15	ME → NG-SS	UE-requested PDU session release procedure to release the PDU session established at step 8	This step is optional, and may occur in parallel to above step 14
16	USER → ME	Wait 30 seconds, then switch off the terminal	

PROACTIVE COMMAND: OPEN CHANNEL 4.2.1

Same as in PROACTIVE COMMAND: OPEN CHANNEL 8.2.1 in sequence 8.2

TERMINAL RESPONSE: OPEN CHANNEL 4.2.1

Same as in TERMINAL RESPONSE: OPEN CHANNEL 8.2.1 in sequence 8.2

PROACTIVE COMMAND: CLOSE CHANNEL 4.2.1

Logically:

Command details
- Command number: 1
- Command type: CLOSE CHANNEL
- Command qualifier: RFU

Device identities
- Source device: UICC
- Destination device: Channel 1

Coding:

BER-TLV:	D0	09	81	03	01	41	00	82	02	81	21

TERMINAL RESPONSE: CLOSE CHANNEL 4.2.1

Logically:

Command details
- Command number: 1
- Command type: CLOSE CHANNEL
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

27.22.4.29 RECEIVE DATA

27.22.4.29.1 RECEIVE DATA (NORMAL)

27.22.4.29.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.1.2 Conformance requirements

The ME shall support the class "e" commands. For sequence 1.2 the support of E-UTRAN, for sequences 1.3 to 1.7 the support of NG-RAN as defined in:

- TS 31.111 [15].

is required in addition.

27.22.4.29.1.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (Command Performed Successfully); or
- TERMINAL RESPONSE (ME currently unable to process command); or
- TERMINAL RESPONSE (Bearer Independent Protocol Error);

to the UICC after the ME receives the RECEIVE DATA proactive command. The TERMINAL RESPONSE sent back to the UICC is function of the ME and the network capabilities against asked parameters by the UICC.

27.22.4.29.1.4 Method of test

27.22.4.29.1.4.1 Initial conditions

For sequence 1.1, the ME is connected to the USIM Simulator and the USS.

For sequence 1.2, the ME is connected to the USIM Simulator and the E-USS/NB-SS.

For sequences 1.3 to 1.7, the ME is connected to the USIM Simulator and the NG-SS.

The elementary files are coded as Toolkit default for sequence 1.1.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If programmable USIM with test applet is used (as defined in clause 27.0), UICC shall register for Data Available Event using the proactive command SET UP EVENT LIST with Data Available event in the event list (ref to ETSI TS 102 241 cl 6.7.1.2).

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in 3GPP TS 51.010-1 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in clause 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in clause 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in clause 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in clause 27.22.4.27.2.4.1.

For sequence 1.2 the default E-UTRAN/EPC UICC, the default E-UTRAN parameters and the following parameters are used:

Network access name: TestGp.rs

User login: UserLog

User password: UserPwd

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in clause 27.22.4.27.6.4.1

Data destination address : Same Data Destination Address as defined in clause 27.22.4.27.6.4.1.

For sequences 1.3 to 1.7 the default NG-RAN UICC, the default NG-RAN parameters, the URSP rules stored in the ME and the Allowed S-NSSAI list as defined in clause 27.22.4.27.8.4.1 is configured in NG-SS are used.

27.22.4.29.1.4.2 Procedure

Expected sequence 1.1 (RECEIVE DATA, already opened channel)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
8	ME → USER	The ME may display channel opening information	
9	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
10	USS → ME	PDP context activation accept	
11	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.1.1	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1	
15	ME → USS	Transfer of 8 Bytes of data to the USS through channel 1	[To retrieve ME's port number]
16	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1	[Command performed successfully]
17	USS → ME	Transfer of 1000 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 15	
18	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data available 1.1.1	(1000 Bytes of data in the ME buffer)
19	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.1	

Step	Direction	MESSAGE / Action	Comments
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.1.1	200 Bytes
22	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.1.1	
23	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.2	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.1.2	200 Bytes
26	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.1.2	
27	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.3	
28	ME → UICC	FETCH	
29	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.1.3	200 Bytes
30	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.1.3	
31	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.4	
32	ME → UICC	FETCH	
33	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.1.4	200 Bytes
34	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.1.4	
35	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.5	
36	ME → UICC	FETCH	
37	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.1.5	200 Bytes
38	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.1.5	

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: ME
Event list Data available

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	09										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1000
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV												
	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	03	04	1F	02	39	02	03	E8
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	03	E8							

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 00

Delay Class: 04

Reliability Class: 03

Peak throughput class: 04

Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	03	E8							

PROACTIVE COMMAND: SEND DATA 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	21	B6
	08	00	01	02	03	04	05	06	07			

TERMINAL RESPONSE: SEND DATA 1.1.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

ENVELOPE: EVENT DOWNLOAD - Data available 1.1.1

Logically:

Event list
Event: Data available
Device identities
Source device: ME
Destination device: UICC
Channel status
Channel status: Channel 1 open, link established
Channel Data Length
Channel data length: FF (more than 255 bytes are available)

Coding:

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	FF								

PROACTIVE COMMAND: RECEIVE DATA 1.1.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	01	42	00	82	02	81	21	B7
	01	C8										

PROACTIVE COMMAND: RECEIVE DATA 1.1.2

Logically:

Command details

Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.1.3

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.1.4

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.1.5

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.1.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	FF	

TERMINAL RESPONSE: RECEIVE DATA 1.1.2

Logically:

Command details
Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.1.2
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	C8	C9	CA	..	FF	00	01	02	..
	8F	B7	01	FF								

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.1.3

Logically:

Command details
- Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.1.3
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Channel Data: 90 91 .. FF 00 01 – 57 (200 Bytes of data)

Channel data length: FF

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	90	91	92	..	FF	00	01	02	..
	57	B7	01	FF								

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.1.4

Logically:

Command details
- Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.1.4
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)

Channel data length: C8

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	58	59	5A	..	FF	00	01	02	..
	1F	B7	01	C8								

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.1.5

Logically:

Command details
- Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.1.5
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities

Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 20 21 .. E7 (200 Bytes of data)
Channel data length: 00

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	20	21	22	..	E7	B7	01	00	

Where XX is the Hex value of the Command number

Expected sequence 1.2 (RECEIVE DATA, already opened channel, E-UTRAN, APN different from default)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.2.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.2.1	
8	ME → USER	The ME should not display channel opening information	
9	ME → E-USS/NB-SS	PDN CONNECTIVITY REQUEST	[The PDN CONNECTIVITY REQUEST shall contain the APN "Test12.rs"] [The UE may request IPv4 or IPv4v6 address as PDP type.]
10	E-USS/NB-SS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
11	ME → E-USS/NB-SS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
12	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.2.1	
13	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.2.1	
14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.2.1	
16	ME → E-USS/NB-SS	Transfer of 8 Bytes of data to the E-USS/NB-SS through channel 1	[To retrieve ME's port number at the Access Point defined in the Open Channel command]
17	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.2.1	[Command performed successfully]
18	E-USS/NB-SS → ME	Transfer of 1000 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 15	[Sent from the Access Point different to the one of the default EPS bearer]
19	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data available 1.2.1	(1000 Bytes of data in the ME buffer)
20	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.2.1	
21	ME → UICC	FETCH	
22	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.2.1	200 Bytes
23	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.2.1	
24	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.2.2	
25	ME → UICC	FETCH	

26	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.2.2	200 Bytes
27	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.2.2	
28	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.2.3	
29	ME → UICC	FETCH	
30	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.2.3	200 Bytes
31	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.2.3	
32	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.2.4	
33	ME → UICC	FETCH	
34	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.2.4	200 Bytes
35	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.2.4	
36	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.2.5	
37	ME → UICC	FETCH	
38	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.2.5	200 Bytes
39	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.2.5	
40	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.2.1	
41	ME → UICC	FETCH	
42	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 1.2.1	
43	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 1.2.1	[Command performed successfully]

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Same as TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

PROACTIVE COMMAND: OPEN CHANNEL 1.2.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier: empty
Bearer
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: Test12.rs
Text String: "UserLog" (User login)
Text String: "UserPwd" (User password)
UICC/ME interface transport level
Transport format: TCP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	44	81	03	01	40	01	82	02	81	82	85
	00	35	07	02	03	04	02	09	1F	02	39	02
	05	78	47	0A	06	54	65	73	74	31	32	02
	72	73	0D	08	F4	55	73	65	72	4C	6F	67
	0D	08	F4	55	73	65	72	50	77	64	3C	03
	02	AD	9C	3E	05	21	01	01	01	01		

TERMINAL RESPONSE: OPEN CHANNEL 1.2.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

PROACTIVE COMMAND: SEND DATA 1.2.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	21	B6
	08	00	01	02	03	04	05	06	07			

TERMINAL RESPONSE: SEND DATA 1.2.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

ENVELOPE: EVENT DOWNLOAD - Data available 1.2.1

Logically:

Event list
Event: Data available
Device identities
Source device: ME
Destination device: UICC
Channel status
Channel status: Channel 1 open, link established
Channel Data Length
Channel data length: FF (more than 255 bytes are available)

Coding:

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	FF								

PROACTIVE COMMAND: RECEIVE DATA 1.2.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	01	42	00	82	02	81	21	B7
	01	C8										

PROACTIVE COMMAND: RECEIVE DATA 1.2.2

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA

Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.2.3

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.2.4

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.2.5

Logically:

Command details
Command number: any value between 1 to 254

Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.2.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	FF	

TERMINAL RESPONSE: RECEIVE DATA 1.2.2

Logically:

Command details
Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.2.2
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	C8	C9	CA	..	FF	00	01	02	..
	8F	B7	01	FF								

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.2.3

Logically:

Command details
- Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.2.3
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Channel Data: 90 91 .. FF 00 01 .. 57 (200 Bytes of data)

Channel data length: FF

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	90	91	92	..	FF	00	01	02	..
	57	B7	01	FF								

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.2.4

Logically:

Command details
- Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.2.4
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)

Channel data length: C8

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	58	59	5A	..	FF	00	01	02	..
	1F	B7	01	C8								

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.2.5

Logically:

Command details
- Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.2.5
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result
General Result: Command performed successfully
Channel Data: 20 21 .. E7 (200 Bytes of data)
Channel data length: 00

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	20	21	22	..	E7	B7	01	00	

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: CLOSE CHANNEL 1.2.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1

Coding:

BER-TLV:	D0	09	81	03	01	41	00	82	02	81	21

TERMINAL RESPONSE: CLOSE CHANNEL 1.2.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

Expected sequence 1.3 (RECEIVE DATA, the length of receive data exceeding the buffer size)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → NG-SS	The ME successfully registers the NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.3.1	
5	ME → UICC	FETCH	

6	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.3.1	
7	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.3.1	If programmable USIM with test applet is used (as defined in clause 27.0), the TERMINAL RESPONSE cannot be verified and that the Event has been registered in the device is implicitly verified at step 21 (ENVELOPE: EVENT DOWNLOAD - Data available 1.3.1).
8	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.3.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.3.1	
11	ME → USER	The ME may display channel opening information.	
12	ME → NG-SS	PDU SESSION ESTABLISHMENT REQUEST within UL NAS TRANSPORT is sent to the network.	DNN=TestGp.rs, S-NSSAI='01 01 01 02', SSC mode=1.
13	NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
14	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.3.1	[Command performed successfully]
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.3.1	
18	ME → NG-SS	Transfer of 8 Bytes of data to the NG-SS through channel 1	[To retrieve ME's port number]
19	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.3.1	[Command performed successfully]
20	NG-SS → ME	Transfer of 1900 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 18	
21	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data available 1.3.1	(1900 Bytes of data in the ME buffer)
22	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.1	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.3.1	200 Bytes
25	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.3.1	
26	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.2	
27	ME → UICC	FETCH	
28	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.3.2	200 Bytes
29	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.3.2	
30	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.3	
31	ME → UICC	FETCH	
32	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.3.3	200 Bytes
33	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.3.3	
34	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.4	
35	ME → UICC	FETCH	
36	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.3.4	200 Bytes
37	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.3.4	
38	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.5	
39	ME → UICC	FETCH	
40	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.3.5	200 Bytes
41	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.3.5	
42	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.6	
43	ME → UICC	FETCH	

44	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.3.6	200 Bytes
45	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.3.6	
46	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.7	
47	ME → UICC	FETCH	
48	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.3.7	200 Bytes
49	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.3.7	
50	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data available 1.3.2	(1900/500 Bytes of data in the ME buffer)
51	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.8	
52	ME → UICC	FETCH	
53	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.3.8	200 Bytes
54	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.3.8	
55	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.9	
56	ME → UICC	FETCH	
57	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.3.9	200 Bytes
58	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.3.9	
59	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.10	
60	ME → UICC	FETCH	
61	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.3.10	100 Bytes

PROACTIVE COMMAND: SET UP EVENT LIST 1.3.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

TERMINAL RESPONSE: SET UP EVENT LIST 1.3.1

Same as TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

PROACTIVE COMMAND: OPEN CHANNEL 1.3.1

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.2.1 in expected sequence 8.2

TERMINAL RESPONSE: OPEN CHANNEL 1.3.1

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.2.1 in expected sequence 8.2

PROACTIVE COMMAND: SEND DATA 1.3.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	21	B6
	08	00	01	02	03	04	05	06	07			

TERMINAL RESPONSE: SEND DATA 1.3.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

ENVELOPE: EVENT DOWNLOAD - Data available 1.3.1

Logically:

Event list
Event: Data available
Device identities
Source device: ME
Destination device: UICC
Channel status
Channel status: Channel 1 open, link established
Channel Data Length
Channel data length: FF (more than 255 bytes are available)

Coding:

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	FF								

PROACTIVE COMMAND: RECEIVE DATA 1.3.1

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.2

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.3

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.4

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.5

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.6

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.7

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.1

Logically:

Command details
- Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.1
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	FF	

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.2

Logically:

Command details
- Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.2
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)

Channel data length: FF

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	C8	C9	CA	..	FF	00	01	02	..
	8F	B7	01	FF								

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.3

Logically:

Command details
- Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.3
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: ME

Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 90 91 .. FF 00 01 .. 57 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	90	91	92	..	FF	00	01	02	..
	57	B7	01	FF								

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.4

Logically:

Command details
Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.4
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	58	59	5A	..	FF	00	01	02	..
	1F	B7	01	FF								

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.5

Logically:

Command details
Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.5
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 20 21 .. E7 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	20	21	22	..	E7	B7	01	FF	

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.6

Logically:

Command details
- Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.6
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: C8

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	C8	

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.7

Logically:

Command details
- Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.7
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)

Channel data length: 00

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	C8	C9	CA	..	FF	00	01	02	..
	8F	B7	01	00								

Where XX is the Hex value of the Command number

ENVELOPE: EVENT DOWNLOAD - Data available 1.3.2

Logically:

Event list
- Event: Data available

Device identities
- Source device: ME
- Destination device: UICC

Channel status
- Channel status: Channel 1 open, link established

Channel Data Length
Channel data length: FF (more than 255 bytes are available)

Coding:

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	FF								

PROACTIVE COMMAND: RECEIVE DATA 1.3.8

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.9

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.10

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1

Channel Data Length
Channel Data Length: 100

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	64										

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.8

Logically:

Command details
Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.8
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 90 91 .. FF 00 01 .. 57 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	90	91	92	..	FF	00	01	02	..
	57	B7	01	FF								

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.9

Logically:

Command details
Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.9
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)
Channel data length: 64

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	58	59	5A	..	FF	00	01	02	..
	1F	B7	01	64								

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.10

Logically:

Command details
- Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.10
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Channel Data: 20 21 .. 83 (100 Bytes of data)

Channel data length: 00

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	64	20	21	22	..	83	B7	01	00		

Where XX is the Hex value of the Command number

Expected sequence 1.4 (RECEIVE DATA, receiving 65535 Bytes of data)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.4.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.4.1	
7	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.4.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.4.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.4.1	
11	ME → USER	The ME may display channel opening information.	
12	ME → NG-SS	The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network.	
13	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.4.1	[Command performed successfully]
14	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.4.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.4.1	
17	ME → NG-SS	Transfer of 8 Bytes of data to the NG-SS through channel 1	[To retrieve ME's port number]
18	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.4.1	[Command performed successfully]
19	NG-SS → ME	Transfer of 65535 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 15	

20	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Data available 1.4.1	(65535 Bytes of data in the ME buffer)
21	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.1	
22	ME → UICC	FETCH	
23	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.4.1	200 Bytes
24	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.4.1	
25	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.2	
26	ME → UICC	FETCH	
27	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.4.2	200 Bytes
28	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.4.2	
29	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.3	
30	ME → UICC	FETCH	
31	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.4.3	200 Bytes
32	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.4.3	
33	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.4	
34	ME → UICC	FETCH	
35	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.4.4	200 Bytes
36	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.4.4	
37	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.5	
38	ME → UICC	FETCH	
39	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.4.5	200 Bytes
40	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.4.5	
41	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.6	
42	ME → UICC	FETCH	
43	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.4.6	200 Bytes
44	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.4.6	
45	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.7	
46	ME → UICC	FETCH	
47	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.4.7	200 Bytes
48	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.4.7	
49	Repeat step 20~step 48 45 times		
50	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Data available 1.4.47	(65535/1135 Bytes of data in the ME buffer)
51	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.323	
52	ME → UICC	FETCH	
53	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.4.323	200 Bytes
54	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.4.323	
55	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.324	
56	ME → UICC	FETCH	

57	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.4.324	200 Bytes
58	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.4.324	
59	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.325	
60	ME → UICC	FETCH	
61	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.4.325	200 Bytes
62	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.4.325	
63	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.326	
64	ME → UICC	FETCH	
65	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.4.326	200 Bytes
66	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.4.326	
67	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.327	
68	ME → UICC	FETCH	
69	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.4.327	200 Bytes
70	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.4.327	
71	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.328	
72	ME → UICC	FETCH	
73	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.4.328	135 Bytes
74	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.4.328	

PROACTIVE COMMAND: SET UP EVENT LIST 1.4.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

TERMINAL RESPONSE: SET UP EVENT LIST 1.4.1

Same as TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

PROACTIVE COMMAND: OPEN CHANNEL 1.4.1

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.1.1 in expected sequence 8.1

TERMINAL RESPONSE: OPEN CHANNEL 1.4.1

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.1.1 in expected sequence 8.1

PROACTIVE COMMAND: SEND DATA 1.4.1

Same as 27.22.4.29.1 PROACTIVE COMMAND: SEND DATA 1.3.1 in expected sequence 1.3

TERMINAL RESPONSE: SEND DATA 1.4.1

Same as 27.22.4.29.1 TERMINAL RESPONSE: SEND DATA 1.3.1 in expected sequence 1.3

ENVELOPE: EVENT DOWNLOAD - Data available 1.4.1

Same as 27.22.4.29.1 ENVELOPE: EVENT DOWNLOAD - Data available 1.3.1 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.4.1

Same as 27.22.4.29.1 PROACTIVE COMMAND: RECEIVE DATA 1.3.1 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.4.2

Same as 27.22.4.29.1 PROACTIVE COMMAND: RECEIVE DATA 1.3.2 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.4.3

Same as 27.22.4.29.1 PROACTIVE COMMAND: RECEIVE DATA 1.3.3 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.4.4

Same as 27.22.4.29.1 PROACTIVE COMMAND: RECEIVE DATA 1.3.4 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.4.5

Same as 27.22.4.29.1 PROACTIVE COMMAND: RECEIVE DATA 1.3.5 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.4.6

Same as 27.22.4.29.1 PROACTIVE COMMAND: RECEIVE DATA 1.3.6 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.4.7

Same as 27.22.4.29.1 PROACTIVE COMMAND: RECEIVE DATA 1.3.7 in expected sequence 1.3

TERMINAL RESPONSE: RECEIVE DATA 1.4.1

Same as 27.22.4.29.1 TERMINAL RESPONSE: RECEIVE DATA 1.3.1 in expected sequence 1.3

TERMINAL RESPONSE: RECEIVE DATA 1.4.2

Same as 27.22.4.29.1 TERMINAL RESPONSE: RECEIVE DATA 1.3.2 in expected sequence 1.3

TERMINAL RESPONSE: RECEIVE DATA 1.4.3

Same as 27.22.4.29.1 TERMINAL RESPONSE: RECEIVE DATA 1.3.3 in expected sequence 1.3

TERMINAL RESPONSE: RECEIVE DATA 1.4.4

Same as 27.22.4.29.1 TERMINAL RESPONSE: RECEIVE DATA 1.3.4 in expected sequence 1.3

TERMINAL RESPONSE: RECEIVE DATA 1.4.5

Same as 27.22.4.29.1 TERMINAL RESPONSE: RECEIVE DATA 1.3.5 in expected sequence 1.3

TERMINAL RESPONSE: RECEIVE DATA 1.4.6

Same as 27.22.4.29.1 TERMINAL RESPONSE: RECEIVE DATA 1.3.6 in expected sequence 1.3

TERMINAL RESPONSE: RECEIVE DATA 1.4.7

Same as 27.22.4.29.1 TERMINAL RESPONSE: RECEIVE DATA 1.3.7 in expected sequence 1.3

ENVELOPE: EVENT DOWNLOAD - Data available 1.4.47

Logically:

Event list
Event: Data available
Device identities
Source device: ME
Destination device: UICC
Channel status
Channel status: Channel 1 open, link established
Channel Data Length
Channel data length: FF (more than 255 bytes are available)

Coding:

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	FF								

PROACTIVE COMMAND: RECEIVE DATA 1.4.323

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.4.324

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.4.325

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.4.326

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.4.327

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.4.328

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 87

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	87										

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.4.327

Logically:

Command details
- Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.4.327
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully
- Channel Data : 20 21 .. E7 (200 Bytes of data)
- Channel data length: 87

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	20	21	22	..	E7	B7	01	87	

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.4.328

Logically:

Command details
- Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.4.328
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result

- General Result: Command performed successfully
- Channel Data : 00 01 .. 86 (135 Bytes of data)
- Channel data length: 00

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	87	00	01	02	..	86	B7	01	00	

Where XX is the Hex value of the Command number

Expected sequence 1.5 (RECEIVE DATA, send refresh after receiving data)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.5.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.5.1	
7	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.5.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.5.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.5.1	
11	ME → USER	The ME may display channel opening information.	
12	ME → NG-SS	The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network.	
13	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.5.1	[Command performed successfully]
14	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.5.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.5.1	
17	ME → NG-SS	Transfer of 8 Bytes of data to the NG-SS through channel 1	[To retrieve ME's port number]
18	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.5.1	[Command performed successfully]
19	NG-SS → ME	Transfer of 1000 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 17	
20	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Data available 1.5.1	(1000 Bytes of data in the ME buffer)
21	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.5.1	
22	ME → UICC	FETCH	
23	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.5.1	200 Bytes
24	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.5.1	
25	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.5.2	

26	ME → UICC	FETCH	
27	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.5.2	200 Bytes
28	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.5.2	
29	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.5.3	
30	ME → UICC	FETCH	
31	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.5.3	200 Bytes
32	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.5.3	
33	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.5.4	
34	ME → UICC	FETCH	
35	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.5.4	200 Bytes
36	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.5.4	
37	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.5.5	
38	ME → UICC	FETCH	
39	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.5.5	200 Bytes
40	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.5.5	
41	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 1.5.1	
42	ME → UICC	FETCH	
43	UICC → ME	PROACTIVE COMMAND: REFRESH 1.5.1	
44	ME → UICC	ME performs UICC reset	Both cold and warm resets are allowed
45	ME → NG-SS	ME successfully REGISTER with NG-RAN cell again.	
46	ME → NG-SS	An Internet PDU Session is established successfully.	
47	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.5.2	
48	ME → UICC	FETCH	
49	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.5.2	
50	ME → USER	The ME may display channel opening information.	
51	ME → NG-SS	The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network.	
52	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.5.2	[Command performed successfully]

PROACTIVE COMMAND: SET UP EVENT LIST 1.5.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

TERMINAL RESPONSE: SET UP EVENT LIST 1.5.1

Same as TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

PROACTIVE COMMAND: OPEN CHANNEL 1.5.1

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.1.1 in expected sequence 8.1

TERMINAL RESPONSE: OPEN CHANNEL 1.5.1

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.1.1 in expected sequence 8.1

PROACTIVE COMMAND: SEND DATA 1.5.1

Same as 27.22.4.29.1 PROACTIVE COMMAND: SEND DATA 1.3.1 in expected sequence 1.3

TERMINAL RESPONSE: SEND DATA 1.5.1

Same as 27.22.4.29.1 TERMINAL RESPONSE: SEND DATA 1.3.1 in expected sequence 1.3

ENVELOPE: EVENT DOWNLOAD - Data available 1.5.1

Same as 27.22.4.29.1 ENVELOPE: EVENT DOWNLOAD - Data available 1.3.1 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.5.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	01	42	00	82	02	81	21	B7
	01	C8										

PROACTIVE COMMAND: RECEIVE DATA 1.5.2

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.5.3

Logically:

Command details
Command number: any value between 1 to 254
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.5.4

Logically:

Command details
- Command number: any value between 1 to 254
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: UICC
- Destination device: Channel 1

Channel Data Length
- Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.5.5

Logically:

Command details
- Command number: any value between 1 to 254
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: UICC
- Destination device: Channel 1

Channel Data Length
- Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	XX	42	00	82	02	81	21	B7
	01	C8										

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.5.1

Logically:

Command details
- Command number: 1
- Command type: RECEIVE DATA
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result

General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	FF	

TERMINAL RESPONSE: RECEIVE DATA 1.5.2

Logically:

Command details
Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.5.2
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	C8	C9	CA	..	FF	00	01	02	..
	8F	B7	01	FF								

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.5.3

Logically:

Command details
Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.5.3
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 90 91 .. FF 00 01 .. 57 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	90	91	92	..	FF	00	01	02	..
	57	B7	01	FF								

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.5.4

Logically:

Command details
Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.5.4
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)
Channel data length: C8

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	58	59	5A	..	FF	00	01	02	..
	1F	B7	01	C8								

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.5.5

Logically:

Command details
Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.5.5
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 20 21 .. E7 (200 Bytes of data)
Channel data length: 00

Coding:

BER-TLV:	81	03	XX	42	00	82	02	82	81	83	01	00
	B6	81	C8	20	21	22	..	E7	B7	01	00	

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: REFRESH 1.5.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: UICC RESET
Device identities
Source device: UICC
Destination device: ME

Refresh enforcement policy

Refresh enforcement policy value: Force immediate REFRESH even if the terminal is busy on data call

Coding:

BER-TLV:	D0	0C	81	03	01	01	04	82	02	81	82
	A3	01	02								

PROACTIVE COMMAND: OPEN CHANNEL 1.5.2

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.1.1 in expected sequence 8.1

TERMINAL RESPONSE: OPEN CHANNEL 1.5.2

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.1.1 in expected sequence 8.1

Expected sequence 1.6 (Void)

Expected sequence 1.7 (RECEIVE DATA, 2 consecutive RECEIVE DATA)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.7.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.7.1	
7	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.7.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.7.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.7.1	
11	ME → USER	The ME may display channel opening information.	
12	ME → NG-SS	The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network.	
13	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.7.1	[Command performed successfully]
14	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.7.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.7.1	
17	ME → NG-SS	Transfer of 8 Bytes of data to the NG-SS through channel 1	[To retrieve ME's port number]
18	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.7.1	[Command performed successfully]
19	NG-SS → ME	Transfer of 200 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 17	
20	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Data available 1.7.1	(200 Bytes of data in the ME buffer)
21	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.7.1	
22	ME → UICC	FETCH	

23	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.7.1	200 Bytes
24	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.7.1	
25	NG-SS → ME	Transfer of 200 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 17	
26	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Data available 1.7.2	(200 Bytes of data in the ME buffer)
27	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.7.2	
28	ME → UICC	FETCH	
29	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.7.2	200 Bytes
30	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.7.2	

PROACTIVE COMMAND: SET UP EVENT LIST 1.7.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

TERMINAL RESPONSE: SET UP EVENT LIST 1.7.1

Same as TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

PROACTIVE COMMAND: OPEN CHANNEL 1.7.1

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.1.1 in expected sequence 8.1

TERMINAL RESPONSE: OPEN CHANNEL 1.7.1

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.1.1 in expected sequence 8.1

PROACTIVE COMMAND: SEND DATA 1.7.1

Same as 27.22.4.29.1 PROACTIVE COMMAND: SEND DATA 1.3.1 in expected sequence 1.3

TERMINAL RESPONSE: SEND DATA 1.7.1

Same as 27.22.4.29.1 TERMINAL RESPONSE: SEND DATA 1.3.1 in expected sequence 1.3

ENVELOPE: EVENT DOWNLOAD - Data available 1.7.1

Logically:

Event list
Event: Data available
Device identities
Source device: ME
Destination device: UICC
Channel status
Channel status: Channel 1 open, link established
Channel Data Length
Channel data length: C8

Coding:

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	C8								

PROACTIVE COMMAND: RECEIVE DATA 1.7.1

Logically:

Command details

Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	01	42	00	82	02	81	21	B7
	01	C8										

TERMINAL RESPONSE: RECEIVE DATA 1.7.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: 00

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	00	

ENVELOPE: EVENT DOWNLOAD - Data available 1.7.2

Logically:

Event list
Event: Data available
Device identities
Source device: ME
Destination device: UICC
Channel status
Channel status: Channel 1 open, link established
Channel Data Length
Channel data length: C8

Coding:

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	C8								

PROACTIVE COMMAND: RECEIVE DATA 1.7.2

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA

Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	01	42	00	82	02	81	21	B7
	01	C8										

TERMINAL RESPONSE: RECEIVE DATA 1.7.2

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: 00

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	00	

27.22.4.29.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.7.

27.22.4.29.2 RECEIVE DATA (support of Text Attribute)

27.22.4.29.2.1 RECEIVE DATA (support of Text Attribute – Left Alignment)

27.22.4.29.2.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.1.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.1.3 Test purpose

To verify that the ME shall display the alpha identifier according to the left alignment text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.1.4 Method of test

27.22.4.29.2.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Sames Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.1.4.2 Procedure

Expected sequence 2.1 (RECEIVE DATA, with Text Attribute – Left Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
8	ME → USER	The ME may display channel opening information	
9	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
10	USS → ME	PDP context activation accept	
11	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.1.1	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1	
15	ME → USS	Transfer of 8 Bytes of data to the USS through channel 1	[To retrieve ME's port number]

16	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1	[Command performed successfully]
17	USS → ME	Transfer of 400 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15	
18	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1ENVELOPE (Data Available)	(400 Bytes of data in the ME buffer)
19	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.1.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.1.1	200 Bytes with alpha identifier is displayed with left alignment
22	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.1.1	
23	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.1.2	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.1.2	200 Bytes with alpha identifier shall be formatted without left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/21, no alignment change will take place
26	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.1.1	

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Logically:

Event list
Event: Data available
Device identities
Source device: ME
Destination device: UICC
Channel status
Channel status: Channel 1 open, link established
Channel Data Length
Channel data length: FF (more than 255 bytes are available)

Coding:

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	FF								

PROACTIVE COMMAND: RECEIVE DATA 2.1.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 1"
Channel Data Length

Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	31	B7	01	C8	D0	04	00	0E	00	B4

PROACTIVE COMMAND: RECEIVE DATA 2.1.2

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 2"
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	1C	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	32	B7	01	C8						

TERMINAL RESPONSE: RECEIVE DATA 2.1.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	FF	

27.22.4.29.2.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.1.

27.22.4.29.2.2 RECEIVE DATA (support of Text Attribute – Center Alignment)

27.22.4.29.2.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.2.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.2.3 Test purpose

To verify that the ME shall display the alpha identifier according to the center alignment text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.2.4 Method of test

27.22.4.29.2.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.2.4.2 Procedure

Expected sequence 2.2 (RECEIVE DATA, with Text Attribute – Center Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions

6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
8	ME → USER	The ME may display channel opening information	
9	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
10	USS → ME	PDP context activation accept	
11	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.1.1	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1	
15	ME → USS	Transfer of 8 Bytes of data to the USS through channel 1	[To retrieve ME's port number]
16	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1	[Command performed successfully]
17	USS → ME	Transfer of 400 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15	
18	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1	(400 Bytes of data in the ME buffer)
19	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.2.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.2.1	200 Bytes with alpha identifier is displayed with center alignment
22	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.2.1	
23	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.2.2	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.2.2	200 Bytes with alpha identifier shall be formatted without center alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/21, no alignment change will take place
26	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.2.1	

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.2.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC

Destination device: Channel 1
Alpha Identifier "Receive Data 1"
Channel Data Length
Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Center Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	31	B7	01	C8	D0	04	00	0E	01	B4

PROACTIVE COMMAND: RECEIVE DATA 2.2.2

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 2"
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	1C	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	32	B7	01	C8						

TERMINAL RESPONSE: RECEIVE DATA 2.2.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	FF	

27.22.4.29.2.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.2.

27.22.4.29.2.3 RECEIVE DATA (support of Text Attribute – Right Alignment)

27.22.4.29.2.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.3.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.3.3 Test purpose

To verify that the ME shall display the alpha identifier according to the right alignment text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.3.4 Method of test

27.22.4.29.2.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.3.4.2 Procedure

Expected sequence 2.3 (RECEIVE DATA, with Text Attribute – Right Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	

4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
8	ME → USER	The ME may display channel opening information	
9	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
10	USS → ME	PDP context activation accept	
11	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.1.1	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1	
15	ME → USS	Transfer of 8 Bytes of data to the USS through channel 1	[To retrieve ME's port number]
16	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1	[Command performed successfully]
17	USS → ME	Transfer of 400 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15	
18	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1	(400 Bytes of data in the ME buffer)
19	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.3.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.3.1	200 Bytes with alpha identifier is displayed with right alignment
22	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.3.1	
23	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.3.2	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.3.2	200 Bytes with alpha identifier shall be formatted without right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/21, no alignment change will take place
26	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.3.1	

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.3.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU

Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 1"
Channel Data Length
Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Right Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	31	B7	01	C8	D0	04	00	0E	02	B4

PROACTIVE COMMAND: RECEIVE DATA 2.3.2

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 2"
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	1C	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	32	B7	01	C8						

TERMINAL RESPONSE: RECEIVE DATA 2.3.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	FF	

27.22.4.29.2.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.3.

27.22.4.29.2.4 RECEIVE DATA (support of Text Attribute – Large Font Size)

27.22.4.29.2.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.4.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.4.3 Test purpose

To verify that the ME shall display the alpha identifier according to the large font size text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.4.4 Method of test

27.22.4.29.2.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.4.4.2 Procedure

Expected sequence 2.4 (RECEIVE DATA, with Text Attribute – Large Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	

4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
8	ME → USER	The ME may display channel opening information	
9	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
10	USS → ME	PDP context activation accept	
11	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.1.1	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1	
15	ME → USS	Transfer of 8 Bytes of data to the USS through channel 1	[To retrieve ME's port number]
16	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1	[Command performed successfully]
17	USS → ME	Transfer of 800 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15	
18	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1	(800 Bytes of data in the ME buffer)
19	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.4.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.4.1	200 Bytes with alpha identifier is displayed with large font size
22	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.4.1	
23	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.4.2	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.4.2	200 Bytes with alpha identifier is displayed with normal font size
26	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.4.1	
27	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.4.1	
28	ME → UICC	FETCH	
29	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.4.1	200 Bytes with alpha identifier is displayed with large font size
30	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.4.1	
31	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.4.3	
32	ME → UICC	FETCH	
33	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.4.3	200 Bytes with alpha identifier is displayed with normal font size
34	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.4.1	

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.4.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 1"
Channel Data Length
Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Large Font, Bold On, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	31	B7	01	C8	D0	04	00	0E	04	B4

PROACTIVE COMMAND: RECEIVE DATA 2.4.2

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 2"
Channel Data Length
Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	32	B7	01	C8	D0	04	00	0E	00	B4

PROACTIVE COMMAND: RECEIVE DATA 2.4.3

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU

Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 3"
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	1C	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	33	B7	01	C8						

TERMINAL RESPONSE: RECEIVE DATA 2.4.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	FF	

27.22.4.29.2.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.4.

27.22.4.29.2.5 RECEIVE DATA (support of Text Attribute – Small Font Size)

27.22.4.29.2.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.5.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.5.3 Test purpose

To verify that the ME shall display the alpha identifier according to small font size the text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.5.4 Method of test

27.22.4.29.2.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.5.4.2 Procedure

Expected sequence 2.5 (RECEIVE DATA, with Text Attribute – Small Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
8	ME → USER	The ME may display channel opening information	
9	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
10	USS → ME	PDP context activation accept	
11	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.1.1	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1	
15	ME → USS	Transfer of 8 Bytes of data to the USS through channel 1	[To retrieve ME's port number]

16	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1	[Command performed successfully]
17	USS → ME	Transfer of 800 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15	
18	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1	(800 Bytes of data in the ME buffer)
19	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.5.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.5.1	200 Bytes with alpha identifier is displayed with small font size
22	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.5.1	
23	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.5.2	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.5.2	200 Bytes with alpha identifier is displayed with normal font size
26	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.5.1	
27	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.5.1	
28	ME → UICC	FETCH	
29	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.5.1	200 Bytes with alpha identifier is displayed with small font size
30	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.5.1	
31	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.5.3	
32	ME → UICC	FETCH	
33	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.5.3	200 Bytes with alpha identifier is displayed with normal font size
34	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.5.1	

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.5.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 1"
Channel Data Length
Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Small Font, Bold On, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	31	B7	01	C8	D0	04	00	0E	08	B4

PROACTIVE COMMAND: RECEIVE DATA 2.5.2

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 2"
Channel Data Length
Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	32	B7	01	C8	D0	04	00	0E	00	B4

PROACTIVE COMMAND: RECEIVE DATA 2.5.3

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 3"
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	1C	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	33	B7	01	C8						

TERMINAL RESPONSE: RECEIVE DATA 2.5.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA

Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	FF	

27.22.4.29.2.5.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.5.

27.22.4.29.2.6 RECEIVE DATA (support of Text Attribute – Bold On)

27.22.4.29.2.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.6.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.6.3 Test purpose

To verify that the ME shall display the alpha identifier according to the bold text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.6.4 Method of test

27.22.4.29.2.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.6.4.2 Procedure

Expected sequence 2.6 (RECEIVE DATA, with Text Attribute – Bold On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
8	ME → USER	The ME may display channel opening information	
9	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
10	USS → ME	PDP context activation accept	
11	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.1.1	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1	
15	ME → USS	Transfer of 8 Bytes of data to the USS through channel 1	[To retrieve ME's port number]
16	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1	[Command performed successfully]
17	USS → ME	Transfer of 800 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15	
18	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1	(800 Bytes of data in the ME buffer)
19	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.6.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.6.1	200 Bytes with alpha identifier is displayed with bold on
22	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.6.1	
23	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.6.2	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.6.2	200 Bytes with alpha identifier is displayed with bold off
26	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.6.1	
27	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.6.1	
28	ME → UICC	FETCH	
29	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.6.1	200 Bytes with alpha identifier is displayed with bold on
30	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.6.1	
31	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.6.3	
32	ME → UICC	FETCH	

33	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.6.3	200 Bytes with alpha identifier is displayed with bold off
34	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.6.1	

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.6.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 1"
Channel Data Length
Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold On, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	31	B7	01	C8	D0	04	00	0E	10	B4

PROACTIVE COMMAND: RECEIVE DATA 2.6.2

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 2"
Channel Data Length
Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	32	B7	01	C8	D0	04	00	0E	00	B4

PROACTIVE COMMAND: RECEIVE DATA 2.6.3

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 3"
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	1C	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	33	B7	01	C8						

TERMINAL RESPONSE: RECEIVE DATA 2.6.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	FF	

27.22.4.29.2.6.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.6.

27.22.4.29.2.7 RECEIVE DATA (support of Text Attribute – Italic On)

27.22.4.29.2.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.7.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.7.3 Test purpose

To verify that the ME shall display the alpha identifier according to the italic text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.7.4 Method of test

27.22.4.29.2.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.7.4.2 Procedure

Expected sequence 2.7 (RECEIVE DATA, with Text Attribute – Italic On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
8	ME → USER	The ME may display channel opening information	
9	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
10	USS → ME	PDP context activation accept	

11	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.1.1	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1	
15	ME → USS	Transfer of 8 Bytes of data to the USS through channel 1	[To retrieve ME's port number]
16	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1	[Command performed successfully]
17	USS → ME	Transfer of 800 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15	
18	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1ENVELOPE	(800 Bytes of data in the ME buffer)
19	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.7.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.7.1	200 Bytes with alpha identifier is displayed with italic on
22	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.7.1	
23	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.7.2	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.7.2	200 Bytes with alpha identifier is displayed with italic off
26	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.7.1	
27	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.7.1	
28	ME → UICC	FETCH	
29	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.7.1	200 Bytes with alpha identifier is displayed with italic on
30	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.7.1	
31	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.7.3	
32	ME → UICC	FETCH	
33	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.7.3	200 Bytes with alpha identifier is displayed with italic off
34	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.7.1	

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.7.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC

Destination device: Channel 1
Alpha Identifier "Receive Data 1"
Channel Data Length
Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	31	B7	01	C8	D0	04	00	0E	20	B4

PROACTIVE COMMAND: RECEIVE DATA 2.7.2

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 2"
Channel Data Length
Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	32	B7	01	C8	D0	04	00	0E	00	B4

PROACTIVE COMMAND: RECEIVE DATA 2.7.3

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 3"
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	1C	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	33	B7	01	C8						

TERMINAL RESPONSE: RECEIVE DATA 2.7.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	FF	

27.22.4.29.2.7.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.7.

27.22.4.29.2.8 RECEIVE DATA (support of Text Attribute – Underline On)

27.22.4.29.2.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.8.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.8.3 Test purpose

To verify that the ME shall display the alpha identifier according to the underline text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.8.4 Method of test

27.22.4.29.2.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e. condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.8.4.2 Procedure

Expected sequence 2.8 (RECEIVE DATA, with Text Attribute – Underline On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
8	ME → USER	The ME may display channel opening information	
9	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
10	USS → ME	PDP context activation accept	
11	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.1.1	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1	
15	ME → USS	Transfer of 8 Bytes of data to the USS through channel 1	[To retrieve ME's port number]
16	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1	[Command performed successfully]
17	USS → ME	Transfer of 800 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15	
18	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1	(800 kBytes of data in the ME buffer)
19	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.8.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.8.1	200 Bytes with alpha identifier is displayed with underline on
22	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.8.1	
23	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.8.2	

24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.8.2	200 Bytes with alpha identifier is displayed with underline off
26	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.8.1	
27	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.8.1	
28	ME → UICC	FETCH	
29	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.8.1	200 Bytes with alpha identifier is displayed with underline on
30	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.8.1	
31	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.8.3	
32	ME → UICC	FETCH	
33	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.8.3	200 Bytes with alpha identifier is displayed with underline off
34	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.8.1	

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.8.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 1"
Channel Data Length
Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline On, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	31	B7	01	C8	D0	04	00	0E	40	B4

PROACTIVE COMMAND: RECEIVE DATA 2.8.2

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU

Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 2"
Channel Data Length
Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	32	B7	01	C8	D0	04	00	0E	00	B4

PROACTIVE COMMAND: RECEIVE DATA 2.8.3

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 3"
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	1C	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	33	B7	01	C8						

TERMINAL RESPONSE: RECEIVE DATA 2.8.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	FF	

27.22.4.29.2.8.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.8.

27.22.4.29.2.9 RECEIVE DATA (support of Text Attribute – Strikethrough On)

27.22.4.29.2.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.9.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.9.3 Test purpose

To verify that the ME shall display the alpha identifier according to the strikethrough text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.9.4 Method of test

27.22.4.29.2.9.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.9.4.2 Procedure

Expected sequence 2.9 (RECEIVE DATA, with Text Attribute – Strikethrough On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	

4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
8	ME → USER	The ME may display channel opening information	
9	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
10	USS → ME	PDP context activation accept	
11	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.1.1	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1	
15	ME → USS	Transfer of 8 Bytes of data to the USS through channel 1	[To retrieve ME's port number]
16	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1	[Command performed successfully]
17	USS → ME	Transfer of 800 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15	
18	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1	(800 Bytes of data in the ME buffer)
19	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.9.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.9.1	200 Bytes with alpha identifier is displayed with strikethrough on
22	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.9.1	
23	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.9.2	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.9.2	200 Bytes with alpha identifier is displayed with strikethrough off
26	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.9.1	
27	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.9.1	
28	ME → UICC	FETCH	
29	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.9.1	200 Bytes with alpha identifier is displayed with strikethrough on
30	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.9.1	
31	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.9.3	
32	ME → UICC	FETCH	
33	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.9.3	200 Bytes with alpha identifier is displayed with strikethrough off
34	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.9.1	

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.9.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 1"
Channel Data Length
Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough On
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	31	B7	01	C8	D0	04	00	0E	80	B4

PROACTIVE COMMAND: RECEIVE DATA 2.9.2

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 2"
Channel Data Length
Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	32	B7	01	C8	D0	04	00	0E	00	B4

PROACTIVE COMMAND: RECEIVE DATA 2.9.3

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 3"
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	1C	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	33	B7	01	C8						

TERMINAL RESPONSE: RECEIVE DATA 2.9.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	FF	

27.22.4.29.2.9.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.9.

27.22.4.29.2.10 RECEIVE DATA (support of Text Attribute – Foreground and Background Colour)

27.22.4.29.2.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.10.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.10.3 Test purpose

To verify that the ME shall display the alpha identifier according to the foreground and background colour text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.10.4 Method of test

27.22.4.29.2.10.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.10.4.2 Procedure

Expected sequence 2.10 (RECEIVE DATA, with Text Attribute – Foreground and Background Colour)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
8	ME → USER	The ME may display channel opening information	
9	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
10	USS → ME	PDP context activation accept	
11	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.1.1	

13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1	
15	ME → USS	Transfer of 8 Bytes of data to the USS through channel 1	[To retrieve ME's port number]
16	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1	[Command performed successfully]
17	USS → ME	Transfer of 400 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15	
18	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1	(400 Bytes of data in the ME buffer)
19	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.10.1	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.10.1	200 Bytes with alpha identifier is displayed with foreground and background colour
22	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.10.1	
23	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 2.10.2	
24	ME → UICC	FETCH	
25	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 2.10.2	200 Bytes with alpha identifier is displayed with ME's default foreground and background colour
26	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 2.10.1	

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.10.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 1"
Channel Data Length
Channel Data Length: 200
Text Attribute
Formatting position: 0
Formatting length: 14
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	22	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	31	B7	01	C8	D0	04	00	0E	00	B4

PROACTIVE COMMAND: RECEIVE DATA 2.10.2

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Receive Data 2"
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	1C	81	03	01	42	00	82	02	81	21	85
	0E	52	65	63	65	69	76	65	20	44	61	74
	61	20	32	B7	01	C8						

TERMINAL RESPONSE: RECEIVE DATA 2.10.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	FF	

27.22.4.29.2.10.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.10.

27.22.4.30 SEND DATA

27.22.4.30.1 SEND DATA (normal)

27.22.4.30.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.1.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.1.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (Command Performed Successfully); or
- TERMINAL RESPONSE (ME currently unable to process command); or
- TERMINAL RESPONSE (Bearer Independent Protocol Error);
- TERMINAL RESPONSE (Proactive USIM session terminated by the user);

to the UICC after the ME receives the SEND DATA proactive command. The TERMINAL RESPONSE sent back to the UICC is the result of the ME and the network capabilities against requested parameters by the UICC.

27.22.4.30.1.4 Method of test

27.22.4.30.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27

The following Bearer Parameters used are those defined in the default Test PDP context for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.1.4.2 Procedure

Expected sequence 1.1 (SEND DATA, immediate mode)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	

7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.1.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1	
11	ME → USS	Transfer of 8 Bytes of data to the USS through channel 1	
12	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1000
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	03	04	1F	02	39	02	03	E8
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment

Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	03	E8							

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	03	E8							

PROACTIVE COMMAND: SEND DATA 1.1.1

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: UICC
Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	21	B6
	08	00	01	02	03	04	05	06	07			

TERMINAL RESPONSE: SEND DATA 1.1.1

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

Expected sequence 1.2 (SEND DATA, Store mode)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.2.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 1.2.1	Send 500 Bytes of data (200 + 200 + 100)
11	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 1.2.1	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.2.2	
13	ME → UICC	FETCH	

14	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 1.2.2	[200 Bytes]
15	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 1.2.2	[Command performed successfully]
16	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.2.3	
17	ME → UICC	FETCH	
18	UICC → ME	PROACTIVE COMMAND: SEND DATA (Immediate mode) 1.2.3	[100 Bytes]
19	ME → USS	Transfer of 500 Bytes of data to the USS through channel 1	
20	ME → UICC	TERMINAL RESPONSE: SEND DATA (Immediate mode) 1.2.3	[Command performed successfully]

PROACTIVE COMMAND: SEND DATA 1.2.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data
Channel Data: 00 01 .. C7 (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	00	01	..	C7					

TERMINAL RESPONSE: SEND DATA 1.2.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

PROACTIVE COMMAND: SEND DATA 1.2.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities

Source device: UICC
Destination device: Channel 1

Channel Data

Channel Data: C8 C9 .. FF 00 01 .. 8F (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	C8	C9	..	FF	00	01	..	8F	

TERMINAL RESPONSE: SEND DATA 1.2.2

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

PROACTIVE COMMAND: SEND DATA 1.2.3

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Immediate mode

Device identities

Source device: UICC
Destination device: Channel 1

Channel Data

Channel Data: 90 91 .. F3 (100 Bytes of data)

Coding:

BER-TLV:	D0	6F	81	03	01	43	01	82	02	81	21	B6
	64	90	91	..	F3							

TERMINAL RESPONSE: SEND DATA 1.2.3

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Immediate mode

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

Expected sequence 1.3 (SEND DATA, Store mode, Tx buffer fully used)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.1	Send 1000 Bytes of data by packet of 200 Bytes
11	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.1	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.2	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.2	[200 Bytes]
15	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2	[Command performed successfully]
16	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.3	
17	ME → UICC	FETCH	
18	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.3	[200 Bytes]
19	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3	[Command performed successfully]
20	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.4	
21	ME → UICC	FETCH	
22	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.4	[200 Bytes]
23	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4	[Command performed successfully]
24	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.5	
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.3.5	[200 Bytes]
27	ME → USS	Transfer of 1000 Bytes of data to the USS through channel 1	
28	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.3.5	[Command performed successfully]

PROACTIVE COMMAND: SEND DATA 1.3.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data
Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	00	01	02	...	C7				

TERMINAL RESPONSE: SEND DATA 1.3.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

PROACTIVE COMMAND: SEND DATA 1.3.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data
Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	C8	C9	CA	...	FF	00	02	..	8F

TERMINAL RESPONSE: SEND DATA 1.3.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

PROACTIVE COMMAND: SEND DATA 1.3.3

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data
Channel Data: 90 91 .. FF 00 01 .. 57 (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	90	91	..	FF	00	01	..	57	

TERMINAL RESPONSE: SEND DATA 1.3.3

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

PROACTIVE COMMAND: SEND DATA 1.3.4

Logically:

Command details
Command number: 1

Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data
Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	58	59	..	FF	00	01	..	1F	

TERMINAL RESPONSE: SEND DATA 1.3.4

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: 200 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	C8									

PROACTIVE COMMAND: SEND DATA 1.3.5

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data
Channel Data: 20 21 .. E7 (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	01	82	02	81	21
	B6	81	C8	20	21	..	E7					

TERMINAL RESPONSE: SEND DATA 1.3.5

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

Expected sequence 1.4 (SEND DATA, 2 consecutive SEND DATA Store mode)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.1	Send 1000 Bytes of data by packet of 200 Bytes
11	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.1	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.2	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.2	[200 Bytes]
15	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2	[Command performed successfully]
16	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.3	
17	ME → UICC	FETCH	
18	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.3	[200 Bytes]
19	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3	[Command performed successfully]
20	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.4	
21	ME → UICC	FETCH	
22	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.4	[200 Bytes]
23	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4	[Command performed successfully]
24	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.5	…
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.3.5	[200 Bytes]
27	ME → USS	Transfer of 1000 Bytes of data to the USS through channel 1	

28	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.3.5	[Command performed successfully]
29	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.1	
30	ME → UICC	FETCH	
31	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.1	Send 1000 Bytes of data by packet of 200 Bytes
32	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.1	[Command performed successfully]
33	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.2	
34	ME → UICC	FETCH	
35	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.2	[200 Bytes]
36	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2	[Command performed successfully]
37	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.3	
38	ME → UICC	FETCH	
39	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.3	[200 Bytes]
40	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3	[Command performed successfully]
41	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.4	
42	ME → UICC	FETCH	
43	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.4	[200 Bytes]
44	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4	[Command performed successfully]
45	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.5	…
46	ME → UICC	FETCH	
47	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.3.5	[200 Bytes]
48	ME → USS	Transfer of 1000 Bytes of data to the USS through channel 1	
49	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.3.5	[Command performed successfully]

Expected sequence 1.5 (SEND DATA, immediate mode with a bad channel identifier)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.5.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.5.1	

11	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.5.1	[Invalid channel number]

PROACTIVE COMMAND: SEND DATA 1.5.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 2
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	22	B6
	08	00	01	02	03	04	05	06	07			

TERMINAL RESPONSE: SEND DATA 1.5.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Bearer Independent Protocol error (3A)
Additional Result: Channel identifier not valid (03)

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	02	3A
	03											

Expected sequence 1.6 Void

27.22.4.30.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.5.

27.22.4.30.2 SEND DATA (support of Text Attribute)

27.22.4.30.2.1 SEND DATA (support of Text Attribute – Left Alignment)

27.22.4.30.2.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.1.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.1.3 Test purpose

To verify that the ME shall display the alpha identifier according to the left alignment text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.1.4 Method of test

27.22.4.30.2.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.1.4.2 Procedure

Expected sequence 2.1 (SEND DATA with Text Attribute – Left Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.1.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.1.1	[alpha identifier shall be displayed with left alignment]
11	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.1.1	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.1.2	

13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.1.2	[Message shall be formatted without left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/22, no alignment change will take place]
15	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.1.1	[Command performed successfully]

PROACTIVE COMMAND: SEND DATA 2.1.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 1"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold On, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	31
	B6	08	00	01	02	03	04	05	06	07	D0	04
	00	0B	00	B4								

PROACTIVE COMMAND: SEND DATA 2.1.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 2"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	20	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	32
	B6	08	00	01	02	03	04	05	06	07		

TERMINAL RESPONSE: SEND DATA 2.1.1

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

27.22.4.30.2.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.1.

27.22.4.30.2.2 SEND DATA (support of Text Attribute – Center Alignment)

27.22.4.30.2.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.2.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.2.3 Test purpose

To verify that the ME shall display the alpha identifier according to the center alignment text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.2.4 Method of test

27.22.4.30.2.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.2.4.2 Procedure

Expected sequence 2.2 (SEND DATA with Text Attribute – Center Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.2.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.2.1	[alpha identifier shall be displayed with center alignment]
11	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.2.1	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.2.2	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.2.2	[Message shall be formatted without center alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/22, no alignment change will take place]
15	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.2.1	[Command performed successfully]

PROACTIVE COMMAND: SEND DATA 2.2.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 1"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Center Alignment, Normal Font, Bold On, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	31

B6	08	00	01	02	03	04	05	06	07	D0	04
00	0B	01	B4								

PROACTIVE COMMAND: SEND DATA 2.2.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 2"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	20	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	32
	B6	08	00	01	02	03	04	05	06	07		

TERMINAL RESPONSE: SEND DATA 2.2.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

27.22.4.30.2.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.2.

27.22.4.30.2.3 SEND DATA (support of Text Attribute – Right Alignment)

27.22.4.30.2.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.3.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.3.3 Test purpose

To verify that the ME shall display the alpha identifier according to the right alignment text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.3.4 Method of test

27.22.4.30.2.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.3.4.2 Procedure

Expected sequence 2.3 (SEND DATA with Text Attribute – Right Alignment)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.3.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.3.1	[alpha identifier shall be displayed with right alignment]
11	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.3.1	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.3.2	
13	ME → UICC	FETCH	

14	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.3.2	[Message shall be formatted without right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/22, no alignment change will take place]
15	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.3.1	[Command performed successfully]

PROACTIVE COMMAND: SEND DATA 2.3.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 1"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Right Alignment, Normal Font, Bold On, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	31
	B6	08	00	01	02	03	04	05	06	07	D0	04
	00	0B	02	B4								

PROACTIVE COMMAND: SEND DATA 2.3.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 2"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	20	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	32
	B6	08	00	01	02	03	04	05	06	07		

TERMINAL RESPONSE: SEND DATA 2.3.1

Logically:

Command details
Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

27.22.4.30.2.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.3.

27.22.4.30.2.4 SEND DATA (support of Text Attribute – Large Font Size)

27.22.4.30.2.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.4.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.4.3 Test purpose

To verify that the ME shall display the alpha identifier according to the large font size text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.4.4 Method of test

27.22.4.30.2.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.4.4.2 Procedure

Expected sequence 2.4 (SEND DATA with Text Attribute – Large Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.4.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.4.1	[alpha identifier shall be displayed with large font size]
11	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.4.1	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.4.2	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.4.2	[alpha identifier shall be displayed with normal font size]
15	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.4.1	[Command performed successfully]
16	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.4.1	
17	ME → UICC	FETCH	
18	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.4.1	[alpha identifier shall be displayed with large font size]
19	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.4.1	[Command performed successfully]
20	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.4.3	
21	ME → UICC	FETCH	
22	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.4.3	[alpha identifier shall be displayed with normal font size]
23	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.4.1	[Command performed successfully]

PROACTIVE COMMAND: SEND DATA 2.4.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 1"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute

Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Large Font, Bold On, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	31
	B6	08	00	01	02	03	04	05	06	07	D0	04
	00	0B	04	B4								

PROACTIVE COMMAND: SEND DATA 2.4.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 2"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	32
	B6	08	00	01	02	03	04	05	06	07	D0	04
	00	0B	00	B4								

PROACTIVE COMMAND: SEND DATA 2.4.3

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 3"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	20	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	33
	B6	08	00	01	02	03	04	05	06	07		

TERMINAL RESPONSE: SEND DATA 2.4.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

27.22.4.30.2.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.4.

27.22.4.30.2.5 SEND DATA (support of Text Attribute – Small Font Size)

27.22.4.30.2.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.5.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.5.3 Test purpose

To verify that the ME shall display the alpha identifier according to the small font size text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.5.4 Method of test

27.22.4.30.2.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.5.4.2 Procedure

Expected sequence 2.5 (SEND DATA with Text Attribute – Small Font Size)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.5.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.5.1	[alpha identifier shall be displayed with small font size]
11	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.5.1	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.5.2	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.5.2	[alpha identifier shall be displayed with normal font size]
15	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.5.1	[Command performed successfully]
16	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.5.1	
17	ME → UICC	FETCH	
18	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.5.1	[alpha identifier shall be displayed with small font size]
19	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.5.1	[Command performed successfully]
20	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.5.3	
21	ME → UICC	FETCH	
22	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.5.3	[alpha identifier shall be displayed with normal font size]
23	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.5.1	[Command performed successfully]

PROACTIVE COMMAND: SEND DATA 2.5.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC

Destination device: Channel 1
Alpha Identifier "Send Data 1"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Small Font, Bold On, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	31
	B6	08	00	01	02	03	04	05	06	07	D0	04
	00	0B	08	B4								

PROACTIVE COMMAND: SEND DATA 2.5.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 2"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	32
	B6	08	00	01	02	03	04	05	06	07	D0	04
	00	0B	00	B4								

PROACTIVE COMMAND: SEND DATA 2.5.3

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 3"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	20	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	33
	B6	08	00	01	02	03	04	05	06	07		

TERMINAL RESPONSE: SEND DATA 2.5.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

27.22.4.30.2.5.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.5.

27.22.4.30.2.6 SEND DATA (support of Text Attribute – Bold On)

27.22.4.30.2.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.6.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.6.3 Test purpose

To verify that the ME shall display the alpha identifier according to the bold text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.6.4 Method of test

27.22.4.30.2.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.6.4.2 Procedure

Expected sequence 2.6 (SEND DATA with Text Attribute – Bold On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.6.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.6.1	[alpha identifier shall be displayed with Bold on]
11	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.6.1	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.6.2	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.6.2	[alpha identifier shall be displayed with bold off]
15	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.6.1	[Command performed successfully]
16	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.6.1	
17	ME → UICC	FETCH	
18	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.6.1	[alpha identifier shall be displayed with bold on]
19	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.6.1	[Command performed successfully]
20	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.6.3	
21	ME → UICC	FETCH	
22	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.6.3	[alpha identifier shall be displayed with bold off]
23	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.6.1	[Command performed successfully]

PROACTIVE COMMAND: SEND DATA 2.6.1

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 1"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold On , Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	31
	B6	08	00	01	02	03	04	05	06	07	D0	04
	00	0B	10	B4								

PROACTIVE COMMAND: SEND DATA 2.6.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 2"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	32
	B6	08	00	01	02	03	04	05	06	07	D0	04
	00	0B	00	B4								

PROACTIVE COMMAND: SEND DATA 2.6.3

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC

Destination device: Channel 1
Alpha Identifier "Send Data 3"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	20	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	33
	B6	08	00	01	02	03	04	05	06	07		

TERMINAL RESPONSE: SEND DATA 2.6.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

27.22.4.30.2.6.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.6.

27.22.4.30.2.7 SEND DATA (support of Text Attribute – Italic On)

27.22.4.30.2.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.7.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.7.3 Test purpose

To verify that the ME shall display the alpha identifier according to the italic text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.7.4 Method of test

27.22.4.30.2.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.7.4.2 Procedure

Expected sequence 2.7 (SEND DATA with Text Attribute – Italic On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.7.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.7.1	[alpha identifier shall be displayed with Italic on]
11	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.7.1	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.7.2	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.7.2	[alpha identifier shall be displayed with italic off]
15	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.7.1	[Command performed successfully]
16	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.7.1	
17	ME → UICC	FETCH	
18	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.7.1	[alpha identifier shall be displayed with italic on]
19	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.7.1	[Command performed successfully]
20	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.7.3	
21	ME → UICC	FETCH	
22	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.7.3	[alpha identifier shall be displayed with italic off]
23	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.7.1	[Command performed successfully]

PROACTIVE COMMAND: SEND DATA 2.7.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 1"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic On, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	31
	B6	08	00	01	02	03	04	05	06	07	D0	04
	00	0B	20	B4								

PROACTIVE COMMAND: SEND DATA 2.7.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 2"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	32
	B6	08	00	01	02	03	04	05	06	07	D0	04
	00	0B	00	B4								

PROACTIVE COMMAND: SEND DATA 2.7.3

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 3"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	20	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	33
	B6	08	00	01	02	03	04	05	06	07		

TERMINAL RESPONSE: SEND DATA 2.7.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

27.22.4.30.2.7.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.7.

27.22.4.30.2.8 SEND DATA (support of Text Attribute – Underline On)

27.22.4.30.2.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.8.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.8.3 Test purpose

To verify that the ME shall display the alpha identifier according to the underline text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.8.4 Method of test

27.22.4.30.2.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.8.4.2 Procedure

Expected sequence 2.8 (SEND DATA with Text Attribute – Underline On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.8.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.8.1	[alpha identifier shall be displayed with underline on]
11	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.8.1	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.8.2	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.8.2	[alpha identifier shall be displayed with underline off]
15	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.8.1	[Command performed successfully]
16	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.8.1	
17	ME → UICC	FETCH	
18	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.8.1	[alpha identifier shall be displayed with underline on]

19	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.8.1	[Command performed successfully]
20	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.8.3	
21	ME → UICC	FETCH	
22	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.8.3	[alpha identifier shall be displayed with underline off]
23	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.8.1	[Command performed successfully]

PROACTIVE COMMAND: SEND DATA 2.8.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 1"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline On, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	31
	B6	08	00	01	02	03	04	05	06	07	D0	04
	00	0B	40	B4								

PROACTIVE COMMAND: SEND DATA 2.8.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 2"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85

	0B	53	65	6E	64	20	44	61	74	61	20	32
	B6	08	00	01	02	03	04	05	06	07	D0	04
	00	0B	00	B4								

PROACTIVE COMMAND: SEND DATA 2.8.3

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 3"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	20	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	33
	B6	08	00	01	02	03	04	05	06	07		

TERMINAL RESPONSE: SEND DATA 2.8.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

27.22.4.30.2.8.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.8.

27.22.4.30.2.9 SEND DATA (support of Text Attribute – Strikethrough On)

27.22.4.30.2.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.9.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.9.3 Test purpose

To verify that the ME shall display the alpha identifier according to the strikethrough text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.9.4 Method of test

27.22.4.30.2.9.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.9.4.2 Procedure

Expected sequence 2.9 (SEND DATA with Text Attribute – Strikethrough On)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.9.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.9.1	[alpha identifier shall be displayed with strikethrough on]
11	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.9.1	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.9.2	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.9.2	[alpha identifier shall be displayed with strikethrough off]

15	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.9.1	[Command performed successfully]
16	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.9.1	
17	ME → UICC	FETCH	
18	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.9.1	[alpha identifier shall be displayed with strikethrough on]
19	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.9.1	[Command performed successfully]
20	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.9.3	
21	ME → UICC	FETCH	
22	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.9.3	[alpha identifier shall be displayed with strikethrough off]
23	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.9.1	[Command performed successfully]

PROACTIVE COMMAND: SEND DATA 2.9.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 1"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough On
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	31
	B6	08	00	01	02	03	04	05	06	07	D0	04
	00	0B	80	B4								

PROACTIVE COMMAND: SEND DATA 2.9.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 2"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute
Formatting position: 0
Formatting length: 11

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	32
	B6	08	00	01	02	03	04	05	06	07	D0	04
	00	0B	00	B4								

PROACTIVE COMMAND: SEND DATA 2.9.3

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 3"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	20	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	33
	B6	08	00	01	02	03	04	05	06	07		

TERMINAL RESPONSE: SEND DATA 2.9.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

27.22.4.30.2.9.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.9.

27.22.4.30.2.10 SEND DATA (support of Text Attribute – Foreground and Background Colour)

27.22.4.30.2.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.10.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.10.3 Test purpose

To verify that the ME shall display the alpha identifier according to the foreground and background colour text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.10.4 Method of test

27.22.4.30.2.10.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.10.4.2 Procedure

Expected sequence 2.10 (SEND DATA with Text Attribute – Foreground and Background Colour)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL	[Command performed successfully]

		RESPONSE: OPEN CHANNEL 1.1.1B	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.10.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.10.1	[alpha identifier shall be displayed with foreground and background colour according to the text attribute configuration]
11	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.10.1	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 2.10.2	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: SEND DATA 2.10.2	[alpha identifier shall be displayed with ME's default foreground and background colour]
15	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 2.10.1	[Command performed successfully]

PROACTIVE COMMAND: SEND DATA 2.10.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 1"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)
Text Attribute
Formatting position: 0
Formatting length: 11
Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off
Colour: Dark Green Foreground, Bright Yellow Background

Coding:

BER-TLV:	D0	26	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	31
	B6	08	00	01	02	03	04	05	06	07	D0	04
	00	0B	00	B4								

PROACTIVE COMMAND: SEND DATA 2.10.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Alpha Identifier "Send Data 2"
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	20	81	03	01	43	01	82	02	81	21	85
	0B	53	65	6E	64	20	44	61	74	61	20	32
	B6	08	00	01	02	03	04	05	06	07		

TERMINAL RESPONSE: SEND DATA 2.10.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

27.22.4.30.2.10.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.10.

27.22.4.30.3 SEND DATA (E-UTRAN)

27.22.4.30.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.3.2 Conformance requirements

The ME shall support the class "e" commands and E-UTRAN as defined in:

- TS 31.111 [15].

27.22.4.30.3.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC after the ME receives the SEND DATA proactive command. The TERMINAL RESPONSE sent back to the UICC is the result of the ME and the network capabilities against requested parameters by the UICC.

To verify that the ME uses the default EPS bearer as requested in the Open Channel Command.

27.22.4.30.3.4 Method of test

27.22.4.30.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the E-USS/NB-SS. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The default E-UTRAN/EPC UICC, the default E-UTRAN parameters and the following parameters are used:

Network access name: TestGp.rs
User login: UserLog
User password: UserPwd

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.6.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.6.4.1.

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

Prior to test case execution the apparatus supplier shall have provided the "Preferred buffer size supported by the terminal for Open Channel command" as requested in table A.2/29.

27.22.4.30.3.4.2 Procedure

Expected sequence 3.1 (SEND DATA, E-UTRAN, Defaults EPS bearer, immediate mode)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 3.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 3.1.1	
4	ME → USER	The ME may display channel opening information	[The user shall confirm the channel opening if required]
5	ME → E-USS/NB-SS	No PDN connectivity request PDN CONNECTIVITY REQUEST is sent if the ME supports A.1/173 AND NOT A.1/174.	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 3.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 3.1.1B	[Command performed successfully] If the ME supports A.1/173 only OPEN CHANNEL 3.1.1A shall be sent.
7	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 3.1.1	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 3.1.1	
10	ME → E-USS/NB-SS	Transfer of 8 Bytes of data to the USS through channel 1	
11	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 3.1.1	[Command performed successfully]
12	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 3.1.1	
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 3.1.1	
15	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 3.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 3.1.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC

Destination device: ME
Bearer
Bearer type: Default bearer for requested transport layer
Buffer
Buffer size: 1400
Text String: "UserLog" (User login)
Text String: "UserPwd" (User password)
UICC/ME interface transport level
Transport format:TCP, UICC in client mode, remote connection
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	30	81	03	01	40	01	82	02	81	82	35
	01	03	39	02	05	78	0D	08	F4	55	73	65
	72	4C	6F	67	0D	08	F4	55	73	65	72	50
	77	64	3C	03	02	AD	9C	3E	05	21	01	01
	01	01										

TERMINAL RESPONSE: OPEN CHANNEL 3.1.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer
Bearer type: Default bearer for requested transport layer
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	01	03	39	02	05	78	

TERMINAL RESPONSE: OPEN CHANNEL 3.1.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer
Bearer type: E-UTRAN / mapped UTRAN packet service
QCI 9

Maximum bit rate for uplink: 64 kbps
Maximum bit rate for downlink: 64 kbps
Guaranteed bit rate for uplink: 64 kbps
Guaranteed bit rate for downlink: 64 kbps
Maximum bit rate for uplink (extended): 0
Maximum bit rate for downlink (extended): 0
Guaranteed bit rate for uplink (extended): 0
Guaranteed bit rate for downlink (extended): 0
PDN Type: IP

Buffer

Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	0B	0B	09	40	40	40	40
	00	00	00	00	02	39	02	05	78			

PROACTIVE COMMAND: SEND DATA 3.1.1

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: UICC
Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	21	B6
	08	00	01	02	03	04	05	06	07			

TERMINAL RESPONSE: SEND DATA 3.1.1

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

PROACTIVE COMMAND: CLOSE CHANNEL 3.1.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1

Coding:

BER-TLV:	D0	09	81	03	01	41	00	82	02	81	21

TERMINAL RESPONSE: CLOSE CHANNEL 3.1.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

Expected sequence 3.2 (SEND DATA, E-UTRAN, APN different from default APN, Store mode)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 3.2.1	If the ME supports A.1/173 AND NOT A.1/174 only one APN will be activated in step 5.
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 3.2.1	
4	ME → USER	The ME should not display channel opening information	
5	ME → E-USS/NB-SS	PDN CONNECTIVITY REQUEST	[The PDN CONNECTIVITY REQUEST shall contain the APN "Test12.rs"] [The UE may request IPv4 or IPv4v6 address as PDP type.]
6	E-USS/NB-SS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
7	ME → E-USS/NB-SS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
8	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 3.2.1	[Command performed successfully]
9	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 3.2.1	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 3.2.1	Send 500 Bytes of data (200 + 200 + 100)
12	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 3.2.1	[Command performed successfully]
13	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 3.2.2	

14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 3.2.2	[200 Bytes]
16	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 3.2.2	[Command performed successfully]
17	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 3.2.3	
18	ME → UICC	FETCH	
19	UICC → ME	PROACTIVE COMMAND: SEND DATA (Immediate mode) 3.2.3	[100 Bytes]
20	ME → E-USS/NB-SS	Transfer of 500 Bytes of data to the USS through channel 1	
21	ME → UICC	TERMINAL RESPONSE: SEND DATA (Immediate mode) 3.2.3	[Command performed successfully]
22	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 3.2.1	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 3.2.1	
25	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 3.2.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 3.2.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Alpha Identifier: empty
Bearer
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: Test12.rs
Text String: "UserLog" (User login)
Text String: "UserPwd" (User password)
UICC/ME interface transport level
Transport format: TCP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	44	81	03	01	40	01	82	02	81	82	85
	00	35	07	02	03	04	02	09	1F	02	39	02
	05	78	47	0A	06	54	65	73	74	31	32	02
	72	73	0D	08	F4	55	73	65	72	4C	6F	67
	0D	08	F4	55	73	65	72	50	77	64	3C	03
	02	AD	9C	3E	05	21	01	01	01	01		

TERMINAL RESPONSE: OPEN CHANNEL 3.2.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

PROACTIVE COMMAND: SEND DATA 3.2.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data
Channel Data: 00 01 .. C7 (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	00	01	..	C7					

TERMINAL RESPONSE: SEND DATA 3.2.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: ME
Destination device: UICC
Result

General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

PROACTIVE COMMAND: SEND DATA 3.2.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data
Channel Data: C8 C9 .. FF 00 01 .. 8F (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	C8	C9	..	FF	00	01	..	8F	

TERMINAL RESPONSE: SEND DATA 3.2.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

PROACTIVE COMMAND: SEND DATA 3.2.3

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Immediate mode
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data
Channel Data: 90 91 .. F3 (100 Bytes of data)

Coding:

BER-TLV:	D0	6F	81	03	01	43	01	82	02	81	21	B6
	64	90	91	..	F3							

TERMINAL RESPONSE: SEND DATA 3.2.3

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Immediate mode
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

PROACTIVE COMMAND: CLOSE CHANNEL 3.2.1

Same as PROACTIVE COMMAND: CLOSE CHANNEL 3.1.1 from sequence 1.1.

TERMINAL RESPONSE: CLOSE CHANNEL 3.2.1

Same as Terminal Response: CLOSE CHANNEL 3.1.1 from sequence 1.1.

27.22.4.30.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 3.1 to 3.2.

27.22.4.30.4 SEND DATA (NG-RAN)

27.22.4.30.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.4.2 Conformance requirements

The ME shall support the class "e" commands and NG-RAN as defined in:

- TS 31.111[15] clause 5.2, clauses 6.4.27 and 6.6.27, clause 8.6, clause 8.7, clause 9.2, clause 8.2, clause 8.15, clause 8.52, clause 8.59, clause 8.61,
- TS 24.501 [40], clauses 6.2.2 and 6.2.3,
- TS 23.501 [41], clauses 5.15.5.2 and 5.15.5.3,
- TS 23.503 [42], clause 6.6.2,
- TS 24.526 [43], clause 4.1, 4.2.2, 5.2 and 5.15.5.3,
- TS 23.003 [44], clause 9A.

27.22.4.30.4.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC after the ME receives the SEND DATA proactive command. The TERMINAL RESPONSE sent back to the UICC is the result of the ME and the network capabilities against requested parameters by the UICC.

27.22.4.30.4.4 Method of test

27.22.4.30.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and the NG-SS. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The default NG-RAN UICC, the default NG-RAN parameters and the following URSP rules stored in the ME are used:

URSP:

Rule Precedence =1

Traffic Descriptor:

DNN=TestGp.rs

Route Selection Descriptor:

Precedence=1

Network Slice Selection, S-NSSAI: 01 01 01 02 (ST: MBB, SD: 010102)

SSC Mode Selection: SSC Mode 1

Access Type preference: 3GPP access

Rule Precedence = <lowest priority>

Traffic Descriptor: *

Route Selection Descriptor:

Precedence =1

Network Slice Selection, S-NSSAI: 01 01 01 01 (ST: MBB, SD: 010101)

SSC Mode Selection: SSC Mode 1

DNN Selection: internet

The Allowed S-NSSAI list is configured in NG-SS as '01 01 01 01', '01 01 01 02'and '01 01 01 03'

For sequence 4.2 the NG-SS shall be able to support 2 active PDU sessions at the same time.

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

Prior to test case execution the apparatus supplier shall have provided the "Preferred buffer size supported by the terminal for Open Channel command" as requested in table A.2/29.

27.22.4.30.4.4.2 Procedure

Expected sequence 4.1 (SEND DATA, NG-RAN, bearer type '03' – Default PDU Session, immediate mode)

Step	Direction	MESSAGE / Action	Comments

1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 4.1.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 4.1.1	
7	ME → USER	The ME may display channel opening information.	
8	ME → NG-SS	The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network.	
9	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 4.1.1	[Command performed successfully]
7	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 4.1.1	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 4.1.1	
10	ME → NG-SS	Transfer of 8 Bytes of data to the NG-SS through channel 1	
11	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 4.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 4.1.1

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.1.1 in expected sequence 8.1

TERMINAL RESPONSE: OPEN CHANNEL 4.1.1

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.1.1 in expected sequence 8.1

PROACTIVE COMMAND: SEND DATA 4.1.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	21	B6
	08	00	01	02	03	04	05	06	07			

TERMINAL RESPONSE: SEND DATA 4.1.1

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

Expected sequence 4.2 (SEND DATA, NG-RAN, bearer type '0C', Store mode)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 4.2.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL4.2.1	
7	ME → USER	The ME may display channel opening information.	
8	ME → NG-SS	PDU SESSION ESTABLISHMENT REQUEST within UL NAS TRANSPORT is sent to the network.	DNN=TestGp.rs, S-NSSAI='01 01 01 02', SSC mode=1.
9	NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
10	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 4.2.1	[Command performed successfully]
11	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA4.2.1	
12	ME → UICC	FETCH	
13	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 4.2.1	Send 500 Bytes of data (200 + 200 + 100)
14	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 4.2.1	[Command performed successfully]
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 4.2.2	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND DATA (store mode) 4.2.2	[200 Bytes]
18	ME → UICC	TERMINAL RESPONSE: SEND DATA (store mode) 4.2.2	[Command performed successfully]
19	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 4.2.3	
20	ME → UICC	FETCH	
21	UICC → ME	PROACTIVE COMMAND: SEND DATA (Immediate mode) 4.2.3	[100 Bytes]
22	ME → NG-SS	Transfer of 500 Bytes of data to the NG-SS through channel 1	

23	ME → UICC	TERMINAL RESPONSE: SEND DATA (Immediate mode) 4.2.3	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 4.2.1

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.2.1 in expected sequence 8.2

TERMINAL RESPONSE: OPEN CHANNEL 4.2.1

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.2.1 in expected sequence 8.2

PROACTIVE COMMAND: SEND DATA 4.2.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data
Channel Data: 00 01 .. C7 (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	00	01	..	C7					

TERMINAL RESPONSE: SEND DATA 4.2.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

PROACTIVE COMMAND: SEND DATA 4.2.2

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Store mode
Device identities
Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: C8 C9 .. FF 00 01 .. 8F (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	C8	C9	..	FF	00	01	..	8F	

TERMINAL RESPONSE: SEND DATA 4.2.2

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

PROACTIVE COMMAND: SEND DATA 4.2.3

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Immediate mode

Device identities

Source device: UICC
Destination device: Channel 1

Channel Data

Channel Data: 90 91 .. F3 (100 Bytes of data)

Coding:

BER-TLV:	D0	6F	81	03	01	43	01	82	02	81	21	B6
	64	90	91	..	F3							

TERMINAL RESPONSE: SEND DATA 4.2.3

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Immediate mode

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

Expected sequence 4.3 (SEND DATA, NG-RAN, RECEIVE DATA suspended during the process of SEND DATA)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	[see initial conditions]
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 4.3.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 4.3.1	
7	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 4.3.1	
8	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 4.3.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 4.3.1	
11	ME → USER	The ME may display channel opening information.	
12	ME → NG-SS	The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network.	
13	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 4.3.1	[Command performed successfully]
14	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 4.3.1	
15	ME → UICC	FETCH	
16	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 4.3.1	
17	ME → NG-SS	Transfer of 8 Bytes of data to the NG-SS through channel 1	[To retrieve ME's port number]
18	NG-SS → ME	Transfer of 200 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 17	
19	ME	The ME receives a RECEIVE DATA command, but it shall not send the command to the UICC	[RECEIVE DATA related command should be suspended until the TERMINAL RESPONSE for SEND DATA command finished]
20	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 4.3.1	[Command performed successfully]
21	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Data available 4.3.1	(200 Bytes of data in the ME buffer)
22	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 4.3.1	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 4.3.1	200 Bytes
25	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 4.3.1	

PROACTIVE COMMAND: SET UP EVENT LIST 4.3.1

Same as 27.22.4.29.1.4.2 PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

TERMINAL RESPONSE: SET UP EVENT LIST 4.3.1

Same as 27.22.4.29.1.4.2 TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

PROACTIVE COMMAND: OPEN CHANNEL 4.3.1

Same as 27.22.4.27.6.4.2 PROACTIVE COMMAND: OPEN CHANNEL 6.5.1 in sequence 6.5

TERMINAL RESPONSE: OPEN CHANNEL 4.3.1

Same as 27.22.4.27.6.4.2 TERMINAL RESPONSE: SET UP EVENT LIST 6.5.1 in sequence 6.5

PROACTIVE COMMAND: SEND DATA 4.3.1

Same as 27.22.4.29.1.4.2 PROACTIVE COMMAND: SEND DATA 1.3.1 in expected sequence 1.3

TERMINAL RESPONSE: SEND DATA 4.3.1

Same as 27.22.4.29.1.4.2 TERMINAL RESPONSE: SEND DATA 1.3.1 in expected sequence 1.3

ENVELOPE: EVENT DOWNLOAD - Data available 4.3.1

Same as 27.22.4.29.1.4.2 ENVELOPE: EVENT DOWNLOAD - Data available 1.7.1 in expected sequence 1.7

PROACTIVE COMMAND: RECEIVE DATA 4.3.1

Same as 27.22.4.29.1.4.2 PROACTIVE COMMAND: RECEIVE DATA 1.7.1 in expected sequence 1.7

TERMINAL RESPONSE: RECEIVE DATA 4.3.1

Same as 27.22.4.29.1.4.2 TERMINAL RESPONSE: RECEIVE DATA 1.7.1 in expected sequence 1.7

27.22.4.30.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.1 to 4.3.

27.22.4.31 GET CHANNEL STATUS

27.22.4.31.1 Definition and applicability

See clause 3.2.2.

27.22.4.31.2 Conformance requirements

The ME shall support the class "e" commands. For sequences 1.4 to 1.5 the support of E-UTRAN, for sequence 1.6 the support of NG-RAN as defined in:

- TS 31.111 [15].

is required in addition.

27.22.4.31.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC after the ME receives the GET STATUS proactive command. The TERMINAL RESPONSE sent back to the UICC is function of the ME and the network capabilities against asked parameters by the UICC.

27.22.4.31.4 Method of test

27.22.4.31.4.1 Initial conditions

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If programmable USIM with test applet is used (as defined in clause 27.0), UICC shall register for Data Available and Channel Status Event using the proactive command SET UP EVENT LIST with Data Available and Channel Status event in the event list (ref to ETSI TS 102.241 cl 6.7.1.2).

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

For sequences 1.1 to 1.3:

The ME is connected to the USIM Simulator and the USS. The following Bearer Parameters used are those defined in the default Test PDP context3, for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in clause 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in clause 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in clause 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in clause 27.22.4.27.2.4.1.

For sequences 1.4 to 1.5

The ME is connected to the USIM Simulator and the E-USS/NB-SS. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The default E-UTRAN/EPC UICC, the default E-UTRAN parameters and the following parameters are used:

Network access name: TestGp.rs
User login: UserLog
User password: UserPwd

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in clause 27.22.4.27.6.4.1

Data destination address: Same Data Destination Address as defined in clause 27.22.4.27.6.4.1.

For sequence 1.6

The ME is connected to the USIM Simulator and the NG-SS. The default NG-RAN UICC, the default NG-RAN parameters, the URSP rules stored in the ME and the Allowed S-NSSAI list as defined in clause 27.22.4.27.8.4.1 is configured in NG-SS are used.

27.22.4.31.4.2 Procedure

Expected sequence 1.1 (GET STATUS, without any BIP channel opened)

For that test, no channel has been opened.

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: GET CHANNEL STATUS 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: GET STATUS 1.1.1	
4	ME → UICC	TERMINAL RESPONSE GET STATUS 1.1.1 A Or TERMINAL RESPONSE: GET STATUS 1.1.1B Or TERMINAL RESPONSE: GET STATUS 1.1.1C	[Command performed successfully]

PROACTIVE COMMAND: GET STATUS 1.1.1

Logically:

Command details
Command number: 1
Command type: GET STATUS
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	44	00	82	02	81	82

TERMINAL RESPONSE: GET STATUS 1.1.1A

Logically:

Command details
Command number: 1
Command type: GET STATUS
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00

TERMINAL RESPONSE: GET STATUS 1.1.1B

Logically:

Command details
Command number: 1

Command type: GET STATUS
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status
Channel status: No Channel available, link not established or PDP context not activated

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
	B8	02	00	00								

TERMINAL RESPONSE: GET STATUS 1.1.1C

Logically:

Command details
Command number: 1
Command type: GET STATUS
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status
Channel 1 status: Channel identifier 1, Link not established or PDP context not activated

Channel 2 status: Channel identifier 2, Link not established or PDP context not activated

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Channel n status: Channel identifier n, Link not established or PDP context not activated

The number of channel status data objects shall be same as the number of channels(n) supported by the ME

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
	Note1											

Note1: The Terminal Response shall contain as many channel status TLVs as channels are supported by the ME. Each channel status TLV coding shall indicate the corresponding channel identifier and shall state "Link not established or PDP context not activated". As an example, if the mobile supports two channels then the corresponding channel status data objects coding would be: 'B8 02 01 00 B8 02 02 00'.

Expected sequence 1.2 (GET STATUS, with a BIP channel currently opened)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]

5	USS → ME	PDP context activation accept	
6	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
7	UICC → ME	PROACTIVE COMMAND PENDING: GET CHANNEL STATUS 1.2.1	
8	ME → UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: GET STATUS 1.2.1	
10	ME → UICC	TERMINAL RESPONSE GET STATUS 1.2.1 A Or TERMINAL RESPONSE: GET STATUS 1.2.1B	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1000
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV												
	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	03	04	1F	02	39	02	03	E8
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details
Command number: 1

Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	03	E8							

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	03	E8							

PROACTIVE COMMAND: GET STATUS 1.2.1

Logically:

Command details
Command number: 1
Command type: GET STATUS
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	44	00	82	02	81	82

TERMINAL RESPONSE: GET STATUS 1.2.1A

Logically:

Command details
Command number: 1
Command type: GET STATUS
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status
Channel status: Channel 1 open, link established or PDP context activated

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
	B8	02	81	00								

TERMINAL RESPONSE: GET STATUS 1.2.1B

Logically:

Command details
Command number: 1
Command type: GET STATUS
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status
Channel 1 status: Channel identifier 1 open, Link established or PDP context activated

Channel 2 status: Channel identifier 2, Link not established or PDP context not activated

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Channel n status: Channel identifier n, Link not established or PDP context not activated

The number of channel status data objects shall be same as the number of channels(n) supported by the ME

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00

	Note1											

Note1: The Terminal Response shall contain as many channel status TLVs as channels are supported by the ME. The channel status TLV coding of the opened channel shall state "Link established or PDP context activated". Each other channel status TLV coding shall indicate the corresponding channel identifier and shall state "Link is not established or PDP context not activated". As an example, if the mobile supports two channels and channel 1 is opened then the corresponding channel status data objects coding would be: 'B8 02 81 00 B8 02 02 00'.

Expected sequence 1.3 (GET STATUS, after a link dropped)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[Command performed successfully]
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
8	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
9	USS → ME	PDP context activation accept	
10	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
11	USS → ME	DROP LINK	
12	ME → UICC	ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.3.1	[Link dropped]
13	UICC → ME	PROACTIVE COMMAND PENDING: GET STATUS 1.3.1	
14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: GET STATUS 1.3.1	
16	ME → UICC	TERMINAL RESPONSE: GET STATUS 1.3.1A Or TERMINAL RESPONSE: GET STATUS 1.3.1B Or TERMINAL RESPONSE: GET STATUS 1.3.1C Or TERMINAL RESPONSE: GET STATUS 1.3.1D Or TERMINAL RESPONSE: GET STATUS 1.3.1E	[Command performed successfully]

TERMINAL RESPONSE: GET STATUS 1.3.1A

Same as TERMINAL RESPONSE: GET STATUS 1.1.1A

TERMINAL RESPONSE: GET STATUS 1.3.1B

Same as TERMINAL RESPONSE: GET STATUS 1.1.1B

TERMINAL RESPONSE: GET STATUS 1.3.1C

Same as TERMINAL RESPONSE: GET STATUS 1.1.1C

TERMINAL RESPONSE: GET STATUS 1.3.1D

Logically:

Command details
Command number: 1
Command type: GET STATUS
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status
Channel status: Channel 1, link dropped

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
	B8	02	01	05								

TERMINAL RESPONSE: GET STATUS 1.3.1E

Logically:

Command details
Command number: 1
Command type: GET STATUS
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status
Channel 1 status: Channel identifier 1, link dropped

Channel 2 status: Channel identifier 2, Link not established or PDP context not activated

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Channel n status: Channel identifier n, Link not established or PDP context not activated

The number of channel status data objects shall be same as the number of channels(n) supported by the ME

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
	B8	02	01	05	Note1							

Note1: The Terminal Response shall contain as many channel status TLVs as channels are supported by the ME. Each channel status TLV coding except that one for which the link was dropped by the SS shall indicate the corresponding channel identifier and shall state "Link not established or PDP context not activated". As an example, if the mobile supports two channels then the corresponding channel status data objects coding would be: 'B8 02 01 05 B8 02 02 00'.

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: Channel Status

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82
	99	01	0A								

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.3.1

Logically:

Event list
Event list: Channel Status
Device identities
Source device: ME
Destination device: UICC
Channel status
Channel status: Channel 1, link dropped

Coding:

BER-TLV:	D6	0B	99	01	0A	82	02	82	81	B8	02	01
	05											

PROACTIVE COMMAND: GET STATUS 1.3.1

Logically:

Command details
Command number: 1
Command type: GET STATUS
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	44	00	82	02	81	82

Expected sequence 1.4 (GET STATUS, EPS bearer with APN different from default APN)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.3.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.3.1	
4	ME → USER	The terminal shall display the alpha identifier "Open Channel for UICC?" during the confirmation phase	[IF NOT A.1/84 (No display) THEN the terminal shall ignore the alpha identifier]
5	USER → ME	The user confirms	[IF NOT A.1/85 (No keypad) THEN the terminal may open the channel without explicit confirmation by the user]
6	ME → E-USS/NB-SS	PDN CONNECTIVITY REQUEST	[The PDN CONNECTIVITY REQUEST shall contain the APN "Test12.rs"]
7	E-USS/NB-SS → ME	ACTIVATE EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
8	ME → E-USS/NB-SS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
9	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A OR TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B	[Command performed successfully OR Command performed with modifications]
10	UICC → ME	PROACTIVE COMMAND PENDING: GET CHANNEL STATUS 1.1.1	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: GET STATUS 1.1.1	
13	ME → UICC	TERMINAL RESPONSE GET STATUS 1.4.1 A Or TERMINAL RESPONSE: GET STATUS 1.4.1B	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 6.3.1

Same as PROACTIVE COMMAND: OPEN CHANNEL 6.3.1 in clause 27.22.4.27.6.4.

TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A

Same as TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A in clause 27.22.4.27.6.4.

TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B

Same as TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B in clause 27.22.4.27.6.4.

PROACTIVE COMMAND: GET STATUS 1.1.1

Same as PROACTIVE COMMAND: GET STATUS from sequence 1.1

TERMINAL RESPONSE: GET STATUS 1.4.1A

Logically:

Command details

Command number: 1
Command type: GET STATUS
Command qualifier: RFU

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Channel status

Channel status: Channel 1 open, link established or PDP context activated

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
	B8	02	81	00								

TERMINAL RESPONSE: GET STATUS 1.4.1B

Logically:

Command details

Command number: 1
Command type: GET STATUS
Command qualifier: RFU

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Channel status

Channel 1 status: Channel identifier 1 open, Link established or PDP context activated

Channel 2 status: Channel identifier 2, Link not established or PDP context not activated

:

:

Channel n status: Channel identifier n, Link not established or PDP context not activated

The number of channel status data objects shall be same as the number of channels(n) supported by the ME

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
	Note											

Note: The Terminal Response shall contain as many channel status TLVs as channels are supported by the ME. The channel status TLV coding of the opened channel shall state "Link established or PDP context activated". Not more than one opened channel shall be indicated. Each other channel status TLV coding shall indicate the corresponding channel identifier and shall state "Link is not established or PDP context not activated". As an example, if the mobile supports two channels and channel 1 is opened then the corresponding channel status data objects coding would be: 'B8 02 81 00 B8 02 02 00'.

Expected sequence 1.5 (GET STATUS, EPS bearer with APN different from default APN, after a link dropped)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
2	ME → UICC	FETCH	

3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[Command performed successfully]
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.3.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 6.3.1	
8	ME → USER	The terminal shall display the alpha identifier "Open Channel for UICC?" during the confirmation phase	[IF NOT A.1/84 (No display) THEN the terminal shall ignore the alpha identifier]
9	USER → ME	The user confirms	[IF NOT A.1/85 (No keypad) THEN the terminal may open the channel without explicit confirmation by the user]
10	ME → E-USS/NB-SS	PDN CONNECTIVITY REQUEST	[The PDN CONNECTIVITY REQUEST shall contain the APN "Test12.rs"]
11	E-USS/NB-SS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
12	ME → E-USS/NB-SS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
13	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A OR TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B	[Command performed successfully OR Command performed with modifications]
14	E-USS/NB-SS → ME	DEACTIVATE EPS BEARER CONTEXT REQUEST	[Cause: #38 network failure]
15	ME → E-USS/NB-SS	DEACTIVATE EPS BEARER CONTEXT ACCEPT	
16	ME → UICC	ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.3.1	[Link dropped]
17	UICC → ME	PROACTIVE COMMAND PENDING: GET STATUS 1.3.1	
18	ME → UICC	FETCH	
19	UICC → ME	PROACTIVE COMMAND: GET STATUS 1.3.1	
20	ME → UICC	TERMINAL RESPONSE: GET STATUS 1.3.1A Or TERMINAL RESPONSE: GET STATUS 1.3.1B Or TERMINAL RESPONSE: GET STATUS 1.3.1C Or TERMINAL RESPONSE: GET STATUS 1.3.1D Or TERMINAL RESPONSE: GET STATUS 1.3.1E	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 6.3.1

Same as PROACTIVE COMMAND: OPEN CHANNEL 6.3.1 in clause 27.22.4.27.6.4.

TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A

Same as TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A in clause 27.22.4.27.6.4.

TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B

Same as TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B in clause 27.22.4.27.6.4.

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: Channel Status

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82
	99	01	0A								

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.3.1

Logically:

Event list
Event list: Channel Status
Device identities
Source device: ME
Destination device: UICC
Channel status
Channel status: Channel 1, link dropped

Coding:

BER-TLV:	D6	0B	99	01	0A	82	02	82	81	B8	02	01
	05											

PROACTIVE COMMAND: GET STATUS 1.3.1

Logically:

Command details
Command number: 1
Command type: GET STATUS
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	44	00	82	02	81	82

TERMINAL RESPONSE: GET STATUS 1.3.1A

Same as TERMINAL RESPONSE: GET STATUS 1.1.1A

TERMINAL RESPONSE: GET STATUS 1.3.1B

Same as TERMINAL RESPONSE: GET STATUS 1.1.1B

TERMINAL RESPONSE: GET STATUS 1.3.1C

Same as TERMINAL RESPONSE: GET STATUS 1.1.1C

TERMINAL RESPONSE: GET STATUS 1.3.1D

Logically:

Command details
Command number: 1
Command type: GET STATUS
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status
Channel status: Channel 1, link dropped

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
	B8	02	01	05								

TERMINAL RESPONSE: GET STATUS 1.3.1E

Logically:

Command details
Command number: 1
Command type: GET STATUS
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status
Channel 1 status: Channel identifier 1, link dropped

Channel 2 status: Channel identifier 2, Link not established or PDP context not activated

:

:

Channel n status: Channel identifier n, Link not established or PDP context not activated

The number of channel status data objects shall be same as the number of channels(n) supported by the ME

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
	B8	02	01	05	Note							

Note: The Terminal Response shall contain as many channel status TLVs as channels are supported by the ME. Each channel status TLV coding except that one for which the link was dropped by the SS shall indicate the corresponding channel identifier and shall state "Link not established or PDP context not activated". As an example, if the mobile supports two channels then the corresponding channel status data objects coding would be: 'B8 02 01 05 B8 02 02 00'.

Expected sequence 1.6 (GET STATUS, after a link dropped during receiving data)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required. Internet PDU session using DNN "internet" is configured in the terminal.	**[see initial conditions]**
2	ME → NG-SS	The ME successfully registers the NG-RAN cell.	
3	ME → NG-SS	An Internet PDU Session is established successfully.	
4	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.6.1	
5	ME → UICC	FETCH	
6	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.6.1	
7	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.6.1	[Command performed successfully] If programmable USIM with test applet is used (as defined in clause 27.0), the TERMINAL RESPONSE cannot be verified and that the Event has been registered in the device is implicitly verified at step 21 (ENVELOPE: EVENT DOWNLOAD - Data available 1.6.1) and step 39 (ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.6.1).
8	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.6.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.6.1	
11	ME → USER	The ME may display channel opening information.	
12	ME → NG-SS	PDU SESSION ESTABLISHMENT REQUEST within UL NAS TRANSPORT is sent to the network.	DNN=TestGp.rs, S-NSSAI='01 01 01 02', SSC mode=1.
13	NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
14	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.6.1	[Command performed successfully]
15	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA (immediate) 1.6.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.6.1	
18	ME → NG-SS	Transfer of 8 Bytes of data to the NG-SS through channel 1	[To retrieve ME's port number]

19	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.6.1	[Command performed successfully]
20	NG-SS → ME	Transfer of 1000 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 18	
21	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data available 1.6.1	(1000 Bytes of data in the ME buffer)
22	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.6.1	
23	ME → UICC	FETCH	
24	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.6.1	200 Bytes
25	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.6.1	
26	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.6.2	
27	ME → UICC	FETCH	
28	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.6.2	200 Bytes
29	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.6.2	
30	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.6.3	
31	ME → UICC	FETCH	
32	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.6.3	200 Bytes
33	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.6.3	
34	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.6.4	
35	ME → UICC	FETCH	
36	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.6.4	200 Bytes
37	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.6.4	
38	NG-SS → ME	DROP LINK	(Close the TCP connection or release PDU session or release the RRC)
39	ME → UICC	ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.6.1	[Link dropped]
40	UICC → ME	PROACTIVE COMMAND PENDING: GET STATUS 1.6.1	
41	ME → UICC	FETCH	
42	UICC → ME	PROACTIVE COMMAND: GET STATUS 1.6.1	
43	ME → UICC	TERMINAL RESPONSE: GET STATUS 1.6.1A Or TERMINAL RESPONSE: GET STATUS 1.6.1B Or TERMINAL RESPONSE: GET STATUS 1.6.1C Or TERMINAL RESPONSE: GET STATUS 1.6.1D Or TERMINAL RESPONSE: GET STATUS 1.6.1E	[Command performed successfully]

PROACTIVE COMMAND: SET UP EVENT LIST 1.6.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: Data available
Event 2: Channel Status

Coding:

BER-TLV:	D0	0D	81	03	01	05	00	82	02	81	82
	99	02	09	0A							

TERMINAL RESPONSE: SET UP EVENT LIST 1.6.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

PROACTIVE COMMAND: OPEN CHANNEL 1.6.1

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.2.1 in expected sequence 8.2

TERMINAL RESPONSE: OPEN CHANNEL 1.6.1

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.2.1 in expected sequence 8.2

PROACTIVE COMMAND: SEND DATA 1.6.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data
Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	21	B6
	08	00	01	02	03	04	05	06	07			

TERMINAL RESPONSE: SEND DATA 1.6.1

Logically:

Command details
Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

ENVELOPE: EVENT DOWNLOAD - Data available 1.6.1

Logically:

Event list
Event: Data available
Device identities
Source device: ME
Destination device: UICC
Channel status
Channel status: Channel 1 open, link established
Channel Data Length
Channel data length: FF (more than 255 bytes are available)

Coding:

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	FF								

PROACTIVE COMMAND: RECEIVE DATA 1.6.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	01	42	00	82	02	81	21	B7
	01	C8										

PROACTIVE COMMAND: RECEIVE DATA 1.6.2

Logically:

Command details
Command number: 2
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	02	42	00	82	02	81	21	B7
	01	C8										

PROACTIVE COMMAND: RECEIVE DATA 1.6.3

Logically:

Command details
Command number: 3
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	03	42	00	82	02	81	21	B7
	01	C8										

PROACTIVE COMMAND: RECEIVE DATA 1.6.4

Logically:

Command details
Command number: 4
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	04	42	00	82	02	81	21	B7
	01	C8										

TERMINAL RESPONSE: RECEIVE DATA 1.6.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	FF	

TERMINAL RESPONSE: RECEIVE DATA 1.6.2

Logically:

Command details
Command number: 2
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	02	42	00	82	02	82	81	83	01	00
	B6	81	C8	C8	C9	CA	..	FF	00	01	02	..
	8F	B7	01	FF								

TERMINAL RESPONSE: RECEIVE DATA 1.6.3

Logically:

Command details
Command number: 3
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 90 91 .. FF 00 01 – 57 (200 Bytes of data)
Channel data length: FF

Coding:

BER-TLV:	81	03	03	42	00	82	02	82	81	83	01	00
	B6	81	C8	90	91	92	..	FF	00	01	02	..
	57	B7	01	FF								

TERMINAL RESPONSE: RECEIVE DATA 1.6.4

Logically:

Command details
Command number: 4
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)
Channel data length: C8

Coding:

BER-TLV:	81	03	04	42	00	82	02	82	81	83	01	00
	B6	81	C8	58	59	5A	..	FF	00	01	02	..
	1F	B7	01	C8								

ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.6.1

Same as ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.3.1 in expected sequence 1.3

PROACTIVE COMMAND: GET STATUS 1.6.1

Same as PROACTIVE COMMAND: GET STATUS 1.3.1 in expected sequence 1.3

TERMINAL RESPONSE: GET STATUS 1.6.1A

Same as TERMINAL RESPONSE: GET STATUS 1.3.1A in expected sequence 1.3

TERMINAL RESPONSE: GET STATUS 1.6.1B

Same as TERMINAL RESPONSE: GET STATUS 1.3.1B in expected sequence 1.3

TERMINAL RESPONSE: GET STATUS 1.6.1C in expected sequence 1.3

Same as TERMINAL RESPONSE: GET STATUS 1.3.1C in expected sequence 1.3

TERMINAL RESPONSE: GET STATUS 1.6.1D

Same as TERMINAL RESPONSE: GET STATUS 1.6.1D in expected sequence 1.3

TERMINAL RESPONSE: GET STATUS 1.6.1E

Same as TERMINAL RESPONSE: GET STATUS 1.6.1E in expected sequence 1.3

27.22.4.31.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.6.

27.22.5 Data Download to UICC

27.22.5.1 SMS-PP Data Download

27.22.5.1.1 Definition and applicability

See clause 3.2.2.

27.22.5.1.2 Conformance requirement

The ME shall support the Proactive UICC: SMS-PP Data Download facility as defined in the following technical specifications:

- TS 31.111 [15] clause 5, clause 7.1, clause 8.1, clause 8.7, clause 8.13 and clause 11.
- TS 31.115 [28] clause 4.
- TS 23.038 [7] clause 4..

27.22.5.1.3 Test purpose

To verify that the ME transparently passes the "data download via SMS Point-to-point" messages to the UICC.

To verify that the ME returns the RP-ACK message back to the USS, if the UICC responds with '90 00', '91 XX', '62 XX' or '63 XX'.

To verify that the ME with an SMS-PP download feature implementation prior to Rel-11 returns the RP-ERROR message back to the system Simulator, if the UICC responds with '62 XX' or '63 XX' (while the ME with the Rel-11 or later implemention of this feature returns an RP-ACK in this case).

To verify that the ME returns the response data from the UICC back to the USS in the TP-User-Data element of the RP-ACK message, if the UICC returns response data'.

27.22.5.1.4 Method of Test

27.22.5.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and connected to the USS.

The "data download via SMS-PP" service is available in the USIM Service Table.

27.22.5.1.4.2 Procedure

Expected Sequence 1.1 (Void)

Expected Sequence 1.2 (Void)

Expected Sequence 1.3 (Void)

Expected Sequence 1.4 (void)

Expected Sequence 1.5 (void)

Expected Sequence 1.6 (Void)

Expected Sequence 1.7 (Void)

Expected Sequence 1.8 (Void)

Expected Sequence 1.9 (SMS-PP Data Download over CS/PS, UTRAN/GERAN)

In case A.1/156 is supported perform the "CS related procedure 1" and continue with "Generic Test Procedure 1 (SMS-PP Data Download)" as defined in this clause 27.22.5.3.4.2 as "Expected Sequence 1.9" with the following parameters:

- Used Network Simulator (NWS): USS (UMTS System Simulator or System Simulator)
- CS domain is used to send and receive short messages
- ME supports UTRAN or GERAN

CS related procedure:

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profle Download and USIM initialisation
2	ME → NWS	ME performs CS/PS or CS registration.	
3		CONTINUE WITH STEP 4 Generic Test Procedure 1 (SMS-PP Data Download) in clause 27.22.5.3.4.2	

In case A.1/156 is not supported but A.1/158 is supported perform the "PS related procedure" and continue with "Generic Test Procedure 1 (SMS-PP Data Download)" as defined in this clause 27.22.5.3.4.2 as "Expected Sequence 1.9" with the following parameters:

- Used Network Simulator (NWS): USS (UMTS System Simulator or System Simulator)
- PS domain is used to send and receive short messages
- ME supports UTRAN or GERAN

PS related procedure:

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profle Download and USIM initialisation
2	ME → NWS	ME performs CS/PS or PS registration.	
3		CONTINUE WITH STEP 4 Generic Test Procedure 1 (SMS-PP Data Download) in clause 27.22.5.3.4.2	

27.22.5.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.9.

27.22.5.2 Cell Broadcast Data Download

27.22.5.2.1 Definition and applicability

See clause 3.2.2.

27.22.5.2.2 Conformance requirement

The ME shall support the Proactive UICC: Cell Broadcast Data Download facility as defined in:

- TS 31.111 [15] clause 5, clause 7.1.2, clause 8.5, clause 8.7 and clause 11.
- TS 31.115 [28] clause 5.
- TS 23.038 [7] clause 5.

27.22.5.2.3 Test purpose

To verify that the ME transparently passes the "data download via Cell Broadcast" messages to the UICC, which contain a message identifier found in EF_{CBMID}.

27.22.5.2.4 Method of Test

27.22.5.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.The elementary files are coded as Toolkit default with the following exeception:

EF PL shall contain an entry indicating "English".

A USS setting up only a GERAN or PCS 1900 cell shall be used for Expected sequence 1.1, 1.7 and 1.3.

A USS setting up only a UTRAN cell shall be used on and expected sequence 1.4, 1.5 and 1.6.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.5.2.4.2 Procedure

Expected Sequence 1.1 (Cell Broadcast Data Download (GSM), ENVELOPE(CELL BROADCAST DOWNLOAD), ME does not display message)

Step	Direction	MESSAGE / Action	Comments
1	USS → ME	CELL BROADCAST 1.1	Message identifier '10 01'
2	ME → UICC	ENVELOPE (CELL BROADCAST DOWNLOAD) 1.1	
3	UICC → ME	SW1, SW2 '90 00'	

Cell Broadcast Message 1.1

Logically:

Message Content
Serial Number
Geographical scope: Cell wide, normal display mode
Message code: 1
Update number: 1
Message Identifier: "1001"

Data coding Scheme
Message Coding: English, language using the GSM 7 bit default alphabet
Page Parameter
Total number of pages: 1
Page number: 1
Content of message: "Cell Broadcast"

Coding:

Coding	C0	11	10	01	01	11	C3	32	9B	0D	12	CA
	DF	61	F2	38	3C	A7	83	40	20	10	08	04
	02	81	40	20	10	08	04	02	81	40	20	10
	08	04	02	81	40	20	10	08	04	02	81	40
	20	10	08	04	02	81	40	20	10	08	04	02
	81	40	20	10	08	04	02	81	40	20	10	08
	04	02	81	40	20	10	08	04	02	81	40	20
	10	08	04	02								

ENVELOPE: CELL BROADCAST DOWNLOAD 1.1

Logically:

Cell Broadcast Download
Device identities
Source device: Network
Destination device: UICC
Cell Broadcast page
Serial Number
Geographical scope: Cell wide, normal display mode
Message code: 1
Update number: 1
Message Identifier: "1001"
Data coding Scheme
Message Coding: English, language using the GSM 7 bit default alphabet
Page Parameter
Number of pages: 1
Page number: 1
Content of message: "Cell Broadcast"

Coding:

BER-TLV:	D2	5E	82	02	83	81	8C	58	C0	11	10	01
	01	11	C3	32	9B	0D	12	CA	DF	61	F2	38
	3C	A7	83	40	20	10	08	04	02	81	40	20
	10	08	04	02	81	40	20	10	08	04	02	81
	40	20	10	08	04	02	81	40	20	10	08	04
	02	81	40	20	10	08	04	02	81	40	20	10
	08	04	02	81	40	20	10	08	04	02	81	40
	20	10	08	04	02	81	40	20	10	08	04	02

Expected Sequence 1.2 (void)

Expected Sequence 1.3 (Cell Broadcast (GSM), ME may display the message)

Step	Direction	MESSAGE / Action	Comments
1	USS → ME	CELL BROADCAST 1.2	Message identifier '03 E7'
2a	ME → USER	ME may display the message	
2b	ME → UICC	ME shall not download the CB message to the UICC using ENVELOPE (CELL BROADCAST DOWNLOAD)	

3	USER → ME	The user shall use a MMI dependent procedure to initiate the display of the received CB message	[only if message has not been displayed in step 2a]
4	ME → USER	ME displays the message	[only if message has not been displayed in step 2a]

Cell Broadcast Message 1.2

Logically:

Message Content
Serial Number
Geographical scope: Cell wide, normal display mode
Message code: 1
Update number: 1
Message Identifier: "03E7"
Data coding Scheme
Message Coding: English, language using the GSM 7 bit default alphabet
Page Parameter
Total number of pages: 1
Page number: 1
Content of message: "Cell Broadcast".

Coding:

Coding	C0	11	03	E7	01	11	C3	32	9B	0D	12	CA
	DF	61	F2	38	3C	A7	83	40	20	10	08	04
	02	81	40	20	10	08	04	02	81	40	20	10
	08	04	02	81	40	20	10	08	04	02	81	40
	20	10	08	04	02	81	40	20	10	08	04	02
	81	40	20	10	08	04	02	81	40	20	10	08
	04	02	81	40	20	10	08	04	02	81	40	20
	10	08	04	02								

Expected Sequence 1.4 (Cell Broadcast (UMTS), ENVELOPE (CELL BROADCAST DOWNLOAD), ME does not display message)

TBD

Expected Sequence 1.5 (Cell Broadcast (UMTS), ENVELOPE (CELL BROADCAST DOWNLOAD), FETCH, MORE TIME, ME does not display message)

TBD

Expected Sequence 1.6 (Cell Broadcast (UMTS), ME displays message)

TBD

Expected Sequence 1.7 (Cell Broadcast (GSM),, ENVELOPE (CELL BROADCAST DATA DOWNLOAD), FETCH, MORE TIME, ME does not display message, User Data Header Payload)

Step	Direction	MESSAGE / Action	Comments
1	USS → ME	CELL BROADCAST Message 1.7	Message identifier '10 01'
2	ME → UICC	ENVELOPE (CELL BROADCAST DOWNLOAD) 1.7	
3	UICC → ME	PROACTIVE COMMAND PENDING: MORE TIME 1.2	SW1/SW2 '91 0B'
4	ME → UICC	FETCH 1.2	
5	UICC → ME	PROACTIVE COMMAND:MORE TIME 1.2	

6	ME → UICC	TERMINAL RESPONSE: MORE TIME 1.2	
7	UICC → ME	SW1/SW2 '90 00'	UICC session ended

CELL BROADCAST Message 1.7

Logically:

Message Content
Serial Number
Geographical scope: Cell wide, normal display mode
Message code: 1
Update number: 1
Message Identifier: "1001"
Data coding Scheme
Message Coding: 8 bit data
Message class: Class 2 (U)SIM specific message
Page Parameter
Total number of pages: 1
Page number: 1
Secured User Header (Content of message)
TP-UDHL 2
IEI (U)SIM Toolkit Security Headers
IEIL 0
Command Packet Length: 77
Command Header Identifier: 0
Command Header Length: 13
Security Parameter Indicator: No RC, CC or DS and No PoR reply to the Sending Entity
Ciphering Key Identifier: Algorithm known implicitly by both entities
Key Identifier: Algorithm known implicitly by both entities
Toolkit Application Reference: Proprietary Toolkit Application
Counter: 1
Padding Counter: 0 (no padding is necessary)
Secure Data: 62 octets set to 'DC' (dummy data)
Coding:

Coding	C0	11	10	01	96	11	02	70	00	00	4D	00
	0D	00	00	00	00	BF	FF	00	00	00	00	00
	01	00	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC
	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC
	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC
	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC
	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC
	DC	DC	DC	DC								

ENVELOPE: CELL BROADCAST DOWNLOAD 1.7

Logically:

Cell Broadcast Download
Device identities
Source device: Network
Destination device: UICC
Cell Broadcast page
Serial Number
Geographical scope: Cell wide, normal display mode
Message code: 1
Update number: 1
Message Identifier: "1001"
Data coding Scheme
Message Coding: 8 bit data (Message with User Data Header (UDH) structure)

Message class: Class 2 (U)SIM specific message
Page Parameter
Number of pages: 1
Page number: 1

Secured User Header (Content of message)

TP-UDHL 2
IEI (U)SIM Toolkit Security Headers
IEIL 0
Command Packet Length: 77
Command Header Identifier: 0
Command Header Length: 13
Security Parameter Indicator: No RC, CC or DS and No PoR reply to the Sending Entity
Ciphering Key Identifier: Algorithm known implicitly by both entities
Key Identifier: Algorithm known implicitly by both entities
Toolkit Application Reference: Proprietary Toolkit Application
Counter: 1
Padding Counter: 0 (no padding is necessary)
Secure Data: 62 octets set to 'DC' (dummy data)

Coding:

BER-TLV:	D2	5E	82	02	83	81	8C	58	C0	11	10	01
	96	11	02	70	00	00	4D	00	0D	00	00	00
	00	BF	FF	00	00	00	00	00	01	00	DC	DC
	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC
	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC
	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC
	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC
	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC

PROACTIVE COMMAND: MORE TIME 1.2

Logically:

Command details

Command number: 1
Command type: MORE TIME
Command qualifier: "00"

Device identities

Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	02	00	82	02	81	82

TERMINAL RESPONSE: MORE TIME 1.2

Logically:

Command details

Command number: 1
Command type: MORE TIME
Command qualifier: "00"

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	02	00	82	02	82	81	83	01	00

27.22.5.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.7.

27.22.5.3 SMS-PP Data Download over IMS

27.22.5.3.1 Definition and applicability

See clause 3.2.2.

For IMS: That the UE correctly implemented the role of an SMS-over-IP receiver is tested in clause 18.2 of TS 34.229-1 [36].

27.22.5.3.2 Conformance requirement

The ME shall support the Proactive UICC: SMS-PP Data Download facility for SMS over IP as defined in the following technical specifications:

- TS 31.111 [15] clause 5, clause 7.1, clause 8.1, clause 8.7, clause 8.13 and clause 11.
- TS 31.115 [28] clause 4.
- TS 23.038 [7] clause 4.
- TS 34.229 [36], Annexes C.2, C.17 and C.18.
- TS 24.341 [37], clause 5.3.2.4.

27.22.5.3.3 Test purpose

To verify that the ME transparently passes the "data download via SMS Point-to-point" messages which have been received over IMS to the UICC.

To verify that the ME returns the RP-ACK message back to the E-USS/USS, if the UICC responds with '90 00', '91 XX', '62 XX' or '63 XX'. In case of IMS the RP-ACK message is contained in the SIP MESSAGE for the SM delivery report.

To verify that the ME with an SMS-PP download feature implementation prior to Rel-11 returns the RP-ERROR message in the SIP MESSAGE for the SM delivery report to the E-USS/USS, if the UICC responds with '62 XX' or '63 XX' (while the ME with the Rel-11 or later implementation of this feature return an RP-ACK in this case). In case of IMS the RP-ERROR message is contained in the SIP MESSAGE for the SM delivery report.

To verify that the ME returns available response data from the UICC in the TP-User-Data element of the RP-ACK message back to the E-USS/USS. In case of IMS the RP-ACK message is contained in the SIP MESSAGE for the SM delivery report.

27.22.5.3.4 Method of Test

27.22.5.3.4.1 Initial conditions

The ME is connected to the USIM Simulator. The elementary files are coded as defined for the E-UTRAN/EPC ISIM-UICC in clause 27.22.2C.

For sequence 3.1 the ME is additionally connected to the E-USS.

For sequence 3.2 the ME is additionally connected to the USS.

27.22.5.3.4.2 Procedure

Expected Sequence 3.1 (SMS-PP Data Download over IMS, E-UTRAN)

Perform the "IMS related procedure 1" and continue with "Generic Test Procedure 1 (SMS-PP Data Download)" as defined in this clause as "Expected Sequence 3.1" with the following parameters:

- Used Network Simulator (NWS): E-USS
- SMS-over-IP is used to send and receive short messages
- ME supports eFDD or eTDD and SMS-over-IP

Expected Sequence 3.2 (SMS-PP Data Download over IMS, UTRAN)

Perform the "IMS related procedure 1" and continue with "Generic Test Procedure 1 (SMS-PP Data Download)" as defined in this clause as "Expected Sequence 3.2" with the following parameters:

- Used Network Simulator (NWS): USS (UMTS System Simulator only)
- SMS-over-IP is used to send and receive short messages
- ME supports UTRAN

IMS related procedure 1:

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profle Download, USIM and ISIM initialisation
2	ME → NWS	ME activates the required bearer, discovers P-CSCF and registers with the values from the ISIM to IMS services	For E-UTRAN: The EPS bearer context activation according to the procedures defined in TS 34.229-1 [36], Annex C.2 and C.18 is performed For UTRAN: For SMS-over-IP a PDP context activation according to the procedures defined in TS 34.229-1 [36], Annex C.2 and C.17 is performed.
3		CONTINUE WITH STEP 4 Generic Test Procedure 1 (SMS-PP Data Download)	

Generic Test Procedure 1 (SMS-PP Data Download)

Step	Direction	MESSAGE / Action	Comments
4	NWS → ME	SMS-PP Data Download Message 3.1.1	See Note 1.
5	ME → USER	The ME shall not display the message or alert the user of a short message waiting.	
6	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 3.1.1	
7	UICC → ME	SMS-PP Data Download UICC Acknowledgement 3.1.1	[SW1 / SW2 of '90 00']
8	ME → NWS	SMS-PP Data Download UICC Acknowledgement 3.1.1 in the TP-User-Data element of the RP-ACK message. The values of protocol identifier and data coding scheme	See Note 2.

Step	Direction	MESSAGE / Action	Comments
		in RP-ACK shall be as in the original message.	
9	NWS → ME	SMS-PP Data Download Message 3.1.2	See Note 1.
10	ME → USER	The ME shall not display the message or alert the user of a short message waiting	
11	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 3.1.2	
12	UICC → ME	PROACTIVE COMMAND PENDING: MORE TIME 3.1.1	[SW1 / SW2 of '91 0B']
13	ME → NWS	RP-ACK	See Note 2.
14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: MORE TIME 3.1.1	
16	ME → UICC	TERMINAL RESPONSE: MORE TIME 3.1.1	
17	UICC → ME	PROACTIVE UICC SESSION ENDED	
18	NWS → ME	SMS-PP Data Download Message 3.1.3	See Note 1.
19	ME	The ME shall not display the message or alert the user of a short message waiting	
20	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 3.1.3	
21	UICC → ME	SW1 / SW2 of '90 00'	
22	ME → NWS	RP-ACK	See Note 2.
23	NWS → ME	SMS-PP Data Download Message 3.1.1	See Note 1.
24	ME → USER	The ME shall not display the message or alert the user of a short message waiting.	
25	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 3.1.1	
26	UICC → ME	SMS-PP Data Download UICC Acknowledgement 3.1.4	[SW1 / SW2 of '62 xx' or '63 xx']

27	ME → NWS	IF A.1/154_THEN
		SMS-PP Data Download UICC Acknowledgement 3.1.4 in the TP-User-Data element of the RP-ACK message. The values of protocol identifier and data coding scheme in RP-ACK shall be as in the original message.
		ELSE
		IF (NOT A.1/154) THENSMS-PP Data Download UICC Acknowledgement 3.1.4 in the TP-User-Data element of the RP-ERROR message. The values of protocol identifier and data coding scheme in RP-ERROR shall be as in the original message.
			See Note 2.
			See Note 3.

28	NWS → ME	SMS-PP Data Download Message 3.1.5	See Note 1.
29	ME	The ME shall not display the message or alert the user of a short message waiting	
30	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 3.1.5	
31	UICC → ME	SW1 / SW2 of '90 00'	
32	ME → NWS	RP-ACK	See Note 2.
33	USER → ME	The ME is switched off	
Note 1: In case of IMS the SMS-PP Data Download Message is contained in the message body of the SIP MESSAGE.			

Step	Direction	MESSAGE / Action	Comments
Note 2: In case of IMS the RP-ACK message is contained in the message body of the SIP MESSAGE.			
Note 3: In case of IMS the RP-ERROR message is contained in the message body of the SIP MESSAGE.			

SMS-PP (Data Download) Message 3.1.1

Logically:

SMS TPDU
TP-MTI SMS-DELIVER
TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME
TP-OA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "1234"
TP-PID (U)SIM Data download
TP-DCS
Coding Group General Data Coding
Compression Text is uncompressed
Message Class Class 2 (U)SIM Specific Message
Alphabet 8 bit data
TP-SCTS: 01/01/98 00:00:00 +0
TP-UDL 13
TP-UD "TestMessage 1"

Coding:

Coding	04	04	91	21	43	7F	16	89	10	10	00	00
	00	00	0D	54	65	73	74	4D	65	73	73	61
	67	65	20	31								

ENVELOPE: SMS-PP DOWNLOAD 3.1.1

Logically:

SMS-PP Download
Device identities
Source device: Network
Destination device: UICC
Address
TON International number
NPI "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-DELIVER
TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME
TP-OA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "1234"
TP-PID (U)SIM Data download
TP-DCS

Coding Group General Data Coding
Compression Text is uncompressed
Message Class Class 2 (U)SIM Specific Message
Alphabet 8 bit data
TP-SCTS: 01/01/98 00:00:00 +0
TP-UDL 13
TP-UD "TestMessage 1"

Coding:

BER-TLV:	D1	2D	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1C	04	04	91	21	43
	7F	16	89	10	10	00	00	00	00	0D	54	65
	73	74	4D	65	73	73	61	67	65	20	31	

SMS-PP Data Download UICC Acknowledgement 3.1.1

Coding	44	61	74	61	20	41	63	6B

SMS-PP (Data Download) Message 3.1.2

Logically:

SMS TPDU
TP-MTI SMS-DELIVER
TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME
TP-OA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "2143"
TP-PID (U)SIM Data download
TP-DCS
Coding Group General Data Coding
Compression Text is uncompressed
Message Class Class 2 (U)SIM Specific Message
Alphabet 8 bit data
TP-SCTS: 01/01/98 00:00:00 +0
TP-UDL 13
TP-UD "TestMessage 2"

Coding:

Coding	04	04	91	12	34	7F	16	89	10	10	00	00
	00	00	0D	54	65	73	74	4D	65	73	73	61
	67	65	20	32								

ENVELOPE: SMS-PP DOWNLOAD 3.1.2

Logically:

SMS-PP Download
Device identities
Source device: Network
Destination device: UICC
Address
TON International number

NPI "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-DELIVER
TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME
TP-OA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "2143"
TP-PID (U)SIM Data download
TP-DCS
Coding Group General Data Coding
Compression Text is uncompressed
Message Class Class 2 (U)SIM Specific Message
Alphabet 8 bit data
TP-SCTS: 01/01/98 00:00:00 +0
TP-UDL 13
TP-UD "TestMessage 2"

Coding:

BER-TLV:	D1	2D	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1C	04	04	91	12	34
	7F	16	89	10	10	00	00	00	00	0D	54	65
	73	74	4D	65	73	73	61	67	65	20	32	

PROACTIVE COMMAND: MORE TIME 1.1.1

Logically:

Command details
Command number: 1
Command type: MORE TIME
Command qualifier: "00"
Device identities
Source device: UICC
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	02	00	82	02	81	82

TERMINAL RESPONSE: MORE TIME 1.1.1

Logically:

Command details
Command number: 1
Command type: MORE TIME
Command qualifier: "00"
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	02	00	82	02	82	81	83	01	00

SMS-PP (Data Download) Message 3.1.3

Logically:

SMS TPDU
TP-MTI SMS-DELIVER
TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME
TP-OA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "2233"
TP-PID (U)SIM Data download
TP-DCS
Coding Group Data Coding / Message Class
Message Coding 8 bit data
Message Class Class 2 (U)SIM Specific Message
TP-SCTS: 01/01/98 00:00:00 +0
TP-UDL 13
TP-UD "TestMessage 3"

Coding:

Coding	04	04	91	22	33	7F	F6	89	10	10	00	00
	00	00	0D	54	65	73	74	4D	65	73	73	61
	67	65	20	33								

ENVELOPE: SMS-PP DOWNLOAD 3.1.3

Logically:

SMS-PP Download
Device identities
Source device: Network
Destination device: UICC
Address
TON International number
NPI "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-DELIVER
TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME
TP-OA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "2233"
TP-PID (U)SIM Data download
TP-DCS
Coding Group Data Coding / Message Class
Message Coding 8 bit data
Message Class Class 2 (U)SIM Specific Message
TP-SCTS: 01/01/98 00:00:00 +0

TP-UDL 13
TP-UD "TestMessage 3"

Coding:

BER-TLV:	D1	2D	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1C	04	04	91	22	33
	7F	F6	89	10	10	00	00	00	00	0D	54	65
	73	74	4D	65	73	73	61	67	65	20	33	

SMS-PP Data Download UICC Acknowledgement 3.1.4

Coding	44	61	74	61	20	45	72	72	65	72

SMS-PP (Data Download) Message 3.1.5

Logically:

SMS TPDU

TP-MTI SMS-DELIVER
TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains user data header and a short message
TP-SRI A status report will not be returned to the SME
TP-OA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "1234"
TP-PID (U)SIM Data download
TP-DCS
Coding Group Data Coding / Message Class
Message Coding 8 bit data
Message Class Class 2 (U)SIM Specific Message
TP-SCTS: 01/01/98 00:00:00 +0
TP-UDL 30

TP-UD

TP-UDHL 2
IEI (U)SIM Toolkit Security Headers
IEIL 0
SM (8 bit data)
Command Packet Length: 25
Command Header Identifier: 0
Command Header Length: 13
Security Parameter Indicator: No RC, CC or DS and No PoR reply to the Sending Entity
Ciphering Key Identifier: Algorithm known implicitly by both entities
Key Identifier: Algorithm known implicitly by both entities
Toolkit Application Reference: Proprietary Toolkit Application
Counter: 1
Padding Counter: 0 (no padding is necessary)
Secure Data: 10 octets set to 'DC' (dummy data)

Coding:

Coding	44	04	91	21	43	7F	F6	89	10	10	00	00
	00	00	1E	02	70	00	00	19	00	0D	00	00
	00	00	BF	FF	00	00	00	00	00	01	00	DC
	DC	DC	DC	DC	DC	DC	DC	DC	DC			

ENVELOPE: SMS-PP DOWNLOAD 3.1.5

Logically:

SMS-PP Download
Device identities
Source device: Network
Destination device: UICC
Address
TON International number
NPI "ISDN / telephone numbering plan"
Dialling number string "112233445566778"
SMS TPDU
TP-MTI SMS-DELIVER
TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains user data header and a short message
TP-SRI A status report will not be returned to the SME
TP-OA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "1234"
TP-PID (U)SIM Data download
TP-DCS
Coding Group Data Coding / Message Class
Message Coding 8 bit data
Message Class Class 2 (U)SIM Specific Message
TP-SCTS: 01/01/98 00:00:00 +0
TP-UDL 30
TP-UD
TP-UDHL 2
IEI (U)SIM Toolkit Security Headers
IEIL 0
SM (8 bit data)
Command Packet Length: 25
Command Header Identifier: 0
Command Header Length: 13
Security Parameter Indicator: No RC, CC or DS and No PoR reply to the Sending Entity
Ciphering Key Identifier: Algorithm known implicitly by both entities
Key Identifier: Algorithm known implicitly by both entities
Toolkit Application Reference: Proprietary Toolkit Application
Counter: 1
Padding Counter: 0 (no padding is necessary)
Secure Data: 10 octets set to 'DC' (dummy data)

Coding:

BER-TLV:	D1	3E	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	2D	44	04	91	21	43
	7F	F6	89	10	10	00	00	00	00	1E	02	70
	00	00	19	00	0D	00	00	00	00	BF	FF	00
	00	00	00	00	01	00	DC	DC	DC	DC	DC	DC
	DC	DC	DC	DC								

27.22.5.3.5 Test requirement

The ME supporting eFDD or eTDD shall operate in the manner defined in expected sequence 3.1.

The ME supporting UTRAN shall operate in the manner defined in expected sequence 3.2.

27.22.5.4 SMS-PP Data Download over SGs in E-UTRAN

27.22.5.4.1 Definition and applicability

See clause 3.2.2.

27.22.5.4.2 Conformance requirement

The ME shall support the Proactive UICC: SMS-PP Data Download facility for SMS over SGs as defined in the following technical specifications:

- TS 31.111 [15] clause 5, clause 7.1, clause 8.1, clause 8.7, clause 8.13 and clause 11.
- TS 31.115 [28] clause 4.
- TS 23.038 [7] clause 4.
- TS 24.301 [32] clause 5.6.3.1, 5.6.3.3 and 9.9.3.22

27.22.5.4.3 Test purpose

To verify that the ME transparently passes the "data download via SMS Point-to-point" messages to the UICC.

To verify that the ME returns the RP-ACK message back to the USS, if the UICC responds with '90 00', '91 XX', '62 XX' or '63 XX'.

To verify that the ME with an SMS-PP download feature implementation prior to Rel-11 returns the RP-ERROR message back to the system Simulator, if the UICC responds with '62 XX' or '63 XX' (while the ME with the Rel-11 or later implemention of this feature return an RP-ACK in this case).

To verify that the ME returns the response data from the UICC back to the USS in the TP-User-Data element of the RP-ACK message, if the UICC returns response data'.

27.22.5.4.4 Method of Test

27.22.5.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and connected to the E-USS/NB-SS.

The "data download via SMS-PP" service is available in the USIM Service Table.

27.22.5.4.4.2 Procedure

Expected Sequence 4.1 (SMS-PP Data Download over SGs, E-UTRAN)

Perform the "SMS over SGs related procedure" and continue with "Generic Test Procedure 1 (SMS-PP Data Download)" as defined in this clause 27.22.5.3.4.2 as "Expected Sequence 4.1" with the following parameters:

- Used Network Simulator (NWS): E-USS/NB-SS
- SMS over SGs (DOWNLINK NAS TRANSPORT and UPLINK NAS TRANSPORT messages) is used to send and receive short messages
- ME supports eFDD or eTDD or NB-IoT
- ME supports SMS-over-SGs.

SMS over SGs related procedure:

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profle Download and USIM initialisation

2	ME → NWS	ME performs regular network registration.	UE is afterwards in state Registered, Idle Mode (state 2) according to TS 36.508 [33].
3		CONTINUE WITH STEP 4 Generic Test Procedure 1 (SMS-PP Data Download) in clause 27.22.5.3.4.2	

27.22.5.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.1.

27.22.6 CALL CONTROL BY USIM

27.22.6.1 Procedure for Mobile Originated calls

27.22.6.1.1 Definition and applicability

See clause 3.2.2.

27.22.6.1.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in:

- TS 31.111 [15] clause 7.3

27.22.6.1.3 Test purpose

To verify that for all call set-up attempts , even those resulting from a SET UP CALL proactive UICC command, the ME shall first pass the call set-up details (dialled digits and associated parameters) to the UICC, using the ENVELOPE (CALL CONTROL).

To verify that if the UICC responds with '90 00', the ME shall set up the call with the dialled digits and other parameters as sent to the UICC.

To verify that if the UICC returns response data, the ME shall use the response data appropriately to set up the call as proposed, not set up the call, or set up a call using the data supplied by the UICC.

To verify that, in the case where the initial call set-up request results from a proactive SET UP CALL, if the call control result is "not allowed" or "allowed with modifications", the ME shall inform the UICC using TERMINAL RESPONSE "interaction with call control by UICC or MO short message control by UICC, action not allowed".

To verify that it is possible for the UICC to request the ME to set up an emergency call by supplying the number "112" as the response data.

27.22.6.1.4 Method of tests

27.22.6.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and USS and has performed the location update procedure.

The GERAN/UTRAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The elementary files are coded as USIM Application Toolkit default with the following exceptions:

1) The call control service is available in the USIM Service Table.

2) Only for sequence 1.9:

EF_{ECC} (Emergency Call Codes)

Logically:

Emergency call code: "1020";
Emergency call code alpha identifier: empty;
Emergency call Service Category: RFU

Coding:	B1	B2	B3	B4	B5	B6	B7	B8
Hex	01	02	FF	FF	FF	FF	FF	FF

27.22.6.1.4.2 Procedure

Expected Sequence 1.1 (CALL CONTROL BY USIM , set up call attempt by user, the USIM responds with '90 00')

Step	Direction	Message / Action	Comments
1	User → ME	Set up a call to "+01234567890123456789"	
2	ME → UICC	ENVELOPE CALL CONTROL 1.1.1A Or ENVELOPE CALL CONTROL 1.1.1B	[Option A shall apply for 3GPP parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	90 00	
4	ME → USS	The ME sets up the call without modification	[Set up call to "+01234567890123456789"

ENVELOPE CALL CONTROL 1.1.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "01234567890123456789"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)

Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 6

Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	Note 5	00
	F1	10	00	01	00	01	Note 6	Note 4				

ENVELOPE CALL CONTROL 1.1.1B

Logically:

Device identities
Source device: ME
Destination device: UICC

Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "01234567890123456789"

Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.

Subaddress
This parameter is optional. If present, the contents shall not be checked.

Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 5: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 6: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified

Expected Sequence 1.2 (CALL CONTROL BY USIM , set up call attempt by user, allowed without modification)

Step	Direction	Message / Action	Comments
1	User → ME	Set up a call to "+01234567890123456789"	
2	ME → UICC	ENVELOPE CALL CONTROL 1.2.1 A or ENVELOPE CALL CONTROL 1.2.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]

3	UICC → ME	CALL CONTROL RESULT 1.2.1	[Call control result: "Allowed, no modification"]
4	ME → USS	The ME sets up the call without modification	[Set up call to "+01234567890123456789"]

ENVELOPE CALL CONTROL 1.2.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "01234567890123456789"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 6
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	Note 5	00
	F1	10	00	01	00	01	Note 6	Note 4				

ENVELOPE CALL CONTROL 1.2.1B

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "01234567890123456789"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 5: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 6: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified

CALL CONTROL RESULT 1.2.1

Logically:

Call control result: '00' = Allowed, no modification

Coding:

BER-TLV:	00	00

Expected Sequence 1.3A (CALL CONTROL BY USIM , set up call attempt resulting from a set up call proactive command, allowed without modification)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.3.1 PENDING	[This test applies to MEs asking for user confirmation before sending the ENVELOPE CALL CONTROL command]
2	ME→UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.3.1	[Set up call to "+012340123456"]
4	ME → USER	ME displays "+012340123456" during user confirmation phase.	
5	USER → ME	The user confirms the call set up	[user confirmation]
6	ME → UICC	ENVELOPE CALL CONTROL 1.3.1A or ENVELOPE CALL CONTROL 1.3.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
7	UICC → ME	CALL CONTROL RESULT 1.3.1	[Call control result: "Allowed, no modification"]
8	ME → USS	The ME sets up the call without modification	[Set up call to "+012340123456"]
9	ME → UICC	TERMINAL RESPONSE: SET UP CALL 1.3.1	[command performed successfully]

Expected Sequence 1.3 B (CALL CONTROL BY USIM , set up call attempt resulting from a set up call proactive command, allowed without modification)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.3.1 PENDING	[This test applies to MEs asking for user confirmation after sending the ENVELOPE CALL CONTROL command]
2	ME→UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.3.1	[Set up call to "+012340123456"]
4	ME → UICC	ENVELOPE CALL CONTROL 1.3.1A or ENVELOPE CALL CONTROL 1.3.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
5	UICC → ME	CALL CONTROL RESULT 1.3.1	[Call control result: "Allowed, no modification"]

6	ME → USER	ME displays "+012340123456" during user confirmation phase.	
7	USER → ME	The user confirms the call set up	[user confirmation]
8	ME → USS	The ME sets up the call without modification	[Set up call to "+012340123456"]
9	ME → UICC	TERMINAL RESPONSE: SET UP CALL 1.3.1	[command performed successfully]

PROACTIVE COMMAND: SET UP CALL 1.3.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: Only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "+012340123456"
Address
TON: International
NPI: "ISDN / telephone numbering plan"
Dialling number string "012340123456"

Coding:

BER-TLV:	D0	21	81	03	01	10	00	82	02	81	83
	05	0D	2B	30	31	32	33	34	30	31	32
	33	34	35	36	86	07	91	10	32	04	21
	43	65									

ENVELOPE CALL CONTROL 1.3.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "012340123456"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 6
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	Note 5	00	F1	10
	00	01	00	01	Note 6	Note 4					

ENVELOPE CALL CONTROL 1.3.1B

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "012340123456"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	07	00	11	10
	00	01	00	01	Note 4						

Note 1: Length of BER-TLV is '16' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 5: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 6: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified

CALL CONTROL RESULT 1.3.1

Logically:

Call control result: '00' = Allowed, no modification

Coding:

BER-TLV:	00	00

TERMINAL RESPONSE: SET UP CALL 1.3.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: Only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

Expected Sequence 1.4 (CALL CONTROL BY USIM , set up call attempt by user, not allowed)

Step	Direction	Message / Action	Comments
1	User → ME	Set up a call to "+01234567890123456789"	
2	ME → UICC	ENVELOPE CALL CONTROL 1.4.1 A or ENVELOPE CALL CONTROL 1.4.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	CALL CONTROL RESULT 1.4.1	[Call control result: "not Allowed"]
4	ME → USS	The ME does not set up the call	

ENVELOPE CALL CONTROL 1.4.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "+01234567890123456789"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 6
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	Note 5	00
	F1	10	00	01	00	01	Note 6	Note 4				

ENVELOPE CALL CONTROL 1.4.1B

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "+01234567890123456789"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)

Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 5: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 6: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified

CALL CONTROL RESULT 1.4.1

Logically:

Call control result: '01' = not Allowed

Coding:

BER-TLV:	01	00

Expected Sequence 1.5A (CALL CONTROL BY USIM , set up call attempt resulting from a set up call proactive command, not allowed)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.5.1 PENDING	[This test applies to MEs asking for user confirmation before sending the ENVELOPE CALL CONTROL command]
2	ME→UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.5.1	[Set up call to "+012340123456"
4	ME → USER	ME displays "+012340123456" during user confirmation phase.	
5	USER → ME	The user confirms the call set up	[user confirmation]
6	ME → UICC	ENVELOPE CALL CONTROL 1.5.1A or ENVELOPE CALL CONTROL 1.5.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
7	UICC → ME	CALL CONTROL RESULT 1.5.1	[Call control result: "Not Allowed"]
8	ME → UICC	TERMINAL RESPONSE: SET UP CALL 1.5.1	[Permanent Problem - Interaction with Call Control by USIM]
9	ME → USS	The ME does not set up the call	

Expected Sequence 1.5 B (CALL CONTROL BY USIM , set up call attempt resulting from a set up call proactive command, not allowed)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.5.1 PENDING	[This test applies to MEs asking for user confirmation after sending the ENVELOPE CALL CONTROL command]
2	ME→UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.5.1	[Set up call to "+012340123456"
4	ME → UICC	ENVELOPE CALL CONTROL 1.5.1A or ENVELOPE CALL CONTROL 1.5.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
5	UICC → ME	CALL CONTROL RESULT 1.5.1	[Call control result: "Not Allowed"] [No user confirmation phase because Call Control has disallowed the request]
6	ME → UICC	TERMINAL RESPONSE: SET UP CALL 1.5.1	[Permanent Problem - Interaction with Call Control by USIM]
7	ME → USS	The ME does not set up the call	

PROACTIVE COMMAND: SET UP CALL 1.5.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: Only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "+012340123456"
Address
TON: International
NPI: "ISDN / telephone numbering plan"
Dialling number string "012340123456"

Coding:

BER-TLV:	D0	21	81	03	01	10	00	82	02	81	83
	05	0D	2B	30	31	32	33	34	30	31	32
	33	34	35	36	86	07	91	10	32	04	21
	43	65									

ENVELOPE CALL CONTROL 1.5.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "012340123456"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 6

Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	Note 5	00	F1	10
	00	01	00	01	Note 6	Note 4					

ENVELOPE CALL CONTROL 1.5.1B

Logically:

Device identities
Source device: ME
Destination device: UICC

Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "012340123456"

Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.

Subaddress
This parameter is optional. If present, the contents shall not be checked.

Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	07	00	11	10
	00	01	00	01	Note 4						

Note 1: Length of BER-TLV is '16' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 5: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 6: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified

CALL CONTROL RESULT 1.5.1

Logically:

Call control result: '01' = not Allowed

Coding:

BER-TLV:	01	00

TERMINAL RESPONSE: SET UP CALL 1.5.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: Only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Interaction with call control by USIM or MO short message control by USIM, permanent problem
Additional information: Action not allowed

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	02	39
	01											

Expected Sequence 1.6 (CALL CONTROL BY USIM , set up call attempt by user, allowed with modifications)

Step	Direction	Message / Action	Comments
1	User → ME	Set up a call to "+01234567890123456789"	
2	ME → UICC	ENVELOPE CALL CONTROL 1.6.1 A or ENVELOPE CALL CONTROL 1.6.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	CALL CONTROL RESULT 1.6.1	[Call control result: "Allowed with modifications",]
4	ME → USS	The ME sets up the call to "+010203"	

ENVELOPE CALL CONTROL 1.6.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "01234567890123456789"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 6
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	Note 5	00
	F1	10	00	01	00	01	Note 6	Note 4				

ENVELOPE CALL CONTROL 1.6.1B

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "01234567890123456789"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 5: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 6: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

CALL CONTROL RESULT 1.6.1

Logically:

Call control result: '02' = Allowed with modifications
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "010203"

Coding:

BER-TLV:	02	06	86	04	91	10	20	30

Expected Sequence 1.7A (CALL CONTROL BY USIM, set up call attempt resulting from a set up call proactive command, allowed with modifications)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.7.1 PENDING	[This test applies to MEs asking for user confirmation before sending the ENVELOPE CALL CONTROL command]
2	ME→UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.7.1	[Set up call to "+012340123456"]
4	ME → USER	ME displays "+012340123456" during user confirmation phase.	
5	USER → ME	The user confirms the call set up	[user confirmation]
6	ME → UICC	ENVELOPE CALL CONTROL 1.7.1A or ENVELOPE CALL CONTROL 1.7.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
7	UICC → ME	CALL CONTROL RESULT 1.7.1	[Call control result: "Allowed with modifications"]
8	ME → USS	The ME sets up the call to "+011111111111"	
9	ME → UICC	TERMINAL RESPONSE: SET UP CALL 1.7.1	[command performed successfully]

Expected Sequence 1.7 B (CALL CONTROL BY USIM, set up call attempt resulting from a set up call proactive command, allowed with modifications)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.7.1 PENDING	[This test applies to MEs asking for user confirmation after sending the ENVELOPE CALL CONTROL command]
2	ME→UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP CALL 1.7.1	[Set up call to "+012340123456"]
4	ME → UICC	ENVELOPE CALL CONTROL 1.7.1A or ENVELOPE CALL CONTROL 1.7.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
5	UICC → ME	CALL CONTROL RESULT 1.7.1	[Call control result: "Allowed with modifications"]
6	ME → USER	ME displays "+012340123456" during user confirmation phase.	
7	USER → ME	The user confirms the call set up	[user confirmation]
8	ME → USS	The ME sets up the call to "+011111111111"	[call is set up to modified address]
9	ME → UICC	TERMINAL RESPONSE: SET UP CALL 1.7.1	[command performed successfully]

PROACTIVE COMMAND: SET UP CALL 1.7.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: Only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "+012340123456"
Address
TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "012340123456"

Coding:

BER-TLV:	D0	21	81	03	01	10	00	82	02	81	83
	05	0D	2B	30	31	32	33	34	30	31	32
	33	34	35	36	86	07	91	10	32	04	21
	43	65									

ENVELOPE CALL CONTROL 1.7.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "012340123456"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 6
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	Note 5	00	F1	10
	00	01	00	01	Note 6	Note 4					

ENVELOPE CALL CONTROL 1.7.1B

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "012340123456"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	07	00	11	10
	00	01	00	01	Note 4						

Note 1: Length of BER-TLV is '16' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 5: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 6: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

CALL CONTROL RESULT 1.7.1

Logically:

Call control result: '02' = Allowed with modifications

Address

TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "011111111111"

Coding:

BER-TLV:	02	09	86	07	91	10	11	11	11	11	11

TERMINAL RESPONSE: SET UP CALL 1.7.1

Logically:

Command details

Command number: 1
Command type: SET UP CALL
Command qualifier: Only if not currently busy on another call

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

Expected Sequence 1.8 (CALL CONTROL BY USIM , set up call attempt by user, allowed with modifications: emergency call)

Step	Direction	Message / Action	Comments
1	User → ME	Set up a call to "+01234567890123456789"	
2	ME → UICC	ENVELOPE CALL CONTROL 1.8.1A or ENVELOPE CALL CONTROL 1.8.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters
3	UICC → ME	CALL CONTROL RESULT 1.8.1	[Call control result: "Allowed with modifications"]
4	ME → USS	The ME sets up an emergency call;	

ENVELOPE CALL CONTROL 1.8.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "01234567890123456789"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 6
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	Note 5	00
	F1	10	00	01	00	01	Note 6	Note 4				

ENVELOPE CALL CONTROL 1.8.1B

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "01234567890123456789"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 5: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 6: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

CALL CONTROL RESULT 1.8.1

Logically:

Call control result Allowed, with modification

Address

TON Unknown
NPI "ISDN / telephone numbering plan"
Address value "112"

Coding:

BER-TLV:	02	05	86	03	81	11	F2

Expected Sequence 1.9 (CALL CONTROL BY USIM , set up call attempt by user, allowed with modifications: number in EF_{ECC})

Step	Direction	Message / Action	Comments
1	User → ME	Set up a call to "+01234567890123456789"	
2	ME → UICC	ENVELOPE CALL CONTROL 1.9.1A or ENVELOPE CALL CONTROL 1.9.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	CALL CONTROL RESULT 1.9.1	[Call control result: "Allowed with modifications"]
4	ME → USS	The ME sets up call with the dialled digits "1020". The ME does not set up an emergency call, but sets up a normal call	

ENVELOPE CALL CONTROL 1.9.1A

Logically:

Device identities

Source device: ME
Destination device: UICC

Address

TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 6

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	Note 5	00
	F1	10	00	01	00	01	Note 6	Note 4				

ENVELOPE CALL CONTROL 1.9.1B

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "01234567890123456789"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 5: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 6: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

CALL CONTROL RESULT 1.9.1

Logically:

Call control result Allowed, with modification
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Address value "1020"

Coding:

BER-TLV:	02	05	86	03	81	01	02

Expected Sequence 1.10 (CALL CONTROL BY USIM , set up call attempt by user to an emergency call)

Step	Direction	Message / Action	Comments
1	User → ME	Set up a call to "112"	
2	ME → UICC	The ME does not send any ENVELOPE CALL CONTROL	
3	ME → USS	The ME sets up an emergency call	

Expected Sequence 1.11 (CALL CONTROL BY USIM , set up call through call register, the USIM responds with '90 00')

Pre-condition: the ME has a mean to register the last dialled number(s), and the ME will store dialled numbers allowed by call control in its register.

Step	Direction	Message / Action	Comments
1	User → ME	Set up a call to "+01234567890123456789"	
2	ME → UICC	ENVELOPE CALL CONTROL 1.1.1A or ENVELOPE CALL CONTROL 1.1.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	90 00	
4	ME → USS	The ME sets up the call without modification	[Set up call to "+01234567890123456789"]
5	USER → ME	End Call.	
6	USER → ME	Recall the last dialled number	
7	ME → UICC	ENVELOPE CALL CONTROL 1.1.1A or ENVELOPE CALL CONTROL 1.1.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
8	UICC → ME	90 00	
9	ME → USS	The ME sets up the call without modification	[Set up call to "+01234567890123456789"]
10	USER → ME	End Call.	

Expected Sequence 1.12 (CALL CONTROL BY USIM , set up call through call register, allowed without modification)

Pre-condition: the ME has a mean to register the last dialled number(s), and the ME will store dialled numbers allowed by call control in its register.

Step	Direction	Message / Action	Comments
1	User → ME	Set up a call to "+01234567890123456789"	
2	ME → UICC	ENVELOPE CALL CONTROL 1.2.1A or ENVELOPE CALL CONTROL 1.2.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	CALL CONTROL RESULT 1.2.1	[Call control result: "Allowed, no modification"]
4	ME → USS	The ME sets up the call without modification	[Set up call to "+01234567890123456789"]
5	User → ME	End the call then call the last dialled number	
6	ME → UICC	ENVELOPE CALL CONTROL 1.2.1A or ENVELOPE CALL CONTROL 1.2.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]

7	UICC → ME	CALL CONTROL RESULT 1.2.1	
8	ME → USS	The ME sets up the call without modification	[Set up call to "+01234567890123456789"]

Expected Sequence 1.13 (CALL CONTROL BY USIM , set up call through call register, not allowed)

Pre-condition: the ME has a mean to register the last dialled number(s), and the ME will store dialled numbers not allowed by call control in its register.

Step	Direction	Message / Action	Comments
1	User → ME	Set up a call to "+01234567890123456789"	
2	ME → UICC	ENVELOPE CALL CONTROL 1.4.1A or ENVELOPE CALL CONTROL 1.4.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	CALL CONTROL RESULT 1.4.1	[Call control result: "not Allowed"]
4	ME → USS	The ME does not set up the call	
5	User → ME	The user calls the last dialled number	
6	ME → UICC	ENVELOPE CALL CONTROL 1.4.1A or ENVELOPE CALL CONTROL 1.4.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
7	UICC → ME	CALL CONTROL RESULT 1.4.1	[Call control result: "not Allowed"]
8	ME → USS	The ME does not set up the call	

Expected Sequence 1.14 (CALL CONTROL BY USIM , set up call through call register, allowed with modifications)

Pre-condition: the ME has a mean to register the last dialled number(s), and the ME will store dialled numbers allowed with modification by call control in its register.

Step	Direction	Message / Action	Comments
1	User → ME	Set up a call to "+01234567890123456789"	
2	ME → UICC	ENVELOPE CALL CONTROL 1.6.1A or ENVELOPE CALL CONTROL 1.6.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	CALL CONTROL RESULT 1.6.1	[Call control result: "Allowed with modifications"]
4	ME → USS	The ME sets up the call to "+010203"	
5	User → ME	End call and then set up a call to "+01234567890123456789"	
6	ME → UICC	ENVELOPE CALL CONTROL 1.6.1A or ENVELOPE CALL CONTROL 1.6.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
7	UICC → ME	CALL CONTROL RESULT 1.6.1	[Call control result: "Allowed with modifications"]
8	ME → USS	The ME sets up the call to "+010203"	

27.22.6.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.14.

27.22.6.2 Procedure for Supplementary (SS) Services

27.22.6.2.1 Definition and applicability

See clause 3.2.2.

27.22.6.2.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in the following technical specifications:

- TS 31.111 [15] clause 7.3.1.2.

27.22.6.2.3 Test purpose

To verify that the ME first pass the supplementary service control string corresponding to the supplementary service operation to the USIM, using the ENVELOPE (CALL CONTROL) command.

To verify that, if the UICC responds with '90 00', the ME shall send the supplementary service operation with the information as sent to the UICC.

To verify that, if the UICC returns response data, the ME shall use the response data appropriately to send the supplementary service operation as proposed, not send the SS operation, or instead send the USS operation using the data supplied by the UICC.

27.22.6.2.4 Method of tests

27.22.6.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The elementary files are coded as USIM Application Toolkit default with the following exception:

The call control service is available in the USIM Service Table.

The GERAN/UTRAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01 ;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

27.22.6.2.4.2 Procedure

Expected Sequence 2.1 (CALL CONTROL BY USIM , send SS, the USIM responds with '90 00')

Step	Direction	Message / Action	Comments

1	User → ME	The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator).	
2	ME → UICC	ENVELOPE CALL CONTROL 2.1.1A or ENVELOPE CALL CONTROL 2.1.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	90 00	
4	ME → USS	REGISTER 2.1A or REGISTER 2.1B	[The ME sends the supplementary service operation with the information as sent to the UICC]
5	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 2.1	

ENVELOPE CALL CONTROL 2.1.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
SS String
TON/NPI:"FF"
Dialling number string "*21**10#"
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 3

Coding:

BER-TLV:	D4	Note1	82	02	82	81	89	05	FF	2A	A1	1A
	B0	13	Note 2	00	F1	10	00	01	00	01	Note 3	

Note 1: Length of BER-TLV is '14' plus the actual length of all the present optional SIMPLE-TLV data objects

Note 2: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 3: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

ENVELOPE CALL CONTROL 2.1.1B

Logically:

Device identities
Source device: ME
Destination device: UICC
SS String
TON/NPI:"FF"
Dialling number string "*21**10#"
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	14	82	02	82	81	89	05	FF	2A	A1	1A
	B0	13	07	00	11	10	00	01	00	01		

REGISTER 2.1A

Logically (only SS argument):

ACTIVATE SS ARGUMENT
SS-Code:
- Call Forwarding Unconditional
TeleserviceCode
- All Tele Services

Coding:

Coding	30	06	04	01	21	83	01	00				

REGISTER 2.1B

Logically (only SS argument):

ACTIVATE SS ARGUMENT
SS-Code:
- Call Forwarding Unconditional
TeleserviceCode
- All Tele Services
LongFTN Supported

Coding:

Coding	30	08	04	01	21	83	01	00	84	00		

RELEASE COMPLETE (SS RETURN RESULT) 2.1

Logically (only from operation code):

ACTIVATE SS RETURN RESULT
ForwardingInfo
SS-Code
- Call Forwarding Unconditional
ForwardFeatureList
ForwardingFeature
TeleserviceCode
- All Tele Services
SS-Status
- state ind.: operative
- provision ind.: provisioned
- registration ind.: registered
- activation ind.: active

Coding:

Coding	0C	A0	0D	04	01	21	30	08	30	06	83	01
	00	84	01	07								

Expected Sequence 2.2 (CALL CONTROL BY USIM , send SS, allowed without modifications)

Step	Direction	Message / Action	Comments

1	User → ME	The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator).	
2	ME → UICC	ENVELOPE CALL CONTROL 2.2.1A or ENVELOPE CALL CONTROL 2.2.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	CALL CONTROL RESULT 2.2.1	[Call control result: "Allowed without modifications"]
4	ME → USS	REGISTER 2.1A or REGISTER 2.1B	The ME sends the supplementary service operation with the information as sent to the UICC
5	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 2.1	

ENVELOPE CALL CONTROL 2.2.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
SS String
TON/NPI:"FF"
Dialling number string "*21**10#"
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 3

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	89	05	FF	2A	A1	1A
	B0	13	Note 2	00	F1	10	00	01	00	01	Note 3	

Note 1: Length of BER-TLV is '14' plus the actual length of all the present optional SIMPLE-TLV data objects

Note 2: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 3: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

ENVELOPE CALL CONTROL 2.2.1B

Logically:

Device identities
Source device: ME
Destination device: UICC
SS String
TON/NPI:"FF"
Dialling number string "*21**10#"
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	14	82	02	82	81	89	05	FF	2A	A1	1A
	B0	13	07	00	11	10	00	01	00	01		

CALL CONTROL RESULT 2.2.1

Logically:

Call control result Allowed, no modifications

Coding:

BER-TLV:	00	00

Expected Sequence 2.3 (CALL CONTROL BY USIM , send SS, not allowed)

Step	Direction	Message / Action	Comments
1	User → ME	The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator).	
2	ME → UICC	ENVELOPE CALL CONTROL 2.3.1A or ENVELOPE CALL CONTROL 2.3.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	CALL CONTROL RESULT 2.3.1	[Call control result: "Not Allowed"]
4	ME → USS	The ME does not send the supplementary service operation	

ENVELOPE CALL CONTROL 2.3.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
SS String
TON/NPI:"FF"
Dialling number string "*21#"
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 3

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	89	03	FF	2A	B1	13
	Note 2	00	F1	10	00	01	00	01	Note 3			

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects

Note 2: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 3: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

ENVELOPE CALL CONTROL 2.3.1B

Logically:

Device identities
Source device: ME
Destination device: UICC
SS String
TON/NPI:"FF"
Dialling number string "*21#"
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	12	82	02	82	81	89	03	FF	2A	B1	13
	07	00	11	10	00	01	00	01				

CALL CONTROL RESULT 2.3.1

Logically:

Call control result Not Allowed

Coding:

BER-TLV:	01	00

Expected Sequence 2.4 (CALL CONTROL BY USIM , send SS, allowed with modifications)

Step	Direction	Message / Action	Comments
1	User → ME	The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator).	
2	ME → UICC	ENVELOPE CALL CONTROL 2.4.1A or ENVELOPE CALL CONTROL 2.4.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	CALL CONTROL RESULT 2.4.1	[Call control result: "Allowed with modifications"]
4	ME → USS	REGISTER 2.4A or REGISTER 2.4B	[The ME sends the supplementary service operation with the information as sent by the UICC]
5	USS → ME	RELEASE COMPLETE (SS RETURN RESULT) 2.4	

ENVELOPE CALL CONTROL 2.4.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
SS String
TON/NPI:"FF"
Dialling number string "*21#"

Location Information

MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 3

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	89	03	FF	2A	B1	13
	Note 2	00	F1	10	00	01	00	01	Note 3			

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects

Note 2: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 3: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

ENVELOPE CALL CONTROL 2.4.1B

Logically:

Device identities

Source device: ME
Destination device: UICC

SS String

TON/NPI:"FF"
Dialling number string "*21#"

Location Information

MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	12	82	02	82	81	89	03	FF	2A	B1	13
	07	00	11	10	00	01	00	01				

CALL CONTROL RESULT 2.4.1

Logically:

Call control result Allowed, with modifications

SS String

TON/NPI "FF"
SS String "*#21#"

Coding:

BER-TLV:	02	06	89	04	FF	BA	12	FB

REGISTER 2.4A

Logically (only SS argument):

INTERROGATE SS ARGUMENT

SS-Code
- Call Forwarding Unconditional

Coding:

BER-TLV	30	03	04	01	21

REGISTER 2.4B

Logically (only SS argument):

INTERROGATE SS ARGUMENT
SS-Code
- Call Forwarding Unconditional
LongFTN Supported

Coding:

BER-TLV	30	05	04	01	21	84	00

RELEASE COMPLETE (SS RETURN RESULT) 2.4

Logically (only from operation code):

INTERROGATE SS RESULT
Call Forwarding Unconditional
SS-Status
- state ind.: operative
- provision ind.: provisioned
- registration ind.: registered
- activation ind.: not active

Coding:

BER-TLV	80	01	06						

27.22.6.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.4.

27.22.6.3 Interaction with Fixed Dialling Number (FDN)

27.22.6.3.1 Definition and applicability

See clause 3.2.2.

27.22.6.3.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in:

- TS 31.111 [15] clause 7.3.1.4.

27.22.6.3.3 Test purpose

To verify that the ME checks that the number entered through the MMI is on the FDN list.

To verify that, if the MMI input does not pass the FDN check, the call shall not be set up.

To verify that, if the MMI input does pass the FDN check, the ME shall pass the dialled digits and other parameters to the UICC, using the ENVELOPE (CALL CONTROL) command.

To verify that, if the UICC responds with "allowed, no modification", the ME shall set up the call as proposed.

To verify that, if the UICC responds with "not allowed", the ME shall not set up the call.

To verify that, if the UICC responds with "allowed with modifications", the ME shall set up the call in accordance with the response from the UICC. If the modifications involve changing the dialled digits, the ME shall not re-check this modified number against the FDN list.

27.22.6.3.4 Method of tests

27.22.6.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The elementary files are coded as SIM Application Toolkit default with the following exceptions:

The call control service is available in the USIM Service Table.

Fixed Dialling Number service is enabled.

The GERAN/UTRAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01 ;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

27.22.6.3.4.2 Procedure

Expected Sequence 3.1 (CALL CONTROL BY USIM , set up a call not in EF_{FDN})

Step	Direction	Message / Action	Comments
1	User → ME	The user sets up a call to "4321"	
2	ME → UICC	The ME does not send the ENVELOPE (CALL CONTROL) command to the USIM.	
3	ME → USS	The ME does not set up the call.	

Expected Sequence 3.2 (CALL CONTROL BY USIM , set up a call in EF_{FDN} , the USIM responds with '90 00')

Step	Direction	Message / Action	Comments
1	User → ME	The user sets up a call to "123"	
2	ME → UICC	ENVELOPE CALL CONTROL 3.2.1A or ENVELOPE CALL CONTROL 3.2.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	90 00	
4	ME → USS	The ME sets up the call without modification	[Set up call to "123"]

ENVELOPE CALL CONTROL 3.2.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "123"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 6
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	F3	Note 2
	Note 3	13	Note 5	00	F1	10	00	01	00	01	Note 6	Note 4

ENVELOPE CALL CONTROL 3.2.1B

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "123"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	F3	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 5: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 6: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

Expected Sequence 3.3 (CALL CONTROL BY USIM , set up a call in EF_{FDN}, Allowed without modifications)

Step	Direction	Message / Action	Comments
1	User → ME	The user sets up a call to "9876"	
2	ME → UICC	ENVELOPE CALL CONTROL 3.3.1A or ENVELOPE CALL CONTROL 3.3.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	CALL CONTROL RESULT 3.3.1	[Call control result: "Allowed without modifications"]
4	ME → USS	The ME sets up the call without modification	[Set up call to "9876"]

ENVELOPE CALL CONTROL 3.3.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "9876"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 6
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note 3	13	Note 5	00	F1	10	00	01	00	01	Note 6	Note 4

ENVELOPE CALL CONTROL 3.3.1B

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "9876"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)

Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 5: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 6: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

CALL CONTROL RESULT 3.3.1

Logically:

Call control result Allowed, no modifications

Coding:

BER-TLV:	00	00

Expected Sequence 3.4 (CALL CONTROL BY USIM , set up a call in EF_{FDN} , Not Allowed)

Step	Direction	Message / Action	Comments
1	User → ME	The user sets up a call to "9876"	
2	ME → UICC	ENVELOPE CALL CONTROL 3.4.1A or ENVELOPE CALL CONTROL 3.4.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	CALL CONTROL RESULT 3.4.1	[Call control result: "Not Allowed"]
4	ME → USS	The ME does not set up the call	

ENVELOPE CALL CONTROL 3.4.1A

Logically:

Device identities

Source device: ME

Destination device: UICC

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)

Cell ID Cell Identity Value (0001)

Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 6

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note 3	13	Note 5	00	F1	10	00	01	00	01	Note 6	Note 4

ENVELOPE CALL CONTROL 3.4.1B

Logically:

Device identities

Source device: ME

Destination device: UICC

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)

Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 5: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 6: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

CALL CONTROL RESULT 3.4.1

Logically:

Call control result Not Allowed

Coding:

BER-TLV:	01	00

Expected Sequence 3.5 (CALL CONTROL BY USIM , set up a call in EF_{FDN} , Allowed with modifications)

Step	Direction	Message / Action	Comments
1	User → ME	The user sets up a call to "9876"	
2	ME → UICC	ENVELOPE CALL CONTROL 3.5.1A or ENVELOPE CALL CONTROL 3.5.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	CALL CONTROL RESULT 3.5.1	[Call control result: "Allowed with modifications"]
4	ME → USS	The ME sets up the call with data sent by the UICC	[Set up call to "3333"]

ENVELOPE CALL CONTROL 3.5.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "9876"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 6
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note3	13	Note 5	00	F1	10	00	01	00	01	Note 6	Note 4

ENVELOPE CALL CONTROL 3.5.1B

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "9876"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 5: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 6: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

CALL CONTROL RESULT 3.5.1

Logically:

Call control result Allowed with modifications

Address

TON Unknown
NPI "ISDN / telephone numbering plan"
Address value "3333"

Coding:

BER-TLV:	02	05	86	03	81	33	33

27.22.6.3.5 Test requirement

The ME shall operate in the manner defined in expected sequences 3.1 to 3.5.

27.22.6.4 Support of Barred Dialling Number (BDN) service

27.22.6.4.1 Definition and applicability

Barred Dialling Numbers (BDN) is a service defined for the USIM. An enabled BDN service results in call restrictions for the ME. The call restrictions are controlled by the Terminal. To ascertain the type of USIM and state of BDN the ME runs the BDN capability request procedure during UICC-Terminal initialisation. At the time an emergency call is setup using the emergency call code read from the EF_{ECC}, the Rel-4+ ME shall use the category of the emergency service indicated.

27.22.6.4.2 Conformance requirement

1) Recognising the state of the USIM (BDN enabled) the ME shall perform the UICC initialisation procedure as specified.

2) The ME shall prevent call set-up to any number stored in EF_{BDN} if BDN service is enabled.

3) The ME shall allow call set-up to any number stored in EF_{BDN} if BDN service is disabled.

4) Any change to the EF_{BDN} or EF_{EST} does request PIN2.

5) The ME allows call set-up of an emergency call, even if this number is stored in the USIM.

References:

- R99: TS 22.101[22], clause 8 and A.19;
- Rel-4: TS 22.101[22], clause 9 and A.20;
- Rel-5+: TS 22.101[22], clause 10 and A.21;
- TS 31.102[14], clauses 4.2.44, 4.4.2.3, 5.1.1 and 5.3.2;
- TS 24.008[10], clause 10.5.4.33;
- TS 31.111[15], clause 7.3.1.5

27.22.6.4.3 Test purpose

1) To verify that the Terminal rejects call set-up to any number that has an entry in EF_{BDN} if BDN service is enabled.
2) To verify that the Terminal allows call set-up to any number not stored in EF_{BDN}.
3) To verify that the Terminal allows emergency call set-up even if the number is stored in EF_{BDN}.
4) To verify that the Rel-4+ Terminal reads correctly the emergency service category stored in $EF_{ECC.}$
5) To verify that, if the UICC responds with "not allowed", the ME does not set up the call.
6) To verify that, if the UICC responds with "allowed, no modification", the ME shall set up the call (or the supplementary service operation) as proposed.
7) To verify that, if the UICC responds with "allowed with modifications", the ME sets up the call in accordance with the response from the UICC. If the modifications involve changing the dialled number the ME does not re-check this modified number against the FDN list when FDN is enabled.
8) To verify that updating EF BDN or changing the status of BDN service shall be performed by the use of second application PIN only.
9) To verify that the ME allows call set up to a BDN number if BDN service is disabled.

27.22.6.4.4 Method of tests

27.22.6.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The call control service is available in the USIM Service Table.

The elementary files are coded as USIM Application Toolkit default with the following exceptions:

Barred Dialling Number service is enabled.

Fixed Dialling Number service is disabled.

Only prior to the execution of expected sequence 4.3 the FDN service shall be enabled.

The Second Application PIN (key reference 81) shall be enabled, but not verified.

Only in expected sequence 4.2B EF_{ECC} shall be used with the following values:

EF_{ECC} (Emergency Call Codes)

Logically: Emergency call code: "122";

Emergency call code alpha identifier: "TEST";
Emergency call Service Category: "Mountain Rescue".

Coding:	B1	B2	B3	B4	B5	B6	B7	B8
Hex	21	F2	FF	54	45	53	54	10

The GERAN/UTRAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01 ;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

The PCS 1900 parameters of the system simulator are:

Mobile Country Code (MCC) = 001;

- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

27.22.6.4.4.2 Procedure

Expected Sequence 4.1 (CALL CONTROL BY USIM, BDN service enabled)

Step	Direction	Message / Action	Comments
1	User → ME	The user sets up a call to "+1357924680"	[Number as stored in record 1 of EF BDN]
2	ME → UICC	ENVELOPE CALL CONTROL 4.1.1A or ENVELOPE CALL CONTROL 4.1.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	CALL CONTROL RESULT 4.1.1	[Call control result: "Not Allowed"]
4	ME → USS	The ME does not set up the call	
5	User → ME	The user sets up a call to the number stored in record 1 of EF ADN	
6	ME → UICC	ENVELOPE CALL CONTROL 4.1.2A or ENVELOPE CALL CONTROL 4.1.2B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
7	UICC → ME	CALL CONTROL RESULT 4.1.2	[Call control result: "Allowed without modifications"]
8	ME → USS	The ME sets up the call without modification	
9	User → ME	The user sets up a call to "123456"	
10	ME → UICC	ENVELOPE CALL CONTROL 4.1.3A or ENVELOPE CALL CONTROL 4.1.3B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
11	UICC → ME	CALL CONTROL RESULT 4.1.2	[Call control result: "Allowed without modifications"]
12	ME → USS	The ME sets up the call without modification	
13	User → ME	The user sets up a call to "1111"	

14	ME → UICC	ENVELOPE CALL CONTROL 4.1.4A or ENVELOPE CALL CONTROL 4.1.4B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
15	UICC → ME	CALL CONTROL RESULT 4.1.3	[Call control result: "Allowed with modifications"]
16	ME → USS	The ME sets up the call with data sent by the UICC	[Set up call to "2222"]
17	User → ME	The user shall use a MMI dependent procedure to initiate the disabling of the BDN service	
18	ME → User	Ask for second application PIN verification	
19	User → ME	The user shall enter the second application PIN	
20	ME → UICC	Update EF EST to disable BDN service	
21	UICC → ME	UICC responds with SW = "90 00"	
22	ME → User	Indicate that the BDN service was disabled successfully	
23	User → ME	The user uses the MMI to store the directory number "+876543210" in EF_{BDN} as barred dialling number 1 (record 1).	[The alpha identifier is not changed.]
24	ME → UICC	Update EF BDN	
25	UICC → ME	UICC responds with SW = "90 00"	
26	ME → User	The user attempts to set up a call to "+876543210".	
27a	ME → UICC	No Envelope call control is sent	
27b	ME → USS	The ME sets up the call without modification	

ENVELOPE CALL CONTROL 4.1.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON International
NPI "ISDN / telephone numbering plan"
Dialling number string "1357924680"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	06	91	31	75	29
	64	08	Note 2	13	Note 4	00	F1	10	00	01	00	01
	Note5	Note 3										

ENVELOPE CALL CONTROL 4.1.1B

Logically:

Device identities

Source device: ME
Destination device: UICC

Address
TON International
NPI "ISDN / telephone numbering plan"
Dialling number string "1357924680"

Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.

Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	06	91	31	75	29
	64	08	Note 2	13	07	00	11	10	00	01	00	01
	Note 3											

Note 1: Length of BER-TLV is '15' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 4: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 5: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

ENVELOPE CALL CONTROL 4.1.2A

Logically:

Device identities
Source device: ME
Destination device: UICC

Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "123"

Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.

Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 5

Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	F3	Note 2
	13	Note 4	00	F1	10	00	01	00	01	Note 5	Note 3	

ENVELOPE CALL CONTROL 4.1.2B

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "123"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	F3	Note 2
	13	07	00	11	10	00	01	00	01	Note 3		

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 4: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 5: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

ENVELOPE CALL CONTROL 4.1.3A

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "123456"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 5
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	04	81	21	43	65
	Note 2	13	Note 4	00	F1	10	00	01	00	01	Note 5	Note 3

ENVELOPE CALL CONTROL 4.1.3B

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "123456"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	04	81	21	43	65
	Note 2	13	07	00	11	10	00	01	00	01	Note 3	

Note 1: Length of BER-TLV is '13' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 4: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'.

Note 5: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

ENVELOPE CALL CONTROL 4.1.4A

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "1111"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 5
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	11	11	Note 2
	13	Note 4	00	F1	10	00	01	00	01	Note 5	Note 3	

ENVELOPE CALL CONTROL 4.1.4B

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "1111"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	11	11	Note 2
	13	07	00	11	10	00	01	00	01	Note 3		

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 4: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 5: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

CALL CONTROL RESULT 4.1.1

Logically:

Call control result Not Allowed

Coding:

BER-TLV:	01	00

CALL CONTROL RESULT 4.1.2

Logically:

Call control result Allowed, no modifications

Coding:

BER-TLV:	00	00

CALL CONTROL RESULT 4.1.3

Logically:

Call control result Allowed with modifications
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Address value "2222"

Coding:

BER-TLV:	02	05	86	03	81	22	22

Expected Sequence 4.2A (CALL CONTROL BY USIM, BDN service enabled, interaction with emergency call codes, R99 only)

Step	Direction	Message / Action	Comments
1	User → ME	The user sets up an emergency call to an emergency number stored in the terminal.	The used emergency number shall be one of the emergency call codes, which are available when a SIM/USIM is present, according to TS 22.101[22], clause 8 is used (i.e. "112", or "911").
2a	ME → UICC	No Envelope call control is sent	
2b	ME → USS	The ME shall allow an emergency call by indicating the call setup as "Emergency Call".	
3	User → ME	End the emergency call.	

Expected Sequence 4.2B (CALL CONTROL BY USIM, BDN service enabled, interaction with emergency call codes, Rel-4+)

Step	Direction	Message / Action	Comments
1	User → ME	The user sets up an emergency call to an emergency number stored in the terminal.	The used emergency number shall be one of the emergency call codes, which are available when a SIM/USIM is present, according to TS 22.101[22], clause 9 (Rel-4) or 10 (Rel-5+) is used (i.e. "112", or "911").
2a	ME → UICC	No Envelope call control is sent	
2b	ME → USS	The ME shall allow an emergency call by indicating the call setup as "Emergency Call".	
3	User → ME	End the emergency call.	
4	User → ME	The user sets up an emergency call to an emergency number stored in the USIM.	
5a	ME → UICC	No Envelope call control is sent	
5b	ME → USS	The ME shall allow an emergency call by sending the emergency service category correctly as "Mountain Rescue".	
6	User → ME	End the emergency call.	

Expected Sequence 4.3 (CALL CONTROL BY USIM , FDN and BDN enabled, set up a call in EF_{FDN}, Allowed with modifications)

Step	Direction	Message / Action	Comments
1	User → ME	The user sets up a call to "123"	
2	ME → UICC	ENVELOPE CALL CONTROL 4.3.1A or ENVELOPE CALL CONTROL 4.3.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	CALL CONTROL RESULT 4.3.1	[Call control result: "Allowed with modifications"]
4	ME → USS	The ME sets up the call with data sent by the UICC	[Set up call to "24680"the ME does not re-check this modified number against the FDN list]

ENVELOPE CALL CONTROL 4.3.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "123"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 5
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	F3	Note 2
	13	Note 4	00	F1	10	00	01	00	01	Note 5	Note 3	

ENVELOPE CALL CONTROL 4.3.1B

Logically:

Device identities
Source device: ME
Destination device: UICC
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "123"
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Subaddress
This parameter is optional. If present, the contents shall not be checked.
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	F3	Note 2
	13	07	00	11	10	00	01	00	01	Note 3		

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

Note 4: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 5: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

CALL CONTROL RESULT 4.3.1

Logically:

Call control result Allowed with modifications
Address
TON Unknown
NPI "ISDN / telephone numbering plan"
Address value "24680"

Coding:

BER-TLV:	02	06	86	04	81	42	86	F0		

27.22.6.4.5 Test requirement

The ME shall operate in the manner defined in expected sequences 4.1 to 4.3.

27.22.6.5 Barred Dialling Number (BDN) service handling for terminals not supporting BDN

27.22.6.5.1 Definition and applicability

Barred Dialling Numbers (BDN) is a service defined for the USIM. An enabled BDN service results in call restrictions for the ME. The call restrictions are controlled by the Terminal. If BDN is enabled, an ME which does not support Call Control shall allow emergency calls but shall not allow MO-CS calls.

27.22.6.5.2 Conformance requirement

1) Recognising the state of the USIM (BDN enabled) the ME shall perform the UICC initialisation procedure as specified.

2) The ME shall prevent MO-CS call set-up to any number except to emergency call numbers if the BDN service is enabled.

References:

- Rel-5+: TS 22.101[22], clause 10 and A.21;

  TS 31.102[14], clauses 4.2.44, 4.4.2.3, 5.1.1.2 and 5.3.2;

  TS 31.111[15], clause 7.3.1.5

27.22.6.5.3 Test purpose

1) To verify that the Terminal rejects MO-CS call set-up to any number except to emergency call numbers if BDN service is enabled.

2) To verify that the Terminal allows emergency call set-up even if the BDN service is enabled.

27.22.6.5.4 Method of tests

27.22.6.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The call control service is available in the USIM Service Table.

The elementary files are coded as USIM Application Toolkit default with the following exceptions:

Barred Dialling Number service is enabled.

27.22.6.5.4.2 Procedure

Expected Sequence 5.1 (CALL CONTROL BY USIM, BDN service enabled, ME not supporting BDN)

Step	Direction	Message / Action	Comments
1	User → ME	The user sets up a call to "+1357924680"	[Number as stored in record 1 of EF BDN]
2a	ME → UICC	No ENVELOPE CALL CONTROL is sent	
2b	ME → USS	The ME does not set up the call	
3	User → ME	The user sets up a call to the number stored in record 1 of EF ADN	
4a	ME → UICC	No ENVELOPE CALL CONTROL is sent	
4b	ME → USS	The ME does not set up the call	
5	User → ME	The user sets up an emergency call to "112"	
6a	ME → UICC	No ENVELOPE CALL CONTROL is sent	
6b	ME → USS	The ME sets up the emergency call to "112"	
7	User → ME	The user shall terminate the emergency call after 5 seconds. The ME returns to idle mode.	

27.22.6.5.5 Test requirement

The ME shall operate in the manner defined in expected sequences 5.1.

27.22.7 EVENT DOWNLOAD

27.22.7.1 MT Call Event

27.22.7.1.1 MT Call Event (normal)

27.22.7.1.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.1.1.2 Conformance requirement

The ME shall support the EVENT: MT Call event as defined in:

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 7.5, and clause 8.25.

27.22.7.1.1.3 Test purpose

To verify that the ME informs the UICC that an Event: MT Call has occurred using the ENVELOPE (EVENT DOWNLOAD - MT Call) command.

27.22.7.1.1.4 Method of test

27.22.7.1.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.1.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD -MT Call event)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	USS → ME	CALL SET UP without CLI	[MT Call Set Up Without CLI]
6	ME → UICC	ENVELOPE: EVENT DOWNLOAD - MT Call 1.1.1	
7	USS → ME	CALL DISCONNECT	
8	USS → ME	CALL SET UP with CLI	[MT Call Set Up With CLI]
9	ME → UICC	ENVELOPE: EVENT DOWNLOAD - MT Call 1.1.2	
10	USS → ME	CALL DISCONNECT	

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: MT call

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	00										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

EVENT DOWNLOAD - MT CALL 1.1.1

Logically:

Event list: MT call event
Device identities
Source device: Network
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 0 (bit 8)

Coding:

BER-TLV:	D6	0A	19	01	00	82	02	83	81	1C	01	00

EVENT DOWNLOAD - MT CALL 1.1.2

Logically:

Event list: MT call event
Device identities
Source device: Network
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 0 (bit 8)
Address:
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "9876"

Coding:

BER-TLV:	D6	0F	19	01	00	82	02	83	81	1C	01	00
	86	03	81	89	67							

27.22.7.1.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

27.22.7.2 Call Connected Event

27.22.7.2.1 Call Connected Event (MT and MO call)

27.22.7.2.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.2.1.2 Conformance requirement

The ME shall support the EVENT: Call Connected event as defined in:

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 7.5, clause 8.25 and clause 8.28.

27.22.7.2.1.3 Test purpose

To verify that the ME informs the UICC that an Event: Call Connected has occurred using the ENVELOPE (EVENT DOWNLOAD -Call Connected) command.

To verify that the ME provides the correct value of the Transaction identifier to the UICC in the Call Connected Event.

27.22.7.2.1.4 Method of test

27.22.7.2.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.2.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD -CALL CONNECTED)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[EVENT: Call Connected active]
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	USS → ME	SETUP	[MT Call] TI = 0
6	USER → ME	Accept Call Set Up	
7	ME→USS	CONNECT	
8	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Call Connected 1.1.1	
9	USS → ME	DISCONNECT	
10	USER → ME	Initiate Call to "123"	
11	ME → USS	SETUP	[MO Call] TI = 0
12	USS → ME	CONNECT	
13	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Call Connected 1.1.2	
14	USER → ME	End Call	
15	ME → USS	DISCONNECT	

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
- Command number: 1
- Command type: SET UP EVENT LIST
- Command qualifier: '00'

Device identities
- Source device: UICC
- Destination device: ME

Event list
- Event 1: Call Connected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	01										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

EVENT DOWNLOAD - CALL CONNECTED 1.1.1

Logically:

Event list: Call connected
Device identities
Source device: ME
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 1 (bit 8)

Coding:

BER-TLV:	D6	0A	19	01	01	82	02	82	81	1C	01	80

EVENT DOWNLOAD - CALL CONNECTED 1.1.2

Logically:

Event list: Call connected
Device identities
Source device: Network
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 1 (bit 8)

Coding:

BER-TLV:	D6	0A	19	01	01	82	02	83	81	1C	01	80

Expected Sequence 1.2 (EVENT DOWNLOAD -CALL CONNECTED, simultaneous calls, MT call followed by MO call)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1	[EVENT: Call Connected active]
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.2.1	
5	USS → ME	SETUP	[MT Call] TI = 0

6	USER → ME	Accept Call Set Up	
7	ME→USS	CONNECT	
8	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Call Connected 1.2.1	
9	USER → ME	Initiate Call to "123"	
10	ME → USS	SETUP	[MO Call] TI = 1
11	USS → ME	CONNECT	
12	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Call Connected 1.2.2	
13	USER → ME	End Call "123"	
14	ME → USS	DISCONNECT Call "123"	[MO Call] TI = 1
15	USS → ME	DISCONNECT MT Call	[MT Call] TI = 0

PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: Call Connected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	01										

TERMINAL RESPONSE: SET UP EVENT LIST 1.2.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

EVENT DOWNLOAD - CALL CONNECTED 1.2.1

Logically:

Event list: Call connected
Device identities
Source device: ME
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 1 (bit 8)

Coding:

BER-TLV:	D6	0A	19	01	01	82	02	82	81	1C	01	80

EVENT DOWNLOAD - CALL CONNECTED 1.2.2

Logically:

Event list: Call connected
Device identities
Source device: Network
Destination device: UICC
Transaction identifier:
TI value: 1 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 1 (bit 8)

Coding:

BER-TLV:	D6	0A	19	01	01	82	02	83	81	1C	01	90

Expected Sequence 1.3 (EVENT DOWNLOAD -CALL CONNECTED, simultaneous calls, MO call followed by MO call)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.3.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.3.1	[EVENT: Call Connected active]
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.3.1	
5	USER → ME	Initiate Call to "123"	
6	ME → USS	SETUP	[MO Call] TI = 0
7	USS → ME	CONNECT	
8	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Call Connected 1.3.1	
9	USER → ME	Initiate Call to "456"	
10	ME → USS	SETUP	[MO Call] TI = 1
11	USS → ME	CONNECT	
12	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Call Connected 1.3.2	
13	USER → ME	End Call "456"	
14	ME → USS	DISCONNECT Call "456"	[MO Call] TI = 1
15	USS → ME	DISCONNECT Call "123"	[MO Call] TI = 0

PROACTIVE COMMAND: SET UP EVENT LIST 1.3.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: Call Connected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	01										

TERMINAL RESPONSE: SET UP EVENT LIST 1.3.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

EVENT DOWNLOAD - CALL CONNECTED 1.3.1

Logically:

Event list: Call connected
Device identities
Source device: Network
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 1 (bit 8)

Coding:

BER-TLV:	D6	0A	19	01	01	82	02	83	81	1C	01	80

EVENT DOWNLOAD - CALL CONNECTED 1.3.2

Logically:

Event list: Call connected
Device identities
Source device: Network
Destination device: UICC
Transaction identifier:
TI value: 1 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 1 (bit 8)

Coding:

BER-TLV:	D6	0A	19	01	01	82	02	83	81	1C	01	90

Expected Sequence 1.4 (EVENT DOWNLOAD -CALL CONNECTED, simultaneous calls, MO call followed by MT call)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.4.1	

2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.4.1	[EVENT: Call Connected active]
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.3.1	
5	USER → ME	Initiate Call to "123"	
6	ME → USS	SETUP	[MO Call] TI = 0
7	USS → ME	CONNECT	
8	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Call Connected 1.4.1	
9	USS → ME	SETUP	[MT Call] TI = 0
10	USER → ME	Accept Call Set Up	
11	ME→USS	CONNECT	
12	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Call Connected 1.4.2	
13	ME → USS	DISCONNECT MT Call	[MO Call] TI = 0
14	USS → ME	DISCONNECT MO Call	[MO Call] TI = 0

PROACTIVE COMMAND: SET UP EVENT LIST 1.4.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: Call Connected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	01										

TERMINAL RESPONSE: SET UP EVENT LIST 1.4.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

EVENT DOWNLOAD - CALL CONNECTED 1.4.1

Logically:

Event list: Call connected
Device identities
Source device: Network

Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 1 (bit 8)

Coding:

BER-TLV:	D6	0A	19	01	01	82	02	83	81	1C	01	80

EVENT DOWNLOAD - CALL CONNECTED 1.4.2

Logically:

Event list: Call connected
Device identities
Source device: ME
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 1 (bit 8)

Coding:

BER-TLV:	D6	0A	19	01	01	82	02	82	81	1C	01	80

27.22.7.2.1.5 Test requirement

The behaviour of the test is as defined in Expected Sequences 1.1 to 1.4.

27.22.7.2.2 Call Connected Event (ME supporting SET UP CALL)

27.22.7.2.2.1 Definition and applicability

See clause 3.2.2.

27.22.7.2.2.2 Conformance requirement

Additionally the ME shall support the SET UP CALL Proactive UICC Command as defined in:

- TS 31.111 [15] clause 7.5, clause 6.4.13 and clause 6.6.12.

27.22.7.2.2.3 Test purpose

To verify that the ME informs the UICC that an Event: Call Connected has occurred using the ENVELOPE (EVENT DOWNLOAD -Call Connected) command.

27.22.7.2.2.4 Method of test

27.22.7.2.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.2.2.4.2 Procedure

Expected Sequence 2.1 (EVENT DOWNLOAD -CALL CONNECTED, ME supporting SET UP CALL)

Step	Direction	Message / Action	Comments

1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 2.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 2.1.1	[EVENT: Call Connected active]
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 2.1.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: SET UP CALL 2.1.1	
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: SET UP CALL 2.1.1	[SAT Call]
8	ME → USER	ME displays "+012340123456" during the user confirmation phase.	ME BEHAVIOUR: SET UP CALL
9	USER → ME	Confirm call set up	
10	ME → USS	SETUP	TI=0
11	USS → ME	CONNECT	
12	ME → UICC	TERMINAL RESPONSE: SET UP CALL 2.1.1	
13	ME → UICC	ENVELOPE: CALL CONNECTED 2.1.1	

PROACTIVE COMMAND: SET UP EVENT LIST 2.1.1

Logically:

Command details
- Command number: 1
- Command type: SET UP EVENT LIST
- Command qualifier: '00'

Device identities
- Source device: UICC
- Destination device: ME

Event list
- Event 1: Call Connected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	01										

TERMINAL RESPONSE: SET UP EVENT LIST 2.1.1

Logically:

Command details
- Command number: 1
- Command type: SET UP EVENT LIST
- Command qualifier: '00'

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

PROACTIVE COMMAND: SET UP CALL 2.1.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: Only if not currently busy on another call
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "+012340123456"
Address
TON: International
NPI: "ISDN / telephone numbering plan"
Dialling number string "012340123456"

Coding:

BER-TLV:	D0	21	81	03	01	10	00	82	02	81	83
	05	0D	2B	30	31	32	33	34	30	31	32
	33	34	35	36	86	07	91	10	32	04	21
	43	65									

TERMINAL RESPONSE: SET UP CALL 2.1.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: Only if not currently busy on another call
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

EVENT DOWNLOAD - CALL CONNECTED 2.1.1

Logically:

Event list: Call connected
Device identities
Source device: Network
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 1 (bit 8)

Coding:

BER-TLV:	D6	0A	19	01	01	82	02	83	81	1C	01	80

27.22.7.2.2.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 2.1'.

27.22.7.3 Call Disconnected Event

27.22.7.3.1 Call Disconnected Event

27.22.7.3.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.3.1.2 Conformance requirement

The ME shall support the EVENT: Call Disconnected event as defined in:

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 7.5, and clause 8.25.

27.22.7.3.1.3 Test purpose

To verify that the ME informs the UICC that an Event: Call Disconnected has occurred using the ENVELOPE (EVENT DOWNLOAD -Call Disconnected) command.

27.22.7.3.1.4 Method of test

27.22.7.3.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.3.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD -CALL DISCONNECTED)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[EVENT: Call Disconnected active]
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	USS → ME	SETUP	[incoming call] TI=0
6	USER → ME	Accept Call Set Up	
7	USS → ME	RELEASE	[MT RELEASE]
8	ME→ UICC	ENVELOPE: CALL DISCONNECTED 1.1.1	
9	USS → ME	SETUP	[incoming call] TI=0
10	USER → ME	Accept Call Set Up	
11	USS → ME	RELEASE COMPLETE	[MT RELEASE COMPLETE]
12	ME→ UICC	ENVELOPE: CALL DISCONNECTED 1.1.1	
13	USS → ME	SETUP	[incoming call] TI=0
14	USER → ME	Accept Call Set Up	
15	USER → ME	End Call	
16	ME → USS	DISCONNECT	[MO DISCONNECT]
17	ME → UICC	ENVELOPE: CALL DISCONNECTED 1.1.2A or ENVELOPE: CALL DISCONNECTED 1.1.2B or ENVELOPE: CALL DISCONNECTED 1.1.2C	
18	USS → ME	SETUP	[incoming call] TI=0

19	USER → ME	Accept Call Set Up	
20	USS → ME	DISCONNECT	[MT DISCONNECT + CAUSE: normal call clearing]
21	ME→ UICC	ENVELOPE: CALL DISCONNECTED 1.1.3A or ENVELOPE: CALL DISCONNECTED 1.1.3B	
22	USS → ME	SETUP	TI=0
23	USER → ME	Accept Call Set Up	
24	USS	TX POWER to XX	[RADIO LINK FAILURE]
25	ME→ UICC	ENVELOPE: CALL DISCONNECTED 1.1.4A or 1.1.4B	

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: Call Disconnected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	02										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

EVENT DOWNLOAD - CALL DISCONNECTED 1.1.1

Logically:

Event list: Call Disconnected
Device identities
Source device: Network
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 0 (bit 8)

Cause:

Coding:

BER-TLV:	D6	0A	19	01	02	82	02	83	81	1C	01	00

EVENT DOWNLOAD - CALL DISCONNECTED 1.1.2A

Logically:

Event list: Call Disconnected
Device identities
Source device: ME
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 1 (bit 8)

Coding:

BER-TLV:	D6	0A	19	01	02	82	02	82	81	1C	01	80

EVENT DOWNLOAD - CALL DISCONNECTED 1.1.2B

Logically:

Event list: Call Disconnected
Device identities
Source device: ME
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 1 (bit 8)
Cause: normal call clearing

Coding:

BER-TLV:	D6	0E	19	01	02	82	02	82	81	1C	01	80
	9A	02	60	90								

EVENT DOWNLOAD - CALL DISCONNECTED 1.1.2C

Logically:

Event list: Call Disconnected
Device identities
Source device: ME
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 1 (bit 8)
Cause: normal call clearing

Coding:

BER-TLV:	D6	0E	19	01	02	82	02	82	81	1C	01	80
	9A	02	E0	90								

EVENT DOWNLOAD - CALL DISCONNECTED 1.1.3A

Logically:

Event list: Call Disconnected
Device identities
Source device: Network
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 0 (bit 8)
Cause: normal call clearing

Coding:

BER-TLV:	D6	0E	19	01	02	82	02	83	81	1C	01	00
	9A	02	60	90								

EVENT DOWNLOAD - CALL DISCONNECTED 1.1.3B

Logically:

Event list: Call Disconnected
Device identities
Source device: Network
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 0 (bit 8)
Cause: normal call clearing

Coding:

BER-TLV:	D6	0E	19	01	02	82	02	83	81	1C	01	00
	9A	02	E0	90								

EVENT DOWNLOAD - CALL DISCONNECTED 1.1.4A

Logically:

Event list: Call Disconnected
Device identities
Source device: ME
Destination device: UICC
Transaction identifier:
TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 1 (bit 8)
Cause: radio link failure

Coding:

BER-TLV:	D6	0C	19	01	02	82	02	82	81	1C	01	80
	9A	00										

EVENT DOWNLOAD - CALL DISCONNECTED 1.1.4B

Logically:

Event list: Call Disconnected
Device identities
Source device: ME
Destination device: UICC
Transaction identifier:

TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified
TI flag: 0 (bit 8)
Cause: radio link failure

Coding:

BER-TLV:	D6	0C	19	01	02	82	02	82	81	1C	01	00
	9A	00										

27.22.7.3.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

27.22.7.4 Location Status Event

27.22.7.4.1 Location Status Event (normal)

27.22.7.4.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.4.1.2 Conformance requirement

The ME shall support the EVENT: Location Status event as defined in:

- TS 31.111 [15] clause 5.2, 7.5 and clause 6.4.16

and

- UTRAN/GERAN for sequence 1.1;
- E-UTRAN (WB-S1 mode or NB-S1 mode) for sequence 1.2;
- NG-RAN for sequence 1.3.

27.22.7.4.1.3 Test purpose

To verify that the ME informs the UICC that an Event: MM_IDLE state has occurred using the ENVELOPE (EVENT DOWNLOAD - Location Status) command.

To verify that the ME supporting E-UTRAN/EPC informs the UICC that an Event: EMM_IDLE state has occurred using the ENVELOPE (EVENT DOWNLOAD - Location Status) command.

To verify that the ME supporting E-UTRAN/EPC correctly encodes the E-UTRAN Cell Id in the ENVELOPE (EVENT DOWNLOAD - Location Status) command.

To verify that the ME supporting NG-RAN informs the UICC that an Event: 5GMM_IDLE state has occurred using the ENVELOPE (EVENT DOWNLOAD - Location Status) command.

To verify that the ME supporting NG-RAN correctly encodes the 5G Cell Id in the ENVELOPE (EVENT DOWNLOAD - Location Status) command.

27.22.7.4.1.4 Method of test

27.22.7.4.1.4.1 Initial conditions

For sequence 1.1 the ME is connected to the USIM Simulator and the USS.

The elementary files are coded as the USIM Application Toolkit default.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

The GERAN/UTRAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001;

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

Two cells are defined. Cell 1 has location area code 1 and cell 2 has location area code 2.

MS is in service on Cell 1.

For sequence 1.2 the ME is connected to the USIM Simulator and the E-USS/NB-SS.

The default E-UTRAN/EPC UICC is used.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

The E-UTRAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;

For cell 1:

- Tracking Area Code (TAC) = 0001;
- E-UTRAN Cell Id = 0001 (28 bits);

For cell 2:

- Tracking Area Code (TAC) = 0002;
- E-UTRAN Cell Id = 0002 (28 bits).

The NB-IoT parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;

For cell 1:

- Tracking Area Code (TAC) = 0001;
- NB-IoT Cell Id = 0001 (28 bits);

For cell 2:

- Tracking Area Code (TAC) = 0002;
- NB-IoT Cell Id = 0002 (28 bits).

For sequence 1.3 the ME is connected to the USIM Simulator and the NG-SS.

The default NG-RAN UICC is used.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

If programmable USIM with test applet is used (as defined in clause 27.0), UICC shall register for Location Status Event using the proactive command SET UP EVENT LIST with Location Status event in the event list (ref to 102.241 cl 6.7.1.2).

The NG-SS transmits on the BCCH, with the following network parameters:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;

For cell 1:

- Tracking Area Code (TAC) = 000001;
- NG-RAN Cell Id = 0001 (36 bits);

For cell 2:

- Tracking Area Code (TAC) = 000002;
- NG-RAN Cell Id = 0002 (36 bits);

27.22.7.4.1.4.2 Procedure

Expected Sequence 1.1(EVENT DOWNLOAD -LOCATION STATUS)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4a	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
4b	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 1.1.1A [applies for GERAN/UTRAN parameters] or ENVELOPE: EVENT DOWNLOAD - Location Status 1.1.1B [applies for PCS1900 parameters]	This step applies only if A.1/171
5	USS	Cell 1 is switched off	
6	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 1.1.1	
7	USS	Cell 2 is switched on after Location Status "No service" has been received in step 6	
8	ME	ME performs cell reselection to cell 2	
9	ME → USS	LOCATION UPDATING REQUEST or ROUTING AREA UPDATE REQUEST	The ME is CS and/or PS registered depending on its capabilities
10	USS → ME	LOCATION UPDATING ACCEPT or ROUTING AREA UPDATE ACCEPT	
11	ME → USS	TMSI REALLOCATION COMPLETE or ROUTING AREA UPDATE COMPLETE	

12	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 1.1.2A or ENVELOPE: EVENT DOWNLOAD - Location Status 1.1.2B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters] [Note: The inclusion of the location information is optional: (If location status indicates normal status)

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: Location status

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	03										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

EVENT DOWNLOAD - LOCATION STATUS 1.1.1

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: No service

Coding:

BER-TLV:	D6	0A	19	01	03	82	02	82	81	1B	01	02

EVENT DOWNLOAD - LOCATION STATUS 1.1.1A

Logically:

Event list: Location status

Device identities

Source device: ME

Destination device: UICC

Location status: normal service

Location Information

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)

Cell ID Cell Identity Value (0001)

Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 3

Coding:

BER-TLV:	D6	Note 1	19	01	03	82	02	82	81	1B	01	00
	13	Note 2	00	F1	10	00	01	00	01	Note 3		

Note 1: Depending on the presence of the Extended Cell Identity Value the length is '13' or '15'

Note 2: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 3: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified

EVENT DOWNLOAD - LOCATION STATUS 1.1.1B

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: normal service
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D6	13	19	01	03	82	02	82	81	1B	01	00
	13	07	00	11	10	00	01	00	01			

EVENT DOWNLOAD - LOCATION STATUS 1.1.2A

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC

Location status: normal service
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0002)
Cell ID Cell Identity Value (0002)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 3

Coding:

BER-TLV:	D6	Note 1	19	01	03	82	02	82	81	1B	01	00
	13	Note 2	00	F1	10	00	02	00	02	Note 3		

Note 1: Depending on the presence of the Extended Cell Identity Value the length is '13' or '15'

Note 2: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 3: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified

EVENT DOWNLOAD - LOCATION STATUS 1.1.2B

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: normal service
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0002)
Cell ID Cell Identity Value (0002)

Coding:

BER-TLV:	D6	13	19	01	03	82	02	82	81	1B	01	00
	13	07	00	11	10	00	02	00	02			

Expected Sequence 1.2 (EVENT DOWNLOAD -LOCATION STATUS, E-UTRAN)

Step	Direction	Message / Action	Comments
1	ME	The ME is registered to cell one and in EMM_IDLE	
2	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
5a	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5b	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 1.2.1A	This step applies only if A.1/171
6	E-USS/NB-SS	Cell 1 is switched off	
7	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 1.2.1	
8	E-USS/NB-SS	Cell 2 is switched on after Location Status "No service" has been received in step 7	
9	ME	ME performs cell reselection to cell 2	

10	ME → E-USS/NB-SS	ME performs EPS ATTACH or TRACKING AREA UPDATE procedure	[E-UTRAN/NB-IoT cell 2 accepts]
11	ME	ME reaches EMM_IDLE state	
12	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 1.2.2	

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in sequence 1.1

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Same as Terminal Response: SET UP EVENT LIST 1.1.1 in sequence 1.1

EVENT DOWNLOAD - LOCATION STATUS 1.2.1

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: No service

Coding:

BER-TLV:	D6	0A	19	01	03	82	02	82	81	1B	01	02

EVENT DOWNLOAD - LOCATION STATUS 1.2.1A

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: normal service
Location Information
MCC & MNC the mobile country and network code (00F110)
TAC 0001
E-UTRAN cell id: 0001 (28bits)

Coding:

BER-TLV:	D6	15	19	01	03	82	02	82	81	1B	01	00
	13	09	00	F1	10	00	01	00	00	00	1F	

EVENT DOWNLOAD - LOCATION STATUS 1.2.2

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: normal service
Location Information
MCC & MNC the mobile country and network code (00F110)
TAC 0002
E-UTRAN cell id: 0002 (28bits)

Coding:

BER-TLV:	D6	15	19	01	03	82	02	82	81	1B	01	00
	13	09	00	F1	10	00	02	00	00	00	2F	

Expected Sequence 1.3 (EVENT DOWNLOAD -LOCATION STATUS, NG-RAN)

Step	Direction	Message / Action	Comments
1	ME	The ME is registered to cell 1 and in 5GMM_IDLE.	
2	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
5a	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	If programmable USIM with test applet is used (as defined in clause 27.0), the TERMINAL RESPONSE cannot be verified and that the Event has been registered in the device is implicitly verified at ste step 5b (ENVELOPE: EVENT DOWNLOAD - Location Status 1.3.1A) and/or step 7 (ENVELOPE: EVENT DOWNLOAD - Location Status 1.3.1).
5b	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 1.3.1A	This step applies only if A.1/171
6	NG-SS	Cell 1 is switched off.	
7	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 1.3.1	
8	NG-SS	Cell 2 is switched on after Location Status "No service" has been received in step 7.	
9	ME	ME performs cell reselection to cell 2.	
10	ME → NG-SS	ME performs 5GS registration with 5GS registration type IE set to "initial registration" or "mobility registration updating".	[NG-SS cell 2 accepts]
11	ME	ME reaches 5GMM_IDLE state.	
12	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 1.3.2	

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in sequence 1.1

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Same as Terminal Response: SET UP EVENT LIST 1.1.1 in sequence 1.1

EVENT DOWNLOAD - LOCATION STATUS 1.3.1

Logically:

Event list: Location status

Device identities

Source device: ME

Destination device: UICC

Location status: No service

Coding:

BER-TLV:	D6	0A	19	01	03	82	02	82	81	1B	01	02

EVENT DOWNLOAD - LOCATION STATUS 1.3.1A

Logically:

Event list: Location status

Device identities

Source device: ME

Destination device: UICC

Location status: normal service

Location Information

MCC & MNC the mobile country and network code (00F110)

TAC 000001

NG-SS cell id: 0001 (36bits)

Coding:

BER-TLV:	D6	17	19	01	03	82	02	82	81	1B	01	00
	13	0B	00	F1	10	00	00	01	00	00	00	00
	1F											

EVENT DOWNLOAD - LOCATION STATUS 1.3.2

Logically:

Event list: Location status

Device identities

Source device: ME

Destination device: UICC

Location status: normal service

Location Information

MCC & MNC the mobile country and network code (00F110)

TAC 000002

NG-SS cell id: 0002 (36bits)

Coding:

BER-TLV:	D6	17	19	01	03	02	02	82	81	1B	01	00
	13	0B	00	F1	10	00	00	02	00	00	00	00
	2F											

27.22.7.4.1.5 Test requirement

The behaviour of the test shall be as defined in expected sequences 1.1 to 1.3.

27.22.7.5 User Activity Event

27.22.7.5.1 User Activity Event (normal)

27.22.7.5.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.5.1.2 Conformance Requirement

The ME shall support the EVENT DOWNLOAD -USER ACTIVITY as defined in:

- TS 31.111 [15] clause 5.2, clause 6.4.16, clause 6.8, clause 6.6.16, clause 6.11, clause 7.5, clause 8.6 and clause 8.25.

27.22.7.5.1.3 Test purpose

To verify that the ME performed correctly the procedure of USER ACTIVITY EVENT.

27.22.7.5.1.4 Method of Test

27.22.7.5.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.7.5.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD -USER ACTIVITY)

See ETSI TS 102 384 [26] in clause 27.22.7.5.1.4.2, Expected Sequence 1.1.

27.22.7.5.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.7.6 Idle screen available event

27.22.7.6.1 Idle Screen Available (normal)

27.22.7.6.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.6.1.2 Conformance requirement

The ME shall support the EVENT: IDLE SCREEN AVAILABLE event as defined in:

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 7.5, and clause 8.25.

27.22.7.6.1.3 Test purpose

To verify that the ME informs the UICC that an Event: Idle Screen Available has occurred using the ENVELOPE (EVENT DOWNLOAD - IDLE SCREEN AVAILABLE) command.

27.22.7.6.1.4 Method of test

27.22.7.6.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.7.6.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD - IDLE SCREEN AVAILABLE)

See ETSI TS 102 384 [26] in clause 27.22.7.6.1.4.2, Expected Sequence 1.1.

27.22.7.6.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.7.7 Card reader status event

27.22.7.7.1 Card Reader Status (normal)

27.22.7.7.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.7.1.2 Conformance requirement

The ME shall support the EVENT: Call Card Reader Status event as defined in:

- TS 31.111 [15] clause 4.7, clause 4.9, clause 5.2, clause 6.4.16, clause 6.8, clause 7.5, clause 8.25, clause 8.33, annex F, annex G, clause 8.25 and clause 8.7.

27.22.7.7.1.3 Test purpose

To verify that the ME informs the UICC that an Event: Card Reader Status has changed using the ENVELOPE (EVENT DOWNLOAD - Card Reader Status) command.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

27.22.7.7.1.4 Method of test

27.22.7.7.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.7.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD, Card reader status, Card reader 1, card reader attached, no card inserted)

See ETSI TS 102 384 [26] in clause 27.22.7.7.1.4.2, Expected Sequence 1.1.

27.22.7.7.1.5 Test requirement

The behaviour of the test is as defined in expected Sequence 1.1.

27.22.7.7.2 Card Reader Status(detachable card reader)

27.22.7.7.2.1 Definition and applicability

See clause 3.2.2.

27.22.7.7.2.2 Conformance requirement

The ME shall support the EVENT: Call Card Reader Status event as defined in:

- TS 31.111 [15] clause 4.7, clause 4.9, clause 5.2, clause 6.4.16, clause 6.8, clause 7.5, clause 8.25, clause 8.33, annex F, annex G, clause 8.25 and clause 8.7.

27.22.7.7.2.3 Test purpose

To verify that the ME informs the UICC that an Event: Card Reader Status has changed using the ENVELOPE (EVENT DOWNLOAD - Card Reader Status) command.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen as an example.

27.22.7.7.2.4 Method of test

27.22.7.7.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.7.2.4.2 Procedure

Expected Sequence 2.1 (EVENT DOWNLOAD, Detachable reader, Card reader 1, detachable card reader not attached, no card inserted)

See ETSI TS 102 384 [26] in clause 27.22.7.7.2.4.2, Expected Sequence 2.1.

27.22.7.7.2.5 Test requirement

The behaviour of the test is as defined in expected Sequence 2.1.

27.22.7.8 Language selection event

27.22.7.8.1 Language selection event (normal)

27.22.7.8.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.8.1.2 Conformance requirement

The ME shall support the EVENT: LANGUAGE SELECTION event as defined in:

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 7.5, and clause 8.25.

27.22.7.8.1.3 Test purpose

To verify that the ME informs the UICC that an Event: Language selection has occurred using the ENVELOPE (EVENT DOWNLOAD - LANGUAGE SELECTION) command.

27.22.7.8.1.4 Method of test

27.22.7.8.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The current language shall have been set to English. Another language has to be supported, German is an example.

27.22.7.8.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD - LANGUAGE SELECTION)

See ETSI TS 102 384 [26] in clause 27.22.7.8.1.4.2, Expected Sequence 1.1.

27.22.7.8.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.7.9 Browser termination event

27.22.7.9.1 Browser termination (normal)

27.22.7.9.1.1 Definition and applicability

This test is only applicable to ME's that support the EVENT: browser termination event driven information.

27.22.7.9.1.2 Conformance requirement

The ME shall support the EVENT: Browser termination event as defined in:

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 7.5, , clause 8.25, clause 8.51, annex F and clause 8.7.

27.22.7.9.1.3 Test purpose

To verify that the ME informs the UICC of an Event: Browser termination using the ENVELOPE (EVENT DOWNLOAD - Browser Termination) command.

This test applies for MEs which have a browser.

27.22.7.9.1.4 Method of test

27.22.7.9.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

A valid access to a Wap gateway is required. The default browser parameters (IP address, gateway/proxy identity, called number…) of the tested mobile shall be properly filled to access that gateway.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

27.22.7.9.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD - Browser termination)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[EVENT: Browser termination Status]
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[Successfully]
5	User→ME	Launch the browser with the URL selected by the user	
6	ME→USS	The ME attempts to launch the session with the default browser parameters and the URL selected by the user.	
7	User→ME	Stop the session and the browser.	
8	ME→ UICC	ENVELOPE: BROWSER TERMINATION 1.1.1	

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: Browser termination

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82
	99	01	08								

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

ENVELOPE: EVENT DOWNLOAD BROWSER TERMINATION 1.1.1

Logically:

Event list
Event 1: Browser termination
Device identities
Source device: ME
Destination device: UICC
Browser termination cause: User termination

Coding:

BER-TLV:	D6	0A	99	01	08	82	02	82	81	B4	01	00

27.22.7.9.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.7.10 Data available event

27.22.7.10.1 Definition and applicability

See clause 3.2.2.

27.22.7.10.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

Additionally the ME shall support ENVELOPE (EVENT DOWNLOAD - Data available).

If the ME supports option A.1/182, and if the UICC supports the UICC suspension mechanism (SUSPEND UICC command), the ME may suspend the UICC after entering the PSM. In this case, the ME shall successfully resume the UICC before it can leave the PSM. Furthermore, the terminal shall maintain the logical status as before the suspension and it shall resume the UICC for any event for which it had previously registered: this includes events registered with SET UP EVENT LIST proactive command, as specified in ETSI TS 102 221 clause 14.5.6

If the ME supports option A.1/182 and/or A.1/181, if the UE is in PSM and in case the ME wants to deactivate the UICC, it shall wait until the current proactive UICC session, if any, is terminated.

If the ME supports option A.1/183, and in case the UICC supports the UICC suspension mechanism (SUSPEND UICC command), the ME may suspend the UICC during the extended idle mode DRX cycle. In this case, the ME shall resume the UICC successfully before the end of the extended idle mode DRX cycle or before any other transmission to the network. Furthermore, the terminal shall maintain the logical status as before the suspension and it shall resume the UICC for any event for which it had previously registered: this includes events registered with SET UP EVENT LIST proactive command, as specified in ETSI TS 102 221 clause 14.5.6.

- TS 102 221 [13]

- TS 31.102 [14]

27.22.7.10.3 Test purpose

To verify that the ME shall send an ENVELOPE (EVENT DOWNLOAD - Data available) to the UICC after the ME receives a packet of data from the server by the BIP channel previously opened.

To verify that the ME shall send an ENVELOPE (EVENT DOWNLOAD - Data available) to the UICC when the ME resumes the UICC and receives a packet of data from the server by the BIP channel previously opened.

To verify that the ME is performing BIP session correctly when the ME is configured and using PSM or eDRX.

27.22.7.10.4 Method of test

27.22.7.10.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.. The elementary files are coded as Toolkit default for sequence 1.1.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure. The UICC must have sent the SET UP EVENT LIST to the ME to supply a set of events (event Data available).

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

For sequence 1.2, 1.3, 1.4 and 1.5 the default E-UTRAN/EPC UICC, the default E-UTRAN parameters and the following parameters are used:

Network access name: TestGp.rs
User login: UserLog
User password: UserPwd

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.6.4.1

Data destination address : Sames Data Destination Address as defined in 27.22.4.27.6.4.1.

For sequence 1.3 UICC suspension mechanism is indicated as supported by the UICC in the UICC Maximum Power Consumption file (EF_{UMPC}) and the PIN of the USIM is enabled.

For sequence 1.4, UICC suspension mechanism is not indicated as supported by the UICC in the UICC Maximum Power Consumption file (EF_{UMPC}) and the PIN of the USIM is disabled.

Prior to sequence 1.3 and 1.4, the ME was prepared to use PSM, has been powered on, attached to the E-USS/NB-SS where the PSM use was accepted by the network. Immediately after the Active Time (T3324) is started and the UE has performed the PROFILE DOWNLOAD procedure, the test sequence shall be executed.

For sequence 1.5 the UICC suspension mechanism is indicated as supported by the UICC in the UICC Maximum Power Consumption file (EF_{UMPC}), the ME is authorized to modify the polling interval and/or disable the UICC interface during extended DRX cycle in EF_{AD} (Administrative Data) and the PIN of the USIM is enabled.

Prior to sequence 1.5, the ME was prepared to use eDRX, has been powered on, attached to the E-USS/NB-SS where the eDRX use was accepted by the network and performed the PROFILE DOWNLOAD procedure.

27.22.7.10.4.2 Procedure

Expected sequence 1.1 (EVENT DOWNLOAD - Data available)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	[Command performed successfully]
4	ME → USER	The ME may display channel opening information	
5	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
6	USS → ME	PDP context activation accept	
7	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	
8	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.1.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1	
11	ME → USS	Transfer of 8 Bytes of data to the USS through channel 1	[To retrieve ME's port number]
12	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1	[Command performed successfully]
13	USS → ME	Data sent through the BIP channel using the ME's port number, which was retrieved in step 11	
14	ME → UICC	ENVELOPE 1.1.1 (Event-Data Available)	

PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1000
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP

Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV												
	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	03	04	1F	02	39	02	03	E8
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1000

Coding:

BER-TLV:												
	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	03	E8							

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:

Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	03	E8							

PROACTIVE COMMAND: SEND DATA 1.1.1

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: UICC
Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	21	B6
	08	00	01	02	03	04	05	06	07			

TERMINAL RESPONSE: SEND DATA 1.1.1

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

ENVELOPE: EVENT DOWNLOAD - Data available 1.1.1

Logically:

Event list

Event: Data available

Device identities

Source device: ME
Destination device: UICC

Channel status

Channel status: Channel 1 open, link established

Channel Data Length

Channel data length: 8 Bytes available in Rx buffer

Coding:

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	08								

Expected sequence 1.2 (EVENT DOWNLOAD - Data available, E-UTRAN)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.2.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.2.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.2.1	
8	ME → USER	The ME may display channel opening information	
9	ME → E-USS/NB-SS	PDN CONNECTIVITY REQUEST	[The UE may request IPv4 or IPv4v6 as PDN type.]
10	E-USS/NB-SS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
11	ME → E-USS/NB-SS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
12	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.2.1	[Command performed successfully]
13	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.2.1	
14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.2.1	
16	ME → E-USS/NB-SS	Transfer of 8 Bytes of data to the USS through channel 1	[To retrieve ME's port number]
17	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.2.1	[Command performed successfully]
18	E-USS/NB-SS → ME	Data sent through the BIP channel using the ME's port number, which was retrieved in step 16	
19	ME → UICC	ENVELOPE 1.2.1 (Event-Data Available)	[Command performed successfully]

PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: ME

Event list Data available

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	09										

TERMINAL RESPONSE: SET UP EVENT LIST 1.2.1

Logically:

Command details
- Command number: 1
- Command type: SET UP EVENT LIST
- Command qualifier: RFU

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

PROACTIVE COMMAND: OPEN CHANNEL 1.2.1

Logically:

Command details
- Command number: 1
- Command type: OPEN CHANNEL
- Command qualifier: immediate link establishment

Device identities
- Source device: UICC
- Destination device: ME

Alpha Identifier: empty

Bearer
- Bearer type: GPRS / UTRAN packet service / E-UTRAN
- Precedence Class: 03
- Delay Class: 04
- Reliability Class: 02
- Peak throughput class: 09
- Mean throughput class: 31
- Packet data protocol: 02 (IP)

Buffer
- Buffer size: 1400

Network access name: Test12.rs

Text String: "UserLog" (User login)

Text String: "UserPwd" (User password)

UICC/ME interface transport level
- Transport format: TCP
- Port number: 44444

Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	44	81	03	01	40	01	82	02	81	82	85
	00	35	07	02	03	04	02	09	1F	02	39	02
	05	78	47	0A	06	54	65	73	74	31	32	02
	72	73	0D	08	F4	55	73	65	72	4C	6F	67

0D	08	F4	55	73	65	72	50	77	64	3C	03
02	AD	9C	3E	05	21	01	01	01	01		

TERMINAL RESPONSE: OPEN CHANNEL 1.2.1

Logically:

Command details
- Command number: 1
- Command type: OPEN CHANNEL
- Command qualifier: immediate link establishment

Device identities
- Source device: ME
- Destination device: UICC

Result

General Result: Command performed successfully

Channel status: Channel identifier 1 and link established or PDP context activated

Bearer description
- Bearer type: GPRS / UTRAN packet service / E-UTRAN
- Bearer parameter:
- Precedence Class: 03
- Delay Class: 04
- Reliability Class: 02
- Peak throughput class: 09
- Mean throughput class: 31
- Packet data protocol: 02 (IP)

Buffer
- Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

PROACTIVE COMMAND: SEND DATA 1.2.1

Logically:

Command details
- Command number: 1
- Command type: SEND DATA
- Command qualifier: Send Immediately

Device identities
- Source device: UICC
- Destination device: Channel 1

Channel Data
- Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	21	B6
	08	00	01	02	03	04	05	06	07			

TERMINAL RESPONSE: SEND DATA 1.2.1

Logically:

Command details
- Command number: 1
- Command type: SEND DATA

Command qualifier: Send Immediately
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

ENVELOPE: EVENT DOWNLOAD - Data available 1.2.1

Logically:

Event list
Event: Data available
Device identities
Source device: ME
Destination device: UICC
Channel status
Channel status: Channel 1 open, link established
Channel Data Length
Channel data length: 8 Bytes available in Rx buffer

Coding:

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	08								

Expected sequence 1.3 (EVENT DOWNLOAD - Data available, PSM by SUSPEND UICC for E-UTRAN)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.2.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.2.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.2.1	
8	ME → USER	The ME may display channel opening information	
9	ME → E-USS/NB-SS	PDN CONNECTIVITY REQUEST	[The UE may request IPv4 or IPv4v6 as PDN type.]
10	E-USS/NB-SS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
11	ME → E-USS/NB-SS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
12	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.2.1	[Command performed successfully]
13	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.2.1	
14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.2.1	

16	ME → E-USS/NB-SS	Transfer of 8 bytes of data to the E-USS/NB-SS through channel 1	[To retrieve ME's port number]
17	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.2.1	[Command performed successfully]
18	E-USS/NB-SS → ME	200 bytes of data sent through the BIP channel using the ME's port number, which was retrieved in step 16	
19	ME → UICC	ENVELOPE 1.3.1 (Event-Data Available)	[Command performed successfully]
20	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.1	
21	ME → UICC	FETCH	
22	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.3.1	
23	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.3.1	[Command performed successfully]
24	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.3.1	
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 1.3.1	
27	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 1.3.1	[Command performed successfully] Before performing this step, and during the above session, the ME should not try to suspend the UICC.
28	ME → UICC	Suspend the UICC	ME is in the PSM.
29	User → ME	Wait until the ME resumes the UICC before it leaves the PSM	
30		Perform steps 5 -17	
31	E-USS/NB-SS → ME	8 bytes of data sent through the BIP channel using the ME's port number, which was retrieved to transfer the data to the E-USS/NB-SS	
32	ME → UICC	ENVELOPE 1.2.1 (Event-Data Available)	[Command performed successfully]

ENVELOPE: EVENT DOWNLOAD - Data available 1.3.1

Logically:

Event list
Event: Data available
Device identities
Source device: ME
Destination device: UICC
Channel status
Channel status: Channel 1 open, link established
Channel Data Length
Channel data length: C8 (200 bytes available in Rx buffer)

Coding:BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	C8								

PROACTIVE COMMAND: RECEIVE DATA 1.3.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC

Destination device: Channel 1
Channel Data Length
Channel Data Length: C8 (200 bytes)

Coding:

BER-TLV:	D0	0C	81	03	01	42	00	82	02	81	21	B7
	01	C8										

TERMINAL RESPONSE: RECEIVE DATA 1.3.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 00 01 02 .. C7 (200 bytes of data)
Channel data length: 00 (0 bytes left to transfer)

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02	..	C7	B7	01	00	

PROACTIVE COMMAND: CLOSE CHANNEL 1.3.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1

Coding:

BER-TLV:	D0	09	81	03	01	41	00	82	02	81	21

TERMINAL RESPONSE: CLOSE CHANNEL 1.3.1

Logically:

Command details
Command number: 1
Command type: CLOSE CHANNEL
Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

Expected sequence 1.4 (EVENT DOWNLOAD - Data available, PSM for E-UTRAN)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.2.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.2.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.2.1	
8	ME → USER	The ME may display channel opening information	
9	ME → E-USS/NB-SS	PDN CONNECTIVITY REQUEST	[The UE may request IPv4 or IPv4v6 as PDN type.]
10	E-USS/NB-SS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
11	ME → E-USS/NB-SS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
12	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.2.1	[Command performed successfully]
13	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.2.1	
14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.2.1	
16	ME → E-USS/NB-SS	Transfer of 8 bytes of data to the E-USS/NB-SS through channel 1	[To retrieve ME's port number]
17	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.2.1	[Command performed successfully]
18	E-USS/NB-SS → ME	200 bytes of data sent through the BIP channel using the ME's port number, which was retrieved in step 16	
19	ME → UICC	ENVELOPE 1.3.1 (Event-Data Available)	[Command performed successfully]
20	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.1	
21	ME → UICC	FETCH	
22	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.3.1	
23	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.3.1	[Command performed successfully]
24	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.3.1	
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 1.3.1	
27	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 1.3.1	[Command performed successfully]
28	ME → UICC	Deactivate the UICC	ME is in the PSM.
29	User → ME	Wait until the ME activates the UICC before it leaves the PSM	
30		Perform steps 1 -27	

Expected sequence 1.5 (EVENT DOWNLOAD - Data available, eDRX by SUSPEND UICC for E-UTRAN)

Step	Direction	MESSAGE / Action	Comments

1	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1 PENDING	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.2.1	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.2.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.2.1	
8	ME → USER	The ME may display channel opening information	
9	ME → E-USS/NB-SS	PDN CONNECTIVITY REQUEST	[The UE may request IPv4 or IPv4v6 as PDN type.]
10	E-USS/NB-SS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
11	ME → E-USS/NB-SS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
12	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.2.1	[Command performed successfully]
13	UICC → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.2.1	
14	ME → UICC	FETCH	
15	UICC → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.2.1	
16	ME → E-USS/NB-SS	Transfer of 8 bytes of data to the E-USS/NB-SS through channel 1	[To retrieve ME's port number]
17	ME → UICC	TERMINAL RESPONSE: SEND DATA (immediate) 1.2.1	[Command performed successfully]
18	E-USS/NB-SS → ME	200 bytes ofdata sent through the BIP channel using the ME's port number, which was retrieved in step 16	
19	ME → UICC	ENVELOPE 1.3.1 (Event-Data Available)	[Command performed successfully]
20	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.1	
21	ME → UICC	FETCH	
22	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.3.1	
23	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.3.1	[Command performed successfully]
24	UICC → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.3.1	
25	ME → UICC	FETCH	
26	UICC → ME	PROACTIVE COMMAND: CLOSE CHANNEL 1.3.1	
27	ME → UICC	TERMINAL RESPONSE CLOSE CHANNEL 1.3.1	[Command performed successfully] Before performing this step, and during the above session, the ME should not try to suspend the UICC.
28	ME → UICC	Suspend the UICC	The ME is in extended idle mode DRX cycle.
29	User → ME	Wait until the ME resumes the UICC	
30		Perform steps 5 -17	
31	E-USS/NB-SS → ME	8 bytes of data sent through the BIP channel using the ME's port number, which was retrieved to transfer the data to the E-USS/NB-SS	
32	ME → UICC	ENVELOPE 1.2.1 (Event-Data Available)	[Command performed successfully]

27.22.7.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1 to 1.5.

27.22.7.11 Channel Status event

27.22.7.11.1 Definition and applicability

See clause 3.2.2.

27.22.7.11.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

Additionally the ME shall support ENVELOPE (EVENT DOWNLOAD - Channel Status).

27.22.7.11.3 Test purpose

To verify that the ME shall send an ENVELOPE (EVENT DOWNLOAD - Channel Status) to the UICC after the link dropped between the NETWORK and the ME.

27.22.7.11.4 Method of test

27.22.7.11.4.1 Initial conditions

The ME is connected to the USIM Simulator and the System Simulator. The elementary files are coded as Toolkit default for sequence 1.1.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

For sequence 1.2 the default E-UTRAN/EPC UICC, the default E-UTRAN parameters and the following parameters are used:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.6.4.1

UICC/ME interface transport level:Same UICC/ME transport interface level as defined in 27.22.4.27.6.4.1

Data destination address : Sames Data Destination Address as defined in 27.22.4.27.6.4.1.

27.22.7.11.4.2 Procedure

Expected sequence 1.1 (EVENT DOWNLOAD - Channel Status on a link dropped)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[EVENT: channel status]
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[command performed successfully]
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
8	ME → USER	The ME may display channel opening information	
9	ME → USS	PDP context activation request	[The UE may request IPv4 or IPv4v6 address as PDP type.]
10	USS → ME	PDP context activation accept	
11	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
12	USS → ME	Link dropped	
13	ME → UICC	ENVELOPE 1.1.1 (Event-Channel Status)	

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: Channel Status

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82
	99	01	0A								

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1000
Network access name: TestGp.rs
Text String: UserLog (User login)
Text String: UserPwd (User password)
UICC/ME interface transport level
Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	03	04	1F	02	39	02	03	E8
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS
Bearer parameter:
Precedence Class: 03

Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	03	04	1F
	02	39	02	03	E8							

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS
Bearer parameter:
Precedence Class: 00
Delay Class: 04
Reliability Class: 03
Peak throughput class: 04
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	03	04	1F
	02	39	02	03	E8							

ENVELOPE: EVENT DOWNLOAD - Channel Status 1.1.1

Logically:

Event list

Event: Channel Status

Device identities

Source device: ME
Destination device: UICC

Channel status

Channel status: Channel 1, link dropped

Coding:

BER-TLV:	D6	0B	99	01	0A	82	02	82	81	B8	02	01

	05											

Expected sequence 1.2 (EVENT DOWNLOAD - Channel Status on a link dropped, E-UTRAN)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.2.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1	[EVENT: channel status]
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.2.1	[command performed successfully]
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.2.1	See initial conditions
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.2.1	
8	ME → USER	The ME may display channel opening information	
9	ME → E-USS/NB-SS	PDN CONNECTIVITY REQUEST	[The UE may request IPv4 or IPv4v6 as PDN type.]
10	E-USS/NB-SS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	
11	ME → E-USS/NB-SS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
12	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.2.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.2.1B	[Command performed successfully]
13	E-USS/NB-SS → ME	Link dropped	
14	ME → UICC	ENVELOPE 1.2.1 (Event-Channel Status)	[Command performed successfully]

PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1

Logically:

Command details
- Command number: 1
- Command type: SET UP EVENT LIST
- Command qualifier: RFU

Device identities
- Source device: UICC
- Destination device: ME

Event list: Data available

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	0A										

TERMINAL RESPONSE: SET UP EVENT LIST 1.2.1

Logically:

Command details
- Command number: 1
- Command type: SET UP EVENT LIST
- Command qualifier: RFU

Device identities

Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

PROACTIVE COMMAND: OPEN CHANNEL 1.2.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: "UserLog" (User login)
Text String: "UserPwd" (User password)
UICC/ME interface transport level
Transport format: TCP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	02	09	1F	02	39	02	05	78
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	02	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.2.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated

Bearer description
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 1.2.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed with modifications
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	07
	38	02	81	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

ENVELOPE: EVENT DOWNLOAD - Channel Status 1.2.1

Logically:

Event list
Event: Channel Status
Device identities
Source device: ME
Destination device: UICC
Channel status
Channel status: Channel 1, link dropped

Coding:

BER-TLV:	D6	0B	99	01	0A	82	02	82	81	B8	02	01
	05											

27.22.7.11.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1 and 1.2.

27.22.7.12 Access Technology Change event

27.22.7.12.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.12.1.2 Conformance requirement

The ME shall support the EVENT: Access Technology Change event as defined in:

- 3GPP TS 31.111 [15] clause 4.7, 4.12, 7.5.12 and clause 8.61.

27.22.7.12.1.3 Test purpose

If the Access Technology Change event is part of the current event list (as set up by the last SET UP EVENT LIST command), then, when the terminal detects a change in its current access technology, verify that the terminal shall inform the UICC that this has occurred, by using the ENVELOPE (EVENT DOWNLOAD - Access Technology Change).

If the event is set up with support for multiple access technologies, the UICC shall be informed if any of the access technologies changes.

27.22.7.12.1.4 Method of test

27.22.7.12.1.4.1 Initial conditions

For test sequence 1.1:

The ME is connected to the USIM Simulator and the UMTS System Simulator.

The default E-UTRAN/EPC UICC is used.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

The E-UTRAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 0001;
- E-UTRAN Cell Identity value = 0001 (28 bits);

The UTRAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;

- Cell Identity value = 0001;

For test sequence 1.3:

The ME is connected to the USIM Simulator and the GSM System Simulator.

The default E-UTRAN/EPC UICC is used.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

The GSM parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001

The E-UTRAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 0001;
- E-UTRAN Cell Identity value = 0001 (28 bits);

The NB-SS parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 0001;
- E-UTRAN Cell Identity value = 0001 (28 bits);

For test sequence 1.4:

The ME is connected to the USIM Simulator and the NG-SS.

The default NG-RAN UICC is used.

The ME shall be powered off.

The NG-RAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 000001;
- NG-RAN Cell Identifier = 0001 (36 bits);

27.22.7.12.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD – Access Technology Change, single access technology)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	

4a	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
4b	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Access technology change Event	This step applies only if A.1/171
5	E-USS	ME detects a change in its current access technology	E-UTRA cell is enabled and UTRA cell is disabled
6	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Access technology change Event 1.1.1	Access Technology = E-UTRAN
7	E-USS	ME detects a change in its current access technology	E-UTRA cell is disabled and UTRA cell is enabled
8	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Access technology change Event 1.1.2	Access Technology = UTRAN

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details:
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities:
Source device: UICC
Destination device: ME
Event list:
Event 1: Access Technology Change (single access technology)

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	0B										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details:
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities:
Source device: ME
Destination device: UICC
Result:
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

ENVELOPE: EVENT DOWNLOAD – Access Technology Change 1.1.1

Logically:

Event list: Access Technology Change (single access technology)
Device identities:
Source device: ME
Destination device: UICC
Access Technology: E-UTRAN
Coding:

BER-TLV:	D6	0A	19	01	0B	82	02	82	81	3F	01	08

ENVELOPE: EVENT DOWNLOAD – Access Technology Change 1.1.2

Logically:

Event list: Access Technology Change (single access technology)
Device identities:
Source device: ME
Destination device: UICC
Access Technology: UTRAN
Coding:

BER-TLV:	D6	0A	19	01	0B	82	02	82	81	3F	01	03

Expected Sequence 1.2 (EVENT DOWNLOAD – Access Technology Change, multiple access technologies)

TBD

Expected Sequence 1.3 (EVENT DOWNLOAD – Access Technology Change, single access technology – WB-S1 (Cat M1)/NB-S1)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Access technology change Event 1.1.3	
6	E-USS/NB-SS	ME detects a change in its current access technology	E-UTRA/NB-IoT cell is enabled and GSM cell is disabled
7	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Access technology change Event 1.1.1	Access Technology = E-UTRAN
8	E-USS/NB-SS	ME detects a change in its current access technology	E-UTRA/NB-IoT cell is disabled and GSM cell is enabled
9	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Access technology change Event 1.1.3	Access Technology = GSM

ENVELOPE: EVENT DOWNLOAD – Access Technology Change 1.1.3

Logically:

Event list: Access Technology Change (single access technology)
Device identities:
Source device: ME
Destination device: UICC
Access Technology: GSM
Coding:

BER-TLV:	D6	0A	19	01	0B	82	02	82	81	3F	01	00

Expected Sequence 1.4 (EVENT DOWNLOAD – Access Technology Change, single access technology, NG-RAN)

Step	Direction	Message / Action	Comments
1	NG-SS	No NG-RAN cell initially available	
2	USER → ME	Switch on the ME	
3	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
6	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
7	NG-SS	The NG-RAN cell is switched on	
8	ME → NG-SS	The ME registers to the NG-RAN cell	
9	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Access technology change Event 1.4.1	Access Technology = 3GPP NR

ENVELOPE: EVENT DOWNLOAD – Access Technology Change 1.4.1

Logically:

Event list: Access Technology Change (single access technology)

Device identities:

Source device: ME

Destination device: UICC

Access Technology: 3GPP NR

Coding:

BER-TLV:	D6	0A	19	01	0B	82	02	82	81	3F	01	0A

27.22.7.12.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.4.

27.22.7.13 Display parameter changed event

TBD

27.22.7.14 Local Connection event

TBD

27.22.7.15 Network search mode change event

27.22.7.15.1 Definition and applicability

See clause 3.2.2.

27.22.7.15.2 Conformance requirements

The ME shall support the network search mode mechanism, as described in TS 31.111 [15] clause 4.13.

27.22.7.15.3 Test purpose

To verify that the ME sends an ENVELOPE (EVENT DOWNLOAD – Network search mode change) to the UICC when network search mode is changed in ME.

27.22.7.15.4 Method of test

27.22.7.15.4.1 Initial conditions

The ME is connected to the USIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME is configured in automatic network search mode.

27.22.7.15.4.2 Procedure

Expected sequence 1.1 (EVENT DOWNLOAD – Network search mode change)

Step	Direction	MESSAGE / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[EVENT: network search mode]
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[command performed successfully]
5	User	The user sets the ME to manual network selection mode	
6	ME → UICC	ENVELOPE 1.1.1 (Event - Network search mode change)	[changed to manual]
7	User	The user sets the ME to automatic network selection mode	
8	ME → UICC	ENVELOPE 1.1.2 (Event - Network search mode change)	[changed to automatic]

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: Network search mode change

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82
	99	01	0E								

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

ENVELOPE: EVENT DOWNLOAD – Network search mode change 1.1.1

Logically:

Event list

Event: Network search mode change

Device identities

Source device: ME

Destination device: UICC

Network search mode

Network search mode: manual

Coding:

BER-TLV:	D6	0A	99	01	0E	82	02	82	81	E5	01	00

ENVELOPE: EVENT DOWNLOAD – Network search mode change 1.1.2

Logically:

Event list

Event: Network search mode change

Device identities

Source device: ME

Destination device: UICC

Network search mode

Network search mode: automatic

Coding:

BER-TLV:	D6	0A	99	01	0E	82	02	82	81	E5	01	01

27.22.7.15.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.7.16 Browsing status event

TBD

27.22.7.17 Network Rejection Event

27.22.7.17.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.17.1.2 Conformance requirement

The ME shall support the EVENT: Network Rejection event E-UTRAN as defined in:

- TS 31.111 [15] clause 4.7, 5.2, 7.5.2, 8.62 and clause 8.99.

The ME shall support the EVENT: Network Rejection event for NG-RAN as defined in:

- TS 31.111 [15] clause 4.7, 5.2, 7.5.2 and 8.62.

27.22.7.17.1.3 Test purpose

For sequences 1.1 and 1.2:

- To verify that the ME informs the UICC with the Event about the Network Rejection.
- To verify that the Rejection Cause Code sent to the UICC is the value from the EMM cause information element received from the E-UTRAN.
- To verify that the correct Access Technology is indicated ENVELOPE: EVENT DOWNLOAD – Network Rejection after the unsuccessful attempt to access the E-UTRAN.
- To verify that the correct Update/Attach/Registration Type is indicated ENVELOPE: EVENT DOWNLOAD – Network Rejection.

For sequence 1.3 and 1.4:

- To verify that the Rejection Cause Code sent to the UICC is the value from the 5GMM cause information element received from the NG-RAN.
- To verify that the correct Access Technology is indicated ENVELOPE: EVENT DOWNLOAD – Network Rejection after the unsuccessful attempt to access the NG-RAN.
- To verify that the correct Update/Attach/Registration Type is indicated ENVELOPE: EVENT DOWNLOAD – Network Rejection.

27.22.7.17.1.4 Method of test

27.22.7.17.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the E-USS/NG-SS.

The default E-UTRAN/EPC or NG-RAN UICC is used.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

If programmable USIM with test applet is used (as defined in clause 27.0), UICC shall register for Network Rejection Event using the proactive command SET UP EVENT LIST with Network Rejection event in the event list (ref to 102.241 cl 6.7.1.2).

The E-UTRAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 0001;

The NG-RAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 000001;

27.22.7.17.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD – Network Rejection, ATTACH REJECT)

Step	Direction	Message / Action	Comments
1	E-USS/NB-SS	No E-UTRAN/NB-IoT available.	
2	USER → ME	Switch on the terminal.	
3	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
6	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
7	E-USS/NB-SS	The E-UTRAN/NB-IoT cell is switched on.	
8	USER→ ME	The terminal is made to start a registration attempt to the E-USS/NB-SS.	
9	ME→ E-USS/NB-SS	The terminal requests RRC CONNECTION and therefore starts the EPS Attach procedure.	
10	E-USS/NB-SS→ ME	The E-USS/NB-SS sends EMM ATTACH REJECT with cause "PLMN not allowed".	
11	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Network Rejection 1.1.1 or 1.1.2	

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: Network Rejection

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	12										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

ENVELOPE: EVENT DOWNLOAD – Network Rejection 1.1.1

Logically:

Event list: Network Rejection
Device identities

Source device: Network
Destination device: UICC

Tracking Area Identification

MCC: 001
MNC: 01
TAC: 0001

Access Technology: E-UTRAN
Update/Attach Type: EPS Attach
Rejection Cause Code: PLMN not allowed

Coding:

BER-TLV:	D6	17	19	01	12	82	02	83	81	7D	05	00
	F1	10	00	01	3F	01	08	74	01	09	75	01
	0B											

ENVELOPE: EVENT DOWNLOAD – Network Rejection 1.1.2

Logically:

Event list: Network Rejection
Device identities

Source device: Network
Destination device: UICC

Tracking Area Identification

MCC: 001
MNC: 01
TAC: 0001

Access Technology: E-UTRAN
Update/Attach Type: Combined EPS/IMSI Attach
Rejection Cause Code: PLMN not allowed

Coding:

BER-TLV:	D6	17	19	01	12	82	02	83	81	7D	05	00
	F1	10	00	01	3F	01	08	74	01	0A	75	01
	0B											

Expected Sequence 1.2 (EVENT DOWNLOAD – Network Rejection, TRACKING AREA UPDATE REJECT)

Step	Direction	Message / Action	Comments
1	ME	The ME is registered to the E-USS/NB-SS and in EMM_IDLE.	The E-USS/NB-SS transmits on cell 1: MCC: 001 MNC: 01 TAC: 0003
2	E-USS/NB-SS	Cell 1 is switched off.	

3	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
6	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
7	E-USS/NB-SS	The E-UTRAN/NB-IoT cell 2 is switched on.	The E-USS/NB-SS transmits on cell 2: MCC: 001 MNC: 01 TAC: 0001
8	ME	The terminal is made to start a re-registration attempt to the E-USS/NB-SS.	
9	ME→ E-USS/NB-SS	The terminal send TRACKING AREA UPDATE REQUEST.	
10	E-USS/NB-SS → ME	The E-USS/NB-SS sends TRACKING AREA UPDATE REJECT with cause "TRACKING AREA not allowed".	
11	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Network Rejection 1.2.1 or 1.2.2	

EVENT DOWNLOAD –Network Rejection 1.2.1

Logically:

Event list: Network Rejection
Device identities
Source device: Network
Destination device: UICC
Tracking Area Identification
MCC: 001
MNC: 01
TAC: 0001
Access Technology: E-UTRAN
Update/Attach Type: TA Updating
Rejection Cause Code: Tracking Area not allowed

Coding:

BER-TLV:	D6	17	19	01	12	82	02	83	81	7D	05	00
	F1	10	00	01	3F	01	08	74	01	0B	75	01
	0C											

EVENT DOWNLOAD –Network Rejection 1.2.2

Logically:

Event list: Network Rejection
Device identities
Source device: Network
Destination device: UICC
Tracking Area Identification
MCC: 001
MNC: 01
TAC: 0001
Access Technology: E-UTRAN
Update/Attach Type: Combined TA/LA updating
Rejection Cause Code: Tracking Area not allowed

Coding:

BER-TLV:	D6	17	19	01	12	82	02	83	81	7D	05	00
	F1	10	00	01	3F	01	08	74	01	0C	75	01
	0C											

Expected Sequence 1.3 (EVENT DOWNLOAD – Network Rejection, REGISTRATION REJECT – Initial Registration)

Step	Direction	Message / Action	Comments
1	NG-SS	No NG-RAN cell available.	
2	USER → ME	Switch on the terminal.	
3	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
6	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	If programmable USIM with test applet is used (as defined in clause 27.0), the TERMINAL RESPONSE cannot be verified and that the Event has been registered in the device is implicitly verified at ste step 11 (ENVELOPE: EVENT DOWNLOAD – Network Rejection 1.3.1)
7	NG-SS	The NG-RAN cell is switched on.	
8	USER → ME	The terminal is made to start a Registration attempt to the NG-SS.	
9	ME → NG-SS	The terminal requests RRC CONNECTION and starts the 5GMM REGISTRATION procedure for "Initial Registration".	
10	NG-SS→ME	The NG-SS sends REGISTRATION REJECT with cause "PLMN not allowed".	
11	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Network Rejection 1.3.1	

ENVELOPE: EVENT DOWNLOAD – Network Rejection 1.3.1

Logically:

Event list: Network Rejection
Device identities
Source device: Network
Destination device: UICC
Tracking Area Identification
MCC: 001
MNC: 01
TAC: 000001
Access Technology: 3GPP NR
Update/Attach/Registration Type: Initial Registration
Rejection Cause Code: PLMN not allowed

Coding:

BER-TLV:	D6	18	19	01	12	82	02	83	81	7D	06	00
	F1	10	00	00	01	3F	01	0A	74	01	0F	75
	01	0B										

Expected Sequence 1.4 (EVENT DOWNLOAD – Network Rejection, REGISTRATION REJECT – Mobility Registration updating)

Step	Direction	Message / Action	Comments
1	USER → ME	Switch on the terminal.	

2	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	If programmable USIM with test applet is used (as defined in clause 27.0), the TERMINAL RESPONSE cannot be verified and that the Event has been registered in the device is implicitly verified at ste step 12 (ENVELOPE: EVENT DOWNLOAD – Network Rejection 1.4.1)
5	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
6	ME	The ME is registered to the NG-SS and in 5GMM_IDLE.	The NG-SS transmits on cell 1: MCC: 001 MNC: 01 TAC: 000003
7	NG-SS	NG-RAN cell 1 is switched off.	
8	NG-SS	NG-RAN cell 2 is switched on.	The NG-SS transmits on cell 2: MCC: 001 MNC: 01 TAC: 000001
9	ME	The terminal is made to start a re-registration attempt to the NG-SS.	
10	ME → NG-SS	The terminal sends 5GMM REGISTRATION REQUEST for "Mobility Registration updating".	
11	NG-SS → ME	The NG-SS sends REGISTRATION REJECT with cause "TRACKING AREA not allowed".	
12	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Network Rejection 1.4.1	

EVENT DOWNLOAD –Network Rejection 1.4.1

Logically:

Event list: Network Rejection
Device identities
Source device: Network
Destination device: UICC
Tracking Area Identification
MCC: 001
MNC: 01
TAC: 000001
Access Technology: 3GPP NR
Update/Attach/Registration Type: Mobility Registration updating
Rejection Cause Code: Tracking Area not allowed

Coding:

BER-TLV:	D6	18	19	01	12	82	02	83	81	7D	06	00
	F1	10	00	00	01	3F	01	0A	74	01	10	75
	01	0C										

27.22.7.17.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 and 1.4.

27.22.7.18 CSG Cell Selection event

27.22.7.18.1 CSG Cell Selection (normal)

27.22.7.18.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.18.1.2 Conformance requirement

The ME shall support the EVENT: CSG Cell selection as defined in:

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 7.5, clause 8.25, 8.101, 8.102, 8.103.

27.22.7.18.1.3 Test purpose

To verify that the ME informs the UICC that an Event: CSG Cell selection has occurred using the ENVELOPE (EVENT DOWNLOAD - CSG Cell selection) command when the ME detects a change in its current CSG cell selection status.

27.22.7.18.1.4 Method of test

27.22.7.18.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the E-USS.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

The E-USS transmits on three cells:

Network parameters of cell 1:

- TAI (MCC/MNC/TAC): 246/081/0001.
- Access control: unrestricted.
- csg-Indication: TRUE
- csg-Identity: 01
- Broadcast information: Cell 3 is included in the neighbour list information.

Network parameters of cell 2:

- TAI (MCC/MNC/TAC): 246/081/0002.
- Access control: unrestricted.
- csg-Indication: TRUE
- csg-Identity: 02
- Home (e)NB Name HOME 02

Network parameters of cell 3:

- TAI (MCC/MNC/TAC): 246/081/0003.
- Access control: unrestricted.

- csg-Indication: FALSE

Network parameters of cell 4:

- TAI (MCC/MNC/TAC): 246/081/0004.
- Access control: unrestricted.
- csg-Indication: TRUE
- csg-Identity: 04
- Broadcast information: Cell 3 is included in the neighbour list information.
- Home (e)NB Name HOME 04

Cell 1, Cell 2 and Cell 4 are initially disabled. Cell 3 is enabled.

The default E-UTRAN/EPC UICC, the default E-UTRAN parameters and the following parameters are used:

EF_{UST} (USIM Service Table)

EF_{UST} shall be configured as defined in 27.22.2B.1 with the exception that Service 86 "Allowed CSG Lists and corresponding indications" is available.

EF_{ACSGL} (Allowed CSG Lists)

Logically:

1st CSG list

PLMN: 246 081 (MCC MNC)
1st CSG list 1st CSG Type indication 01
1st CSG list 1st CSG HNB Name indication 01
1st CSG list 1st CSG CSG ID: 01 (27bit)
2nd CSG list 2nd CSG Type indication 01
2nd CSG list 2nd CSG HNB Name indication 01
2nd CSG list 2nd CSG CSG ID: 04 (27bit)

Byte:	B01	B02	B03	B04	B05	B06	B07	B08	B09	B10
Coding:	A0	15	80	03	42	16	80	81	06	01
	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
	01	00	00	00	3F	81	06	01	01	00
	B21	B22	B23							
	00	00	9F							

All other records are empty.

EF_{CSGT} (CSG Type)

Record 1:

Logically: Group ONE

Byte:	B01	B02	B03	B04	B05	B06	B07	B08	B09	B10
Coding:	89	13	80	00	47	00	72	00	6F	00
	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
	75	00	70	00	20	00	4F	00	4E	00
	B21	B22	B23	B24	B25	B26	B27	B28	B29	B30
	45	FF	FF	FF	FF	FF	FF	FF	FF	FF

EF_{HNBN} (Home (e)NodeB Name)

Record 1:

Logically: Home ONE

Byte:	B01	B02	B03	B04	B05	B06	B07	B08	B09	B10
Coding:	80	11	80	00	48	00	6F	00	6D	00
	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
	65	00	20	00	4F	00	4E	00	45	FF
	B21	B22	B23	B24	B25	B26	B27	B28	B29	B30
	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF

27.22.7.18.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD - CSG Cell Selection event)

Step	Direction	Message / Action	Comments
1	ME	The ME is registered to cell 3 and in EMM_IDLE	Cell 3 = macro cell
2	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
5	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
6	E-USS	Cell 2 is enabled	
7	User→ ME	A manual CSG cell selection is performed. CSG ID=02 is selected.	
8	E-USS→ME	*AttachReject* with rejection cause #25 (not authorized for this CSG)	No ENVELOPE command is sent.
9	E-USS	Cell 2 is disabled Cell 1 is enabled	
10	User→ME	A manual CSG cell selection is performed. CSG ID=01 is selected.	
11	ME → UICC	ENVELOPE: EVENT DOWNLOAD – CSG Cell selection 1.1.1A OR ENVELOPE: EVENT DOWNLOAD – CSG Cell selection 1.1.1B	Camping on CSG cell, CSG ID=01
12	E-USS	Cell 1 is disabled	
13	ME → UICC	ENVELOPE: EVENT DOWNLOAD – CSG Cell selection 1.1.2	Leaving CSG cell with CSG ID=01. Not camped on a CSG cell.
14	E-USS	Cell 4 is enabled	
15	User→ ME	A manual CSG cell selection is performed. CSG ID=04 is selected.	
16	ME → UICC	ENVELOPE: EVENT DOWNLOAD – CSG Cell selection 1.1.3A OR ENVELOPE: EVENT DOWNLOAD – CSG Cell selection 1.1.3B	Camping on CSG cell, CSG ID=04

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: UICC

Destination device: ME

Event list

Event 1: '15' CSG Cell selection Event

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	15										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

EVENT DOWNLOAD – CSG CELL SELECTION 1.1.1A

Logically:

Event list

Event 1: CSG Cell selection

Device identities

Source device: Network

Destination device: UICC

Access Technology

Technology: E-UTRAN

CSG Cell selection status: Byte 1 = '01' (camped on a CSG or Hybrid cell of the Operator CSG list or Allowed CSG list), additional information not available

CSG id 01 (27 bit)

Coding:

BER-TLV:	D6	14	19	01	15	82	02	83	81	3F	01	08
	55	02	01	00	56	04	00	00	00	3F		

EVENT DOWNLOAD – CSG CELL SELECTION 1.1.1B

Logically:

Event list

Event 1: CSG Cell selection

Device identities

Source device: Network

Destination device: UICC

Access Technology
Technology: E-UTRAN
CSG Cell selection status: Byte 1 = '01' (camped on a CSG or Hybrid cell of the Operator CSG list or Allowed CSG list), additional information: result of a manual CSG cell selection.
CSG id 01 (27 bit)

Coding:

BER-TLV:	D6	14	19	01	15	82	02	83	81	3F	01	08
	55	02	01	41	56	04	00	00	00	3F		

EVENT DOWNLOAD – CSG CELL SELECTION 1.1.2

Logically:

Event list
Event 1: CSG Cell selection
Device identities
Source device: Network
Destination device: UICC
Access Technology
Technology: E-UTRAN
CSG Cell selection status: Byte 1 = '00' (Not camped on a CSG or Hybrid cell), additional information not available

Coding:

BER-TLV:	D6	0E	19	01	15	82	02	83	81	3F	01	08
	55	02	00	00								

EVENT DOWNLOAD – CSG CELL SELECTION 1.1.3A

Logically:

Event list
Event 1: CSG Cell selection
Device identities
Source device: Network
Destination device: UICC
Access Technology
Technology: E-UTRAN
CSG Cell selection status: Byte 1 = '01' (camped on a CSG or Hybrid cell of the Operator CSG list or Allowed CSG list), additional information not available
CSG id 04 (27 bit)
HNB name "HOME 04"

Coding:

BER-TLV:	D6	25	19	01	15	82	02	83	81	3F	01	08
	55	02	01	00	56	04	00	00	00	9F	57	0F
	80	00	48	00	4F	00	4D	00	45	00	20	00
	30	00	34									

EVENT DOWNLOAD – CSG CELL SELECTION 1.1.3B

Logically:

Event list
Event 1: CSG Cell selection

Device identities
Source device: Network
Destination device: UICC
Access Technology
Technology: E-UTRAN
CSG Cell selection status: Byte 1 = '01' (camped on a CSG or Hybrid cell of the Operator CSG list or Allowed CSG list), additional information: result of a manual CSG cell selection.
CSG id 04 (27 bit)
HNB name "HOME 04"

Coding:

BER-TLV:	D6	25	19	01	15	82	02	83	81	3F	01	08
	55	02	01	41	56	04	00	00	00	9F	57	0F
	80	00	48	00	4F	00	4D	00	45	00	20	00
	30	00	34									

27.22.7.18.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.7.19 IMS registration event

It is expected that the IMS registration event will not be used seperately, but always in combination with the Incoming IMS Data Event and further features which are required for UICC access to IMS.

The IMS registration event is therefore tested in 27.22.4.27.7.1 and 27.22.7.20

27.22.7.20 Incoming IMS data event

27.22.7.20.1 Incoming IMS data (normal)

27.22.7.20.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.20.1.2 Conformance requirement

The ME shall support:

- the EVENT Incoming IMS DATA as defined in:
  - TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 7.5, clause 8.7, clause 8.25, clause 8.110.
- the EVENT: IMS Registration as defined in:
  - TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 7.5, clause 8.7, clause 8.25, clause 8.111, clause 8.112.the EVENT: Data available as defined in:
  - TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 7.5, clause 8.7, clause 8.25, clause 8.56, clause 8.57.
- the Open Channel for IMS and Event Download – IMS Registration Event commands as defined in:
  - TS 31.111[15] clauses 5.2, clauses 6.4.27 and 6.6.27, clause 8.6, clause 8.7, clause 8.55, clause 8.110
  - TS 31.102 [14] clauses 4.2.8, 4.2.95

The ME shall support the $EF_{UICCIARI}$ reading procedure as defined in:

- TS 31.103 [35] clause 4.2.16

Additionally the ME shall be able to carry out the IMS registration procedure according to TS 34.229-1 [36], Annex C.2.

27.22.7.20.1.3 Test purpose

To verify that the ME informs the UICC that an Event: Incoming IMS data has occurred using the ENVELOPE (EVENT DOWNLOAD – Incoming IMS data) command when the ME received a SIP message for the card, including an UICC IARI.

27.22.7.20.1.4 Method of test

27.22.7.20.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the Network Simulator (NWS).

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

The ME activates the required bearer, discovers P-CSCF and registers with the value from the ISIM to IMS services. The ME has registered the IARI associated with active applications intalled on the UICC, stored in EF_UICCIARI on the ISIM.

The channel identifier value used for these tests is set to 1 as an example. This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The E-UTRAN/EPC ISIM-UICC with the following execptions is used:

EF$_{IST}$ (ISIM Service Table)

EF$_{IST}$ shall be configured as defined in 27.22.2C.3.2 with the exception that Service 10 "Support of UICC access to IMS" is available.

EF$_{UICCIARI}$ (UICC IARI list)

Record 1:

Logically: urn:ur-7:3gpp-application.ims.iari.uicctest

Byte:	B01	B02	B03	B04	B05	B06	B07	B08	B09	B10
Coding:	80	2B	75	72	6E	3A	75	72	2D	37
	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
	3A	33	67	70	70	2D	61	70	70	6C
	B21	B22	B23	B24	B25	B26	B27	B28	B29	B30
	69	63	61	74	69	6F	6E	2E	69	6D
	B31	B32	B33	B34	B35	B36	B37	B38	B39	B40
	73	2E	69	61	72	69	2E	75	69	63
	B41	B42	B43	B44	B45	B46	B47	B48	B49	B50
	63	74	65	73	74	FF	FF	FF	FF	FF

27.22.7.20.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD – Incoming IMS data, IMS Registration and Data available event, IARI list stored on the ISIM)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	[As response to the TERMINAL PROFILE command]
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	

4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[The ME will read the ISIM Service Table and the UICC IARI list on the ISIM before it will attempt the initial registration to the IMS network]
5	ME → NWS NWS → ME	ME attempts to register to IMS services with values derived from the ISIM and additionally registers the IARI from $EF_{UICCIARI}$ during the intial registration or subsequent registration to IMS services.	[Initial registration to the IMS network is performed according to TS 34.229-1 [36], Annex C.2]
6	ME → UICC	ENVELOPE: EVENT DOWNLOAD – IMS registration 1.1.1	[After the IARI "urn:ur-7:3gpp-application.ims.iari.uicctest" has been successfully registered during the intial or a subsequent SIP REGISTER message containing this IARI. If the IARI "urn:ur-7:3gpp-application.ims.iari.uicctest" is not registered during the intial registration to the IMS network further Envelopes – Event Download – IMS Registration without the IARI might have been received. These shall be ignored by the USIM Simulator.]
7	NWS → ME	IMS network sends SIP INVITE message with UICC IARI	
8	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Incoming IMS data 1.1.1	
9	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
10	ME → UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL for IMS 1.1.1	
12	ME	Channel id, buffer assigned	
13	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL for IMS 1.1.1	[Command performed successfully]
14	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Data Available 1.1.1	
15	UICC → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.1	
16	ME → UICC	FETCH	
17	UICC → ME	PROACTIVE COMMAND: RECEIVE DATA 1.1.1	
18	ME → UICC	TERMINAL RESPONSE: RECEIVE DATA 1.1.1	Contains SIP message received in step 7

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list

Event 1: IMS Registration
Event 2: Incoming IMS data Event
Event 3: Data available

Coding:

BER-TLV:	D0	0E	81	03	01	05	00	82	02	81	82	99
	03	17	18	09								

EVENT DOWNLOAD - IMS Registration 1.1.1

Logically:

Event list
Event 1: IMS Registration
Device identities
Source device: Network
Destination device: UICC
IMPU list: At least one IMPU containing "urn:ur-7:3gpp-application.ims.iari.uicctest"

Coding:

BER-TLV:	D6	Note 1	19	01	17	82	02	83	81	77	Note 2	Note 3
Note 1: The TLV length depends on the IMPU list content Note 2: The IMPU TLV length depends on the IMPU list entries. Note 3: The IMPU list shall contain the IMPU "urn:ur-7:3gpp-application.ims.iari.uicctest" and might contain further IMPUs												

ENVELOPE: EVENT DOWNLOAD - Data available 1.1.1

Logically:

Event list
Event: Data available
Device identities
Source device: ME
Destination device: UICC
Channel status
Channel status: Channel 1 open, link established
Channel Data Length
Channel data length: 200 Bytes available in Rx buffer

Coding:

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	C8								

PROACTIVE COMMAND: OPEN CHANNEL for IMS 1.1.1

Logically:

Command details
Command number: 01
Command type: OPEN CHANNEL
Command qualifier: 00 (RFU)
Device identities
Source device: UICC
Destination device: ME
Buffer

Buffer size: 1400
IARI urn:ur-7:3gpp-application.ims.iari.uicctest

Coding:

BER-TLV:	D0	3A	81	03	01	40	00	82	02	81	82	39
	02	05	78	76	2B	75	72	6E	3A	75	72	2D
	37	3A	33	67	70	70	2D	61	70	70	6C	69
	63	61	74	69	6F	6E	2E	69	6D	73	2E	69
	61	72	69	2E	75	69	63	63	74	65	73	74

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: 00 (RFU)
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1, link established.
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	00	82	02	82	81	83	01	00
	38	02	81	00	39	02	05	78				

PROACTIVE COMMAND: RECEIVE DATA 1.1.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA
Command qualifier: RFU
Device identities
Source device: UICC
Destination device: Channel 1
Channel Data Length
Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	01	42	00	82	02	81	21	B7
	01	C8										

TERMINAL RESPONSE: RECEIVE DATA 1.1.1

Logically:

Command details
Command number: 1
Command type: RECEIVE DATA

Command qualifier: RFU
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel Data: 200 Bytes of data, includes SIP message
Channel data length: 00

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	ab	cd	ef	..	xy	B7	01	00	

Note: The content of the channel data is not tested.

27.22.7.20.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.7.21 Data Connection Status Change event

27.22.7.21.1 Definition and applicability

See clause 3.2.2.

27.22.7.21.2 Conformance requirement

The ME shall support the EVENT: Data Connection Status Change event as defined in:

- TS 31.111 [15] clause 4.7, 4.12, 7.5.25, 8.25, 8.28, 8.137, 8.138, 8.139 and 8.142

27.22.7.21.3 Test purpose

If the Data Connection Status Change event is part of the current event list (as set up by the last SET UP EVENT LIST command), then, upon detection by the ME of a change in the data connection status, the terminal shall inform the UICC that this event has occurred, by using the ENVELOPE (EVENT DOWNLOAD – Data Connection Status Change) command.

27.22.7.21.4 Method of test

27.22.7.21.4.1 Initial conditions

The ME is connected to the USIM Simulator and a E-USS/NB-SS for sequence 1.1 and a NG-SS for sequence 1.2.

For sequence 1.1 the default E-UTRAN/EPC UICC the following parameters are used:

Network access name: TestGp.rs
User login: UserLog
User password: UserPwd

UICC/ME interface transport level
Transport format: TCP
Port number: 44444
Data destination address: 01.01.01.01 (as an example)

For sequence 1.2 the default NG-RAN UICC and the following parameters are used:

PDU session:
DNN: TestGp.rs
PDU Session Type: IPv4v6

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

The E- UTRAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 0001;
- E-UTRAN Cell Identity value = 0001 (28 bits);

The NB-IoT parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 0001;
- E-UTRAN Cell Identity value = 0001 (28 bits);

The NG-RAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 000001;
- NG-RAN Cell Identifier (NCI) = 0000000001 (36 bits);

The system simulator should accept connection requests for APN/DNN: TestGP.rs

27.22.7.21.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD – Data Connection Status Change event, E-UTRAN, Activate PDN and Deactivate PDN)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	USER → ME	Set, configure and initiate an EPS PDN connection to APN "TestGp.rs"	The PDN connection shall be established as defined in 27.22.10.1, Seq 1.1
6	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data Connection Status Change event 1.1.1	[Data connection successful; i.e. accepted by the network and completed by the device]
7	E-USS/NB-SS → ME	DEACTIVATE EPS BEARER CONTEXT REQUEST	The DEACTIVATE EPS BEARER CONTEXT REQUEST message contains an ESM cause #26: insufficient resources
8	ME → E-USS/NB-SS	DEACTIVATE EPS BEARER CONTEXT ACCEPT	
9	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Data Connection Status Change event 1.1.2	Data connection status: [Data connection dropped or deactivated]

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1

Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: Data Connection Status Change

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	1D										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

EVENT DOWNLOAD - Data Connection Status Change 1.1.1

Logically:

Event list
Event 1: Data Connection Status Change
Device identities
Source device: Network
Destination device: UICC
Data connection status: Data connection successful; i.e. accepted by the network and completed by the device.
Data connection type: PDN connection
Transaction identifier: the Transaction identifier data object shall contain:
- TI value generated by the terminal to uniquely identify the PDP or PDN data connection
- TI flag is 0.

Date-Time and Time zone: Date and time set by the user if A.1/185 is supported by the ME
Location Information: Mobile Country Codes (MCC): 001
MNC: 01
TAC: 0001
ECI: 00000001
Access Technology: E-UTRAN
Location status: Normal service
Network Access Name: TestGp.rs
PDP/PDN type ME dependent

Coding:

BER-TLV:	D6	Note 1	19	01	1D	82	02	83	81	1D	01	00
	2A	01	01	1C	Note 2	Note 3	13	09	00	F1	10	00

	01	00	00	00	1F	3F	01	08	1B	01	00	C7
	0A	06	54	65	73	74	47	70	02	72	73	0B
	Note 4											
Note 1: The length of the BER-TLV is present here. Note 2: Transaction identifier length and data. Note 3: If A.1/185 is supported by the ME, Date-Time and Time zone shall be provided. Note 4: The PDN Type length and data.												

EVENT DOWNLOAD - Data Connection Status Change 1.1.2

Logically:

Event list
Event 1: Data Connection Status Change
Device identities
Source device: Network
Destination device: UICC
Data connection status: Data connection dropped or deactivated.
Data connection type: PDN connection
(E)SM cause: Insufficient resources
Transaction identifier: the Transaction identifier data object shall contain:
- TI value generated by the terminal to uniquely identify the PDP or PDN data connection
- TI flag is 0.

Date-Time and Time zone: Date and time set by the user if A.1/185 is supported by the ME
Location Information: MCC: 001
MNC: 01
TAC: 0001
ECI: 00000001
Access Technology: Not Checked
Location status: Normal service

Coding:

BER-TLV:	D6	Note 1	19	01	1D	82	02	83	81	1D	01	02
	2A	01	01	1A	01	1A	1C	Note 2	Note 3	13	09	00
	F1	10	00	01	00	00	00	1F	Note 4	1B	01	00
Note 1: The length of the BER-TLV is present here. Note 2: Transaction identifier length and data. Note 3: If A.1/185 is supported by the ME, Date-Time and Time zone shall be provided. Note 4: Access Technology may be present, but not checked												

Expected Sequence 1.2 (EVENT DOWNLOAD – Data Connection Status Change event, NG-RAN, Activate PDU and Deactivate PDU)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	USER → ME	Set, configure and initiate an PDU session with DNN "TestGp.rs"	The PDU session shall be established
6	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Data Connection Status Change event 1.2.1	[Data connection successful; i.e. accepted by the network and completed by the device]
7	NG-SS → ME	PDU SESSION RELEASE COMMAND	PDU SESSION RELEASE COMMAND message contains an (E/5G)SM cause #26: insufficient resources
8	ME → NG-SS	PDU SESSION RELEASE COMPLETE	
9	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Data Connection Status Change event 1.2.2	[Data connection dropped or deactivated]

EVENT DOWNLOAD - Data Connection Status Change 1.2.1

Logically:

Event list
Event 1: Data Connection Status Change
Device identities
Source device: Network
Destination device: UICC
Data connection status: Data connection successful; i.e. accepted by the network and completed by the device.
Data connection type: PDU connection
Transaction identifier: the Transaction identifier data object shall contain:
- TI value generated by the terminal to uniquely identify the PDP or PDN data connection
- TI flag is 0.

Date-Time and Time zone: Date and time set by the user if A.1/185 is supported by the ME
Location Information: Mobile Country Codes (MCC): 001
MNC: 01
TAC: 000001
NCI: 0000000001
Access Technology: 3GPP NR
Location status: Normal service
Network Access Name: TestGp.rs
PDP/PDN type ME dependent

Coding:

BER-TLV:	D6	Note 1	19	01	1D	82	02	83	81	1D	01	00
	2A	01	02	1C	Note 2	Note 3	13	0B	00	F1	10	00
	00	01	00	00	00	00	1F	3F	01	0A	1B	01
	00	C7	0A	06	54	65	73	74	47	70	02	72
	73	0B	Note 4									

Note 1: The length of the BER-TLV is present here.
Note 2: Transaction identifier length and data.
Note 3: If A.1/185 is supported by the ME, Date-Time and Time zone shall be provided.
Note 4: The PDN Type length and data.

EVENT DOWNLOAD - Data Connection Status Change 1.2.2

Logically:

Event list
Event 1: Data Connection Status Change
Device identities
Source device: Network
Destination device: UICC
Data connection status: Data connection dropped or deactivated.
Data connection type: PDU session
(E/5G)SM cause: Insufficient resources
Transaction identifier: the Transaction identifier data object shall contain:
- TI value generated by the terminal to uniquely identify the PDU data connection
- TI flag is 0.

Date-Time and Time zone: Date and time set by the user if A.1/185 is supported by the ME
Location Information: MCC: 001
MNC: 01
TAC: 000001
NCI: 0000000001
Location status: Normal service

Coding:

BER-TLV:	D6	Note 1	19	01	1D	82	02	83	81	1D	01	02
	2A	01	02	2E	01	1A	1C	Note 2	Note 3	13	0B	00
	F1	10	00	00	01	00	00	00	00	1F	1B	01
	00											
Note 1: The length of the BER-TLV is present here. Note 2: Transaction identifier length and data. Note 3: If A.1/185 is supported by the ME, Date-Time and Time zone shall be provided.												

27.22.7.21.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1 to 1.2.

27.22.7.22 CAG Cell Selection event

27.22.7.22.1 CAG Cell Selection (normal)

27.22.7.22.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.22.1.2 Conformance requirement

The ME shall support the EVENT: CAG Cell selection as defined in:

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 7.5, 7.5.26, clause 8.25, 8.147, 8.148, 8.149.

27.22.7.22.1.3 Test purpose

To verify that the ME informs the UICC that an Event: CAG Cell selection has occurred using the ENVELOPE (EVENT DOWNLOAD – CAG Cell selection) command when the ME detects a change in its current CAG cell selection status.

27.22.7.22.1.4 Method of test

27.22.7.22.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the NG-SS.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

The NG-SS configures three NR CAG cells with the following configuration:

Network parameters for cell 1:

- Mobile Country Code (MCC) = 244;
- Mobile Network Code (MNC) = 083;
- Tracking Area Code (TAC) = 000001;

with following parameters configured for NPN-Identity and corresponding HRNN in SIB1 and SIB 10 respectively:

- Mobile Country Code (MCC) = 244;
- Mobile Network Code (MNC) = 083;
- CAG ID: 00 00 00 01
- CAG Human-readable network name: 'CAG-00000001'
- Manual selection of the CAG-ID: allowed

Network parameters for cell 2:

- Mobile Country Code (MCC) = 244;
- Mobile Network Code (MNC) = 083;
- Tracking Area Code (TAC) = 000002;

with following parameters configured for NPN-Identity and corresponding HRNN in SIB1 and SIB 10 respectively:

- Mobile Country Code (MCC) = 244;
- Mobile Network Code (MNC) = 083;
- CAG ID: 00 00 00 02
- CAG Human-readable network name: 'CAG-00000002'
- Manual selection of the CAG-ID: allowed

Network parameters for cell 3:

- Mobile Country Code (MCC) = 244;
- Mobile Network Code (MNC) = 083;
- Tracking Area Code (TAC) = 000003;

with following parameters configured for NPN-Identity and corresponding HRNN in SIB1 and SIB 10 respectively:

- Mobile Country Code (MCC) = 244;
- Mobile Network Code (MNC) = 083;
- CAG ID: 00 00 00 03
- CAG Human-readable network name: 'CAG-00000003'
- Manual selection of the CAG-ID: not allowed

Cell 1 and Cell 2 are initially disabled. Cell 3 is enabled.

The NG-RAN UICC supporting CAG as defined in clause 27.22.2D.4 is used.

27.22.7.22.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD - CAG Cell Selection event)

Step	Direction	Message / Action	Comments
1	ME → NG-SS	The ME is registered to Cell 3 and in 5GMM-IDLE	ME is in automatic network selection mode
2	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
5	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5A	ME → UICC	ENVELOPE: EVENT DOWNLOAD – CAG Cell selection 1.1.1A.1 OR ENVELOPE: EVENT DOWNLOAD – CAG Cell selection 1.1.1B.1	This step only applies only if A.1/198
6	NG-SS	Cell 1 is enabled	ME is set to manual network selection mode
7	User→ ME	A manual CAG cell selection is performed. CAG ID=00000001 is selected.	

8	ME → NG-SS	REGISTRATION REQUEST	
9	NG-SS → ME	REGISTRATION ACCEPT	'CAG information list' shall not be provided in REGISTRATION ACCEPT message
10	ME → NG-SS	REGISTRATION COMPLETE	
11	ME → UICC	ENVELOPE: EVENT DOWNLOAD – CAG Cell selection 1.1.1A OR ENVELOPE: EVENT DOWNLOAD – CAG Cell selection 1.1.1B	Camping on CAG cell, CAG ID=00000001
12	NG-SS	Cell 1 is disabled Cell 2 is enabled	
13	ME → UICC	ENVELOPE: EVENT DOWNLOAD – CAG Cell selection 1.1.2A OR ENVELOPE: EVENT DOWNLOAD – CAG Cell selection 1.1.2B	Leaving CAG cell with CAG ID=00000001 Not camped on a CAG cell
14	User→ME	A manual CAG cell selection is performed. CAG ID=00000002 is selected.	
15	ME → NG-SS	REGISTRATION REQUEST	
16	NG-SS → ME	REGISTRATION ACCEPT	'CAG information list' shall not be provided in REGISTRATION ACCEPT message
17	ME → NG-SS	REGISTRATION COMPLETE	
18	ME → UICC	ENVELOPE: EVENT DOWNLOAD – CAG Cell selection 1.1.3A OR ENVELOPE: EVENT DOWNLOAD – CAG Cell selection 1.1.3B	Camping on CAG cell, CAG ID=00000002
19	NG-SS	Cell 2 is disabled	
20	ME → UICC	ENVELOPE: EVENT DOWNLOAD – CAG Cell selection 1.1.2A OR ENVELOPE: EVENT DOWNLOAD – CAG Cell selection 1.1.2B	Leaving CAG cell with CAG ID=00000002 Not camped on a CAG cell.

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: '1E' = CAG cell selection

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	1E										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details:
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities :
Source device: ME

Destination device: UICC
Result:
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

EVENT DOWNLOAD – CAG CELL SELECTION 1.1.1A.1

Logically:

Event list:
Event 1: CAG Cell selection
Device identities:
Source device: Network
Destination device: UICC
Access Technology:
Technology: 3GPP NG-RAN
CAG Cell selection status:
Byte 1, general information: '01' (camped on a CAG cell)
Byte 2, additional information: '81' (Result of another CAG selection type)
CAG information list:
One CAG ID for MCC = 244, MNC = 083
Ignore 'CAG only' bit = true
CAG ID: 00 00 00 03
CAG Human-readable network name list:
Only one CAG Human-readable network name in the list
CAG Human-readable network name: 'CAG-00000003'

Coding:

BER-TLV:	D6	29	19	01	1E	82	02	83	81	3F	01	0A
	55	02	01	81	56	09	08	42	34	80	04	00
	00	00	03	57	0E	80	0C	43	41	47	2D	30
	30	30	30	30	30	30	33					

EVENT DOWNLOAD – CAG CELL SELECTION 1.1.1B.1

Logically:

Event list:
Event 1: CAG Cell selection
Device identities:
Source device: Network
Destination device: UICC
Access Technology:
Technology: 3GPP NG-RAN
CAG Cell selection status:
Byte 1, general information: '01' (camped on a CAG cell)
Byte 2, no additional information: '00'
CAG information list
One CAG IDs for MCC = 244, MNC = 083
Ignore 'CAG only' bit = true
CAG ID: 00 00 00 03
CAG Human-readable network name list:
Only one CAG Human-readable network name in the list
CAG Human-readable network name: 'CAG-00000003'

Coding:

BER-TLV:	D6	29	19	01	1E	82	02	83	81	3F	01	0A

	55	02	01	00	56	09	08	42	34	80	04	00
	00	00	03	57	0E	80	0C	43	41	47	2D	30
	30	30	30	30	30	30	33					

EVENT DOWNLOAD – CAG CELL SELECTION 1.1.1A

Logically:

Event list:
Event 1: CAG Cell selection
Device identities:
Source device: Network
Destination device: UICC
Access Technology:
Technology: 3GPP NG-RAN
CAG Cell selection status:
Byte 1, general information: '01' (camped on a CAG cell)
Byte 2, additional information: '41' (Result of a manual CAG selection)
CAG information list:
One CAG ID for MCC = 244, MNC = 083
Ignore 'CAG only' bit = true
CAG ID: 00 00 00 01
CAG Human-readable network name list:
Only one CAG Human-readable network name in the list
CAG Human-readable network name: 'CAG-00000001'

Coding:

BER-TLV:	D6	29	19	01	1E	82	02	83	81	3F	01	0A
	55	02	01	41	56	09	08	42	34	80	04	00
	00	00	01	57	0E	80	0C	43	41	47	2D	30
	30	30	30	30	30	30	31					

EVENT DOWNLOAD – CAG CELL SELECTION 1.1.1B

Logically:

Event list:
Event 1: CAG Cell selection
Device identities:
Source device: Network
Destination device: UICC
Access Technology:
Technology: 3GPP NG-RAN
CAG Cell selection status:
Byte 1, general information: '01' (camped on a CAG cell)
Byte 2, no additional information: '00'
CAG information list
One CAG IDs for MCC = 244, MNC = 083
Ignore 'CAG only' bit = true
CAG ID: 00 00 00 01
CAG Human-readable network name list:
Only one CAG Human-readable network name in the list
CAG Human-readable network name: ′CAG-00000001′

Coding:

BER-TLV:	D6	29	19	01	1E	82	02	83	81	3F	01	0A
	55	02	01	00	56	09	08	42	34	80	04	00
	00	00	01	57	0E	80	0C	43	41	47	2D	30
	30	30	30	30	30	30	31					

EVENT DOWNLOAD – CAG CELL SELECTION 1.1.2A

Logically:

Event list:
Event 1: CAG Cell selection
Device identities:
Source device: Network
Destination device: UICC
CAG Cell selection status:
Byte 1, general information: '00' (not camped on a CAG cell)
Byte 2, no additional information: '00'

Coding:

BER-TLV:	D6	0B	19	01	1E	82	02	83	81	55	02	00
	00											

EVENT DOWNLOAD – CAG CELL SELECTION 1.1.2B

Logically:

Event list:
Event 1: CAG Cell selection
Device identities:
Source device: Network
Destination device: UICC
CAG Cell selection status:
Byte 1, general information: '00' (not camped on a CAG cell)
Byte 2, additional information: '41' (Result of a manual CAG selection)

Coding:

BER-TLV:	D6	0B	19	01	1E	82	02	83	81	55	02	00
	41											

EVENT DOWNLOAD – CAG CELL SELECTION 1.1.3A

Logically:

Event list:
Event 1: CAG Cell selection
Device identities:
Source device: Network
Destination device: UICC
Access Technology:
Technology: 3GPP NG-RAN
CAG Cell selection status:
Byte 1, general information: '01' (camped on a CAG cell)
Byte 2, additional information: '41' (Result of a manual CAG selection)
CAG information list:
One CAG IDs for MCC = 244, MNC = 083
Ignore 'CAG only' bit = true
CAG ID: 00 00 00 02
CAG Human-readable network name list:
Only one CAG Human-readable network name in the list
CAG Human-readable network name: 'CAG-00000002'

Coding:

BER-TLV:	D6	29	19	01	1E	82	02	83	81	3F	01	0A
	55	02	01	41	56	09	08	42	34	80	04	00
	00	00	02	57	0E	80	0C	43	41	47	2D	30

30	30	30	30	30	30	32	

EVENT DOWNLOAD – CAG CELL SELECTION 1.1.3B

Logically:

Event list:
Event 1: CAG Cell selection
Device identities
Source device: Network
Destination device: UICC
Access Technology
Technology: 3GPP NG-RAN
CAG Cell selection status:
Byte 1, general information: '01' (camped on a CAG cell)
Byte 2, no additional information: '00'
CAG information list:
One CAG IDs for MCC = 244, MNC = 083
Ignore 'CAG only' bit = true
CAG ID: 00 00 00 02
CAG Human-readable network name list
Only one CAG Human-readable network name in the list
CAG Human-readable network name: 'CAG-00000002'

Coding:

BER-TLV:	D6	29	19	01	1E	82	02	83	81	3F	01	0A
	55	02	01	00	56	09	08	42	34	80	04	00
	00	00	02	57	0E	80	0C	43	41	47	2D	30
	30	30	30	30	30	30	32					

27.22.7.22.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.7.23 Slices Status Change event

27.22.7.23.1 Slice Status change (allowed, rejected, served slices)

27.22.7.23.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.23.1.2 Conformance requirement

The ME shall support the EVENT: Slices Status Change event as defined in:

- TS 31.111 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 7.5, 7.5.27, clause 8.25.

27.22.7.23.1.3 Test purpose

To verify that the ME informs the UICC that an Event: Slices status change has occurred using the ENVELOPE (EVENT DOWNLOAD – Slices status) command when the ME detects a change in any S-NSSAI status (S-NSSAI included to or removed from Rejected S-NSSAI, Allowed S-NSSAI , Served S-NSSAI , partially allowed or partially rejected slice(s) list).

27.22.7.23.1.4 Method of test

27.22.7.23.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the NG-SS.

The ME shall be configured with:

URSP:

Rule Precedence =1

Traffic Descriptor:

- DNN=TestGp.rs

Route Selection Descriptor:

- Precedence=1
- Network Slice Selection, S-NSSAI: 01 01 01 03 (SST: eMBB, SD: 010103)
- SSC Mode Selection: SSC Mode 1
- Access Type preference: 3GPP access

Rule Precedence =2

Traffic Descriptor:

- DNN=Test12.rs

Route Selection Descriptor:

- Precedence=1
- Network Slice Selection, S-NSSAI: 01 01 01 02 (SST: eMBB, SD: 010102)
- SSC Mode Selection: SSC Mode 1
- Access Type preference: 3GPP access

Rule Precedence = <lowest priority>

Traffic Descriptor: *

Route Selection Descriptor:

- Precedence =1
- SSC Mode Selection: SSC Mode 1
- Access Type preference: 3GPP access

The ME shall be powered off.

The NG-SS configures NR cells with the following configuration:

Network parameters for sequence 1.1:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 000001;

The allowed S-NSSAI list and rejected S-NSSAI is configured as below:

- Allowed S-NSSAIs = 01010103 (SST: eMBB, SD: 010103), 01010102 (SST: eMBB, SD: 010102);

- Rejected S-NSSAI = 01010101 (SST: eMBB, SD: 010101);

Network parameters for sequence 1.2:

- Mobile Country Code (MCC) =001;
- Mobile Network Code (MNC) = 02;
- Tracking Area Code (TAC) = 000002;

The allowed S-NSSAI with mapping information and rejected S-NSSAI with mapping information is configured as below

- Allowed S-NSSAIs (with mapping) = '01010103' (SST: eMBB, SD: 010103) '01010103' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010103),
- Rejected S-NSSAI (with mapping) = '01010102' (SST: eMBB, SD: 010102) '01010102' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010102);

Network parameters for sequence 1.3:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 03;
- Tracking Area Code (TAC) = 000003;

The allowed S-NSSAI with mapping information and rejected S-NSSAI with mapping information is configured as below

- Allowed S-NSSAIs (with mapping) = '01010106' (SST: eMBB, SD: 010106) '01010103' Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010103),
- Rejected S-NSSAI (with mapping) = '01010104' (SST: eMBB, SD: 010104) '01010102' Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010102);

The NG-RAN UICC as defined in clause 27.22.2D.5 is used for sequences 1.1, 1.2, 1.3.

27.22.7.23.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD – Slices Status Change event) - no mapping case.

Step	Direction	Message / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required.	[see initial conditions]
2	ME → NG-SS	NG-RAN cell is switched on.	
3	USER → ME	The terminal is switched on and made to start a registration attempt to the NG-SS.	
4	ME → NG-SS	REGISTRATION REQUEST	
5	NG-SS → ME	REGISTRATION ACCEPT	Allowed S-NSSAIs = 01010103, 01010102; Rejected S-NSSAI = 01010101
6	ME → NG-SS	REGISTRATION COMPLETE	
7	USER → ME	PDU Session is established successfully to DNN TestGp.rs.	DNN=TestGp.rs, Served S-NSSAI = 01010103
8	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
11	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
12	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Slice Status 1.1.1	Slice status: Allowed

13	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Slice Status 1.1.2	Slice status: Served
14	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Slice Status 1.1.3	Slice status: Rejected
15	USER → ME	The terminal is switched off	[Device perform de-registration procedure]

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event list
Event 1: '1F' = Slices Status Change

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	1F										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details:
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities :
Source device: ME
Destination device: UICC
Result:
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

ENVELOPE: EVENT DOWNLOAD – Slice Status 1.1.1

Logically:

Event list:
Event 1: Slices Status Change
Device identities:
Source device: ME
Destination device: UICC
Access Technology:
Technology: 3GPP NG-RAN
Slices status: '01' = Allowed
Allowed Slices information with S-NSSAI mapping: empty (zero length)
Allowed Slice information:
Length of allowed S-NSSAI (n) elements (X=4n): 8
Allowed S-NSSAI: '01 01 01 03' (SST: eMBB, SD: 010103)
Allowed S-NSSAI: '01 01 01 02' (SST: eMBB, SD: 010102)

Coding:

BER-TLV:	D6	19 Note 1	19	01	1F	82	02	82	81	3F	01	0A
	55	01	01	77 Note 2	00 Note 2	78	08	01	01	01	03	01
	01	01	02									

Note 1: The TLV length depends on the content.
Note 2: Certain ME implementations may include an empty 'Allowed Slices information with S-NSSAI mapping'.

ENVELOPE: EVENT DOWNLOAD – Slice Status 1.1.2

Logically:

Event list:
Event 1: Slices Status Change
Device identities:
Source device: ME
Destination device: UICC
Access Technology:
Technology: 3GPP NG-RAN
Slices status: '04' = Served
Slices information (served):
Number of Served S-NSSAIs: 1
Served S-NSSAI: '01 01 01 03' (SST: eMBB, SD: 010103)

Coding:

BER-TLV:	D6	14	19	01	1F	82	02	82	81	3F	01	0A
	55	01	04	56	05	01	01	01	01	03		

ENVELOPE: EVENT DOWNLOAD – Slice Status 1.1.3

Logically:

Event list:
Event 1: Slices Status Change
Device identities:
Source device: ME
Destination device: UICC
Access Technology:
Technology: 3GPP NG-RAN
Slices status: '02' = Rejected
Rejected slices information with S-NSSAI mapping: empty (zero length)
Rejected slices information:
Length of rejected S-NSSAI elements: 4
Rejected S-NSSAI: '01 01 01 01' (SST: eMBB, SD: 010101)

Coding:

BER-TLV:	D6	15 Note 1	19	01	1F	82	02	82	81	3F	01	0A
	55	01	02	57 Note 2	00 Note 2	31	04	01	01	01	01	

Note 1: The TLV length depends on the content.
Note 2: Certain ME implementations may include an empty 'Rejected slices information with S-NSSAI mapping'.

Expected Sequence 1.2 (EVENT DOWNLOAD – Slices Status Change event) - with mapping (same).

Step	Direction	Message / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required.	[see initial conditions]
2	ME → NG-SS	NG-RAN cell is switched on.	
3	USER → ME	The terminal is switched on and made to start a registration attempt to the NG-SS.	
4	ME → NG-SS	REGISTRATION REQUEST	
5	NG-SS → ME	REGISTRATION ACCEPT	Allowed S-NSSAIs = '01010103', '01010103' Rejected S-NSSAI = '01010102', '01010102'
6	ME → NG-SS	REGISTRATION COMPLETE	
7	USER → ME	PDU Session is established successfully to DNN TestGp.rs.	DNN=TestGp.rs, Served S-NSSAI = 01010103
8	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
11	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
12	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Slice Status 1.2.1	Slice status: Allowed
13	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Slice Status 1.1 2	Slice status: Served
14	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Slice Status 1.2.2	Slice status: Rejected
15	USER → ME	The terminal is switched off	[Device perform de-registration procedure]

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Same as TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

ENVELOPE: EVENT DOWNLOAD – Slice Status 1.2.1

Logically:

Event list:
Event 1: Slices Status Change
Device identities:
Source device: ME
Destination device: UICC
Access Technology:
Technology: 3GPP NG-RAN
Slices status: '01' = Allowed
Allowed Slice information with S-NSSAI mapping:
Length of allowed S-NSSAI with mapping information elements: 08
Allowed S-NSSAI with mapping information element 1: '01010103' (SST: eMBB, SD: 010103)
'01010103' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010103)
Allowed Slices information: empty (zero length)

Coding:

BER-TLV:	D6	19	19	01	1F	82	02	82	81	3F	01	0A

		Note 1										
	55	01	01	77	08	01	01	01	03	01	01	01
	03	78 Note 2	00 Note 2									
	Note 1: The TLV length depends on the content. Note 2: Certain ME implementations may include an empty 'Allowed Slices information'.											

ENVELOPE: EVENT DOWNLOAD – Slice Status 1.1 2

Same as ENVELOPE: EVENT DOWNLOAD – Slice Status 1.1 2 in expected sequence 1.1

ENVELOPE: EVENT DOWNLOAD – Slice Status 1.2.2

Logically:

Event list:
Event 1: Slices Status Change
Device identities:
Source device: ME
Destination device: UICC
Access Technology:
Technology: 3GPP NG-RAN
Slices status: '02' = Rejected
Rejected Slice information with S-NSSAI mapping:
Length of allowed S-NSSAI with mapping information elements: 08
Rejected S-NSSAI with mapping information element 1: '01010102' (SST: eMBB, SD: 010102)
'01010102' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010102)
Rejected Slices information: empty (zero length)

Coding:

BER-TLV:	D6	19 Note 1	19	01	1F	82	02	82	81	3F	01	0A
	55	01	02	57	08	01	01	01	02	01	01	01
	02	31 Note 2	00 Note 2									
	Note 1: The TLV length depends on the content. Note 2: Certain ME implementations may include an empty 'Rejected slices information'.											

Expected Sequence 1.3 (EVENT DOWNLOAD – Slices Status Change event) - with mapping (different).

Step	Direction	Message / Action	Comments
1	USER → ME	Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required.	[see initial conditions]
2	ME → NG-SS	NG-RAN cell 3 is switched on.	
3	USER → ME	The terminal is switched on and made to start a registration attempt to the NG-SS.	
4	ME → NG-SS	REGISTRATION REQUEST	
5	NG-SS →ME	REGISTRATION ACCEPT	Allowed S-NSSAIs = '01010106', '01010103' Rejected S-NSSAI = '01010104', '01010102'
6	ME → NG-SS	REGISTRATION COMPLETE	
7	USER → ME	PDU Session is established successfully to DNN TestGp.rs.	DNN=TestGp.rs, Served S-NSSAI = 01010103

8	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
9	ME → UICC	FETCH	
10	UICC → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
11	ME → UICC	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
12	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Slice Status 1.3.1	Slice status: Allowed
13	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Slice Status 1.1.2	Slice status: Served
14	ME → UICC	ENVELOPE: EVENT DOWNLOAD – Slice Status 1.3.2	Slice status: Rejected
15	USER → ME	The terminal is switched off	[Device perform de-registration procedure]

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Same as TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

ENVELOPE: EVENT DOWNLOAD – Slice Status 1.3.1

Logically:

Event list:
Event 1: Slices Status Change
Device identities:
Source device: ME
Destination device: UICC
Access Technology:
Technology: 3GPP NG-RAN
Slices status: '01' = Allowed
Allowed Slice information with S-NSSAI mapping:
Length of allowed S-NSSAI with mapping information elements: 08
Allowed S-NSSAI with mapping information element 1: '01010106' (SST: eMBB, SD: 010106) '01010103' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010103)
Allowed Slices information: empty (zero length)

Coding:

BER-TLV:	D6	19 Note 1	19	01	1F	82	02	82	81	3F	01	0A
	55	01	01	77	08	01	01	01	06	01	01	01
	03	78 Note 2	00 Note 2									
	Note 1: The TLV length depends on the content. Note 2: Certain ME implementations may include an empty 'Allowed Slices information'.											

ENVELOPE: EVENT DOWNLOAD – Slice Status 1.1 2

Same as ENVELOPE: EVENT DOWNLOAD – Slice Status 1.1 2 in expected sequence 1.1

ENVELOPE: EVENT DOWNLOAD – Slice Status 1.3.2

Logically:

Event list:
Event 1: Slices Status Change
Device identities:

Source device: ME
Destination device: UICC
Access Technology:
Technology: 3GPP NG-RAN
Slices status: '02' = Rejected
Rejected Slice information with S-NSSAI mapping:
Length of allowed S-NSSAI with mapping information elements: 08
Rejected S-NSSAI with mapping information element 1: '01010104' (SST: eMBB, SD: 010104)
'01010102' (Mapped HPLMN SST: eMBB, Mapped HPLMN SD:010102)
Rejected Slices information: empty (zero length)

Coding:

BER-TLV:	D6	19 Note 1	19	01	1F	82	02	82	81	3F	01	0A
	55	01	02	57	08	01	01	01	04	01	01	01
	02	31 Note 2	00 Note 2									
	Note 1: The TLV length depends on the content. Note 2: Certain ME implementations may include an empty 'Rejected slices information'.											

27.22.7.23.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1 to 1.3.

27.22.8 MO SHORT MESSAGE CONTROL BY USIM

27.22.8.1 Definition and applicability

See clause 3.2.2.

27.22.8.2 Conformance requirement

The ME shall support the MO SEND SHORT MESSAGE CONTROL facility as defined in:

- TS 31.111 [15] clause 7.3.2.

The ME shall also support the SEND SMS facility as specified in

- TS 31.111 [15] clause 6.4.10

27.22.8.3 Test purpose

To verify that for all SMS sending attempts, even those resulting from a SEND SHORT MESSAGE proactive UICC command, the ME shall first pass the RP_destination_address of the service center and the TP_Destination_Address to the UICC, using the ENVELOPE (MO Short Message CONTROL).

To verify that if the UICC responds with '90 00', the ME shall send the SMS with the address unchanged.

To verify that if the UICC returns response data, the ME shall use the response data appropriately to send the SM as proposed, not send the SM, or send the SM using the data supplied by the UICC.

To verify that, in the case where the initial SM request results from a proactive SEND SHORT MESSAGE, if the MO SMS CONTROL result is "not allowed" or "allowed with modifications", the ME shall inform the UICC using TERMINAL RESPONSE "interaction with call control by UICC or MO short message control by USIM, action not allowed".

27.22.8.4 Method of tests

27.22.8.4.1 Initial conditions

The ME is connected to the System Simulator and the USIM Simulator.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The MO SMS control service is available in the USIM Service Table.

The SMS service center address in the ME shall be set to "+112233445566778" prior to the execution of the tests.

For test sequences 1.1 to 1.8 the ME is connected to USS or SS.

The GERAN/UTRAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001;

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;

- Cell Identity value = 0001.

For test sequences 1.10 to 1.17 the ME is connected to the E-USS/NB-SS, where:

- SMS over SGs (DOWNLINK NAS TRANSPORT and UPLINK NAS TRANSPORT messages) is used to send and receive short messages

The E-USS parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 0001;
- E-UTRAN Cell Id = 0001.

The NB-SS parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 0001;
- NB-IoT Cell Id = 0001.

27.22.8.4.2 Procedure

Expected Sequence 1.1 (MO SM CONTROL BY USIM , with Proactive command, Allowed, no modification')

Step	Direction	Message / Action	Comments
1	UICC -> ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1	
2	ME -> UICC	FETCH	
3	UICC -> ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1	
4	ME -> USER	Display "Send SM"	[Alpha Identifier]
5	ME -> UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A Or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
6	UICC -> ME	MO SMS CONTROL RESULT 1.1.1	["Allowed, no modification"]
7	ME -> USS	Send SMS-PP Message 1.1	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.1 without modification]
8	USS -> ME	SMS RP-ACK	
9	ME -> UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 1.1.1	

PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: UICC
Destination device: Network
Alpha identifier: "Send SM"

Address

TON: International number
NPI: "ISDN / telephone numbering plan"
Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 8-bit data
Message class class 0
TP-UDL 12
TP-UD "Test Message"

Coding:

BER-TLV:	D0	37	81	03	01	13	00	82	02	81	83	85
	07	53	65	6E	64	20	53	4D	86	09	91	11
	22	33	44	55	66	77	F8	8B	18	01	00	09
	91	10	32	54	76	F8	40	F4	0C	54	65	73
	74	20	4D	65	73	73	61	67	65			

SMS-PP (SEND SHORT MESSAGE) Message 1.1

Logically:

SMS RPDU

RP-Originator Address not used
RP-Destination SMSC Address
TON International number
NPI "ISDN / telephone numbering plan"
Address value "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "01"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"
TP-PID Short message type 0
TP-DCS
Message coding 8-bit data
Message class class 0
TP-UDL 12
TP-UD "Test Message"

Coding:

Coding	00	09	91	11	22	33	44	55	66	77	F8	18
	01	01	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

ENVELOPE MO SHORT MESSAGE CONTROL 1.1.1A

Logically:

Device identities
Source device: ME
Destination device: UICC
RP Destination Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "112233445566778"
TP Destination Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "012345678"
Location Information
MCC & MNC the mobile country and network code (00F110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)
Extended Cell ID RNC-id value (for Rel-4 onwards), see also Note 3

Coding:

Coding	D5	Note 1	02	02	82	81	06	09	91	11	22
	33	44	55	66	77	F8	06	06	91	10	32
	54	76	F8	13	Note 2	00	F1	10	00	01	00
	01	Note 3									

Note 1: Length of BER-TLV is '20' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'

Note 3: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

ENVELOPE MO SHORT MESSAGE CONTROL 1.1.1B

Logically:

Device identities
Source device: ME
Destination device: UICC
RP Destination Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "112233445566778"
TP Destination Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "012345678"
Location Information
MCC & MNC the mobile country and network code (001110)
LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D5	20	02	02	82	81	06	09	91	11	22

	33	44	55	66	77	F8	06	06	91	10	32
	54	76	F8	13	07	00	11	10	00	01	00
	01										

MO SHORT MESSAGE CONTROL RESULT 1.1.1

Logically:

MO Short Message control result: '00' = Allowed, no modification

Coding:

BER-TLV:	00	00

TERMINAL RESPONSE: SEND SHORT MESSAGE 1.1.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

Expected Sequence 1.2 (MO SM CONTROL BY USIM , with user SMS, Allowed, no modification')

Step	Direction	Message / Action	Comments
1	USER -> ME	The user makes a SMS with the user data "Test Message" and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as defined in SMS-PP (SEND SHORT MESSAGE) Message 1.2.
2	ME -> UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC -> ME	MO SHORT MESSAGE CONTROL RESULT 1.1.1	["Allowed, no modification"]
4	ME -> USS	Send SMS-PP Message 1.2	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.2 without modification]
5	USS -> ME	SMS RP-ACK	

SMS-PP (SEND SHORT MESSAGE) Message 1.2

Logically:

SMS RPDU
RP-Originator Address not used
RP-Destination SMSC Address
TON International number
NPI "ISDN / telephone numbering plan"
Address value "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD value shall not be verified
TP-VPF value shall not be verified
TP-RP value shall not be verified
TP-UDHI value shall not be verified
TP-SRR value shall not be verified
TP-MR "01"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"

Coding:

Coding	00	09	91	11	22	33	44	55	66	77	F8	Note 1
	Note 2	01	09	91	10	32	54	76	F8	Note 3		

Note 1: Octet shall not be verified

Note 2: Only the TP-MTI bits shall be verified

Note 3: The remaining octets shall not be verified

Expected Sequence 1.3 (MO SM CONTROL BY USIM , with Proactive command, Not allowed')

Step	Direction	Message / Action	Comments
1	UICC -> ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1	
2	ME -> UICC	FETCH	
3	UICC -> ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1	
4	ME -> USER	Display "Send SM"	[The display of the Alpha Identifier shall not be verified]
5	ME -> UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
6	UICC -> ME	MO SHORT MESSAGE CONTROL RESULT 1.3.1	["not Allowed"]
7	ME -> UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 1.3.1	[Permanent Problem - Interaction with Call Control or MO short message control by USIM]
8	ME→ USS	The ME does not send the Short Message	

MO SHORT MESSAGE CONTROL RESULT 1.3.1

Logically:

MO Short Message control result: '01' = Not Allowed

Coding:

BER-TLV:	01	00

TERMINAL RESPONSE: SEND SHORT MESSAGE 1.3.1

Logically:

Command details
Command number: 01
Command Type: SEND SHORT MESSAGE
Command qualifier: packing not required

Device identities
Source device: ME
Destination device: UICC
Result
General Result: Interaction with call control or MO-SM by USIM permanent problem
Additional information: Action not allowed

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	02	39
	01											

Expected Sequence 1.4 (MO SM CONTROL BY USIM , with user SMS, Not allowed ')

Step	Direction	Message / Action	Comments
1	USER -> ME	The user makes a SMS with the user data "Test Message" and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as defined in SMS-PP (SEND SHORT MESSAGE) Message 1.2.
2	ME -> UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC -> ME	MO SM CONTROL RESULT 1.3.1	["Not allowed"]
4	ME → USS	The ME does not send the Short Message	

Expected Sequence 1.5 (MO SM CONTROL BY USIM , with Proactive command, Allowed with modifications')

Step	Direction	Message / Action	Comments
1	UICC -> ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1	
2	ME -> UICC	FETCH	
3	UICC -> ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1	Send SMS to "+012345678"
4	ME -> USER	Display "Send SM"	[Alpha Identifier]
5	ME -> UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
6	UICC -> ME	MO SM CONTROL RESULT 1.5.1	["Allowed with modifications"]
7	ME -> USS	Send SMS-PP Message 1.5	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.5 with the data provided by the UICC to the changed Service Center Address "+112233445566779"]
8	USS -> ME	SMS RP-ACK	
9	ME -> UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 1.5.1	

MO SHORT MESSAGE CONTROL RESULT 1.5.1

Logically:
MO Short Message control result: '02' = Allowed with modifications
RP Destination_Address of the Service Center
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string: "112233445566779"
TP Destination Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string: "012345679"

Coding:

02	13	86	09	91	11	22	33	44	55	66
77	F9	86	06	91	10	32	54	76	F9	

SMS-PP (SEND SHORT MESSAGE) Message 1.5

Logically:

SMS RPDU

RP-Originator Address not used
RP-Destination SMSC Address
TON International number
NPI "ISDN / telephone numbering plan"
Address value "112233445566779"

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "01"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345679"
TP-PID Short message type 0
TP-DCS
Message coding 8-bit data
Message class class 0
TP-UDL 12
TP-UD "Test Message"

Coding:

Coding												
	00	09	91	11	22	33	44	55	66	77	F9	18
	01	01	09	91	10	32	54	76	F9	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

TERMINAL RESPONSE: SEND SHORT MESSAGE 1.5.1

Logically:

Command details
Command number: 01
Command Type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

Expected Sequence 1.6 (MO SM CONTROL BY USIM , with user SMS, Allowed with modifications')

Step	Direction	Message / Action	Comments
1	USER -> ME	The user makes a SMS with the user data "Test Message" and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as defined in SMS-PP (SEND SHORT MESSAGE) Message 1.2.
2	ME -> UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC -> ME	MO SM CONTROL RESULT 1.5.1	["Allowed with modifications"]
4	ME-> USS	Send SMS-PP Message 1.6	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1. 6 with the data provided by the UICC to the changed Service Center Address "+112233445566779"]
5	USS -> ME	SMS RP-ACK	

SMS-PP (SEND SHORT MESSAGE) Message 1.6

Logically:

SMS RPDU

RP-Originator Address not used
RP-Destination SMSC Address
TON International number
NPI "ISDN / telephone numbering plan"
Address value "112233445566779"

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD value shall not be verified
TP-VPF value shall not be verified
TP-RP value shall not be verified
TP-UDHI value shall not be verified
TP-SRR value shall not be verified
TP-MR "01"
TP-DA
TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345679"

Coding:

Coding	00	09	91	11	22	33	44	55	66	77	F9	Note 1
	Note 2	01	09	91	10	32	54	76	F9	Note 3		

Note 1: Octet shall not be verified.

Note 2: Only the TP-MTI bits shall be verified.

Note 3: The remaining octets shall not be verified.

Expected Sequence 1.7 (MO SM CONTROL BY USIM , with Proactive command, the USIM responds with '90 00', Allowed, no modification)

Step	Direction	Message / Action	Comments
1	UICC -> ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1	
2	ME -> UICC	FETCH	
3	UICC -> ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1	Send SMS to "+012345678"

4	ME -> USER	Display "Send SM"	[Alpha Identifier]
5	ME -> UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
6	UICC -> ME	90 00	
7	ME -> USS	Send SMS-PP	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.1 without modification]
8	USS -> ME	SMS RP-ACK	
9	ME -> UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 1.1.1	

Expected Sequence 1.8 (MO SM CONTROL BY USIM , Send Short Message attempt by user, the USIM responds with '90 00', Allowed, no modification)

Step	Direction	Message / Action	Comments
1	User → ME	The user makes a SMS with the user data "Test Message" and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as defined in SMS-PP (SEND SHORT MESSAGE) Message 1.2.
2	ME → UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1 A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GERAN/UTRAN parameters] [Option B shall apply for PCS1900 parameters]
3	UICC → ME	90 00	
4	ME → USS	Send SMS-PP	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.2 without modification]
5	USS -> ME	SMS RP-ACK	

Expected Sequence 1.9void

Expected Sequence 1.10 (MO SM CONTROL BY USIM over SG in E-UTRAN, with Proactive command, Allowed, no modification)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1	
2	ME → UICC	FETCH	
3	UICC -> ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1	
4	ME → USER	Display "Send SM"	[Alpha Identifier]
5	ME → UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.10.1	
6	UICC → ME	MO SMS CONTROL RESULT 1.1.1	["Allowed, no modification"]
7	ME → E-USS/NB-SS	Send SMS-PP Message 1.10	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.10 without modification]
8	E-USS/NB-SS → ME	RP-ACK	
9	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 1.1.1	

SMS-PP (SEND SHORT MESSAGE) Message 1.10

Logically:

SMS TPDU

TP-MTI	SMS-SUBMIT
TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF	TP-VP field not present
TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT

TP-UDHI	The TP-UD field contains only the short message
TP-SRR	A status report is not requested
TP-MR	"01"
TP-DA	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345678"
TP-PID	Short message type 0
TP-DCS	
Message coding	8-bit data
Message class	class 0
TP-UDL	12
TP-UD	"Test Message"

Coding:

Coding	00	09	91	11	22	33	44	55	66	77	F8	18
	01	01	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

ENVELOPE MO SHORT MESSAGE CONTROL 1.10.1

Logically:

Device identities
- Source device: ME
- Destination device: UICC

RP Destination Address
- TON: International
- NPI: "ISDN / telephone numbering plan" or "unknown"
- Dialling number string "112233445566778"

TP Destination Address
- TON: International
- NPI: "ISDN / telephone numbering plan" or "unknown"
- Dialling number string "012345678"

Location Information

Mobile Country Codes (MCC)	001
Mobile Network Codes (MNC)	01
Tracking Area Code (TAC):	0001
E-UTRAN Cell Identifier (ECI):	0001

Coding:

Coding	D5	22	02	02	82	81	06	09	91	11	22
	33	44	55	66	77	F8	06	06	91	10	32
	54	76	F8	13	09	00	F1	10	00	01	00
	00	00	1F								

Expected Sequence 1.11 (MO SM CONTROL BY USIM over SG in E-UTRAN, with user SMS, Allowed, no modification)

Step	Direction	Message / Action	Comments
1	USER → ME	The user makes a SMS with the user data "Test Message"and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as defined in SMS-PP (SEND SHORT MESSAGE) Message 1.11.
2	ME → UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.10.1	
3	UICC → ME	MO SHORT MESSAGE CONTROL RESULT 1.1.1	["Allowed, no modification"]

4	ME → E-USS/NB-SS	Send SMS-PP Message 1.11	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.11 without modification]
5	E-USS/NB-SS → ME	RP-ACK	

SMS-PP (SEND SHORT MESSAGE) Message 1.11

Logically:

SMS TPDU

TP-MTI	SMS-SUBMIT
TP-RD	value shall not be verified
TP-VPF	value shall not be verified
TP-RP	value shall not be verified
TP-UDHI	value shall not be verified
TP-SRR	value shall not be verified
TP-MR	"01"
TP-DA	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345678"

Coding:

Coding	00	09	91	11	22	33	44	55	66	77	F8	Note 1
	Note 2	01	09	91	10	32	54	76	F8	Note 3		

Note 1: Octet shall not be verified

Note 2: Only the TP-MTI bits shall be verified

Note 3: The remaining octets shall not be verified

Expected Sequence 1.12 (MO SM CONTROL BY USIM over SG in E-UTRAN, with Proactive command, Not allowed)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1	
4	ME → USER	Display "Send SM"	[The display of the Alpha Identifier shall not be verified]
5	ME → UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.10.1	
6	UICC → ME	MO SHORT MESSAGE CONTROL RESULT 1.3.1	
7	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 1.3.1	[Permanent Problem - Interaction with Call Control or MO short message control by USIM]
8	ME→ E-USS/NB-SS	The ME does not send the Short Message	

Expected Sequence 1.13 (MO SM CONTROL BY USIM over SG in E-UTRAN, with user SMS, Not allowed)

Step	Direction	Message / Action	Comments
1	USER → ME	The user makes a SMS with the user data "Test Message" and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as defined in SMS-PP (SEND SHORT MESSAGE) Message 1.10.
2	ME → UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.10.1	

3	UICC → ME	MO SM CONTROL RESULT 1.3.1	["Not allowed"]
4	ME → E-USS/NB-SS	The ME does not send the Short Message	

Expected Sequence 1.14 (MO SM CONTROL BY USIM over SG in E-UTRAN, with Proactive command, Allowed with modifications)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1	Send SMS to "+012345678"
4	ME → USER	Display "Send SM"	[Alpha Identifier]
5	ME → UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.10.1	
6	UICC → ME	MO SM CONTROL RESULT 1.5.1	["Allowed with modifications"]
7	ME → E-USS/NB-SS	Send SMS-PP Message 1.14	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.14 with the data provided by the UICC to the changed Service Center Address "+112233445566779"]
8	E-USS/NB-SS → ME	RP-ACK	
9	ME →UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 1.5.1	

SMS-PP (SEND SHORT MESSAGE) Message 1.14

Logically:

SMS TPDU

TP-MTI	SMS-SUBMIT
TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF	TP-VP field not present
TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI	The TP-UD field contains only the short message
TP-SRR	A status report is not requested
TP-MR	"01"
TP-DA	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345679"
TP-PID	Short message type 0
TP-DCS	
Message coding	8-bit data
Message class	class 0
TP-UDL	12
TP-UD	"Test Message"

Coding:

Coding	00	09	91	11	22	33	44	55	66	77	F9	18
	01	01	09	91	10	32	54	76	F9	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

Expected Sequence 1.15 (MO SM CONTROL BY USIM over SG in E-UTRAN, with user SMS, Allowed with modifications)

Step	Direction	Message / Action	Comments

1	USER → ME	The user makes a SMS with the user data "Test Message" and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as defined in SMS-PP (SEND SHORT MESSAGE) Message 1.15.
2	ME → UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.10.1	
3	UICC → ME	MO SM CONTROL RESULT 1.5.1	["Allowed with modifications"]
4	ME→ E-USS/NB-SS	Send SMS-PP Message 1.15	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.15 with the data provided by the UICC to the changed Service Center Address "+112233445566779"]
5	E-USS/NB-SS → ME	RP-ACK	

SMS-PP (SEND SHORT MESSAGE) Message 1.15

Logically:

SMS TPDU

TP-MTI	SMS-SUBMIT
TP-RD	value shall not be verified
TP-VPF	value shall not be verified
TP-RP	value shall not be verified
TP-UDHI	value shall not be verified
TP-SRR	value shall not be verified
TP-MR	"01"
TP-DA	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345679"

Coding:

Coding	00	09	91	11	22	33	44	55	66	77	F9	Note 1
	Note 2	01	09	91	10	32	54	76	F9	Note 3		

Note 1: Octet shall not be verified.

Note 2: Only the TP-MTI bits shall be verified.

Note 3: The remaining octets shall not be verified.

Expected Sequence 1.16 (MO SM CONTROL BY USIM over SG in E-UTRAN, with Proactive command, the USIM responds with '90 00', Allowed, no modification)

Step	Direction	Message / Action	Comments
1	UICC → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1	
2	ME → UICC	FETCH	
3	UICC → ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1	Send SMS to "+012345678"
4	ME → USER	Display "Send SM"	[Alpha Identifier]
5	ME → UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.10.1	
6	UICC → ME	90 00	
7	ME → E-USS/NB-SS	Send SMS-PP	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.10 without modification]
8	E-USS/NB-SS → ME	RP-ACK	

9	ME → UICC	TERMINAL RESPONSE: SEND SHORT MESSAGE 1.1.1	

Expected Sequence 1.17 (MO SM CONTROL BY USIM over SG in E-UTRAN, Send Short Message attempt by user, the USIM responds with '90 00', Allowed, no modification)

Step	Direction	Message / Action	Comments
1	User → ME	The user makes a SMS with the user data "Test Message" and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as defined in SMS-PP (SEND SHORT MESSAGE) Message 1.11.
2	ME → UICC	ENVELOPE: MO SHORT MESSAGE CONTROL 1.10.1	
3	UICC → ME	90 00	
4	ME → E-USS/NB-SS	Send SMS-PP	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.11 without modification]
5	E-USS/NB-SS → ME	RP-ACK	

27.22.8.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.17.

27.22.9 Handling of command number

27.22.9.1 Definition and applicability

See clause 3.2.2.

27.22.9.2 Conformance requirement

The ME shall support the facility as defined in TS 31.111 [15] clause 6.5.1, clause 6.8 and clause 8.6

27.22.9.3 Test purpose

To verify that the ME sends a Terminal Response with the Command number equivalent to the value in the corresponding proactive command.

27.22.9.4 Method of tests

27.22.9.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

The ME shall support the DISPLAY TEXT command.

27.22.9.4.2 Procedure

Expected Sequence 1.1 (DISPLAY TEXT normal priority, Unpacked 8 bit data for Text String, successful)

See ETSI TS 102 384 [26] in clause 27.22.9.4.2, Expected Sequence 1.1.

27.22.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1

27.22.10 CALL CONTROL on EPS PDN Connection

27.22.10.1 Procedure for Mobile Originated calls

27.22.10.1.1 Definition and applicability

See clause 3.2.2.

27.22.10.1.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in:

- TS 31.111 [15] clause 7.3.1.6, clause 7.3.1.8, clause 8.98,
- TS 24.301 [32], clause 6.4.1 and clause 6.5.1.
- TS 36.508 [33], clause 6.6.1.

27.22.10.1.3 Test purpose

To verify that when the service "call control on EPS PDN connection by USIM" is available in the USIM Service Table, then for all EPS PDN connection activation (including those resulting from a OPEN CHANNEL proactive UICC command where E-UTRAN is selected), the ME shall first pass the corresponding PDN Connectivity Request message to the UICC, using the ENVELOPE (CALL CONTROL) command. The ME shall also pass to the UICC in the ENVELOPE (CALL CONTROL) command the current serving cell.

To verify that the ME interpret the UICC returns response correctly.

27.22.10.1.4 Method of tests

27.22.10.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the E-USS/NB-SS. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The default E-UTRAN/EPC UICC, the default E-UTRAN parameters and the following parameters are used:

Network access name: TestGp.rs
User login: UserLog
User password: UserPwd

UICC/ME interface transport level
Transport format: TCP
Port number: 44444
Data destination address: 01.01.01.01 (as an example)

The E-USS parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 0001;
- E-UTRAN Cell Id = 0001.

The NB-SS parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 0001;
- NB-IoT Cell Id = 0001.

The system simulator should accept connections requests for APNs: TestGp.rs, Test12.rs and Test13.rs.

The elementary files are coded as USIM Application Toolkit default with the following exceptions:

- The call control on EPS PDN connection by USIM service is available in the USIM Service Table.

27.22.10.1.4.2 Procedure

Expected Sequence 1.1 (CALL CONTROL on EPS PDN for E-UTRAN – default PDN connection activation, allowed without modification)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For default PDN establishment during ATTACH procedure
2	UICC → ME	CALL CONTROL RESULT 1.1.1	[Call control result: "Allowed", no modification]
3	ME → E-USS/NB-SS	The PDN connection is established successfully without modification	Same EPS PDN activation parameters used by the ME within the ENVELOPE CALL CONTROL 1.1.1 are used to establish the PDN connection

ENVELOPE CALL CONTROL 1.1.1

Logically:

Device identities
Source device: ME
Destination device: UICC
EPS PDN connection activation parameters
Protocol Discriminator: EPS session management messages
EPS bearer identity: No EPS bearer identity assigned
Procedure Transaction Identity: 1
PDN connectivity request message identity: PDN connectivity request
Request type: Initial request
PDN Type: IPv4 and/or IPv6
Access Point Name: TestGp.rs
Protocol configuration options:
Protocol config. optional contents: content not checked
Capability configuration parameters 1
This parameter is optional. If present, the contents shall not be checked.
Location Information
Mobile Country Codes (MCC) : 001
Mobile Network Codes (MNC): 01
Tracking Area Code (TAC): 0001
E-UTRAN Cell Identifier (ECI): 000000001
Capability configuration parameters 2
This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note1	02	02	82	81	7C	Note 2	02	01	D0	X1 Note 3

D1	28	0A	09	54	65	73	74	47	70	2E	72
73	Note 4	13	09	00	F1	10	00	01	00	00	00
1F											

Note 1: The length of the BER-TLV is present here.

Note 2: Length of EPS PDN connection activation parameters, dependent of optional fields.

Note 3: X is the PDN Type.

Note 4: Optional fields.

CALL CONTROL RESULT 1.1.1

Logically:

Call control result: '00' = Allowed, no modification

Coding:

BER-TLV:	00	00

Expected Sequence 1.2 (CALL CONTROL on EPS PDN for E-UTRAN – default PDN connection activation, not allowed)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For default PDN establishment during ATTACH procedure
2	UICC → ME	CALL CONTROL RESULT 1.2.1	[Call control result: " not Allowed"]. The ME may retry to send the command.
3	ME → E-USS/NB-SS	The ME shall not send the PDN Connectivity Request message.	

CALL CONTROL RESULT 1.2.1

Logically:

Call control result: '01' = not Allowed

Coding:

BER-TLV:	01	00

Expected Sequence 1.3 (CALL CONTROL on EPS PDN for E-UTRAN – default PDN connection activation, allowed with modification)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For default PDN establishment during ATTACH procedure.
2	UICC → ME	CALL CONTROL RESULT 1.3.1	[Call control result: "Allowed with modifications"]

3	ME → E-USS/NB-SS	The PDN connection is established successfully with modification	Same EPS PDN activation parameters returned by the UICC in the CALL CONTROL RESULT 1.3.1 are used to establish the PDN connection.

CALL CONTROL RESULT 1.3.1

Logically:

Call control result: '02' = Allowed with modifications
EPS PDN connection activation parameters
Protocol Discriminator: EPS session management messages
EPS bearer identity: No EPS bearer identity assigned
Procedure Transaction Identity: 1
PDN connectivity request message identity: PDN connectivity request
Request type: Initial request
PDN Type: same PDN Type in ENVELOPE CALL CONTROL 1.1.1
Access Point Name: Test12.rs

Coding:

BER-TLV:	02	Note 1	7C	Note 2	02	01	D0	X1 Note 3	28	0A
	09	54	65	73	74	31	32	2E	72	73
	Note 4									

Note 1: The length of the BER-TLV is present here.

Note 2: Length of EPS PDN context activation parameters, dependent of optional fields.

Note 3: X is the PDN Type.

Note 4: Optional fields, same as in ENVELOPE CALL CONTROL 1.1.1.

Expected Sequence 1.4 (CALL CONTROL on EPS PDN for E-UTRAN – PDN connection triggered by user, UICC sends 90 00)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For default PDN establishment during ATTACH procedure.
2	UICC → ME	90 00	
3	ME → E-USS	The PDN connection is established successfully without modification	Same EPS PDN activation parameters used by the ME within the ENVELOPE CALL CONTROL 1.1.1 are used to establish the PDN connection.
4	USER → ME	Set and configure APN "Test12.rs" in the terminal configuration if required, and trigger the ME to establish a PDN connection	[see initial conditions]
5	ME → UICC	ENVELOPE CALL CONTROL 1.4.1	
6	UICC → ME	90 00	
7	ME → E-USS	PDN CONNECTIVITY REQUEST	
8	E-USS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
9	ME → E-USS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	

10	ME → E-USS	The PDN connection is established successfully without modification	Same EPS PDN activation parameters used by the ME within the ENVELOPE CALL CONTROL 1.4.1 are used to establish the PDN connection.

ENVELOPE CALL CONTROL 1.4.1

Logically:

Device identities

Source device: ME

Destination device: UICC

EPS PDN connection activation parameters

Protocol Discriminator: EPS session management messages

EPS bearer identity: No EPS bearer identity assigned

Procedure Transaction Identity: 2

PDN connectivity request message identity: PDN connectivity request

Request type: Initial request

PDN Type: IPv4 and/or IPv6

Access Point Name: Test12.rs

Protocol configuration options:

Protocol config. options contents: not checked

Location Information

Mobile Country Codes (MCC) 001

Mobile Network Codes (MNC) 01

Tracking Area Code (TAC): 0001

E-UTRAN Cell Identifier (ECI): 000000001

Coding:

BER-TLV:	D4	Note 1	02	02	82	81	7C	Note 2	02	01	D0	Note 3
	D1	28	0A	09	54	65	73	74	31	32	2E	72
	73		Note 4	13	09	00	F1	10	00	01	00	01
	00	01										

Note 1: The length of the BER-TLV is present here.

Note 2: Length of EPS PDN connection activation parameters, dependent of optional fields.

Note 3: X is the PDN Type.

Note 4: Optional fields.

Expected Sequence 1.5 (CALL CONTROL on EPS PDN for E-UTRAN – PDN connection triggered by user, UICC sends 93 00)

Step	Direction	Message / Action	Comments
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For default PDN establishment during ATTACH procedure.
2	UICC → ME	90 00	
3	ME → E-USS	The PDN connection is established successfully without modification	Same EPS PDN activation parameters used by the ME within the ENVELOPE CALL CONTROL 1.1.1 are used to establish the PDN connection.
4	USER → ME	Set and configure APN "Test12.rs" in the terminal configuration if required, and trigger the ME to establish a PDN connection	[see initial conditions]
5	ME → UICC	ENVELOPE CALL CONTROL 1.4.1	
6	UICC → ME	93 00	The ME may retry to send the command.
7	ME → E-USS	The ME shall not send the PDN Connectivity Request message.	

Expected Sequence 1.6 (CALL CONTROL on EPS PDN for E-UTRAN – PDN connection triggered by user, allowed with modification)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For default PDN establishment during ATTACH procedure.
2	UICC → ME	90 00	
3	ME → E-USS	The PDN connection is established successfully without modification	Same EPS PDN activation parameters used by the ME within the ENVELOPE CALL CONTROL 1.1.1 are used to establish the PDN connection.
4	USER → ME	Set and configure APN "Test12.rs" in the terminal configuration if required, and trigger the ME to establish a PDN connection	[see initial conditions]
5	ME → UICC	ENVELOPE CALL CONTROL 1.4.1	
6	UICC → ME	CALL CONTROL RESULT 1.6.1	[Call control result: "Allowed with modifications",]
7	ME → E-USS	PDN CONNECTIVITY REQUEST	
8	E-USS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
9	ME → E-USS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
10	ME → E-USS	The PDN connection is established successfully with modification	Same EPS PDN activation parameters returned by the UICC in the CALL CONTROL RESULT 1.6.1 are used to establish the PDN connection.

CALL CONTROL RESULT 1.6.1

Logically:

Call control result: '02' = Allowed with modifications
EPS PDN connection activation parameters
Protocol Discriminator: EPS session management messages
EPS bearer identity: No EPS bearer identity assigned
Procedure Transaction Identity: 2
PDN connectivity request message identity: PDN connectivity request
Request type: Initial request
PDN Type: same PDN Type in CALL CONTROL RESULT 1.6.1
Access Point Name: Test13.rs

Coding:

BER-TLV:	02	Note 1	7C	Note 2	02	02	D0	X1 Note 3	28	0A
	09	54	65	73	74	31	33	2E	72	73
	Note 4									

Note 1: The length of the BER-TLV is present here.

Note 2: Length of EPS PDN context activation parameters, dependent of optional fields.

Note 3: X is the PDN Type.

Note 4: Optional fields, same as in ENVELOPE CALL CONTROL 1.4.1.

Expected Sequence 1.7 (CALL CONTROL on EPS PDN - PDN connection activation from OPEN CHANNEL command)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For default PDN establishment during ATTACH procedure.
2	UICC → ME	90 00	
3	ME → E-USS	The PDN connection is established successfully without modification	Same EPS PDN activation parameters used by the ME within the ENVELOPE CALL CONTROL 1.1.1 are used to establish the PDN connection.
4	USER → ME	Set and configure APN "Test12.rs" in the terminal configuration if required	[see initial conditions]
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
8	ME → USER	The ME may display channel opening information	
9	ME → UICC	ENVELOPE CALL CONTROL 1.4.1	
10	UICC → ME	90 00	
11	ME → E-USS	PDN CONNECTIVITY REQUEST	The UE may request IPv4 or IPv4v6 as PDN type
12	E-USS → ME	ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST	[The E-UTRAN parameters are used]
13	ME → E-USS	ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT	
14	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A OR TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully OR Command performed with modifications]

15	ME → E-USS	The PDN connection is established successfully without modification	Same EPS PDN activation parameters returned by the ME within the ENVELOPE CALL CONTROL 1.4.1 are used to establish the PDN connection.

PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

Logically:

Command details
- Command number: 1
- Command type: OPEN CHANNEL
- Command qualifier: immediate link establishment

Device identities
- Source device: UICC
- Destination device: ME

Bearer
- Bearer type: GPRS / UTRAN packet service / E-UTRAN
- Precedence Class: 03
- Delay Class: 04
- Reliability Class: 02
- Peak throughput class: 09
- Mean throughput class: 31
- Packet data protocol: 02 (IP)

Buffer
- Buffer size: 1400

Network access name: Test12.rs

Text String: "UserLog" (User login)

Text String: "UserPwd" (User password)

UICC/ME interface transport level
- Transport format: TCP
- Port number: 44444

Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	02	09	1F	02	39	02	05	78
	47	0A	06	54	65	73	74	30	32	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	02	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details
- Command number: 1
- Command type: OPEN CHANNEL
- Command qualifier: immediate link establishment

Device identities
- Source device: ME
- Destination device: UICC

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed with modifications
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Bearer parameter:
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	07
	38	02	81	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

27.22.10.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.7.

27.22.11 CALL CONTROL on PDP Context Activation

27.22.11.1 Procedure for Mobile Originated calls

27.22.11.1.1 Definition and applicability

See clause 3.2.2.

27.22.11.1.2 Conformance requirement

The ME shall support the CALL CONTROL for PDP Context Activation facility as defined in:

- TS 31.111 [15] clause 7.3, clause 7.3.1.7, clause 8.72.
- TS 24.008 [10], clause 6.1.3.3, clause 9.5.7 and clause 9.5.8.
- TS 36.508 [33], clause 4.8.4.

27.22.11.1.3 Test purpose

To verify that when the service "call control on GPRS by USIM" is available in the USIM Service Table, then for all PS PDP Context Activation (including those resulting from an OPEN CHANNEL proactive UICC command where UTRAN is selected), the ME shall first pass the corresponding Activate PDP Context message to the UICC, using the ENVELOPE (CALL CONTROL) command. The ME shall also pass to the UICC in the ENVELOPE (CALL CONTROL) command the current serving cell.

To verify that the ME interpret the UICC returns response correctly.

27.22.11.1.4 Method of tests

27.22.11.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS/SS. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The default GERAN/UTRAN/EPC UICC, the default GERAN/UTRAN parameters and the following parameters are used:

Network access name: TestGp.rs
User login: UserLog
User password: UserPwd

UICC/ME interface transport level

Transport format:TCP
Port number: 44444
Data destination address: 01.01.01.01 (as an example)

The GERAN/UTRAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;- Cell Identity Value = 0001;
- The simulator must accept connections requests for APNs: TestGp.rs, Test12.rs and Test13.rs

The elementary files are coded as USIM Application Toolkit default with the following exceptions:

- The call control on GPRS by USIM service is available in the USIM Service Table.

27.22.11.4.2 Procedure

Expected Sequence 1.1 (CALL CONTROL on PDP Context Activation – default PDP connection activation, allowed without modification)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required.	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For default PDP establishment during ATTACH procedure
2	UICC → ME	CALL CONTROL RESULT 1.1.1	[Call control result: "Allowed", no modification]
3	ME → USS/SS	The PDP connection is established successfully without modification	Same PDP activation parameters used by the ME within the ENVELOPE CALL CONTROL 1.1.1 are used to establish the PDP connection

ENVELOPE CALL CONTROL 1.1.1

Logically:

Device identities
Source device: ME
Destination device: UICC

PDP Context Activation parameters
Protocol Discriminator: GPRS session management messages
Transaction Identifier: 0
Request PDP context activation message identity: Activate PDP context request
Requested NSAPI: NSAPI 5
Requested LLC SAPI: SAPI 3
Requested QoS: Subscribed QoS parameters

Requested PDP address:
PDP type organisation: as declared by the ME
PDP type: as declared by the ME
Address: as declared by the ME

Access point name: 06 54 65 73 74 47 70 02 72 73 ("TestGp.rs")

Protocol configuration options:
Protocol config. optional contents: content not checked

Location Information
MCC: 001
MNC: 01
Location Area Code: 0001
Cell Identity Value: 0001
Extended Cell Identity Value: RNC-id value (for Rel-4 onwards), see also Note 6

Coding:

BER-TLV	D4	Note1	02	02	82	81	52	Note2	0A	41	05	03	0E
	00	00	00	00	00	00	00	00	00	00	00	00	00
	00	Note3	28	0A	06	54	65	73	74	47	70	02	72

73	Note4	13	Note5	00	F1	10	00	01	00	01	Note6	

Note1: Length of BER-TLV, dependent of optional fields.

Note2: Length of PDP context activation parameters, dependent of optional fields.

Note3: Requested PDP Address.

Note4: Optional fields.

Note5: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'.

Note6: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

CALL CONTROL RESULT 1.1.1

Logically:

Call control result: '00' = Allowed, no modification

Coding:

BER-TLV:	00	00

Expected Sequence 1.2 (CALL CONTROL on PDP Context Activation – default PDP connection activation, not allowed)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure APN "Test.Gp.rs" in the terminal configuration if required	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For default PDP establishment during ATTACH procedure
2	UICC → ME	CALL CONTROL RESULT 1.2.1	[Call control result: " not Allowed"]. The ME may retry to send the command.
3	ME → USS/SS	The ME shall not send the Activate PDP Context Request message.	

CALL CONTROL RESULT 1.2.1

Logically:

Call control result: '01' = not Allowed

Coding:

BER-TLV:	01	00

Expected Sequence 1.3 (CALL CONTROL on PDP Context Activation – default PDP connection activation, allowed with modification)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For default PDP establishment during ATTACH procedure

2	UICC → ME	CALL CONTROL RESULT 1.3.1	[Call control result: "Allowed with modifications"]
3	ME → USS/SS	The PDP connection is established successfully with modification	Same PDP activation parameters returned by the UICC within the CALL CONTROL RESULT 1.3.1 are used to establish the PDP connection

CALL CONTROL RESULT 1.3.1

Logically:

Call control result: '02' = Allowed with modifications
Address:

PDP Context Activation parameters
Protocol Discriminator: GPRS session management messages
Transaction Identifier: 0
Request PDP context activation message identity: Activate PDP context request
Requested NSAPI: NSAPI 5
Requested LLC SAPI: SAPI 3
Requested QoS: Subscribed QoS parameters

Requested PDP address:
PDP type organisation: as declared by the ME
PDP type: as declared by the ME
Address: as declared by the ME

Access point name: 06 54 65 73 74 31 32 02 72 73 ("Test12.rs")

Coding:

BER-TLV:	02	Note1	52	Note2	0A	41	05	03	0E	00	00	00
	00	00	00	00	00	00	00	00	00	00	00	Note3
	28	0A	06	54	65	73	74	31	32	02	72	73
	Note4											

Note1: Length of BER-TLV, dependent on optional fields.

Note2: Length dependent on optional fields.

Note3: Requested PDP Address.

Note4: Optional fields.

Expected Sequence 1.4 (CALL CONTROL on PDP Context Activation – PDP connection triggered by user, UICC sends 90 00)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure APN "Test.Gp.rs" in the terminal configuration if required	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For default PDP establishment during ATTACH procedure.
2	UICC → ME	90 00	
3	ME → USS/SS	The PDP connection is established successfully without modification	Same PDP activation parameters used by the ME within the ENVELOPE CALL CONTROL 1.1.1 are used to establish the PDP connection.

4	USER → ME	Set and configure APN "Test12.rs" in the terminal configuration if required, and trigger the ME to perform a PS call to Activate PDP Context Request connection	[see initial conditions]
5	ME → UICC	ENVELOPE CALL CONTROL 1.4.1	
6	UICC → ME	90 00	
7	ME → USS/SS	ACTIVATE DEFAULT PDP CONTEXT REQUEST	[The UTRAN parameters are used]
8	USS/SS → ME	ACTIVATE DEFAULT PDP CONTEXT ACCEPT	
9	ME → USS/SS	The PDP connection is established successfully without modification	Same PDP activation parameters used by the ME within the ENVELOPE CALL CONTROL 1.4.1 are used to establish the PDP connection

ENVELOPE CALL CONTROL 1.4.1

Logically:

Device identities
Source device: ME
Destination device: UICC

PS PDP connection activation parameters
Protocol Discriminator: GPRS session management messages
Transaction Identifier: 0
Request PDP context activation message identity: Activate PDP context request
Requested NSAPI: NSAPI 5
Requested LLC SAPI: SAPI 3
Requested QoS: Subscribed QoS parameter

Requested PDP address:
PDP type organisation: as declared by the ME
PDP type: as declared by the ME
Address: as declared by the ME

Access Point Name: 06 54 65 73 74 31 32 02 72 73 ("Test12.rs")

Protocol configuration options:
Protocol config. options contents: not checked

Location Information
MCC: 001
MNC: 01
Location Area Code: 0001
Cell Identity Value: 0001
Extended Cell Identity Value: RNC-id value (for Rel-4 onwards), see also Note 6

Coding:

BER-TLV	D4	Note1	02	02	82	81	52	Note2	0A	41	05	03
	0E	00	00	00	00	00	00	00	00	00	00	00
	00	00	00	Note3	28	0A	06	54	65	73	74	31
	32	02	72	73	Note4	13	Note5	00	F1	10	00	01
	00	01	Note6									

Note1: Length of BER-TLV, dependent on optional fields.

Note2: Length of PDP context activation parameters, dependent on optional fields.

Note3: Requested PDP address.

Note4: Optional fields.

Note5: Depending on the presence of the Extended Cell Identity Value the length is '07' or '09'.

Note6: The Extended Cell Identity Value is present in Rel-4 and onwards implementations, the values of the two bytes shall not be verified.

Expected Sequence 1.5 (CALL CONTROL on PDP Context Activation – PDP connection triggered by user, UICC sends 93 00)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure APN "Test.Gp.rs" in the terminal configuration if required	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For default PDP establishment during ATTACH procedure.
2	UICC → ME	90 00	
3	ME → USS/SS	The PDP connection is established successfully without modification	Same PDP activation parameters used by the ME within the ENVELOPE CALL CONTROL 1.1.1 are used to establish the PDP connection.
4	USER → ME	Set and configure APN "Test12.rs" in the terminal configuration if required, and trigger the ME to perform a PS call to Activate PDP Context Request connection	[see initial conditions]
5	ME → UICC	ENVELOPE CALL CONTROL 1.4.1	
6	UICC → ME	93 00	The ME may retry to send the command.
7	ME → USS/SS	The ME shall not send the Activate PDP Context Request message.	

Expected Sequence 1.6 (CALL CONTROL on PDP Context Activation – PDP connection triggered by user, allowed with modification)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For default PDP establishment during ATTACH procedure.
2	UICC → ME	90 00	
3	ME → USS/SS	The PDP connection is established successfully without modification	Same PDP activation parameters used by the ME within the ENVELOPE CALL CONTROL 1.1.1 are used to establish the PDP connection.
4	USER → ME	Set and configure APN "Test12.rs" in the terminal configuration if required, and trigger the ME to perform a PS call to Activate PDP Context Request connection.	[see initial conditions]

5	ME → UICC	ENVELOPE CALL CONTROL 1.4.1	
6	UICC → ME	CALL CONTROL RESULT 1.6.1	[Call control result: "Allowed with modifications",]
7	ME → USS/SS	ACTIVATE PDP CONTEXT REQUEST	[The UTRAN parameters are used]
8	USS/SS → ME	ACTIVATE PDP CONTEXT ACCEPT	
9	ME → USS/SS	The PDP connection is established successfully with modification	Same PDP parameters returned by the UICC within the CALL CONTROL RESULT 1.6.1 are used to establish the PDP connection.

CALL CONTROL RESULT 1.6.1

Logically:

Call control result: '02' = Allowed with modifications
PDP Context Activation parameters
Protocol Discriminator: GPRS session management messages
Transaction Identifier: 0
Request PDP context activation message identity: Activate PDP context request
Requested NSAPI: NSAPI 5
Requested LLC SAPI: SAPI 3
Requested QoS: Subscribed QoS parameters

Requested PDP address:
PDP type organisation: as declared by the ME
PDP type: as declared by the ME
Address: as declared by the ME

Access point name: 06 54 65 73 74 31 33 02 72 73 ("Test13.rs")

Coding:

BER-TLV:	02	Note1	52	Note2	0A	41	05	03	0E	00	00
	00	00	00	00	00	00	00	00	00	00	00
	00	Note3	28	0A	06	54	65	73	74	31	33
	02	72	73	Note4							

Note1: Length of BER-TLV, dependent on optional fields.

Note2: Length dependent on optional fields.

Note3: Requested PDP address.

Note4: Optional fields.

Expected Sequence 1.7 (CALL CONTROL on PDP Context Activation - PDP connection activation from OPEN CHANNEL command)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure APN "TestGp.rs" in the terminal configuration if required	[see initial conditions]
1	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
2	ME → UICC	FETCH	

3	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	ME → USER	The ME may display channel opening information	
5	ME → UICC	ENVELOPE CALL CONTROL 1.4.1	
6	UICC → ME	90 00	
7 8 9	ME → USS/SS USS/SS → ME ME → UICC	ACTIVATE DEFAULT PDP CONTEXT REQUEST ACTIVATE DEFAULT PDP CONTEXT ACCEPT TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A OR TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[The UTRAN parameters are used] [Command performed successfully OR Command performed with modifications]
10	ME → USS/SS	The PDP connection is established successfully without modification	Same PDP parameters used by the ME within the ENVELOPE CALL CONTROL 1.4.1 are used to establish the PDP connection.

PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: UICC
Destination device: ME
Bearer
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400
Network access name: TestGp.rs
Text String: "UserLog" (User login)
Text String: "UserPwd" (User password)
UICC/ME interface transport level
Transport format: TCP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	03	04	02	09	1F	02	39	02	05	78
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	02	AD

9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Bearer parameter: IP (Internet Protocol, IETF STD 5)
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed with modifications
Channel status Channel identifier 1 and link established or PDP context activated
Bearer description
Bearer type: GPRS / UTRAN packet service / E-UTRAN
Bearer parameter: IP (Internet Protocol, IETF STD 5)
Precedence Class: 03
Delay Class: 04
Reliability Class: 02
Peak throughput class: 09
Mean throughput class: 31
Packet data protocol: 02 (IP)
Buffer
Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	07
	38	02	81	00	35	07	02	03	04	02	09	1F
	02	39	02	05	78							

27.22.11.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.7.

27.22.12 Change eCall mode

27.22.12.1 Definition and applicability

See clause 3.2.2.

27.22.12.2 Conformance requirement

The UE shall support eCall feature on the USIM and is able to change the eCall mode as specified in:

- TS 31.102 [14] clause 5.3.40.

27.22.12.3 Test purpose

To verify that the ME is able to change the eCall mode after the re-configuration of the USIM from eCall only support to eCall and Normal call support, or vice versa, by changing the content of the USIM Service Table, and/or by changing the content of the EF_{EST}, where the ME shall be notified of the changes by using the REFRESH proactive command.

27.22.12.4 Method of test

27.22.12.4.1 Initial conditions

The ME is connected to the USIM Simulator and connected to the E-USS or USS.

For test sequences 1.1 – 1.3 the E-UTRAN parameters of the E-USS are:

- Mobile Country Code (MCC) = 246;
- Mobile Network Code (MNC) = 81;
- Tracking Area Code (TAC) = 0001.

For test sequences 1.4 and 1.5 the GERAN or UTRAN parameters of the USS are:

Mobile Country Code (MCC) = 246;

- Mobile Network Code (MNC) = 81;
- Location Area Code (LAC) = 0001.

The elementary files are coded as the default E-UTRAN/EPC UICC, with the following exceptions:

For test sequences 1.1, 1.4:

- EF_{UST} the services (Service n°2) Fixed Dialling Numbers (FDN), (Service n°4) Service Dialling Numbers (SDN) and (Service n°89) eCall Data are available
- EF_{EST} has the Service n°2 Fixed Dialling Numbers (FDN) is enabled
- EF_{FDN} contains only two entries: eCall test number (123) and eCall reconfiguration number (345)
- EF_{SDN} the last two entries contains two entries: eCall test number (456) and eCall reconfiguration number (678)

For test sequences 1.2, and 1.5:

- EF_{UST} the services (Service n°2) Fixed Dialling Numbers (FDN), (Service n°4) Service Dialling Numbers (SDN) and (Service n°89) eCall Data are available
- EF_{EST} has the Service n°2 Fixed Dialling Numbers (FDN) disabled
- EF_{FDN} contains only two entries: eCall test number (123) and eCall reconfiguration number (345)
- EF_{SDN} the last two entries contains two entries: eCall test number (456) and eCall reconfiguration number (678)

For test sequence 1.3:

- EF_{UST} the services (Service n°2) Fixed Dialling Numbers (FDN), (Service n°4) Service Dialling Numbers (SDN), (Service n°99) URI support by UICC and (Service n°112) eCall Data over IMS are available.
- EF_{EST} has the Service n°2 Fixed Dialling Numbers (FDN) enabled
- EF_{FDNURI} contains only two entries: eCall test number (123) and eCall reconfiguration number (345)
- EF_{SDNURI} the last two entries contains two entries: eCall test number (456) and eCall reconfiguration number (678)

PIN of the USIM is disabled.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and registered to the network.

27.22.12.4.2 Procedure

Expected Sequence 1.1 (REFRESH after change eCall mode, disable FDN in EF_{EST}, E-UTRAN)

Step	Direction	MESSAGE / Action	Comments
1	User → ME ME → E-USS	Set up an eCall	[Call is established using the number in EF_{FDN}]
2	User → ME	Call is terminated after a few seconds.	
3	User → ME	Set up a normal call to "54321"	Steps 3 – 4 apply only if the ME supports A.1/87 AND A.1/85, else these steps should be skipped.
4	ME → User	Call set up not allowed	
5	E-USS → ME	SMS-PP Data Download	
6	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 1.1.1	
7	UICC → ME	SMS-PP Data Download UICC Acknowledgement	[SW '90 00']
8	ME → E-USS	SMS-PP Data Download UICC acknowledgement (RP-ACK) message.	
9	UICC	EF_{EST} contents state FDN is disabled	[New EF_{EST} value: 00]
10	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 1.1.1	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: REFRESH 1.1.1	
13	ME → UICC	TERMINAL RESPONSE: REFRESH 1.1.1A or TERMINAL RESPONSE: REFRESH 1.1.1B	[additional EFs read]
14	User → ME ME→ E-USS	Set up an eCall	[Call is established using the number located in EF_{SDN}]
15	User → ME	Call is terminated after a few seconds.	
16	User → ME	Set up a normal call to "54321"	Steps 16 – 18 apply only if the ME supports A.1/87 AND A.1/85, else these steps should be skipped.
17	ME → E-USS	Setup	Call is established
18	User → ME	Call is terminated after a few seconds	

SMS-PP (Data Download) Message 1.1.1

Logically:

SMS TPDU
- TP-MTI: SMS-DELIVER
- TP-MMS: No more messages waiting for the MS in this SC
- TP-RP: TP-Reply-Path is not set in this SMS-DELIVER
- TP-UDHI: TP-UD field contains only the short message
- TP-SRI: A status report will not be returned to the SME
- TP-OA
- TON: International number
- NPI: "ISDN / telephone numbering plan"
- Address value: "1234"
- TP-PID: (U)SIM Data download
- TP-DCS
- Coding Group: General Data Coding
- Compression: Text is uncompressed
- Message Class: Class 2 (U)SIM Specific Message
- Alphabet: 8 bit data
- TP-SCTS: 01/01/98 00:00:00 +0
- TP-UDL: 13
- TP-UD: "Short Message"

Coding:

Coding	04	04	91	21	43	7F	16	89	10	10	00	00
	00	00	0D	53	68	6F	72	74	20	4D	65	73
	73	61	67	65								

ENVELOPE: SMS-PP DOWNLOAD 1.1.1

Logically:

SMS-PP Download
- Device identities
- Source device: Network
- Destination device: UICC
- Address
- TON International number
- NPI "ISDN / telephone numbering plan"
- Dialling number string "112233445566778"
- SMS TPDU
- TP-MTI: SMS-DELIVER
- TP-MMS: No more messages waiting for the MS in this SC
- TP-RP TP-Reply-Path is not set in this SMS-DELIVER
- TP-UDHI: TP-UD field contains only the short message
- TP-SRI: A status report will not be returned to the SME
- TP-OA
- TON International number
- NPI "ISDN / telephone numbering plan"
- Address value: "1234"
- TP-PID: (U)SIM Data download
- TP-DCS
- Coding Group: General Data Coding
- Compression: Text is uncompressed
- Message Class: Class 2 (U)SIM Specific Message
- Alphabet: 8 bit data
- TP-SCTS: 01/01/98 00:00:00 +0
- TP-UDL: 13
- TP-UD: "Short Message"

Coding:

BER-TLV:	D1	2D	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1C	04	04	91	21	43
	7F	16	89	10	10	00	00	00	00	0D	53	68
	6F	72	74	20	4D	65	73	73	61	67	65	

PROACTIVE COMMAND: REFRESH 1.1.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: USIM Initialization and File Change Notification

Device identities
- Source device: UICC
- Destination device: ME
- File List: EF EST

Coding:

BER-TLV:	D0	12	81	03	01	01	02	82	02	81	82	92
	07	01	3F	00	7F	FF	6F	56				

TERMINAL RESPONSE: REFRESH 1.1.1A

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: USIM Initialization and File Change Notification

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	02	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 1.1.1B

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: USIM Initialization and File Change Notification

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	02	82	02	82	81	83	01	03

Expected Sequence 1.2 (REFRESH after change eCall mode, enable FDN in EF_{EST}, E-UTRAN)

Step	Direction	MESSAGE / Action	Comments
1	User → ME ME → E-USS	Set up an eCall	[Call is established and maintained using the number in EF_{SDN}]
2	User → ME	Call is terminated after a few seconds.	
3	User → ME	Set up a normal call to "54321"	Steps 3 – 5 apply only if the ME supports A.1/87 AND A.1/85, else these steps should be skipped.
4	ME → E-USS	Setup	Call is established
5	User → ME	Call is terminated after a few seconds	
6	E-USS → ME	SMS-PP Data Download	
7	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 1.1.1	
8	UICC → ME	SMS-PP Data Download UICC Acknowledgement	[SW '90 00']
9	ME → E-USS	SMS-PP Data Download UICC Acknowledgement (RP-ACK) message.	
10	UICC	EF_{EST} contents state FDN is enabled	[New EF_{EST} value: 01]
11	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 1.2.1	
12	ME → UICC	FETCH	
13	ME → UICC	USIM Initialization including send STATUS[P1='01']	[ME performs USIM initialization in accordance with TS 31.111 [15] clause 6.4.7]
14	UICC → ME	PROACTIVE COMMAND: REFRESH 1.2.1	
15	ME → UICC	TERMINAL RESPONSE: REFRESH 1.2.1A or TERMINAL RESPONSE: REFRESH 1.2.1B	[additional EFs read]
16	ME→ E-USS	Set up an eCall	[Call is established using the number located in EF_{FDN}]
17	User → ME	Call is terminated after a few seconds.	
18	User → ME	Set up a normal call to "54321"	Steps 18 – 19 apply only if the ME supports A.1/87 AND A.1/85, else these steps should be skipped.
19	ME → User	Call set up not allowed	

PROACTIVE COMMAND: REFRESH 1.2.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: USIM Initialization and Full File Change Notification

Device identities
- Source device: UICC
- Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	00	82	02	81	82

TERMINAL RESPONSE: REFRESH 1.2.1A

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: USIM Initialization and Full file Change Notification

Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	00	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 1.2.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: USIM Initialization and full File change Notification
Device identities
Source device: ME
Destination device: UICC
Result
General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	00	82	02	82	81	83	01	03

Expected Sequence 1.3 (REFRESH after changing eCall mode, disable FDN in EF_{EST}, IMS Emergency Services in E-UTRAN)

Step	Direction	MESSAGE / Action	Comments
1	User → ME ME → E-USS	Set up an eCall	[Call is established using the number in EF_{FDNURI}]
2	User → ME	Call is terminated after a few seconds.	
3	User → ME	Set up a normal call to "54321"	Steps 3 – 4 apply only if the ME supports A.1/87 AND A.1/85, else these steps should be skipped.
4	ME → User	Call set up not allowed	
5	E-USS → ME	SMS-PP Data Download	
6	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 1.1.1	
7	UICC → ME	SMS-PP Data Download UICC Acknowledgement	[SW '90 00']
8	ME → E-USS	SMS-PP Data Download UICC acknowledgement (RP-ACK) message.	
9	UICC	EF_{EST} contents state FDN is disabled	New EF_{EST} value: 00
10	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 1.1.1	
11	ME → UICC	FETCH	
12	UICC → ME	PROACTIVE COMMAND: REFRESH 1.1.1	
13	ME → UICC	TERMINAL RESPONSE: REFRESH 1.1.1A or TERMINAL RESPONSE: REFRESH 1.1.1B	[additional EFs read]
14	User → ME ME→ E-USS	Set up an eCall	[Call is established using the number located in EF_{SDNURI}]
15			
16	User → ME	Call is terminated after a few seconds.	
17	User → ME	Set up a normal call to "54321"	Steps 17 – 19 apply only if the ME supports A.1/87 AND A.1/85, else these steps should be skipped.
18	ME → E-USS	Setup	Call is established
19	User → ME	Call is terminated after a few seconds	

Expected Sequence 1.4 (REFRESH after changing eCall mode, disable FDN in EF_{EST}, UTRAN/GERAN)

Step	Direction	MESSAGE / Action	Comments
1	User → ME ME → USS	Set up an eCall	[Call is established using the number in EF_{FDN}]
2	User → ME	Call is terminated after a few seconds	
3	User → ME	Set up a normal call to "54321"	Steps 3 – 4 apply only if the ME supports A.1/87 AND A.1/85, else these steps should be skipped.
4	ME → User	Call set up not allowed	
5	USS → ME	SMS-PP Data Download	
6	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 1.1.1	
7	UICC → ME	SMS-PP Data Download UICC Acknowledgement	[SW '90 00']
8	ME → USS	SMS-PP Data Download UICC acknowledgement (RP-ACK) message.	
9	UICC	EF_{EST} contents state FDN is disabled	[New EF_{EST} value: 00]
10	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 1.1.1	
	ME → UICC	FETCH	
11			
12	UICC → ME	PROACTIVE COMMAND: REFRESH 1.1.1	
13	ME → UICC	TERMINAL RESPONSE: REFRESH 1.1.1A or TERMINAL RESPONSE: REFRESH 1.1.1B	[additional EFs read]
14	User → ME ME→ USS	Set up an eCall	[Call is established using the number located in EF_{SDN}]
15	User → ME	Call is terminated after a few seconds.	
16	User → ME	Set up a normal call to "54321"	Steps 16 – 18 apply only if the ME supports A.1/87 AND A.1/85, else these steps should be skipped.
17	ME → E-USS	Setup	Call is established
18	User → ME	Call is terminated after a few seconds	

Expected Sequence 1.5 (REFRESH after change eCall mode, enable FDN in EF_{EST}, UTRAN/GERAN)

Step	Direction	MESSAGE / Action	Comments
1	User → ME ME → USS	Set up an eCall	[Call is established and maintained using the number in EF_{SDN}.]
2	User → ME	Call is terminated after a few seconds.	
3	User → ME	Set up a normal call to "54321"	Steps 3 – 5 apply only if the ME supports A.1/87 AND A.1/85, else these steps should be skipped.
4	ME → E-USS	Setup	Call is established
5	User → ME	Call is terminated after a few seconds	
6	USS → ME	SMS-PP Data Download	
7	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 1.1.1	
8	UICC → ME	SMS-PP Data Download UICC Acknowledgement	[SW '90 00']
9	ME → USS	SMS-PP Data Download UICC Acknowledgement (RP-ACK) message.	
10	UICC	EF_{EST} contents state FDN is enabled	[New EF_{EST} value: 01]
11	UICC → ME	PROACTIVE COMMAND PENDING: REFRESH 1.2.1	
12	ME → UICC	FETCH	
13	ME → UICC	USIM Initialization including send STATUS[P1='01']	[ME performs USIM initialization in accordance with TS 31.111 [15] clause 6.4.7]
14	UICC → ME	PROACTIVE COMMAND: REFRESH 1.2.1	
15	ME → UICC	TERMINAL RESPONSE: REFRESH 1.2.1A or TERMINAL RESPONSE: REFRESH 1.2.1B	[additional EFs read]
16	ME→ USS	Set up an eCall	[Call is established using the number located in EF_{FDN}.]
17	User → ME	Call is terminated after a few seconds.	

18	User → ME	Set up a normal call to "54321"	Steps 18 – 19 apply only if the ME supports A.1/87 AND A.1/85, else these steps should be skipped.
19	ME → User	Call set up not allowed	

27.22.12.4.3 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1 to 1.5.

27.22.13 CALL CONTROL on PDU Session Establishment for NG-RAN

27.22.13.1 Procedure for Mobile Originated calls

27.22.13.1.1 Definition and applicability

See clause 3.2.2.

27.22.13.1.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in:

- 3GPP TS 31.111 [15] clause 7.3.1.6, clause 7.3.1.10, clause 8.143.
- 3GPP TS 24.501 [40] clause 6.4.1, clause 8.3.1, clause 9.11.4.6 and clause 9.11.4.15.

27.22.13.1.3 Test purpose

To verify that when the service 128 "Call Control on PDU Session by USIM" is available in the USIM Service Table, then for all PDU Session Establishment Requests (including those resulting from an OPEN CHANNEL proactive command where NG-RAN is selected), the ME shall first pass the corresponding PDU Session Establishment Request message to the UICC, using the ENVELOPE (CALL CONTROL) command. The ME shall also pass to the UICC in the ENVELOPE (CALL CONTROL) command the current serving cell.

To verify the PDU Session Establishment Request parameters are used in the ENVELOPE (CALL CONTROL), as defined in 3GPP TS 24.501 [40].

To verify UICC/ME CALL CONTROL modify only the following parameters:

- SM PDU DN request container; and
- operator specific parameters in Extended Protocol configuration options,

included in the PDU SESSION ESTABLISHMENT REQUEST message

To verify that the ME interpret the UICC returns response correctly.

27.22.13.1.4 Method of tests

27.22.13.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the NG-SS. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The default NG-RAN UICC and the following parameters are used:

PDU session:
DNN: TestGp.rs
PDU Session Type: IPv4v6

UICC/ME interface transport level

Transport format: TCP
Port number: 44444
Data destination address: 01.01.01.01 (as an example)

The ME shall be configured with following URSP rules.

Rule Precedence =1

Traffic Descriptor:

DNN=TestGp.rs

Route Selection Descriptor:

Precedence=1

Network Slice Selection, S-NSSAI: 01 01 01 01 (ST: MBB, SD: 010101)

SSC Mode Selection: SSC Mode 1

Access Type preference: 3GPP access

Rule Precedence = 2

Traffic Descriptor:

DNN= Test12.rs

Route Selection Descriptor:

Precedence =1

Network Slice Selection, S-NSSAI: 01 01 01 02 (ST: MBB, SD: 010102)

SSC Mode Selection: SSC Mode 1

Access Type preference: 3GPP access

The NG-RAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 000001;
- NG-RAN Cell Id = 0001 (36 bits).

The Allowed S-NSSAI list is configured in NG-SS as '01 01 01 01' and '01 01 01 02'.

The system simulator should accept connections requests for DNNs: TestGp.rs, Test12.rs.

The elementary files are coded as USIM Application Toolkit default with the following exceptions:

- The call control on PDU session by USIM service is available in the USIM Service Table.

27.22.13.1.4.2 Procedure

Expected Sequence 1.1 (CALL CONTROL on PDU Session for NG-RAN, PDU Session Establishment, allowed without modification)

Step	Direction	Message / Action	Comments

0	USER → ME	Set and configure the URSP rules and DNN "TestGp.rs" in the terminal configuration as defined in the initial conditions.	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For PDU Session establishment
2	UICC → ME	CALL CONTROL RESULT 1.1.1	[Call control result: "Allowed", no modification]
3	ME → NG-SS	The PDU Session is established successfully without modification.	Same PDU Session Establishment parameters used by the ME within the ENVELOPE CALL CONTROL 1.1.1 are used to establish the PDU Session.

ENVELOPE CALL CONTROL 1.1.1

Logically:

Device identities:
- Source device: ME
- Destination device: UICC

PDU Session Establishment parameters:
- DNN: TestGp.rs
- Extended Protocol Discriminator: 5GS Session Management messages (2E)
- PDU Session identity: Any valid value in the range of 1 to 15
- Procedure Transaction Identity: Any valid value in the range of 1 to 254
- 5GS Session message identity: PDU session establishment request (C1)
- PDU Session Type: IPv4v6
- Extended Protocol configuration options:
- Extended Protocol config. optional contents: content not checked

Location Information:
- Mobile Country Codes (MCC): 001
- Mobile Network Codes (MNC): 01
- Tracking Area Code (TAC): 000001
- NG-RAN Cell Identifier (NCI): 0001 (36 bits)

Coding:

BER-TLV:	D4	Note 1	02	02	82	81	0C	Note 2	25	0A	06	54
	65	73	74	47	70	02	72	73	2E	Note 5	Note 6	C1
	Note 3	Note 3	93	Note 4	13	0B	00	F1	10	00	00	01
	00	00	00	00	1F							

Note 1: The length of the BER-TLV is present here.

Note 2: Length of PDU session establishment parameters, dependent of optional fields.

Note 3: Integrity protection maximum data rate.

Note 4: Optional fields / extended protocol configuration options (byte 27 to 27+n if available).

Note 5: PDU session identity.

Note 6: Procedure transaction identity.

CALL CONTROL RESULT 1.1.1

Logically:

Call control result: '00' = Allowed, no modification

Coding:

BER-TLV:	00	00

Expected Sequence 1.2 (CALL CONTROL on PDU Session for NG-RAN, PDU Session Establishment, Not allowed)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure the URSP rules and DNN "TestGp.rs" in the terminal configuration as defined in the initial conditions.	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For PDU Session establishment
2	UICC → ME	CALL CONTROL RESULT 1.2.1	[Call control result: "Not Allowed"]
3	ME → NG-SS	ME shall not send PDU Session Establishment Request.	No PDU Session is established.

CALL CONTROL RESULT 1.2.1

Logically:

Call control result: '01' = Not Allowed

Coding:

BER-TLV:	01	00

Expected Sequence 1.3 (CALL CONTROL on PDU Session for NG-RAN, PDU Session Establishment triggered by user, UICC sends 90 00)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure the URSP rules and DNN "TestGp.rs" in the terminal configuration as defined in the initial conditions.	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For PDU Session establishment
2	UICC → ME	90 00	
3	ME → NG-SS	The PDU Session is established successfully without modification.	Same PDU Session Establishment parameters used by the ME within the ENVELOPE CALL CONTROL 1.1.1 are used to establish the PDU Session.
4	USER → ME	Set and configure DNN as "Test12.rs" in the terminal configuration for a new PDU Session if required and trigger ME to establish the PDU Session.	[PDU Session triggered by the user]
5	ME → UICC	ENVELOPE CALL CONTROL 1.3.1	

6	UICC → ME	90 00	
7	ME → NG-SS	PDU SESSION ESTABLISHMENT REQUEST	Same PDU Session Establishment parameters within the ENVELOPE CALL CONTROL 1.3.1 are used to establish the PDU Session.
8	NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
9	ME → NG-SS	The PDU Session is established successfully without modification	

ENVELOPE CALL CONTROL 1.3.1

Logically:

Device identities:
- Source device: ME
- Destination device: UICC

PDU Session Establishment parameters:
- DNN: Test12.rs
- Extended Protocol Discriminator: 5GS Session Management messages (2E)
- PDU Session identity: Any valid value in the range of 1 to 15
- Procedure Transaction Identity: Any valid value in the range of 1 to 254
- 5GS Session message identity: PDU session establishment request (C1)
- PDU Session Type: IPv4v6
- Extended Protocol configuration options:
- Extended Protocol config. optional contents: content not checked

Location Information:
- Mobile Country Codes (MCC): 001
- Mobile Network Codes (MNC): 01
- Tracking Area Code (TAC): 000001
- NG-RAN Cell Identifier (NCI): 0001 (36 bits)

Coding:

BER-TLV:	D4	Note 1	02	02	82	81	0C	Note 2	25	0A	06	54
	65	73	74	31	32	02	72	73	2E	Note 5	Note 6	C1
	Note 3	Note 3	93	Note 4	13	0B	00	F1	10	00	00	01
	00	00	00	00	1F							

Note 1: The length of the BER-TLV is present here.

Note 2: Length of PDU session establishment parameters, dependent of optional fields.

Note 3: Integrity protection maximum data rate.

Note 4: Optional fields / extended protocol configuration options (byte 27 to 27+n if available).

Note 5: PDU session identity.

Note 6: Procedure transaction identity.

Expected Sequence 1.4 (CALL CONTROL on PDU Session for NG-RAN, PDU Session Establishment triggered by user, UICC sends 93 00)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure the URSP rules and DNN "TestGp.rs" in the terminal configuration as defined in the initial conditions.	[see initial conditions]

1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For PDU Session establishment
2	UICC → ME	90 00	
3	ME → NG-SS	The PDU Session is established successfully without modification.	Same PDU Session Establishment parameters used by the ME within the ENVELOPE CALL CONTROL 1.1.1 are used to establish the PDU Session.
4	USER → ME	Set and configure DNN as "Test12.rs" in the terminal configuration for a new PDU Session if required and trigger ME to establish the PDU Session.	[PDU Session triggered by the user]
5	ME → UICC	ENVELOPE CALL CONTROL 1.3.1	
6	UICC → ME	93 00	
7	ME → NG-SS	ME shall not sent PDU SESSION ESTABLISHMENT REQUEST	The ME may retry to send the command.

Expected Sequence 1.5 (CALL CONTROL on PDU Session for NG-RAN, PDU Session Establishment triggered by user, allowed with modification of SM PDU DN request container)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure the URSP rules and DNN "TestGp.rs" in the terminal configuration as defined in the initial conditions.	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	[For PDU Session establishment]
2	UICC → ME	90 00	
3	ME → NG-SS	The PDU Session is established successfully without modification.	Same PDU Session Establishment parameters used by the ME within the ENVELOPE CALL CONTROL 1.1.1 are used to establish the PDU Session.
4	USER → ME	Set and configure DNN as "Test12.rs" and DN-Specific Identity as 0123456789@Test.org in the terminal configuration for a new PDU Session if required and trigger ME to establish the PDU Session.	[PDU Session triggered by the user]
5	ME → UICC	ENVELOPE CALL CONTROL 1.5.1	
6	UICC → ME	CALL CONTROL RESULT 1.5.1	[Call control result: "Allowed with modifications", DN-Specific Identity is modified to 0123456789@Test3gpp.org]
7	ME → NG-SS	PDU SESSION ESTABLISHMENT REQUEST	[The modified SM PDU DN request container and rest of the same PDU Session Establishment parameters within the ENVELOPE CALL CONTROL 1.5.1 are used to establish the PDU Session.]

8	NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
9	ME → NG-SS	The PDU Session is established successfully with modified SM PDU DN request container (DN-Specific Identity).	

ENVELOPE CALL CONTROL 1.5.1

Logically:

Device identities:
Source device: ME
Destination device: UICC
PDU Session Establishment parameters:
DNN: Test12.rs
Extended Protocol Discriminator: 5GS Session Management messages (2E)
PDU Session identity: Any valid value in the range of 1 to 15
Procedure Transaction Identity: Any valid value in the range of 1 to 254
5GS Session message identity: PDU session establishment request (C1)
PDU Session Type: IPv4v6
SM PDU DN request container 0123456789@Test.org
Extended Protocol configuration options:
Extended Protocol config. optional contents: content not checked
Location Information:
Mobile Country Codes (MCC): 001
Mobile Network Codes (MNC): 01
Tracking Area Code (TAC): 000001
NG-RAN Cell Identifier (NCI): 0001 (36 bits)

Coding:

BER-TLV:	D4	Note 1	02	02	82	81	0C	Note 2	25	0A	06	54
	65	73	74	31	32	02	72	73	2E	Note5	Note 6	C1
	Note 3	Note3	93	Note 4	39	13	30	31	32	33	34	35
	36	37	38	39	40	54	65	73	74	2E	6F	72
	67	Note 4	13	0B	00	F1	10	00	00	01	00	00
	00	00	1F									

Note 1: The length of the BER-TLV is present here.

Note 2: Length of PDU session establishment parameters, dependent of optional fields.

Note 3: Integrity protection maximum data rate

Note 4: Optional fields / extended protocol configuration options (byte 27 to 27+n if available, second Note 4 is handled accordingly).

Note 5: PDU session identity.

Note 6: Procedure transaction identity.

CALL CONTROL RESULT 1.5.1

Logically:

Call control result: '02' = Allowed, with modification
PDU Session Establishment parameters:
DNN: Test12.rs
Extended Protocol Discriminator: 5GS Session Management messages (2E)
PDU Session identity: Same PSI as used in ENVELOPE CALL CONTROL 1.5.1
Procedure Transaction Identity: Same PTI as used in ENVELOPE CALL CONTROL 1.5.1

5GS Session message identity: PDU session establishment request (C1)
PDU Session Type: IPv4v6
SM PDU DN request container: 0123456789@Test3gpp.org
Extended Protocol configuration options:
Extended Protocol config. optional contents: content not checked

Coding:

BER-TLV:	02	Note 1	0C	Note 2	25	0A	06	54	65	73	74	31
	32	02	72	73	2E	Note 6	Note 7	C1	Note 3	Note 3	93	Note 4
	39	17	30	31	32	33	34	35	36	37	38	39
	40	54	65	73	74	33	67	70	70	2E	6F	72
	67	Note 5										

Note 1: The length of the BER-TLV is present here.

Note 2: Length of PDU session establishment parameters, dependent of optional fields.

Note 3: Integrity protection maximum data rate (same as received in ENVELOPE).

Note 4: Optional fields / extended protocol configuration options (same as received in ENVELOPE).

Note 5: Optional fields (if available in ENVELOPE).

Note 6: PDU session identity (same as received in ENVELOPE).

Note 7: Procedure transaction identity (same as received in ENVELOPE).

Expected Sequence 1.6 (CALL CONTROL on PDU Session for NG-RAN, PDU Session Establishment triggered by user, allowed with modification of ePCO)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure the URSP rules and DNN "TestGp.rs" in the terminal configuration for as defined in the initial conditions.	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	[For PDU Session establishment]
2	UICC → ME	90 00	
3	ME → NG-SS	The PDU Session is established successfully without modification.	Same PDU Session Establishment parameters used by the ME within the ENVELOPE CALL CONTROL 1.1.1 are used to establish the PDU Session.
4	USER → ME	Set and configure DNN as "Test12.rs" and the terminal is configured to include any ePCO containers in PDU Session Establishment if required and trigger ME to establish the PDU Session.	[PDU Session triggered by the user]
5	ME → UICC	ENVELOPE CALL CONTROL 1.6.1	
6	UICC → ME	CALL CONTROL RESULT 1.6.1	[Call control result: "Allowed with modifications", include rfc1877_primary_dns_server IPv4 Address as 192.168.3.3 in IPCP container]

7	ME → NG-SS	PDU SESSION ESTABLISHMENT REQUEST	[The modified ePCO container and rest of the same PDU Session Establishment parameters within the ENVELOPE CALL CONTROL 1.6.1 are used to establish the PDU Session.]
8	NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
9	ME → NG-SS	The PDU Session is established successfully with modified ePCO as included in the CALL_CONTROL_RESULT 1.6.1.	

ENVELOPE CALL CONTROL 1.6.1

Logically:

Device identities
Source device: ME
Destination device: UICC
PDU Session Establishment parameters
DNN: Test12.rs
Extended Protocol Discriminator: 5GS Session Management messages (2E)
PDU Session identity: Any valid value in the range of 1 to 15
Procedure Transaction Identity: Any valid value in the range of 1 to 254
5GS Session message identity: PDU session establishment request (C1)
PDU Session Type: IPv4v6
Extended Protocol configuration options:
Extended Protocol config. optional contents: content not checked
Location Information:
Mobile Country Codes (MCC): 001
Mobile Network Codes (MNC): 01
Tracking Area Code (TAC): 000001
NG-RAN Cell Identifier (NCI): 0001 (36 bits)

Coding:

BER-TLV:	D4	Note 1	02	02	82	81	0C	Note 2	25	0A	06	54
	65	73	74	31	32	02	72	73	2E	Note 7	Note 8	C1
	Note 3	Note 3	93	Note 4	7B	Note 5	Note 5	Note 6	Note 4	13	0B	00
	F1	10	00	00	01	00	00	00	00	1F		

Note 1: The length of the BER-TLV is present here.

Note 2: Length of PDU session establishment parameters, dependent on optional fields.

Note 3: Integrity protection maximum data rate.

Note 4: Optional fields / extended protocol configuration options (byte 27 to 27+n if available, second Note 4 is handled accordingly).

Note 5: Length of the ePCO (2 bytes).

Note 6: Data of extended protocol configuration fields.

Note 7: PDU session identity.

Note 8: Procedure transaction identity.

CALL CONTROL RESULT 1.6.1

Logically:

Call control result: '02' = Allowed, with modification
PDU Session Establishment parameters:
DNN: Test12.rs
Extended Protocol Discriminator: 5GS Session Management messages (2E)
PDU Session identity: Same value as used in ENVELOPE CALL CONTROL 1.6.1
Procedure Transaction Identity: Same value as used in ENVELOPE CALL CONTROL 1.6.1
5GS Session message identity: PDU session establishment request (C1)
PDU Session Type: IPv4v6
Extended Protocol configuration options:
Protocol or Container: IPCP
rfc1332_conf_req
rfc1877_primary_dns_server_IPv4_address: 192.168.3.3
Additional protocol and container data as provided in ENVELOPE

Coding:

BER-TLV:	02	Note 1	0C	Note 2	25	0A	06	54	65	73	74	31
	32	02	72	73	2E	Note 9	Note 10	C1	Note 3	Note 3	93	Note 4
	7B	Note 5	Note 5	80	80	21	Note 6	01	00	Note 7	Note 7	81
	06	C0	A8	03	03	Note 8						

Note 1: The length of the BER-TLV is present here.

Note 2: Length of PDU session establishment parameters, dependent of optional fields.

Note 3: Integrity protection maximum data rate (same as received in ENVELOPE).

Note 4: Optional fields / extended protocol configuration options.

Note 5: Length of the ePCO (2 bytes).

Note 6: Length of the IPCP content.

Note 7: Length of rfc1332_conf_req.

Note 8: Additional protocol and container data as provided in ENVELOPE.

Note 9: PDU session identity (same as received in ENVELOPE).

Note 10: Procedure transaction identity (same as received in ENVELOPE).

Expected Sequence 1.7 (CALL CONTROL on PDU Session for NG-RAN, PDU Session Establishment triggered by OPEN CHANNEL, UICC sends 90 00)

Step	Direction	Message / Action	Comments
0	USER → ME	Set and configure the URSP rules and DNN "TestGp.rs" in the terminal configuration as defined in the initial conditions.	[see initial conditions]
1	ME → UICC	ENVELOPE CALL CONTROL 1.1.1	For PDU Session establishment
2	UICC → ME	90 00	
3	ME → NG-SS	The PDU Session is established successfully without modification.	Same PDU Session Establishment parameters used by the ME within the ENVELOPE CALL CONTROL 1.1.1 are used to establish the PDU Session.

4	USER → ME	Set and configure DNN as "Test12.rs" in the terminal configuration for a new PDU Session by the OPEN CHANNEL if required.	
5	UICC → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.7.1	[PDU Session triggered by the proactive command OPEN CHANNEL with Bearer Type 0x0C]
6	ME → UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: OPEN CHANNEL 1.7.1	
8	ME → USER	The ME may display channel opening information	
9	ME → UICC	ENVELOPE CALL CONTROL 1.3.1	
10	UICC → ME	90 00	
11	ME → NG-SS	PDU SESSION ESTABLISHMENT REQUEST	Same PDU Session Establishment parameters within the ENVELOPE CALL CONTROL 1.3.1 are used to establish the PDU Session.
12	NG-SS → ME	PDU SESSION ESTABLISHMENT ACCEPT	
13	ME → UICC	TERMINAL RESPONSE: OPEN CHANNEL 1.7.1	[Command performed successfully]
14	ME → NG-SS	The PDU Session is established successfully without modification	

PROACTIVE COMMAND: OPEN CHANNEL 1.7.1

Logically:

Command details:
- Command number: 1
- Command type: OPEN CHANNEL
- Command qualifier: immediate link establishment

Device identities:
- Source device: UICC
- Destination device: ME

Bearer description:
- Bearer type: NG-RAN
- Bearer parameter:
- PDU Session Type: IPv4v6

Buffer:
- Buffer size: 1400

Network access name: Test12.rs

Text String: "UserLog" (User login)

Text String: "UserPwd" (User password)

UICC/ME interface transport level
- Transport format: TCP
- Port number: 44444

Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	3D	81	03	01	40	01	82	02	81	82	35

	02	0C	93	39	02	05	78	47	0A	06	54	65
	73	74	31	32	02	72	73	0D	08	F4	55	73
	65	72	4C	6F	67	0D	08	F4	55	73	65	72
	50	77	64	3C	03	02	AD	9C	3E	05	21	01
	01	01	01									

TERMINAL RESPONSE: OPEN CHANNEL 1.7.1

Logically:

Command details:
- Command number: 1
- Command type: OPEN CHANNEL
- Command qualifier: immediate link establishment

Device identities:
- Source device: ME
- Destination device: UICC

Result:
- General Result: Command performed successfully
- Channel status: Channel identifier 1 and link established, or PDP context activated or PDU Session established

Bearer description:
- Bearer type: NG-RAN
- Bearer parameter:
- PDU Session Type: IPv4v6

Buffer:
- Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	02	0C	93	39	02	05	78

27.22.13.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.7.

27.22.14 ENVELOPE SMS-PP Data Download on NAS messages

27.22.14.1 Routing Indicator Data update via DL NAS TRANSPORT messages

27.22.14.1.1 Definition and applicability

See clause 3.2.2.

27.22.14.1.2 Conformance requirement

The ME shall support the Proactive UICC: SMS-PP Data Download facility as defined in the following technical specifications:

- 3GPP TS 31.111 [15] clause 5, clause 7.1, clause 8.1, clause 8.7, clause 8.13 and clause 11.
- 3GPP TS 31.115 [28] clause 4.
- 3GPP TS 23.038 [7] clause 4.

The ME shall support the Procedure for SMS-PP data download via DL NAS TRANSPORT messages as defined in the following technical specifications:

- 3GPP TS 31.111 [15] clause 7.1.1.1a.

27.22.14.1.3 Test purpose

To verify that when:

- the service "data download via SMS Point-to-point" is available in the USIM Service Table

and

- the ME receives a DL NAS TRANSPORT message that includes
  - a UE parameters update transparent container containing a UE parameters update data set with UE parameters update data set type with value "1"=Routing Indicator update data
  - containing a secure packet constructed as an SMS-Deliver (as specified in 3GPP TS 23.040 [5]) with:
    - protocol identifier = SIM data download; and
    - data coding scheme = class 2 message
  - and the integrity check of the message was successful

then

- the ME shall
  - pass the message transparently to the UICC using the ENVELOPE (SMS-PP DOWNLOAD) command as defined in TS 31.111 [15] clause 7.1.1.2
  - the ME shall not display or alert the user
  - the secure packet is coded as a Command Packet formatted as Short Message Point to Point (as specified in 3GPP TS 31.115 [28]).

To verify that the ME interprets the UICC returns response correctly.

27.22.14.1.4 Method of Test

27.22.14.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the NG-SS.

The ME is connected to NG-SS and it has performed the Registration procedure.

The default NG-RAN UICC and the following parameters.

The NG-RAN UICC parameters are:

- one OTA Key Set with:
  Key Version: 01
  1st key
  Key Index (Kic): 01
  Key value: 000102030405060708090A0B0C0D0E0F
  2nd key
  Key Index (Kid): 02
  Key value: 000102030405060708090A0B0C0D0E0F
  3rd key
  Key Index (Kik): 03
  Key value: 000102030405060708090A0B0C0D0E0F

The default NG-RAN parameters and the following parameters are used:

The NG-RAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;

- Tracking Area Code (TAC) = 000001;
- NG-RAN Cell Id = 0001 (36 bits).

The elementary files are coded as USIM Application Toolkit default with the following exceptions:

- The "data download via SMS Point-to-point" service is available in the USIM Service Table.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.14.1.4.2 Procedure

Expected Sequence 1.1 (SMS-PP Data Download after UE parameters update data (Routing Indicator Data) via DL NAS TRANSPORT message "acknowledgement not requested" and "re-registration not requested")

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profile Download and USIM initialisation
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	NG-SS → ME	NG-SS send to ME DL NAS TRANSPORT message 1.1.1 with acknowledgement not requested re-registration not requested	UE parameters update header with: ACK set to "acknowledgement not requested" REG set to "re-registration not requested"
4	ME→ UICC	ENVELOPE: SMS-PP DOWNLOAD 1.1.1	the ME shall pass the message transparently to the UICC using the ENVELOPE (SMS-PP DOWNLOAD) command as specified in TS 31.111 [15] clause 7.1.1.1a
5	UICC → ME	SW1/SW2 91 XX	
6	UICC	$EF_{Routing\_Indicator}$ contents updated correctly	New $EF_{Routing\_Indicator}$ value "00550000"
7	ME→ UICC	FETCH	
8	UICC → ME	PROACTIVE COMMAND: REFRESH 1.1.1 [File Change Notification]	
9	ME→ UICC	TERMINAL RESPONSE: REFRESH 1.1.1A or TERMINAL RESPONSE: REFRESH 1.1.1B	
10	UICC→ ME	PROACTIVE UICC SESSION ENDED	
11	NG-SS → ME	NG-SS shall send IDENTITY REQUEST for SUCI and verify if UE sends SUCI with newly updated Routing Indicator.	

DL NAS TRANSPORT message 1.1.1

Logically:

Message details (referring to 3GPP TS 24.501 Table 9.11.3.53A.1)
- Payload container type IE: "0110" (UE parameters update transparent container)
- UE parameters update header:
  - UPU data type: "0" (UE parameters update transparent container carries a UE parameters update list)
  - ACK: "0" (acknowledgment not requested)
  - REG: "0" (re-registration not requested)
  - UE parameters update list: includes one UE parameters update data set with UE parameters update data set type "0001" (Routing indicator update data)
- Corresponding UE parameters update data set:
  - Secured packet: as specified in 3GPP TS 31.111 [15] clause 7.1.1.1a – TPDU Command Packet

Coding:

40	00	91	7F	F6	00	00	00	00	00	00	00
4E	02	70	00	00	49	15	02	00	10	10	B0
01	40	00	00	00	00	00	00	0F	13	8E	84
E8	D6	F8	01	AA	31	22	07	00	A4	00	04
02	5F	C0	22	07	00	A4	00	04	02	4F	0A
22	07	00	D6	00	00	02	00	55	81	14	81
03	01	01	01	82	02	81	82	12	09	01	3F
00	7F	FF	5F	C0	4F	0A					

ENVELOPE: SMS-PP DOWNLOAD 1.1.1

Logically:

SMS-PP Download:
Device identities:
Source device: Network
Destination device: UICC
SMS TPDU: Contents of Secured Packet from DL NAS TRANSPORT message 1.1.1

Coding:

BER-TLV:	D1	61	82	02	83	81	8B	5B	40	00	91	7F
	F6	00	00	00	00	00	00	00	4E	02	70	00
	00	49	15	02	00	10	10	B0	01	40	00	00
	00	00	00	00	0F	13	8E	84	E8	D6	F8	01
	AA	31	22	07	00	A4	00	04	02	5F	C0	22
	07	00	A4	00	04	02	4F	0A	22	07	00	D6
	00	00	02	00	55	81	14	81	03	01	01	01
	82	02	81	82	12	09	01	3F	00	7F	FF	5F
	C0	4F	0A									

PROACTIVE COMMAND: REFRESH 1.1.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: File Change Notification
Device identities
Source device: UICC
Destination device: ME
File List: $EF_{Routing\_Indicator}$

Coding:

BER-TLV:	D0	14	81	03	01	01	01	82	02	81	82	12
	09	01	3F	00	7F	FF	5F	C0	4F	0A		

TERMINAL RESPONSE: REFRESH 1.1.1A

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: File Change Notification
Device identities
Source device: ME
Destination device: UICC
Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	01	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 1.1.1B

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: File Change Notification
Device identities
Source device: ME
Destination device: UICC
Result
General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	01	82	02	82	81	83	01	03

Expected Sequence 1.2 (SMS-PP Data Download after UE parameters update data (Routing Indicator Data) via DL NAS TRANSPORT message "acknowledgement not requested" and "re-registration requested")

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profile Download and USIM initialisation
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	NG-SS → ME	NG-SS send to ME DL NAS TRANSPORT message 1.2.1 with acknowledgement not requested re-registration requested	UE parameters update header with: ACK set to "acknowledgement not requested" REG set to "re-registration requested"
4	ME→ UICC	ENVELOPE: SMS-PP DOWNLOAD 1.1.1	the ME shall pass the message transparently to the UICC using the ENVELOPE (SMS-PP DOWNLOAD) command as specified in TS 31.111 [15] clause 7.1.1.1a
5	UICC → ME	SW1/SW2 91 XX	
6	UICC	$EF_{Routing\_Indicator}$ contents updated correctly	New $EF_{Routing\_Indicator}$ value "00550000"
7	ME→ UICC	FETCH	
8	UICC → ME	PROACTIVE COMMAND: REFRESH 1.1.1 [File Change Notification]	
9	ME→ UICC	TERMINAL RESPONSE: REFRESH 1.1.1A or TERMINAL RESPONSE: REFRESH 1.1.1B	
10	UICC → ME	PROACTIVE UICC SESSION ENDED	
11	ME	Enter in 5GMM-IDLE	NG-SS shall send RRC Release
12	ME	ME performs a de-registration procedure, delete its 5G-GUTI and initiate a registration procedure for initial registration Verify if UE sends SUCI with newly updated Routing Indicator in the REGISTRATION REQUEST.	As specified in TS 24.501 [40] clause 5.4.5.3.3 clause i.1.i.C1

DL NAS TRANSPORT message 1.2.1

Logically:

Message details (referring to 3GPP TS 24.501 Table 9.11.3.53A.1)
Payload container type IE: "0110" (UE parameters update transparent container)
UE parameters update header:
UPU data type: "0" (UE parameters update transparent container carries a UE parameters update list)
ACK: "0" (acknowledgment not requested)
REG: "1" (re-registration requested)
UE parameters update list: includes one UE parameters update data set with UE parameters update data set type "0001" (Routing indicator update data)
Corresponding UE parameters update data set:
Secured packet: as specified in 3GPP TS 31.111 [15] clause 7.1.1.1a – TPDU Command Packet

Coding:

40	00	91	7F	F6	00	00	00	00	00	00	00
4E	02	70	00	00	49	15	02	00	10	10	B0
01	40	00	00	00	00	00	00	0F	13	8E	84
E8	D6	F8	01	AA	31	22	07	00	A4	00	04
02	5F	C0	22	07	00	A4	00	04	02	4F	0A
22	07	00	D6	00	00	02	00	55	81	14	81
03	01	01	01	82	02	81	82	12	09	01	3F
00	7F	FF	5F	C0	4F	0A					

Expected Sequence 1.3 (SMS-PP Data Download after UE parameters update data (Routing Indicator Data) via DL NAS TRANSPORT message "acknowledgement requested" and "re-registration requested")

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profile Download and USIM initialisation
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	NG-SS → ME	NG-SS send to ME DL NAS TRANSPORT message 1.3.1 with acknowledgement requested re-registration requested	UE parameters update header with: ACK set to "acknowledgement requested" REG set to "re-registration requested"
4	ME→ UICC	ENVELOPE: SMS-PP DOWNLOAD 1.1.1	the ME shall pass the message transparently to the UICC using the ENVELOPE (SMS-PP DOWNLOAD) command as specified in TS 31.111 [15] clause 7.1.1.1a
5	UICC → ME	SW1/SW2 91 XX	
6	ME → NG-SS	ME sends to NG-SS an acknowledgement in the Payload container IE of an UL NAS TRANSPORT message with Payload type IE set to "UE parameters update transparent container".	Note 1: this step can be performed in parallel or after step 8.
7	UICC	$EF_{Routing\_Indicator}$ contents updated correctly	New $EF_{Routing\_Indicator}$ value "00550000"
8	ME→ UICC	FETCH	
9	UICC → ME	PROACTIVE COMMAND: REFRESH 1.1.1 [File Change Notification]	
10	ME→ UICC	TERMINAL RESPONSE: REFRESH 1.1.1A or TERMINAL RESPONSE: REFRESH 1.1.1B	ME shall have sent by now an acknowledgement in the Payload container IE of an UL NAS TRANSPORT message as specified in TS 24.501 [40] clause 5.4.5.3.3 clause i.1.i.B
11	UICC → ME	PROACTIVE UICC SESSION ENDED	

12	ME	Enter in 5GMM-IDLE	NG-SS shall send RRC Release
13	ME	ME performs a de-registration procedure, delete its 5G-GUTI and initiate a registration procedure for initial registration Verify if UE sends SUCI with newly updated Routing Indicator in the REGISTRATION REQUEST.	As specified in TS 24.501 [40] clause 5.4.5.3.3 clause i.1.i.C1

DL NAS TRANSPORT message 1.3.1

Logically:

Message details (referring to 3GPP TS 24.501 Table 9.11.3.53A.1)

Payload container type IE: "0110" (UE parameters update transparent container)

UE parameters update header:

UPU data type: "0" (UE parameters update transparent container carries a UE parameters update list)

ACK: "1" (acknowledgment requested)

REG: "1" (re-registration requested)

UE parameters update list: includes one UE parameters update data set with UE parameters update data set type "0001" (Routing indicator update data)

Corresponding UE parameters update data set:

Secured packet: as specified in 3GPP TS 31.111 [15] clause 7.1.1.1a – TPDU Command Packet

Coding:

40	00	91	7F	F6	00	00	00	00	00	00	00
4E	02	70	00	00	49	15	02	00	10	10	B0
01	40	00	00	00	00	00	00	0F	13	8E	84
E8	D6	F8	01	AA	31	22	07	00	A4	00	04
02	5F	C0	22	07	00	A4	00	04	02	4F	0A
22	07	00	D6	00	00	02	00	55	81	14	81
03	01	01	01	82	02	81	82	12	09	01	3F
00	7F	FF	5F	C0	4F	0A					

Expected Sequence 1.4 (SMS-PP Data Download after UE parameters update data (Routing Indicator Data) via DL NAS TRANSPORT message "acknowledgement requested" and "re-registration not requested")

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profile Download and USIM initialisation
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	NG-SS → ME	NG-SS send to ME DL NAS TRANSPORT message 1.4.1 with acknowledgement requested re-registration not requested	UE parameters update header with: ACK set to "acknowledgement requested" REG set to "re-registration not requested"
4	ME→ UICC	ENVELOPE: SMS-PP DOWNLOAD 1.1.1	the ME shall pass the message transparently to the UICC using the ENVELOPE (SMS-PP DOWNLOAD) command as specified in TS 31.111 [15] clause 7.1.1.1a
5	UICC → ME	SW1/SW2 91 XX	
6	ME → NG-SS	ME sends to NG-SS an acknowledgement in the Payload container IE of an UL NAS TRANSPORT message with Payload type IE set to "UE parameters update transparent container".	Note 1: this step can be performed in parallel or after step 8.
7	UICC	$EF_{Routing\_Indicator}$ contents updated correctly	New $EF_{Routing\_Indicator}$ value "00550000"
8	ME→ UICC	FETCH	

9	UICC → ME	PROACTIVE COMMAND: REFRESH 1.1.1 [File Change Notification]	
10	ME→ UICC	TERMINAL RESPONSE: REFRESH 1.1.1A or TERMINAL RESPONSE: REFRESH 1.1.1B	ME shall have sent by now an acknowledgement in the Payload container IE of an UL NAS TRANSPORT message as specified in TS 24.501 [40] clause 5.4.5.3.3 clause i.1.i.B
11	UICC → ME	PROACTIVE UICC SESSION ENDED	
12	NG-SS → ME	NG-SS shall send IDENTITY REQUEST for SUCI and verify if UE sends SUCI with newly updated Routing Indicator.	

DL NAS TRANSPORT message 1.4.1

Logically:

Message details (referring to 3GPP TS 24.501 Table 9.11.3.53A.1)
Payload container type IE: "0110" (UE parameters update transparent container)
UE parameters update header:
UPU data type: "0" (UE parameters update transparent container carries a UE parameters update list)
ACK: "1" (acknowledgment requested)
REG: "0" (re-registration not requested)
UE parameters update list: includes one UE parameters update data set with UE parameters update data set type "0001" (Routing indicator update data)
Corresponding UE parameters update data set:
Secured packet: as specified in 3GPP TS 31.111 [15] clause 7.1.1.1a – TPDU Command Packet

Coding:

40	00	91	7F	F6	00	00	00	00	00	00	00
4E	02	70	00	00	49	15	02	00	10	10	B0
01	40	00	00	00	00	00	00	0F	13	8E	84
E8	D6	F8	01	AA	31	22	07	00	A4	00	04
02	5F	C0	22	07	00	A4	00	04	02	4F	0A
22	07	00	D6	00	00	02	00	55	81	14	81
03	01	01	01	82	02	81	82	12	09	01	3F
00	7F	FF	5F	C0	4F	0A					

27.22.14.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.4.

27.22.14.2 Steering of Roaming via DL NAS TRANSPORT message

27.22.14.2.1 Definition and applicability

See clause 3.2.2.

27.22.14.2.2 Conformance requirement

The ME shall support the Proactive UICC: SMS-PP Data Download facility as defined in the following technical specifications:

- 3GPP TS 31.111 [15] clause 5, clause 7.1, clause 8.1, clause 8.7, clause 8.13 and clause 11.
- 3GPP TS 31.115 [28] clause 4.
- 3GPP TS 23.038 [7] clause 4.

The ME shall support the Procedure for SMS-PP data download via DL NAS TRANSPORT messages as defined in the following technical specifications:

- 3GPP TS 31.111 [15] clause 7.1.1.1a.

The ME shall support the steering of roaming procedure as defined in:

- 3GPP TS 23.122 [29] clause 4.4.6.

27.22.14.2.3 Test purpose

To verify that when the service "data download via SMS Point-to-point" is available in the USIM Service Table and the ME receives a DL NAS TRANSPORT message that includes:

- a SOR transparent container information element with list type with value "0"= secured packet, containing a secured packet constructed as an SMS-Deliver (as specified in TS 23.040 [8]) with:
  - protocol identifier = SIM data download;
  - data coding scheme = class 2 message;

and the integrity check of the message was successful, then the ME shall:

- pass the message transparently to the UICC using the ENVELOPE (SMS-PP DOWNLOAD) command as defined in 3GPP TS 31.111 [15] clause 7.1.1.2;
- not display or alert the user.

Where the secured packet is coded as a Command Packet formatted as Short Message Point to Point (as specified in TS 31.115 [28]).

For sequence 2.1:

To verify that when the ME receives a USAT REFRESH command qualifier of type "Steering of Roaming", it (as specified in 3GPP TS 23.122 [29], clause 4.4.6):

- deletes formerly forbidden PLMNs provided as allowed in the REFRESH command from the Forbidden PLMN list and from the Forbidden PLMNs for GPRS service list. This includes any information stored in the UICC.

For sequence 2.3:

To verify that when ME receives a USAT REFRESH command qualifier of type "Steering of Roaming", it (as specified in 3GPP TS 23.122 [29], clause 4.4.6):

- replaces the highest priority entries in the "Operator Controlled PLMN Selector with Access Technology" list stored in the ME with the list provided in the REFRESH command;

Note: This requirement is implicitly verified when the ME attempts to obtain service on a higher priority PLMN.

- deletes formerly forbidden PLMNs provided as allowed in the REFRESH command from the Forbidden PLMN list and from the Forbidden PLMNs for GPRS service list. This includes any information stored in the UICC;
- considers new information provided in subsequent attempts to access a higher priority PLMN;

and

- attempts to obtain service on a higher priority PLMN as specified in 3GPP TS 23.122 [29], clause 4.4.3.3 by acting as if timer T that controls periodic attempts has expired.

27.22.14.2.4 Method of Test

27.22.14.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the NG-SS.

The default NG-RAN UICC with the following exceptions is used:

EF$_{UST}$ (USIM Service Table)

Logically:

Service n°42 Operator controlled PLMN selector with Access Technology available

Coding:

Byte:	B1		B6		B16
Binary:	xxxx xxxx	…	xxxx xx1x	….	xxxx xxxx

The NG-RAN UICC parameters are:

- one OTA Key Set with:
  Key Version: 01
  1st key
  Key Index (Kic): 01
  Key Algorithm: Triple DES
  Key value: 000102030405060708090A0B0C0D0E0F
  2nd key
  Key Index (Kid): 02
  Key Algorithm: Triple DES
  Key value: 000102030405060708090A0B0C0D0E0F
  3rd key
  Key Index (Kik): 03
  Key Algorithm: Triple DES
  Key value: 000102030405060708090A0B0C0D0E0F

For sequences 2.1:

The NG-RAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Tracking Area Code (TAC) = 000001;
- NG-RAN Cell Id = 0001 (36 bits).

For sequence 2.3:

EF$_{FPLMN}$

Logically:

PLMN1: 254 002 (MCC MNC)
PLMN2: 254 003
PLMN3: 254 004
PLMN4: 234 004
PLMN5: 234 005
PLMN6: 234 006

Coding:

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
Hex	52	24	00	52	34	00	52	44	00	32	44	00
	B13	**B14**	**B15**	**B16**	**B17**	**B18**						
	32	54	00	32	64	00						

EF$_{OPLMNwACT}$:

Logically:

1st PLMN: 254 001 (MCC MNC)
1st ACT: NG-RAN
2nd PLMN: 254 001
2nd ACT: E-UTRAN
3rd PLMN: 274 002
3rd ACT: NG-RAN
4th PLMN: 274 003
4th ACT: E-UTRAN
5th PLMN: 274 004
5th ACT: E-UTRAN
6th PLMN: 274 005
6th ACT: E-UTRAN
7th PLMN: 274 006
7th ACT: E-UTRAN
8th PLMN: 274 007
8th ACT: UTRAN

Coding:

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
Hex	52	14	00	08	00	52	14	00	40	00	72	24
	B13	**B14**	**B15**	**B16**	**B17**	**B18**	**B19**	**B20**	**B21**	**B22**	**B23**	**B24**
	00	08	00	72	34	00	40	00	72	44	00	40
	B25	**B26**	**B27**	**B28**	**B29**	**B30**	**B31**	**B32**	**B33**	**B34**	**B35**	**B36**
	00	72	54	00	40	00	72	64	00	40	00	72
	B37	**B38**	**B39**	**B40**								
	74	00	80	00								

EF_{HPPLMN} (Higher Priority PLMN Search period)

Logically: set to 6 minutes

Coding:

Coding:	B1
Hex	01

NG-RAN Cell 1:

- Mobile Country Code (MCC) = 254;
- Mobile Network Code (MNC) = 001;
- Tracking Area Code (TAC) = 000001;
- NG-RAN Cell Id = 0001 (36 bits).

NG-RAN Cell 2:

- Mobile Country Code (MCC) = 254;
- Mobile Network Code (MNC) = 003;
- Tracking Area Code (TAC) = 000001;
- NG-RAN Cell Id = 0001 (36 bits).

27.22.14.2.4.2 Procedure

Expected Sequence 2.1 (SMS-PP Data Download after Steering of Roaming via DL NAS TRANSPORT message with REFRESH command [Steering of Roaming])

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	The ME will perform Profile Download and USIM initialisation
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	NG-SS → ME	NG-SS send to ME DL NAS TRANSPORT message 2.1.1 with acknowledgement not requested List Type is secured packet	SOR header with: ACK set to "acknowledgement not requested" List Type set to "secured packet"
4	ME→ UICC	ENVELOPE: SMS-PP DOWNLOAD 2.1.1	The ME shall pass the message transparently to the UICC using the ENVELOPE (SMS-PP DOWNLOAD) command as specified in 3GPP TS 31.111 [15] clause 7.1.1.1a
5	UICC → ME	SW1/SW2 91 XX	
6	ME→ UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: REFRESH 2.1.1 [Steering of Roaming]	
8	ME→ UICC	TERMINAL RESPONSE: REFRESH 2.1.1	
9	UICC → ME	PROACTIVE UICC SESSION ENDED	
10	ME	Steering of Roaming procedure	As specified in TS 23.122 [29] clause 4.4.6 NOTE: the SoR procedure cannot be verified completely in this step. A verification of the complete SoR procedure is done in Expected Sequence 2.3

DL NAS TRANSPORT message 2.1.1

Logically:

Message details (referring to 3GPP TS 24.501 Figure 9.11.3.51.1)
- Payload container type IE: "0100" (SOR transparent container)
- SOR header:
- SOR data type: "0" (SOR transparent container carries steering of roaming information)
- List indication: "1" (list of preferred PLMN/access technology combinations is provided)
- List type: "0" (The list type is a secured packet.)
- ACK: "0" (acknowledgment not requested)

Secured packet: as specified in 3GPP TS 31.111 [15] clause 7.1.1.1a – TPDU Command Packet

Coding:

40	00	91	7F	F6	00	00	00	00	00	00	00
4E	02	70	00	00	49	15	02	00	10	10	B0
01	40	00	00	00	00	00	00	93	8A	B4	08
49	71	14	29	AA	31	22	07	00	A4	00	04
02	6F	61	22	0F	00	D6	00	00	0A	52	34
00	80	00	52	44	00	00	80	81	15	81	03
01	01	07	82	02	81	82	72	0A	52	34	00
80	00	52	44	00	00	80					

ENVELOPE: SMS-PP DOWNLOAD 2.1.1

Logically:

SMS-PP Download:
- Device identities:

Source device: Network
Destination device: UICC
SMS TPDU: Contents of Secured Packet from DL NAS TRANSPORT message 2.1.1

Coding:

BER-TLV:	D1	61	82	02	83	81	8B	5B	40	00	91	7F
	F6	00	00	00	00	00	00	00	4E	02	70	00
	00	49	15	02	00	10	10	B0	01	40	00	00
	00	00	00	00	93	8A	B4	08	49	71	14	29
	AA	31	22	07	00	A4	00	04	02	6F	61	22
	0F	00	D6	00	00	0A	52	34	00	80	00	52
	44	00	00	80	81	15	81	03	01	01	07	82
	02	81	82	72	0A	52	34	00	80	00	52	44
	00	00	80									

PROACTIVE COMMAND: REFRESH 2.1.1

Logically:

Command details:
Command number: 1
Command type: REFRESH
Command qualifier: Steering of Roaming
Device identities:
Source device: UICC
Destination device: ME
PLMNwAcT List:
1stPLMN: 254/003
1stACT: UTRAN
2ndPLMN: 254/004
2ndACT: GERAN

Coding:

BER-TLV:	D0	15	81	03	01	01	07	82	02	81	82	72
	0A	52	34	00	80	00	52	44	00	00	80	

TERMINAL RESPONSE: REFRESH 2.1.1

Logically:

Command details:
Command number: 1
Command type: REFRESH
Command qualifier: Steering of Roaming
Device identities:
Source device: ME
Destination device: UICC
Result:
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	07	82	02	82	81	83	01	00

Expected Sequence 2.2 Void

Expected Sequence 2.3: (Steering of Roaming via DL NAS TRANSPORT message with "Acknowledgement requested" and REFRESH command [Steering of Roaming])

Step	Direction	MESSAGE / Action	Comments

1	NG-SS	NG-RAN Cell 1 and NG-RAN Cell 2 transmit BCCH.	
2	USER → ME	The ME is switched on	The ME will perform Profile Download and USIM initialisation
3	UICC → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 2.3.1	If programmable non-removable UICC with a Test Applet is used (as defined in clause 27.0), the TERMINAL RESPONSE cannot be verified by the Test Applet and that the LOCATION STATUS Event has been successfully registered in the device after step 5 is implicitly verified at steps 8 and 19.
4	ME → UICC	FETCH	
5	UICC → ME	PROACTIVE COMMAND; SET UP EVENT LIST 2.3.1	
6a	ME → UICC	TERMINAL RESPONSE; SET UP EVENT LIST 2.3.1	
6b	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 2.3.0	This step is optional and applies in case the ME did not successfully register to NG-RAN cell 1 yet.
7	ME → NG-SS	The ME successfully registers to NG-RAN cell 1	
8	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 2.3.1	
9	NG-SS → ME	DL NAS TRANSPORT message 2.3.1	SOR header with: - ACK set to "acknowledgement requested" - List Type set to "secured packet"
10	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 2.3.1	The ME shall pass the message transparently to the UICC using the ENVELOPE (SMS-PP DOWNLOAD) command as specified in TS 31.111 [15] clause 7.1.1.1a
11	UICC → ME	SW1/SW2 '91 XX'	
12	ME → NG-SS	ME sends to NG-SS an acknowledgement in the Payload container IE of an UL NAS TRANSPORT message with Payload type IE set to "Steering of Roaming transparent container".	NOTE: this step can be performed in parallel or any point after step 13 and before step 18. [SOR transparent container 2.3.1 with Acknowledgement]
13	ME → UICC	FETCH	
14	UICC → ME	PROACTIVE COMMAND: REFRESH 2.3.1 [Steering of Roaming]	
15	ME → UICC	Update of EF_{FPLMN}	[Deletion of the entry with PLMN 254/003]
16	ME → UICC	TERMINAL RESPONSE: REFRESH 2.3.1	
17	UICC → ME	Proactive UICC session is terminated	
17a	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 2.3.1A	This step is optional and applies when the ME did not successfully register to the NG-RAN cell 2 yet. NOTE: this step and associated ENVELOPE: EVENT DOWNLOAD - LOCATION STATUS 2.3.1A is applicable from Rel-17 onwards implementations.
18	ME → NG-SS	The ME successfully registers to NG-RAN cell 2 within 6 minutes	NOTE: the ME might have registered to the Cell 2 before this step
19	ME → UICC	ENVELOPE: EVENT DOWNLOAD - Location Status 2.3.2	PLMN MCC/MNC 254/003, Normal service

DL NAS TRANSPORT message 2.3.1

Logically:

Message details (referring to TS 24.501, Figure 9.11.3.51.1)
Payload container type IE: "0100" (SOR transparent container)
SOR header:
SOR data type: "0" (SOR transparent container carries steering of roaming information)
List indication: "1" (list of preferred PLMN/access technology combinations is provided)
List type: "0" (The list type is a secured packet.)
ACK: "1" (acknowledgment requested)

Secured packet: as specified in TS 31.111 [15] clause 7.1.1.1a – TPDU Command Packet
Coding: (Security payload with 254/003 and 254/004 included in the NG-RAN PLMN List)

Coding:

40	00	91	7F	F6	00	00	00	00	00	00	00
4E	02	70	00	00	49	15	02	00	10	10	B0
01	40	00	00	00	00	00	00	64	D8	5D	E1
35	EB	A6	BF	AA	31	22	07	00	A4	00	04
02	6F	61	22	0F	00	D6	00	00	0A	52	34
00	08	00	52	44	00	08	00	81	15	81	03
01	01	07	82	02	81	82	72	0A	52	34	00
08	00	52	44	00	08	00					

SOR Transparent container in REGISTRATION REQUEST (Acknowledgement) 2.3.1

Logically:

Payload container details (referring to TS 24.501 Figure 9.11.3.51.4 and 9.11.3.51.6)
Payload container type IE: "0100" (SOR transparent container)
SOR header:
SOR data type: "1" (The SOR transparent container carries acknowledgement of successful reception of the steering of roaming information)

ENVELOPE: SMS-PP DOWNLOAD 2.3.1

Logically:

SMS-PP Download
Device identities:
Source device: Network
Destination device: UICC
SMS TPDU: Contents of Secured Packet from DL NAS TRANSPORT message 2.3.1

Coding:

BER-TLV:	D1	61	82	02	83	81	8B	5B	40	00	91	7F
	F6	00	00	00	00	00	00	00	4E	02	70	00
	00	49	15	02	00	10	10	B0	01	40	00	00
	00	00	00	00	64	D8	5D	E1	35	EB	A6	BF
	AA	31	22	07	00	A4	00	04	02	6F	61	22
	0F	00	D6	00	00	0A	52	34	00	08	00	52
	44	00	08	00	81	15	81	03	01	01	07	82
	02	81	82	72	0A	52	34	00	08	00	52	44
	00	08	00									

PROACTIVE COMMAND: SET UP EVENT LIST 2.3.1

Logically:

Command details:
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: UICC
Destination device: ME
Event List:
Event 1: Location status

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	03										

TERMINAL RESPONSE: SET UP EVENT LIST 2.3.1

Logically:

Command details:
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities:
Source device: ME
Destination device: UICC
Result:
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

PROACTIVE COMMAND: REFRESH 2.3.1

Logically:

Command details:
Command number: 1
Command type: REFRESH
Command qualifier: Steering of Roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwAcT List:
1st PLMN: 254/003
1st ACT: NG-RAN
2nd PLMN: 254/004
2nd ACT: NG-RAN

Coding:

BER-TLV:	D0	15	81	03	01	01	07	82	02	81	82	72
	0A	52	34	00	08	00	52	44	00	08	00	

TERMINAL RESPONSE: REFRESH 2.3.1

Logically:

Command details:
Command number: 1
Command type: REFRESH
Command qualifier: Steering of Roaming
Device identities:
Source device: ME
Destination device: UICC
Result:
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	07	82	02	82	81	83	01	00

ENVELOPE: EVENT DOWNLOAD - LOCATION STATUS 2.3.0

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: no service

Coding:

BER-TLV:	D6	0A	19	01	03	82	02	82	81	9B	01	02

ENVELOPE: EVENT DOWNLOAD - LOCATION STATUS 2.3.1

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: normal service
Location Information:
MCC & MNC: the mobile country and network code (MCC = 254, MNC = 001)
TAC: the tracking area code (000001)
NG-SS cell id: the cell identity value (0001 (36 bits))

Coding:

BER-TLV:	D6	17	19	01	03	82	02	82	81	1B	01	00
	13	0B	52	14	00	00	00	01	00	00	00	00
	1F											

ENVELOPE: EVENT DOWNLOAD - LOCATION STATUS 2.3.1A

Logically:

Event list: Location status

Device identities

Source device: ME

Destination device: UICC

Location status: limited service

Coding:

BER-TLV:	D6	0A	19	01	03	82	02	82	81	1B	01	01

ENVELOPE: EVENT DOWNLOAD - LOCATION STATUS 2.3.2

Logically:

Event list: Location status
Device identities
Source device: ME
Destination device: UICC
Location status: normal service
Location Information:
MCC & MNC: the mobile country and network code (MCC = 254, MNC = 003)
TAC: the tracking area code (000001)
NG-SS cell id: the cell identity value (0001 (36 bits))

Coding:

BER-TLV:	D6	17	19	01	03	82	02	82	81	1B	01	00
	13	0B	52	34	00	00	00	01	00	00	00	00
	1F											

Expected Sequence 2.4 (SMS-PP Data Download in several ENVELOPE commands after Steering of Roaming via DL NAS TRANSPORT long message with REFRESH command [Steering of Roaming])

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profile Download and USIM initialisation
2	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
3	NG-SS → ME	NG-SS send to ME DL NAS TRANSPORT long message 2.4.1 with acknowledgement not requested List Type is secured packet	SOR header with: ACK set to "acknowledgement not requested" List Type set to "secured packet"
4	ME→ UICC	ENVELOPE: SMS-PP DOWNLOAD 2.4.1	the ME shall pass the message transparently to the UICC using the ENVELOPE (SMS-PP DOWNLOAD) command as specified in TS 31.111 [15] clause 7.1.1.1a Note: Message is too long for one ENVELOPE command then it is cut in several ENVELOPE commands. 1st part of message
5	UICC → ME	SW1/SW2 90 00	
6	ME→ UICC	ENVELOPE: SMS-PP DOWNLOAD 2.4.2	2nd part of message
7	UICC → ME	SW1/SW2 90 00	
8	ME→ UICC	ENVELOPE: SMS-PP DOWNLOAD 2.4.3	3rd and last part of message
9	UICC → ME	SW1/SW2 91 XX	
10	ME→ UICC	FETCH	
11	UICC → ME	PROACTIVE COMMAND: REFRESH 2.4.1 [Steering of Roaming]	
12	ME→ UICC	TERMINAL RESPONSE: REFRESH 2.4.1	
13	UICC → ME	PROACTIVE UICC SESSION ENDED	
14	ME	Steering of Roaming procedure	As specified in TS 23.122 [29] clause 4.4.6 Note: The SoR procedure cannot be verified completely in this step. A verification of the complete SoR procedure is done in Expected Sequence 2.3

DL NAS TRANSPORT message 2.4.1

Logically:

Message details (referring to TS 24.501 Table 9.11.3.51.1)

Payload container type IE: "0100" (SOR transparent container)
SOR header:
SOR data type: "0" (SOR transparent container carries steering of roaming information)
List indication: "1" (list of preferred PLMN/access technology combinations is provided)

List type: "0" (The list type is a secured packet.)
ACK: "0" (acknowledgment not requested)
Secured packet as specified in TS 31.111 [15] clause 7.1.1.1a:

40	00	91	7F	F6	00	00	00	00	00	00	00
8C	07	00	03	1C	03	01	70	00	01	48	15
02	00	10	10	B0	01	40	00	00	00	00	00
00	02	99	54	A1	DC	40	46	7B	AA	82	01
2E	22	07	00	A4	00	04	02	6F	61	22	81
8C	00	D6	00	00	87	52	14	00	00	80	52
24	00	80	00	52	34	00	08	00	52	44	00
00	80	52	54	00	80	00	52	64	00	08	00
52	74	00	00	80	52	84	00	80	00	52	94
00	08	00	52	19	00	00	80	52	29	00	80
00	52	39	00	08	00	52	49	00	00	80	52
59	00	80	00	52	69	00	08	00	52	79	00
00	80	52	89	00	80	00	52	99	40	00	91
7F	F6	00	00	00	00	00	00	00	8C	05	00
03	1C	03	02	00	08	00	52	11	00	00	80
52	21	00	80	00	52	31	00	08	00	52	41
00	00	80	52	51	00	80	00	52	61	00	08
00	52	71	00	00	80	52	81	00	80	00	52
91	00	08	00	81	81	93	81	03	01	01	07
82	02	81	82	72	81	87	52	14	00	00	80
52	24	00	80	00	52	34	00	08	00	52	44
00	00	80	52	54	00	80	00	52	64	00	08
00	52	74	00	00	80	52	84	00	80	00	52
94	00	08	00	52	19	00	00	80	52	29	00
80	00	52	39	00	08	00	52	49	00	00	80
52	59	00	80	00	52	44	00	91	7F	F6	00
00	00	00	00	00	00	46	05	00	03	1C	03
03	69	00	08	00	52	79	00	00	80	52	89
00	80	00	52	99	00	08	00	52	11	00	00
80	52	21	00	80	00	52	31	00	08	00	52
41	00	00	80	52	51	00	80	00	52	61	00
08	00	52	71	00	00	80	52	81	00	80	00
52	91	00	08	00							

ENVELOPE: SMS-PP DOWNLOAD 2.4.1

Logically:

SMS-PP Download
Device identities
Source device: Network
Destination device: UICC
SMS TPDU 1st part of Secured Packet from DL NAS TRANSPORT message 2.4.1

Coding:

BER-TLV:	D1	81	A0	02	02	83	81	0B	81	99	40	00
	91	7F	F6	00	00	00	00	00	00	00	8C	07
	00	03	1C	03	01	70	00	01	48	15	02	00
	10	10	B0	01	40	00	00	00	00	00	00	02
	99	54	A1	DC	40	46	7B	AA	82	01	2E	22
	07	00	A4	00	04	02	6F	61	22	81	8C	00
	D6	00	00	87	52	14	00	00	80	52	24	00
	80	00	52	34	00	08	00	52	44	00	00	80
	52	54	00	80	00	52	64	00	08	00	52	74
	00	00	80	52	84	00	80	00	52	94	00	08
	00	52	19	00	00	80	52	29	00	80	00	52
	39	00	08	00	52	49	00	00	80	52	59	00
	80	00	52	69	00	08	00	52	79	00	00	80
	52	89	00	80	00	52	99					

ENVELOPE: SMS-PP DOWNLOAD 2.4.2

Logically:

SMS-PP Download
Device identities
Source device: Network
Destination device: UICC
SMS TPDU 2nd part of Secured Packet from DL NAS TRANSPORT message 2.4.1

Coding:

BER-TLV:	D1	81	A0	02	02	83	81	0B	81	99	40	00
	91	7F	F6	00	00	00	00	00	00	00	8C	05
	00	03	1C	03	02	00	08	00	52	11	00	00
	80	52	21	00	80	00	52	31	00	08	00	52
	41	00	00	80	52	51	00	80	00	52	61	00
	08	00	52	71	00	00	80	52	81	00	80	00
	52	91	00	08	00	81	81	93	81	03	01	01
	07	82	02	81	82	72	81	87	52	14	00	00
	80	52	24	00	80	00	52	34	00	08	00	52
	44	00	00	80	52	54	00	80	00	52	64	00
	08	00	52	74	00	00	80	52	84	00	80	00
	52	94	00	08	00	52	19	00	00	80	52	29
	00	80	00	52	39	00	08	00	52	49	00	00
	80	52	59	00	80	00	52					

ENVELOPE: SMS-PP DOWNLOAD 2.4.3

Logically:

SMS-PP Download
Device identities
Source device: Network
Destination device: UICC
SMS TPDU 3rd part of Secured Packet from DL NAS TRANSPORT message 2.4.1

Coding:

BER-TLV:	D1	59	02	02	83	81	0B	53	44	00	91	7F
	F6	00	00	00	00	00	00	00	46	05	00	03
	1C	03	03	69	00	08	00	52	79	00	00	80
	52	89	00	80	00	52	99	00	08	00	52	11
	00	00	80	52	21	00	80	00	52	31	00	08
	00	52	41	00	00	80	52	51	00	80	00	52
	61	00	08	00	52	71	00	00	80	52	81	00
	80	00	52	91	00	08	00					

PROACTIVE COMMAND: REFRESH 2.4.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of Roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwAcT List (27 entries)
1st PLMN: 254/001 1st ACT: GERAN
2nd PLMN: 254/002 2nd ACT: UTRAN
3rd PLMN: 254/003 3rd ACT: NG-RAN
4th PLMN: 254/004 4th ACT: GERAN
5th PLMN: 254/005 5th ACT: UTRAN

6th PLMN: 254/006	6th ACT: NG-RAN
7th PLMN: 254/007	7th ACT: GERAN
8th PLMN: 254/008	8th ACT: UTRAN
9th PLMN: 254/009	9th ACT: NG-RAN
10th PLMN: 259/001	10th ACT: GERAN
11th PLMN: 259/002	11th ACT: UTRAN
12th PLMN: 259/003	12th ACT: NG-RAN
13th PLMN: 259/004	13th ACT: GERAN
14th PLMN: 259/005	14th ACT: UTRAN
15th PLMN: 259/006	15th ACT: NG-RAN
16th PLMN: 259/007	16th ACT: GERAN
17th PLMN: 259/008	17th ACT: UTRAN
18th PLMN: 259/009	18th ACT: NG-RAN
19th PLMN: 251/001	19th ACT: GERAN
20th PLMN: 251/002	20th ACT: UTRAN
21st PLMN: 251/003	21st ACT: NG-RAN
22nd PLMN: 251/004	22nd ACT: GERAN
23rd PLMN: 251/005	23rd ACT: UTRAN
24th PLMN: 251/006	24th ACT: NG-RAN
25th PLMN: 251/007	25th ACT: GERAN
26th PLMN: 251/008	26th ACT: UTRAN
27th PLMN: 251/009	27th ACT: NG-RAN

Coding:

BER-TLV:	D0	81	93	81	03	01	01	07	82	02	81	82
	72	81	87	52	14	00	00	80	52	24	00	80
	00	52	34	00	08	00	52	44	00	00	80	52
	54	00	80	00	52	64	00	08	00	52	74	00
	00	80	52	84	00	80	00	52	94	00	08	00
	52	19	00	00	80	52	29	00	80	00	52	39
	00	08	00	52	49	00	00	80	52	59	00	80
	00	52	69	00	08	00	52	79	00	00	80	52
	89	00	80	00	52	99	00	08	00	52	11	00
	00	80	52	21	00	80	00	52	31	00	08	00
	52	41	00	00	80	52	51	00	80	00	52	61
	00	08	00	52	71	00	00	80	52	81	00	80
	00	52	91	00	08	00						

TERMINAL RESPONSE: REFRESH 2.4.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: Steering of Roaming

Device identities
- Source device: ME
- Destination device: UICC

Result
- General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	07	82	02	82	81	83	01	00

27.22.14.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1 to 2.4.

27.22.14.3 Steering of Roaming via REGISTRATION ACCEPT message

27.22.14.3.1 Definition and applicability

See clause 3.2.2.

27.22.14.3.2 Conformance requirement

The ME shall support the Proactive UICC: SMS-PP Data Download facility as defined in the following technical specifications:

- TS 31.111 [15] clause 5, clause 7.1, clause 8.1, clause 8.7, clause 8.13 and clause 11.
- TS 31.115 [28] clause 4.
- TS 23.038 [7] clause 4.

The ME shall support the Procedure for SMS-PP data download via REGISTRATION ACCEPT messages as defined in the following technical specifications:

- TS 31.111 [15] clause 7.1.1.1a.

The ME shall support the steering of roaming procedure as defined in:

- TS 23.122 [29] clause 4.4.6.

27.22.14.3.3 Test purpose

To verify that when the service "data download via SMS Point-to-point" is available in the USIM Service Table and the ME receives a REGISTRATION ACCEPT message that includes:

- a SOR transparent container information element with list type with value "0"= secure packet containing a secure packet constructed as an SMS-Deliver (as specified in TS 23.040 [5] with:
  - protocol identifier = SIM data download;
  - data coding scheme = class 2 message;

and the integrity check of the message was successful then the ME shall:

- pass the message transparently to the UICC using the ENVELOPE (SMS-PP DOWNLOAD) command as defined in TS 31.111 [15] clause 7.1.1.2;
- not display or alert the user;

Where the secure packet is coded as a Command Packet formatted as Short Message Point to Point (as specified in TS 31.115 [41])).

To verify that the ME interprets the UICC returns response correctly.

27.22.14.3.4 Method of Test

27.22.14.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the NG-SS.

The ME is connected to NG-SS and it has performed the Registration procedure.

The default NG-RAN UICC and the following parameters are used:

EF_{UST} (USIM Service Table)

EF_{UST} shall be configured as defined in 27.22.2D.1 with the exception that Service n°42 "Operator controlled PLMN selector with Access Technology" and Service n°127 "Control plane-based steering of UE in VPLMN" are available.

The NG-RAN UICC parameters are:

- one OTA Key Set for Remote Management with:
  - Key Version: 01
    - 1st key
      - Key Index (Kic): 01
      - Key Algorithm: Triple DES
      - Key value: 000102030405060708090A0B0C0D0E0F
    - 2nd key
      - Key Index (Kid): 02
      - Key Algorithm: Triple DES
      - Key value: 000102030405060708090A0B0C0D0E0F
    - 3rd key
      - Key Index (Kik): 03
      - Key Algorithm: Triple DES
      - Key value: 000102030405060708090A0B0C0D0E0F

The NG-RAN parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 02;
- Tracking Area Code (TAC) = 000001;
- NG-RAN Cell Id = 0001 (36 bits).

The elementary files are coded as USIM Application Toolkit default with the following exceptions:

- The "data download via SMS Point-to-point" service is available in the USIM Service Table.

Prior to this test, the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.14.3.4.2 Procedure

Expected Sequence 3.1 (SMS-PP Data Download after Steering of Roaming via REGISTRATION ACCEPT message with REFRESH command [Steering of Roaming])

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profile Download and USIM initialisation
2	ME → NG-SS	ME initiates registration to NG-RAN cell.	
3	NG-SS → ME	ME is successfully registered to NG-RAN NG-SS sends REGISTRATION ACCEPT message 3.1.1 with SOR transparent container	SOR header with: ACK set to "acknowledgement not requested" List Type set to "secured packet"
4	ME→ UICC	ENVELOPE: SMS-PP DOWNLOAD 3.1.1	the ME shall pass the message transparently to the UICC using the ENVELOPE (SMS-PP DOWNLOAD) command as specified in TS 31.111 [15] clause 7.1.1.1a
5	UICC → ME	SW1/SW2 91 XX	
6	ME→ UICC	FETCH	
7	UICC → ME	PROACTIVE COMMAND: REFRESH 3.1.1 [Steering of Roaming]	
8	ME→ UICC	TERMINAL RESPONSE: REFRESH 3.1.1	
9	UICC → ME	PROACTIVE UICC SESSION ENDED	
10	ME	Steering of Roaming procedure	As specified in TS 23.122 [29] clause 4.4.6 Note: the complete SOR procedure cannot be verified.

REGISTRATION ACCEPT message 3.1.1

Logically:

Including SOR transparent container IEI 73 (referring to TS 24.501 Table 8.2.7.1.1) defined as below

Message details (referring to TS 24.501 Figure 9.11.3.51.1)

SOR header:

SOR data type: "0" (SOR transparent container carries steering of roaming information)
List indication: "1" (list of preferred PLMN/access technology combinations is provided)

List type: "0" (The list type is a secured packet.)
ACK: "0" (acknowledgment not requested)
Secured packet as specified in TS 31.111 [15] clause 7.1.1.1a – TPDU Command Packet
Coding:

40	00	91	7F	F6	00	00	00	00	00	00	00
4E	02	70	00	00	49	15	02	00	10	10	B0
01	40	00	00	00	00	00	00	93	8A	B4	08
49	71	14	29	AA	31	22	07	00	A4	00	04
02	6F	61	22	0F	00	D6	00	00	0A	52	34
00	80	00	52	44	00	00	80	81	15	81	03
01	01	07	82	02	81	82	72	0A	52	34	00
80	00	52	44	00	00	80					

ENVELOPE: SMS-PP DOWNLOAD 3.1.1

Logically:

SMS-PP Download
Device identities
Source device: Network
Destination device: UICC
SMS TPDU Contents of Secured Packet from REGISTRATION ACCEPT message 3.1.1

Coding:

BER-TLV:	D1	61	82	02	83	81	8B	5B	40	00	91	7F
	F6	00	00	00	00	00	00	00	4E	02	70	00
	00	49	15	02	00	10	10	B0	01	40	00	00
	00	00	00	00	93	8A	B4	08	49	71	14	29
	AA	31	22	07	00	A4	00	04	02	6F	61	22
	0F	00	D6	00	00	0A	52	34	00	80	00	52
	44	00	00	80	81	15	81	03	01	01	07	82
	02	81	82	72	0A	52	34	00	80	00	52	44
	00	00	80									

PROACTIVE COMMAND: REFRESH 3.1.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of Roaming
Device identities
Source device: UICC
Destination device: ME
PLMNwAcT List:

1stPLMN:254/003
1stACT: UTRAN
2ndPLMN: 254/004
2ndACT: GERAN

Coding:

BER-TLV:	D0	15	81	03	01	01	07	82	02	81	82	72
	0A	52	34	00	80	00	52	44	00	00	80	

TERMINAL RESPONSE: REFRESH 3.1.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of Roaming
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	07	82	02	82	81	83	01	00

Expected Sequence 3.2 Void

Expected Sequence 3.3 (SMS-PP Data Download in several ENVELOPE commands after Steering of Roaming via REGISTRATION ACCEPT long message with REFRESH command [Steering of Roaming])

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	The ME is switched on	ME will perform Profile Download and USIM initialisation
2	ME → NG-SS	ME initiates registration to NG-RAN	
3	NG-SS → ME	ME is successfully registered to NG-RAN NG-SS sends REGISTRATION ACCEPT long message 3.3.1 with acknowledgement not requested List Type is secured packet	SOR header with: ACK set to "acknowledgement not requested" List Type set to "secured packet"
4	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 3.3.1	the ME shall pass the message transparently to the UICC using the ENVELOPE (SMS-PP DOWNLOAD) command as specified in TS 31.111 [15] clause 7.1.1.1a Note: Message is too long for one ENVELOPE command then it is cut in several ENVELOPE commands. 1st part of message
5	UICC → ME	SW1/SW2 90 00	
6	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 3.3.2	2nd part of message
7	UICC → ME	SW1/SW2 90 00	
8	ME → UICC	ENVELOPE: SMS-PP DOWNLOAD 3.3.3	3rd and last part of message
9	UICC → ME	SW1/SW2 91 XX	
10	ME → UICC	FETCH	

11	UICC → ME	PROACTIVE COMMAND: REFRESH 3.3.1 [Steering of Roaming]	
12	ME → UICC	TERMINAL RESPONSE: REFRESH 3.3.1	
13	UICC → ME	PROACTIVE UICC SESSION ENDED	
14	ME	Steering of Roaming procedure	As specified in TS 23.122 [29] clause 4.4.6 Note: the complete SOR procedure cannot be verified.

REGISTRATION ACCEPT message 3.3.1

Logically:

Including SOR transparent container IEI 73 (refering to TS 24.501 Table 8.2.7.1.1) defined as below

Message details (refering to TS 24.501 Table 9.11.3.51.1)

SOR header:

SOR data type: "0" (SOR transparent container carries steering of roaming information)
List indication: "1" (list of preferred PLMN/access technology combinations is provided)

List type: "0" (The list type is a secured packet.)
ACK: "0" (acknowledgment not requested)
Secured packet as specified in TS 31.111 [15] clause 7.1.1.1a:

40	00	91	7F	F6	00	00	00	00	00	00	00
8C	07	00	03	1C	03	01	70	00	01	48	15
02	00	10	10	B0	01	40	00	00	00	00	00
00	02	99	54	A1	DC	40	46	7B	AA	82	01
2E	22	07	00	A4	00	04	02	6F	61	22	81
8C	00	D6	00	00	87	52	14	00	00	80	52
24	00	80	00	52	34	00	08	00	52	44	00
00	80	52	54	00	80	00	52	64	00	08	00
52	74	00	00	80	52	84	00	80	00	52	94
00	08	00	52	19	00	00	80	52	29	00	80
00	52	39	00	08	00	52	49	00	00	80	52
59	00	80	00	52	69	00	08	00	52	79	00
00	80	52	89	00	80	00	52	99	40	00	91
7F	F6	00	00	00	00	00	00	00	8C	05	00
03	1C	03	02	00	08	00	52	11	00	00	80
52	21	00	80	00	52	31	00	08	00	52	41
00	00	80	52	51	00	80	00	52	61	00	08
00	52	71	00	00	80	52	81	00	80	00	52
91	00	08	00	81	81	93	81	03	01	01	07
82	02	81	82	72	81	87	52	14	00	00	80
52	24	00	80	00	52	34	00	08	00	52	44
00	00	80	52	54	00	80	00	52	64	00	08
00	52	74	00	00	80	52	84	00	80	00	52
94	00	08	00	52	19	00	00	80	52	29	00
80	00	52	39	00	08	00	52	49	00	00	80
52	59	00	80	00	52	44	00	91	7F	F6	00
00	00	00	00	00	00	46	05	00	03	1C	03
03	69	00	08	00	52	79	00	00	80	52	89
00	80	00	52	99	00	08	00	52	11	00	00
80	52	21	00	80	00	52	31	00	08	00	52
41	00	00	80	52	51	00	80	00	52	61	00
08	00	52	71	00	00	80	52	81	00	80	00
52	91	00	08	00							

ENVELOPE: SMS-PP DOWNLOAD 3.3.1

Logically:

SMS-PP Download
Device identities
Source device: Network
Destination device: UICC
SMS TPDU 1st part of Secured Packet from REGISTRATION ACCEPT message 3.3.1

Coding:

BER-TLV:	D1	81	A0	02	02	83	81	0B	81	99	40	00
	91	7F	F6	00	00	00	00	00	00	00	8C	07
	00	03	1C	03	01	70	00	01	48	15	02	00
	10	10	B0	01	40	00	00	00	00	00	00	02
	99	54	A1	DC	40	46	7B	AA	82	01	2E	22
	07	00	A4	00	04	02	6F	61	22	81	8C	00
	D6	00	00	87	52	14	00	00	80	52	24	00
	80	00	52	34	00	08	00	52	44	00	00	80
	52	54	00	80	00	52	64	00	08	00	52	74
	00	00	80	52	84	00	80	00	52	94	00	08
	00	52	19	00	00	80	52	29	00	80	00	52
	39	00	08	00	52	49	00	00	80	52	59	00
	80	00	52	69	00	08	00	52	79	00	00	80
	52	89	00	80	00	52	99					

ENVELOPE: SMS-PP DOWNLOAD 3.3.2

Logically:

SMS-PP Download
Device identities
Source device: Network
Destination device: UICC
SMS TPDU 2nd part of Secured Packet from REGISTRATION ACCEPT message 3.3.1

Coding:

BER-TLV:	D1	81	A0	02	02	83	81	0B	81	99	40	00
	91	7F	F6	00	00	00	00	00	00	00	8C	05
	00	03	1C	03	02	00	08	00	52	11	00	00
	80	52	21	00	80	00	52	31	00	08	00	52
	41	00	00	80	52	51	00	80	00	52	61	00
	08	00	52	71	00	00	80	52	81	00	80	00
	52	91	00	08	00	81	81	93	81	03	01	01
	07	82	02	81	82	72	81	87	52	14	00	00
	80	52	24	00	80	00	52	34	00	08	00	52
	44	00	00	80	52	54	00	80	00	52	64	00
	08	00	52	74	00	00	80	52	84	00	80	00
	52	94	00	08	00	52	19	00	00	80	52	29
	00	80	00	52	39	00	08	00	52	49	00	00
	80	52	59	00	80	00	52					

ENVELOPE: SMS-PP DOWNLOAD 3.3.3

Logically:

SMS-PP Download
Device identities
Source device: Network
Destination device: UICC
SMS TPDU 3rd part of Secured Packet from REGISTRATION ACCEPT message 3.3.1

Coding:

BER-TLV:	D1	59	02	02	83	81	0B	53	44	00	91	7F
	F6	00	00	00	00	00	00	00	46	05	00	03
	1C	03	03	69	00	08	00	52	79	00	00	80
	52	89	00	80	00	52	99	00	08	00	52	11
	00	00	80	52	21	00	80	00	52	31	00	08
	00	52	41	00	00	80	52	51	00	80	00	52
	61	00	08	00	52	71	00	00	80	52	81	00
	80	00	52	91	00	08	00					

PROACTIVE COMMAND: REFRESH 3.3.1

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: Steering of Roaming

Device identities
- Source device: UICC
- Destination device: ME

PLMNwAcT List (27 entries)

1st PLMN:	254/001	1st ACT:	GERAN
2nd PLMN:	254/002	2nd ACT:	UTRAN
3rd PLMN:	254/003	3rd ACT:	NG-RAN
4th PLMN:	254/004	4th ACT:	GERAN
5th PLMN:	254/005	5th ACT:	UTRAN
6th PLMN:	254/006	6th ACT:	NG-RAN
7th PLMN:	254/007	7th ACT:	GERAN
8th PLMN:	254/008	8th ACT:	UTRAN
9th PLMN:	254/009	9th ACT:	NG-RAN
10th PLMN:	259/001	10th ACT:	GERAN
11th PLMN:	259/002	11th ACT:	UTRAN
12th PLMN:	259/003	12th ACT:	NG-RAN
13th PLMN:	259/004	13th ACT:	GERAN
14th PLMN:	259/005	14th ACT:	UTRAN
15th PLMN:	259/006	15th ACT:	NG-RAN
16th PLMN:	259/007	16th ACT:	GERAN
17th PLMN:	259/008	17th ACT:	UTRAN
18th PLMN:	259/009	18th ACT:	NG-RAN
19th PLMN:	251/001	19th ACT:	GERAN
20th PLMN:	251/002	20th ACT:	UTRAN
21st PLMN:	251/003	21st ACT:	NG-RAN
22nd PLMN:	251/004	22nd ACT:	GERAN
23rd PLMN:	251/005	23rd ACT:	UTRAN
24th PLMN:	251/006	24th ACT:	NG-RAN
25th PLMN:	251/007	25th ACT:	GERAN
26th PLMN:	251/008	26th ACT:	UTRAN
27th PLMN:	251/009	27th ACT:	NG-RAN

Coding:

BER-TLV:	D0	81	93	81	03	01	01	07	82	02	81	82
	72	81	87	52	14	00	00	80	52	24	00	80
	00	52	34	00	08	00	52	44	00	00	80	52
	54	00	80	00	52	64	00	08	00	52	74	00
	00	80	52	84	00	80	00	52	94	00	08	00
	52	19	00	00	80	52	29	00	80	00	52	39
	00	08	00	52	49	00	00	80	52	59	00	80
	00	52	69	00	08	00	52	79	00	00	80	52
	89	00	80	00	52	99	00	08	00	52	11	00
	00	80	52	21	00	80	00	52	31	00	08	00
	52	41	00	00	80	52	51	00	80	00	52	61

00	08	00	52	71	00	00	80	52	81	00	80
00	52	91	00	08	00						

TERMINAL RESPONSE: REFRESH 3.3.1

Logically:

Command details
Command number: 1
Command type: REFRESH
Command qualifier: Steering of Roaming
Device identities
Source device: ME
Destination device: UICC
Result
General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	07	82	02	82	81	83	01	00

27.22.14.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1 to 3.3.

27.22.15 Geographical location discovery

27.22.15.1 Definition and applicability

See clause 3.2.2.

27.22.15.2 Conformance requirement

The ME shall support the Geographical Location Request Command and Geographical Location Reporting Command as defined in:

- TS 31.111 [15] clause 6.4.40, clause 6.6.40 and clause 7.10.

27.22.15.3 Test purpose

To verify that the ME performs the proactive command Geographical Location Request and the envelope command Geographical Location Reporting allows the UICC to request and receive the current geographical location information from the ME when the ME is equipped with a positioning feature and it is enabled (e.g. autonomous GPS, Assisted GPS or Assisted GNSS).

27.22.15.4 Method of test

27.22.15.4.1 Initial conditions

The ME is connected to the USIM Simulator and connected to the NG-SS.

The NG-RAN parameters of the NG-SS are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;

- Tracking Area Code (TAC) = 000001;

The elementary files are coded as the default NG-RAN UICC .

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME is equipped with a positioning feature and it is enabled.

Test environment shall be set up to provide the needed input to the UE, in order for the UE to derive its location, if the UE uses Geolocation header for providing its geographical location. This shall be done by use of the test function Update UE Location Information defined in TS 38.509 [46], if supported by the UE. Otherwise, or in addition any other suitable method may also be used.

27.22.15.4.2 Procedure

Expected Sequence 1.1 (Geographical location discovery, Preferred GAD shapes is Ellipsoid point with altitude, NG-RAN)

Step	Direction	MESSAGE / Action	Comments
1	ME → NG-SS	ME successfully REGISTER with NG-RAN cell.	
2	UICC → ME	PROACTIVE COMMAND Geographical Location Request 1.1.1	
3	ME → UICC	FETCH	
4	UICC → ME	PROACTIVE COMMAND: Geographical Location Request 1.1.1	
5	ME → UICC	TERMINAL RESPONSE: Geographical Location Request 1.1.1	[normal ending]
6	ME → UICC	ENVELOPE Geographical Location Reporting 1.1.1	[The ME provides the GAD shapes of Ellipsoid point with altitude]

PROACTIVE COMMAND: Geographical Location Request 1.1.1

Logically:

Command details
Command number: 1
Command type: Geographical Location Request
Command qualifier: 0
Device identities
Source device: UICC
Destination device: ME
Geographical Location Parameters
Horizontal accuracy: horizontal accuracy not specified / best effort
Vertical coordinate: vertical coordinate is requested, (i.e. 3D location fix is preferred) but accuracy is not specified (best effort)
Velocity: Horizontal velocity requested
Preferred GAD shapes: Ellipsoid point with altitude
Preferred NMEA sentences: RMC
Preferred Maximum Response Time: $2^{\wedge 7}$ seconds

Coding:

BER-TLV:	D0	11	81	03	01	16	00	82	02	81	82	76
	06	81	81	01	08	01	07					

TERMINAL RESPONSE: Geographical Location Request 1.1.1

Logically:

Command details

Command number: 1
Command type: Geographical Location Request
Command qualifier: 0

Device identities

Source device: ME
Destination device: UICC

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	16	00	82	02	82	81	83	01	00

ENVELOPE: Geographical Location Reporting 1.1.1

Logically:

Device identities

Source device: ME
Destination device: UICC

GAD shapes

GAD shape: Degrees of latitude, Degrees of longitude and Altitude 8038D13852BC9A0071 (as an example)
Velocity: Horizontal Velocity 005B0006 (as an example)

Coding:

BER-TLV:	DD	15	82	02	82	81	77	0F	09	Note 1	04	Note 2

NOTE 1: The GAD shape values are present. The values of these nine bytes shall not be verified.

NOTE 2: The Velocity values are present. The values of these four bytes shall not be verified.

27.22.15.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1.

Annex A (normative): Details of Test-SIM (TestSIM)

The TestSIM shall be able to present the following data:

ANSWER TO RESET

Logically:

TS (Initial character): '3B'
T0 (Format character): '86' (Following interface characters: TD(1), number of historical characters: 6)
TD1: '00' (Following interface characters: none, Transfer protocol: T=0)
T1: 91
T2: 99
T3: 00
T4: 12
T5: C1
T6: 00

Coding:

Coding:	3B	86	00	91	99	00	12	C1	00

1. For a successful outcome of the command "Select MasterFile" the TestSIM shall send SW1/SW2 "9F 1B".

2. For a successful outcome of the command "Get Response with Length 1B" on the MasterFile the TestSIM shall respond:

RFU: '00 00'
Not allocated memory: '653 bytes'
File ID: Master File
Type of file: MF
RFU: 00 00 22 FF 01'
Length of following data: 14 bytes'
File characteristics:
Clock Stop: Not allowed
Min. frequency for GSM algorithm: 13/8 MHz
Technology identification: 3V Technology SIM
CHV1: disabled
DFs in current directory: 2
EFs in current directory: 8
Number of CHV and admin. Codes: 3
RFU byte 18: 00
CHV1 status:
False representations remaining: 3
RFU-bits 7-5: 000
Secret code: Initialized
Unlock CHV1 status:
False representations remaining: 10
RFU-bits 7-5: 000
Secret code: Initialized
CHV2 status:
False representations remaining: 3
RFU-bits 7-5: 000
Secret code: Initialized
Unlock CHV2 status:
False representations remaining: 10
RFU-bits 7-5: 000
Secret code: Initialized
RFU bytes 23: 00

Reserved for admin. management: 00 83 00 FF
Status Words
SW1 / SW2: Normal ending of command

Coding:

Coding	00	00	02	8D	3F	00	01	00	00	22	FF	01
	0E	9B	02	08	03	00	83	8A	83	8A	00	00
	83	00	FF	90	00							

1. For a successful outcome of the command "Select GSM" the TestSIM shall send SW1/SW2 "9F 1B".

2. For a successful outcome of the command "Select PLMN" the TestSIM shall send SW1/SW2 "9F 0F".

3. EF_{PLMN} Information:

RFU-Bytes 1-2: 00 00
File size: 102 bytes
File ID: 6F30
Type of File: Elementary file
Byte 8
RFU: 00
Access Condition:
UPDATE: CHV1
READ/SEEK: CHV1
RFU-bits 4-1: 1111
INCREASE: NEVER
INVALIDATE: NEVER
REHABILITATE: NEVER
File Status:
Invalidation status: File not invalidated
Readable/updateable: Not readable/updatable when invalidated
RFU-bits 8-4, 2: 0000 0
Length of following data: 2 bytes
Structure: Transparent
Length of record: 00

The initial coding of the EF_{PLMN} shall be FF FF ... FF (logically: Empty).

Annex B (normative): Details of terminal profile support

Table E.1: TERMINAL PROFILE support

Item	Byte.bit	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
1	1.1	Profile Download	TS 31.111 §5.2	R99	M		PD_Pro_Dwnl
2	1.2	SMS-PP data download	TS 31.111 §5.2	R99	C279		PD_SMS_PP
3	1.3	Cell Broadcast data download	TS 31.111 §5.2	R99	C279		PD_CB
4	1.4	Menu selection	TS 31.111 §5.2	R99	C267 AND C268		PD_Menu_sel
5	1.5	Bit =1 if SMS-PP data Download supported	TS 31.111 §5.2	R99	C279		PD_SMS_PP
6	1.6	Timer expiration	TS 31.111 §5.	R99	M		PD_TExpir
7	1.7	Bit=1 if Call control supported	TS 31.111 §5.2.	R99	C304 AND C279		PD_CC
8	1.8	Bit=1 if Call control supported	TS 31.111 §5.2	R99	C304 AND C279		PD_CC
9	2.1	Command result	TS 31.111 §5.2	R99	M		PD_Cmd_Res
10	2.2	Call Control by USIM	TS 31.111 §5.2	R99	C304 AND C279		PD_CC
11	2.3	Bit=1 if Call control supported	TS 31.111 §5.2	R99	C304 AND C279		PD_CC
12	2.4	MO short message control by USIM	TS 31.111 §5.2	R99	C279		PD_MO_SMS_CC
13	2.5	Bit=1 if Call control supported	TS 31.111 §5.2	R99	C304 AND C279		PD_CC
14	2.6	UCS2 Entry supported	TS 31.111 §5.2	R99	C203 AND C268		PD_UCS2_entry
15	2.7	UCS2 Display supported	TS 31.111 §5.2	R99	C204 AND C267		PD_UCS2_Display
16	2.8	Bit=1 if Display Text supported	TS 31.111 §5.2	R99	C267		PD_Display_Text
17	3.1	DISPLAY TEXT	TS 31.111 §5.2	R99	C267		PD_Display_Text
18	3.2	GET INKEY	TS 31.111 §5.2	R99	C267 AND C268		PD_Get_Inkey
19	3.3	GET INPUT	TS 31.111 §5.2	R99	C267 AND C268		PD_Get_Input
20	3.4	MORE TIME	TS 31.111 §5.2	R99	M		PD_More_Time
21	3.5	PLAY TONE	TS 31.111 §5.2 TS 11.14, 5	R99	C269		PD_Play_Tone
22	3.6	POLL INTERVAL	TS 31.111 §5.2 TS 11.14, 5	R99	M		PD_Poll_interval
23	3.7	POLLING OFF	TS 31.111 §5.2	R99	M		PD_Polling_Off
24	3.8	REFRESH	TS 31.111 §5.2	R99	M		PD_Refresh
25	4.1	SELECT ITEM	TS 31.111 §5.2	R99	C267 AND C268		PD_Select_Item
26	4.2	SEND SHORT MESSAGE	TS 31.111 §5.2	R99	C279		PD_Send_SMS
27	4.3	SEND SS	TS 31.111 §5.2	R99	C313		PD_Send_SS
28	4.4	SEND USSD	TS 31.111 §5.2	R99	C279		PD_Send_USSD
29	4.5	SET UP CALL	TS 31.111 §5.2	R99	C291		PD_SetUp_Call

Item	Byte.bit	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
30	4.6	SET UP MENU	TS 31.111 §5.2	R99	C267 AND C268		PD_SetUp_Menu
31	4.7	PROVIDE LOCAL INFORMATION (LOCI & IMEI)	TS 31.111 §5.2	R99	M		PD_Provide_Local
32	4.8	PROVIDE LOCAL INFORMATION (NMR)	TS 31.111 §5.2	R99	C280		PD_Provide_Local_NMR
33	5.1	SET UP EVENT LIST	TS 31.111 §5.2	R99	M		PD_Setup_Evt_List
34	5.2	Event: MT call	TS 31.111 §5.2	R99	C270 AND C279		PD_MT_Call
35	5.3	Event: Call connected	TS 31.111 §5.2	R99	C270 AND C279		PD_Call_Conn
36	5.4	Event: Call disconnected	TS 31.111 §5.2	R99	C270 AND C279		PD_Call_Disc
37	5.5	Event: Location status	TS 31.111 §5.2	R99	M		PD_Loc_Status
38	5.6	Event: User activity	TS 31.111 §5.2	R99	C268		PD_User_Act
39	5.7	Event: Idle screen available	TS 31.111 §5.2	R99	C267		PD_Idle_Scr_Avail
40	5.8	Event: Card reader status	TS 31.111 §5.2	R99	C206		PD_Evt_Rdr_Status
41	6.1	Event: Language selection	TS 31.111 §5.2	R99	C271		PD_Lang_Select
42	6.2	Event: Browser Termination	TS 31.111 §5.2	R99	C212 AND C267 AND C268		PD_Browser_Term
43	6.3	Event: Data available	TS 31.111 §5.2	R99	C223		PD_Data_Avail
44	6.4	Event: Channel status	TS 31.111 §5.2	R99	C223		PD_Evt_Ch_Status
45	6.5	Event:Access Technology Change	TS 31.111 §5.2	Rel-4	C306		PD_Evt_ATC
46	6.6	Event: Display Parameters Changed	TS 31.111 §5.2	Rel-4	C218 AND C267		PD_Disp_Resiz
47	6.7	Event: Local Connection	TS 31.111 §5.2	Rel-4	C224		PD_Evt_LC
48	6.8	Event: Network Search Mode Change	TS 31.111 §5.2	Rel-6	M		PD_Evt_NSMC
49	7.1	POWER ON CARD	TS 31.111 §5.2	R99	C206		PD_C_On
50	7.2	POWER OFF CARD	TS 31.111 §5.2	R99	C206		PD_C_Off
51	7.3	PERFORM CARD APDU	TS 31.111 §5.2	R99	C206		PD_C_APDU
52	7.4	GET READER STATUS (Card reader status)	TS 31.111 §5.2	R99	C206		PD_Get_Rdr_Status
53	7.5	GET READER STATUS (Card reader identifier)	TS 31.111 §5.2	R99	C208		PD_Get_Rdr_Id
54	7.6	RFU	TS 31.111 §5.2	R99	X		PD_RFU_54
55	7.7	RFU	TS 31.111 §5.2	R99	X		PD_RFU_55
56	7.8	RFU	TS 31.111 §5.2	R99	X		PD_RFU_56
57	8.1	TIMER MANAGEMENT (start, stop)	TS 31.111 §5.2	R99	M		PD_Timer_Mgt_Start_Stop
58	8.2	TIMER MANAGEMENT (get current value)	TS 31.111 §5.2	R99	M		PD_Timer_Val
59	8.3	PROVIDE LOCAL INFORMATION (date, time and time zone)	TS 31.111 §5.2	R99	M		PD_Provide_Local_D_Time
60	8.4	Bit=1 if Get Inkey	TS 31.111 §5.2	R99	C268		PD_Get_Inkey
61	8.5	SET UP IDLE MODE TEXT	TS 31.111 §5.2	R99	C267		PD_Stup_Id_Mod_Txt
62	8.6	RUN AT COMMAND (i.e. class "b" is supported)	TS 31.111 §5.2	R99	C209		PD_Run_AT

Item	Byte.bit	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
63	8.7	Bit=1 if Set UpCall	TS 31.111 §5.2	R99	C267 AND C268 AND C270		PD_SetUp_Call
64	8.8	Bit=1 if Call Control	TS 31.111 §5.2	R99	C304 AND C279		PD_CC
65	9.1	Bit=1 if Display Text	TS 31.111 §5.2	R99	C267		PD_Display_Text
66	9.2	SEND DTMF command	TS 31.111 §5.2	R99	C270 AND C279		PD_Send_DTMF
67	9.3	Bit = 1 if Provide Local Information (NMR) supported	TS 31.111 §5.2	R99	C279		PD_Provide_Local
68	9.4	PROVIDE LOCAL INFORMATION (language)	TS 31.111 §5.2	R99	C292		PD_Provide_Local_LS
69	9.5	PROVIDE LOCAL INFORMATION (Timing Advance)	TS 31.111 §5.2	R99	C280		PD_Provide_Local_TA
70	9.6	LANGUAGE NOTIFICATION	TS 31.111 §5.2	R99	C293		PD_Lang_Notif
71	9.7	LAUNCH BROWSER	TS 31.111 §5.2	R99	C212 AND C267 AND C268		PD_Launch_Brws
72	9.8	PROVIDE LOCAL INFORMATION (Access Technology)	TS 31.111 §5.2	Rel-4	M		PD_Provide_Local_AT
73	10.1	Soft keys support for SELECT ITEM	TS 31.111 §5.2	R99	C213		PD_Softkey_Select_Item
74	10.2	Soft Keys support for SET UP MENU	TS 31.111 §5.2	R99	C213		PD_Softkey_SetUp_Menu
75	10.3	RFU	TS 31.111 §5.2	R99	X		PD_RFU_75
76	10.4	RFU	TS 31.111 §5.2	R99	X		PD_RFU_76
77	10.5	RFU	TS 31.111 §5.2	R99	X		PD_RFU_77
78	10.6	RFU	TS 31.111 §5.2	R99	X		PD_RFU_78
79	10.7	RFU	TS 31.111 §5.2	R99	X		PD_RFU_79
80	10.8	RFU	TS 31.111 §5.2	R99	X		PD_RFU_80
81	11.1	Maximum number of soft keys available ('FF' = RFU)	TS 31.111 §5.2	R99	C214		PD_Max_SoftKey
82	11.2	Maximum number of soft keys available ('FF' = RFU)	TS 31.111 §5.2	R99	C214		PD_Max_SoftKey
83	11.3	Maximum number of soft keys available ('FF' = RFU)	TS 31.111 §5.2	R99	C214		PD_Max_SoftKey
84	11.4	Maximum number of soft keys available ('FF' = RFU)	TS 31.111 §5.2	R99	C214		PD_Max_SoftKey
85	11.5	Maximum number of soft keys available ('FF' = RFU)	TS 31.111 §5.2	R99	C214		PD_Max_SoftKey
86	11.6	Maximum number of soft keys available ('FF' = RFU)	TS 31.111 §5.2	R99	C214		PD_Max_SoftKey
87	11.7	Maximum number of soft keys available ('FF' = RFU)	TS 31.111 §5.2	R99	C214		PD_Max_SoftKey
88	11.8	Maximum number of soft keys available ('FF' = RFU)	TS 31.111 §5.2	R99	C214		PD_Max_SoftKey
89	12.1	OPEN CHANNEL	TS 31.111 §5.2	R99	C223		PD_Open_Ch
90	12.2	CLOSE CHANNEL	TS 31.111 §5.2	R99	C223		PD_Close_Ch
91	12.3	RECEIVE DATA	TS 31.111 §5.2	R99	C223		PD_Rx_Data
92	12.4	SEND DATA	TS 31.111 §5.2	R99	C223		PD_Send_Data
93	12.5	GET CHANNEL STATUS	TS 31.111 §5.2	R99	C223		PD_Get_Ch_Status
94	12.6	SERVICE SEARCH	TS 31.111 §5.2	Rel-4	C224		PD_Serv_Search
95	12.7	GET SERVICE INFORMATION	TS 31.111 §5.2	Rel-4	C224		PD_Get_Serv_Info
96	12.8	DECLARE SERVICE	TS 31.111 §5.2	Rel-4	C224		PD_Declare_Serv

Item	Byte.bit	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
97	13.1	BIP related to CSD supported by ME	TS 31.111 §5.2	R99	C207		PD_BIP_CSD
98	13.2	BIP related to GPRS supported by ME	TS 31.111 §5.2	R99	C222		PD_BIP_GPRS
99	13.3	BIP related to Bluetooth supported by ME	TS 31.111 §5.2	Rel-4	C225		PD_BIP_BT
100	13.4	BIP related to IrDA supported by ME	TS 31.111 §5.2	Rel-4	C226		PD_BIP_IrDA
101	13.5	BIP related to RS232 supported by ME	TS 31.111 §5.2	Rel-4	C227		PD_BIP_RS232
102	13.6	Number of channels supported by ME	TS 31.111 §5.2	R99	C257		PD_Nb_Channel
103	13.7	Number of channels supported by ME	TS 31.111 §5.2	R99	C257		PD_Nb_Channel
104	13.8	Number of channels supported by ME	TS 31.111 §5.2	R99	C257		PD_Nb_Channel
105	14.1	Number of characters supported down the ME	TS 31.111 §5.2	R99	C274		PD_Nb_Char
106	14.2	Number of characters supported down the ME	TS 31.111 §5.2	R99	C274		PD_Nb_Char
107	14.3	Number of characters supported down the ME	TS 31.111 §5.2	R99	C274		PD_Nb_Char
108	14.4	Number of characters supported down the ME	TS 31.111 §5.2	R99	C274		PD_Nb_Char
109	14.5	Number of characters supported down the ME	TS 31.111 §5.2	R99	C274		PD_Nb_Char
110	14.6	No display capability (i.e class "ND" is indicated)	TS 31.111 §5.2	Rel-8	C276		PD_Type_ND
111	14.7	No keypad available (i.e. class "NK" is indicated)	TS 31.111 §5.2	Rel-8	C277		PD_Type_NK
112	14.8	Screen Sizing Parameters	TS 31.111 §5.2	R99	C216		PD_Screen_Siz
113	15.1	Number of characters supported across the ME display	TS 31.111 §5.2	R99	C274		PD_Nb_Char_Disp
114	15.2	Number of characters supported across the ME display	TS 31.111 §5.2	R99	C274		PD_Nb_Char_Disp
115	15.3	Number of characters supported across the ME display	TS 31.111 §5.2	R99	C274		PD_Nb_Char_Disp
116	15.4	Number of characters supported across the ME display	TS 31.111 §5.2	R99	C274		PD_Nb_Char_Disp
117	15.5	Number of characters supported across the ME display	TS 31.111 §5.2	R99	C274		PD_Nb_Char_Disp
118	15.6	Number of characters supported across the ME display	TS 31.111 §5.2	R99	C274		PD_Nb_Char_Disp
119	15.7	Number of characters supported across the ME display	TS 31.111 §5.2	R99	C274		PD_Nb_Char_Disp
120	15.8	Variable size fonts Supported	TS 31.111 §5.2	R99	C274		PD_Var_Font
121	16.1	Display can be resized	TS 31.111 §5.2	R99	C218		PD_Disp_Resiz
122	16.2	Text Wrapping supported	TS 31.111 §5.2	R99	C274		PD_Txt_Wrap
123	16.3	Text Scrolling supported	TS 31.111 §5.2	R99	C274		PD_Txt_Scroll
124	16.4	Text attributes supported	TS 31.111 §5.2	Rel-5	C228		PD_Text_Attrib
125	16.5	RFU	TS 11.14, 5	R96	X		PD_RFU_125
126	16.6	Width reduction when in a menu	TS 31.111 §5.2	R99	C274		PD_Width_Reduc
127	16.7	Width reduction when in a menu	TS 31.111 §5.2	R99	C274		PD_Width_Reduc
128	16.8	Width reduction when in a menu	TS 31.111 §5.2	R99	C274		PD_Width_Reduc

Item	Byte.bit	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
129	17.1	TCP, UICC in client mode	TS 31.111 §5.2	R99	C220		PD_TCP
130	17.2	UDP, UICC in client mode	TS 31.111 §5.2	R99	C221		PD_UDP
131	17.3	TCP, UICC in server mode (i.e. class "k" is supported)	TS 31.111 §5.2	Rel-7	C262		PD_TCP_UICC_ServerMode
132	17.4	TCP, Terminal in server mode (i.e. class "k" is supported)	TS 31.111 §5.2	Rel-7	C263		PD_TCP_Terminal_ServerMode
133	17.5	UDP, Terminal in server mode (i.e. class "k" is supported)	TS 31.111 §5.2	Rel-7	C264		PD_UDP_Terminal_ServerMode
134	17.6	Direct communication channel (i.e. class "k" is supported)	TS 31.111 §5.2	Rel-10	C284		Direct_Com_Channel
135	17.7	E- UTRAN (i.e. if class "e" is supported)	TS 31.111 §5.2	Rel-8	C275		PD_E_UTRAN
136	17.8	HSDPA supported by ME	TS 31.111 §5.2	Rel-6	C258		PD_ HSDPA
137	18.1	DISPLAY TEXT (Variable time out)	TS 31.111 §5.2	Rel-4	C229		PD_Disp_Var_Timeout
138	18.2	GET INKEY (help is supported while waiting for immediate response or variable time out)	TS 31.111 §5.2	Rel-4	C231		PD_Get_Inkey_Help
139	18.3	USB (Bearer Independent protocol supported bearers, class "e")	TS 31.111 §5.2	Rel-4	C232		PD_USB
140	18.4	GET INKEY (Variable time out)	TS 31.111 §5.2	Rel-4	C229 AND C267 AND C268		PD_Get_Inkey_Var_Timeout
141	18.5	Reserved for 3GPP2: PROVIDE LOCAL INFORMATION (ESN)	TS 31.111 §5.2	R99	O		Reserved
142	18.6	CALL CONTROL on GPRS	TS 31.111 §5.2	Rel-5	C242		PD_CC_GPRS
143	18.7	PROVIDE LOCAL INFORMATION (IMEISV)	TS 31.111 §5.2	Rel-6	M		PD_Provide_Local_SV
144	18.8	PROVIDE LOCAL INFORMATION (search mode change)	TS 31.111 §5.2	Rel-6	M		PD_Provide_Local_SMC
145	19.1	Protocol Version	TS 31.111 §5.2	R99	X		Reserved
146	19.2	Protocol Version	TS 31.111 §5.2	R99	X		Reserved
147	19.3	Protocol Version	TS 31.111 §5.2	R99	X		Reserved
148	19.4	Protocol Version	TS 31.111 §5.2	R99	X		Reserved
149	19.5	RFU	TS 31.111 §5.2	R99	X		PD_RFU_149
150	19.6	RFU	TS 31.111 §5.2	R99	X		PD_RFU_150
151	19.7	RFU	TS 31.111 §5.2	R99	X		PD_RFU_151
152	19.8	RFU	TS 31.111 §5.2	R99	X		PD_RFU_152
153	20.1	Reserved by TIA/EIA/IS-820 [25]	TS 31.111 §5.2	R99	X		Reserved
154	20.2	Reserved by TIA/EIA/IS-820 [25]	TS 31.111 §5.2	R99	X		Reserved
155	20.3	Reserved by TIA/EIA/IS-820 [25]	TS 31.111 §5.2	R99	X		Reserved
156	20.4	Reserved by TIA/EIA/IS-820 [25]	TS 31.111 §5.2	R99	X		Reserved
157	20.5	Reserved by TIA/EIA/IS-820 [25]	TS 31.111 §5.2	R99	X		Reserved
158	20.6	Reserved by TIA/EIA/IS-820 [25]	TS 31.111 §5.2	R99	X		Reserved
159	20.7	Reserved by TIA/EIA/IS-820 [25]	TS 31.111 §5.2	R99	X		Reserved
160	20.8	Reserved by TIA/EIA/IS-820 [25]	TS 31.111 §5.2	R99	X		Reserved

Item	Byte.bit	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
161	21.1	WML browser supported	TS 31.111 §5.2	Rel-6	C233 AND C267		PD_WML
162	21.2	XHTML browser supported	TS 31.111 §5.2	Rel-6	C234 AND C267		PD_XHTML
163	21.3	HTML browser supported	TS 31.111 §5.2	Rel-6	C235 AND C267		PD_HTML
164	21.4	CHTML browser supported	TS 31.111 §5.2	Rel-6	C236 AND C267		PD_CHTML
165	21.5	RFU	TS 31.111 §5.2	R99	X		PD_RFU_165
166	21.6	RFU	TS 31.111 §5.2	R99	X		PD_RFU_166
167	21.7	RFU	TS 31.111 §5.2	R99	X		PD_RFU_167
168	21.8	RFU	TS 31.111 §5.2	R99	X		PD_RFU_168
169	22.1	Support of UTRAN PS with extended parameters	TS 31.111 §5.2	Rel-6	C259		PD_UTRAN_PS_Ext_Param
170	22.2	PROVIDE LOCAL INFORMATION (Battery state) if class "g" supported	TS 31.111 §5.2	Rel-6	C239		PD_Provide_Local_Batt
171	22.3	PLAY TONE (Melody tones & themed tones supported)	TS 31.111 §5.2	Rel-6	C241		PD_M_T_Tones
172	22.4	Multi-media in SET UP CALL supported (if class "h" supported)	TS 31.111 §5.2	Rel-6	C240		PD_Xmedia_Call
173	22.5	Toolkit-initiated GBA	TS 31.111 §5.2	Rel-6	C266		PD_Toolkit_GBA
174	22.6	RETRIEVE MULTIMEDIA MESSAGE, (if class "j" is supported)	TS 31.111 §5.2	Rel-6	C238		PD_Retrieve_MMS
175	22.7	SUBMIT MULTIMEDIA MESSAGE, (if class "j" is supported)	TS 31.111 §5.2	Rel-6	C238		PD_Submit_MMS
176	22.8	DISPLAY MULTIMEDIA MESSAGE, (if class "j" is supported)	TS 31.111 §5.2	Rel-6	C238 AND C267		PD_Display_MMS
177	23.1	SET FRAMES supported (if class "i" supported)	TS 31.111 §5.2	Rel-6	C237		PD_Set_Frames
178	23.2	GET FRAMES STATUS supported (if class "i" supported)	TS 31.111 §5.2	Rel-6	C237		PD_Get_Frames_Stat
179	23.3	MMS notification download (if class "j" is supported)	TS 31.111 §5.2	Rel-6	C238		PD_MMS_Notification
180	23.4	Alpha Identifier in REFRESH command supported by ME	TS 31.111 §5.2	Rel-7	C294		PD_Refresh_AlphaIdentifier
181	23.5	Geographical Location Reporting (if class "n" is supported)	TS 31.111 §5.2	Rel-8	C265		PD_Geo_Loaction_Reporting
182	23.6	Reserved for 3GPP2: PROVIDE LOCAL INFORMATION (MEID)	TS 31.111 §5.2	Rel-6	O		Reserved
183	23.7	PROVIDE LOCAL INFORMATION (NMR (UTRAN/E-UTRAN))	TS 31.111 §5.2	Rel-6	C278		PD_Provide_Local_NMR
184	23.8	USSD Data Download and application mode	TS 31.111 §5.2	Rel-6	C272		PD_USSD_DD
185	24.1	Maximum number of frames supported (if class "i" supported)	TS 31.111 §5.2	Rel-6	C256		PD_Max_Frames
186	24.2	Maximum number of frames supported (if class "i" supported)	TS 31.111 §5.2	Rel-6	C256		PD_Max_Frames

Item	Byte.bit	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
187	24.3	Maximum number of frames supported (if class "i" supported)	TS 31.111 §5.2	Rel-6	C256		PD_Max_Frames
188	24.4	Maximum number of frames supported (if class "i" supported)	TS 31.111 §5.2	Rel-6	C256		PD_Max_Frames
189	24.5	RFU	TS 31.111 §5.2	R99	X		PD_RFU_189
190	24.6	RFU	TS 31.111 §5.2	R99	X		PD_RFU_190
191	24.7	RFU	TS 31.111 §5.2	R99	X		PD_RFU_191
192	24.8	RFU	TS 31.111 §5.2	R99	X		PD_RFU_192
193	25.1	Event: browsing status (if class "ac" is supported)	TS 31.111 §5.2	Rel-6	C212 AND C267 AND C268		PD_Browser_Stat
194	25.2	Event: MMS Transfer status (if class "j" is supported)	TS 31.111 §5.2	Rel-6	C238		PD_MMS
195	25.3	Event Frame parameters changed (if class "i" supported)	TS 31.111 §5.2	Rel-6	C237		PD_Event_Frames
196	25.4	Event: I-WLAN Access status (if class "e" is supported)	TS 31.111 §5.2	Rel-7	C260		PD_RFU_Event_I-WLAN
197	25.5	Event: Network Rejection	TS 31.111 §5.2	Rel-8	C279		PD_Event_NW_Rejection
198	25.6	Reserved by ETSI	TS 31.111 §5.2	Rel-7	O		PD_Reserved
199	25.7	Event: Network Rejection for E-UTRAN	TS 31.111 §5.2	Rel-8	C283		PD_Event_NW_Rejection_E_UTRAN
200	25.8	Multiple access technologies supported in Event Access Technology Change and Provide Local Information	TS 31.111 §5.2	Rel-8	O		PD_Multiple_ACT
201	26.1	Event: CSG Cell Selection (if class "q" is supported)	TS 31.111 §5.2	Rel-9	C281		PD_Event_CSG_Cell_Selection
202	26.2	Reserved by ETSI	TS 31.111 §5.2	Rel-9	O		PD_Reserved
203	26.3	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_203
204	26.4	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_204
205	26.5	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_205
206	26.6	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_206
207	26.7	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_207
208	26.8	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_208
209	27.1	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_209
210	27.2	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_210
211	27.3	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_211
212	27.4	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_212
213	27.5	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_213
214	27.6	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_214
215	27.7	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_215
216	27.8	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_216
217	28.1	Alignment left supported	TS 31.111 §5.2	Rel-5	C243		PD_Text_Attrib_Left
218	28.2	Alignment center supported	TS 31.111 §5.2	Rel-5	C244		PD_Text_Attrib_Center
219	28.3	Alignment right supported	TS 31.111 §5.2	Rel-5	C245		PD_Text_Attrib_Right
220	28.4	Font size normal supported	TS 31.111 §5.2	Rel-5	C246		PD_Text_Attrib_Normal
221	28.5	Font size large supported	TS 31.111 §5.2	Rel-5	C247		PD_Text_Attrib_Large
222	28.6	Font size small supported	TS 31.111 §5.2	Rel-5	C248		PD_Text_Attrib_Small
223	28.7	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_223
224	28.8	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_224

Item	Byte.bit	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
225	29.1	Style normal supported	TS 31.111 §5.2	Rel-5	C249		PD_Text_Attrib_Styl_Norm
226	29.2	Style bold supported	TS 31.111 §5.2	Rel-5	C250		PD_Text_Attrib_Styl_Bold
227	29.3	Style italic supported	TS 31.111 §5.2	Rel-5	C251		PD_Text_Attrib_Styl_Italic
228	29.4	Style underlined supported	TS 31.111 §5.2	Rel-5	C252		PD_Text_Attrib_Styl_Underl
229	29.5	Style strikethrough supported	TS 31.111 §5.2	Rel-5	C253		PD_Text_Attrib_Styl_Strik
230	29.6	Style text foreground colour supported	TS 31.111 §5.2	Rel-5	C254		PD_Text_Attrib_Styl_Text_Fore
231	29.7	Style text background colour supported	TS 31.111 §5.2	Rel-5	C255		PD_Text_Attrib_Styl_Text_Back
232	29.8	RFU	TS 31.111 §5.2	Rel-6	X		PD_RFU_232
233	30.1	I-WLAN bearer support (if class "e" is supported)	TS 31.111 §5.2	Rel-7	C260		PD_I-WLAN
234	30.2	Proactive UICC: PROVIDE LOCAL INFORMATION (WSID of the current I-WLAN connection)	TS 31.111 §5.2	Rel-7	C260		PD_Provide_Local_WSID_WLAN
235	30.3	TERMINAL APPLICATIONS (i.e. class "k" is supported)	TS 31.111 §5.2	Rel-7	C261		PD_Terminal_Applications
236	30.4	"Steering of Roaming" REFRESH support	TS 31.111 §5.2	Rel-7	M		PD_Steering_Of_Roaming
237	30.5	Reserved by ETSI	TS 31.111 §5.2	Rel-7	O		PD_Reserved
238	30.6	Proactive UICC: Geographical Location Request (if class "n" is supported)	TS 31.111 §5.2	Rel-8	C265		PD_Geo_Loaction_Request
239	30.7	Reserved by ETSI	TS 31.111 §5.2	Rel-8	O		PD_Reserved
240	30.8	"Steering of Roaming for I-WLAN" REFRESH support	TS 31.111 §5.2	Rel-8	C260		PD_Steering_Of_Roaming _I-WLAN
241	31.1	Reserved by ETSI	TS 31.111 §5.2	Rel-9	O		PD_Reserved
242	31.2	Support of CSG cell discovery (if class "q" is supported)	TS 31.111 §5.2	Rel-9	C282		PS_CSG_Cell_Discovery
243	31.3	Confirmation parameters supported for OPEN CHANNEL in Terminal Server Mode	TS 31.111 §5.2	Rel-9	C285		PD_Open_Channel_Conf_Parameters
244	31.4	Communication Control for IMS	TS 31.111 §5.2	Rel-10	C286		PD_IMS_COMMUNICATION_CONTROL
245	31.5	Support of CAT over the modem interface (if class "s" is supported)	TS 31.111 §5.2	Rel-10	C287		PD_CAT_Modem_Interface
246	31.6	Support for Incoming IMS Data event (if classes "e" and "t" are supported)	TS 31.111 §5.2	Rel-10	C288		PD_Incoming_IMS_Data_Event
247	31.7	Support for IMS Registration event (if classes "e" and "t" are supported)	TS 31.111 §5.2	Rel-10	C289		PD_IMS_Reg_Event
248	31.8	Reserved by ETSI	TS 31.111 §5.2	Rel-10	O		PD_Reserved
249	32.1	IMS support (if class "e" and "t" are supported)	TS 31.111 §5.2	Rel-10	C290		PD_UICC_ACCESS_IMS
250	32.2	PROVIDE LOCAL INFORMATION, H(e)NB IP address support (if class "v" is supported)	TS 31.111 §5.2	Rel-11	C307		PD_PLI_HeNB_IP_Address

Item	Byte.bit	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
251	32.3	PROVIDE LOCAL INFORMATION, H(e)NB surrounding macrocells support (if class "w" is supported)	TS 31.111 §5.2	Rel-11	C308		PD_PLI_HeNB_Sur_Macrocells
252	32.4	Reserved by ETSI	TS 31.111 §5.2	Rel-11	O		PD_Reserved
253	32.5	Reserved by ETSI	TS 31.111 §5.2	Rel-11	O		PD_Reserved
254	32.6	Reserved by ETSI	TS 31.111 §5.2	Rel-11	O		PD_Reserved
255	32.7	Reserved by ETSI	TS 31.111 §5.2	Rel-11	O		PD_Reserved
256	32.8	Reserved by ETSI (Support of refresh enforcement policy)	TS 31.111 §5.2	Rel-12	M		PD_Refresh_Enforcement_Policy
257	33.1	Reserved by ETSI	TS 31.111 §5.2	Rel-12	O		PD_Reserved
258	33.2	Reserved by ETSI	TS 31.111 §5.2	Rel-12	O		PD_Reserved
259	33.3	Reserved by ETSI	TS 31.111 §5.2	Rel-12	O		PD_Reserved
260	33.4	ProSe usage information reporting (used only if class "e" is supported)	TS 31.111 §5.2	Rel-12	C295		PD_ProSE
261	33.5	Reserved by ETSI	TS 31.111 §5.2	Rel-12	O		PD_Reserved
262	33.6	Event: WLAN Access status (if class "e" is supported)	TS 31.111 §5.2	Rel-13	C296		PD_WLAN_Access_St
263	33.7	WLAN bearer support (if class "e" is supported)	TS 31.111 §5.2	Rel-13	C297		PD_WLAN_Bearer
264	33.8	Proactive UICC: PROVIDE LOCAL INFORMATION (WLAN identifier of the current WLAN connection)	TS 31.111 §5.2	Rel-13	C298		PD_Provide_Local_WLAN_ID
265	34.1	URI support for SEND SHORT MESSAGE	TS 31.111 §5.2	Rel-13	C299		PD_URI_Send_Short_IMS
266	34.2	IMS URI supported for SET UP CALL	TS 31.111 §5.2	Rel-13	C300		PD_IMS_URI_Setup_call
267	34.3	Media Type "Voice" supported for SET UP CALL and Call Control by USIM	TS 31.111 §5.2	Rel-13	C301		PD_Voice_Media_USIM
268	34.4	Media Type "Video" supported for SET UP CALL and Call Control by USIM	TS 31.111 §5.2	Rel-13	C302		PD_Video_Media_USIM
269	34.5	Proactive UICC: PROVIDE LOCAL INFORMATION (E-UTRAN Timing Advance Information)	TS 31.111 §5.2	Rel-13	C283		PD_Provide_Local_EUTRAN_TA
270	34.6	Reserved by ETSI	TS 31.111 §5.2	Rel-13	O		PD_Reserved
271	34.7	Extended Rejection Cause Code in Event: Network Rejection for E-UTRAN	TS 31.111 §5.2	Rel-14	O		PD_EUTRAN_Extended_Reject_Cause_Code
272	34.8	Reserved by ETSI	TS 31.111 §5.2	Rel-13	O		PD_Reserved
273	35.1	Reserved by ETSI	TS 31.111 §5.2	Rel-14	O		PD_Reserved
274	35.2	Data Connection Status Change Event support – PDP Connection (if class "e" is supported)	TS 31.111 §5.2	Rel-14	C305		PD_Data_Connection_Status_Change_PDP
275	35.3	Data Connection Status Change Event support – PDN Connection (if class "e" is supported)	TS 31.111 §5.2	Rel-14	C283		PD_Data_Connection_Status_Change_PDN
276	35.4	Reserved by ETSI	TS 31.111 §5.2	Rel-14	O		PD_Reserved
277	35.5	Reserved by ETSI	TS 31.111 §5.2	Rel-14	O		PD_Reserved
278	35.6	Reserved by ETSI	TS 31.111 §5.2	Rel-14	O		PD_Reserved
279	35.7	Reserved by ETSI	TS 31.111 §5.2	Rel-14	O		PD_Reserved
280	35.8	Reserved by ETSI	TS 31.111 §5.2	Rel-14	O		PD_Reserved

Item	Byte.bit	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
281	36.1	Data Connection Status Change Event support – PDU Connection	TS 31.111 §5.2	Rel-15	C310		PD_Data_Connection_Status_Change_PDU
282	36.2	Event: Network Rejection for NG-RAN	TS 31.111 §5.2	Rel-15	C310		PD_Event_NW_Rejection_NR
283	36.3	Non-IP Data Delivery support (if class "e" and class "ai" are supported)	TS 31.111 §5.2	Rel-15	C311		PD_Non_IP_Data_Delivery
284	36.4	Support of PROVIDE LOCAL INFORMATION, Slice information	TS 31.111 §5.2	Rel-16	C310		PD_PLI_Slice_Information
285	36.5	REFRESH "Steering of Roaming" SOR-CMCI parameter support	TS 31.111 §5.2	Rel-17	C316		PD_Steering_Of_Roaming_CMCI
286	36.6	Event: Network Rejection for Satellite NG-RAN	TS 31.111 §5.2	Rel-17	X		PD_Event_NW_Rejection_nonTerrestrial
287	36.7	Support of CAG feature	TS 31.111 §5.2	Rel-17	C314		PD_CAG_feature
288	36.8	Support of Event: Slice Status Change	TS 31.111 §5.2	Rel-18	C317		PD_Event_Slices Status Change
289	37.1	Support of PROVIDE LOCAL INFORMATION, Rejected Slice information	TS 31.111 §5.2	Rel-18	C310		PD_PLI_Rejected Slice_Information
290	37.2	Reserved for 3GPP	TS 31.111 §5.2	Rel-15	X		
291	37.3	Reserved for 3GPP	TS 31.111 §5.2	Rel-15	X		
292	37.4	Reserved for 3GPP	TS 31.111 §5.2	Rel-15	X		
293	37.5	Reserved for 3GPP	TS 31.111 §5.2	Rel-15	X		
294	37.6	Reserved for 3GPP	TS 31.111 §5.2	Rel-15	X		
295	37.7	Reserved for 3GPP	TS 31.111 §5.2	Rel-15	X		
296	37.8	Reserved for 3GPP	TS 31.111 §5.2	Rel-15	X		
297	38.1	Reserved for 3GPP	TS 31.111 §5.2	Rel-15	X		
298	38.2	Reserved for 3GPP	TS 31.111 §5.2	Rel-15	X		
299	38.3	Reserved for 3GPP	TS 31.111 §5.2	Rel-15	X		
300	38.4	Reserved for 3GPP	TS 31.111 §5.2	Rel-15	X		
301	38.5	Reserved for 3GPP	TS 31.111 §5.2	Rel-15	X		
302	38.6	Reserved for 3GPP	TS 31.111 §5.2	Rel-15	X		
303	38.7	Reserved for 3GPP	TS 31.111 §5.2	Rel-15	X		
304	38.8	Reserved for 3GPP	TS 31.111 §5.2	Rel-15	X		
305	39.1	Proactive UICC: PROVIDE LOCAL INFORMATION (NG-RAN/Satellite NG-RAN Timing Advance Information)	TS 31.111 §5.2	Rel-16	C310 OR C315		PD_Provide_Local_NR_TA
306	39.2	Reserved for 3GPP	TS 31.111 §5.2	Rel-16	X		
307	39.3	Reserved for 3GPP	TS 31.111 §5.2	Rel-16	X		
308	39.4	Reserved for 3GPP	TS 31.111 §5.2	Rel-16	X		
309	39.5	Reserved for 3GPP	TS 31.111 §5.2	Rel-16	X		
310	39.6	Reserved for 3GPP	TS 31.111 §5.2	Rel-16	X		
311	39.7	Reserved for 3GPP	TS 31.111 §5.2	Rel-16	X		
312	39.8	Reserved for 3GPP	TS 31.111 §5.2	Rel-16	X		

C201	Void	
C202	Void	
C203	IF A.1/3 THEN M ELSE O.1	-- O_Ucs2_Entry
C204	IF A.1/15 THEN M ELSE O.1	-- O_Ucs2_Disp
C205	Void	
C206	IF A.1/7 THEN M ELSE O.1	-- O_Dual_Slot
C207	IF A.1/12 THEN M ELSE O.1	-- O_BIP_CSD
C208	IF (A.1/7 AND A.1/8) THEN M ELSE O.1	-- O_Dual_Slot AND O_Detach_Rdr
C209	IF A.1/9 THEN M ELSE O.1	-- O_Run_At
C210	Void	
C211	Void	
C212	IF A.1/10 THEN M ELSE O.1	-- O_LB

C213	IF A.1/11 AND A.1/85 THEN M for at least one of the bits 1 - 2 of byte 10	-- O_Soft_key AND O_No_Type_NK
C214	IF C213 THEN M for at least one, but not for all of the bits 1 - 8 of byte 11	-- O_Soft_key AND O_No_Type_NK (parameters)
C215	Void	
C216	IF A.1/13 AND A.1/84 THEN M ELSE O.1	-- O_Scr_Siz AND O_No_Type_ND
C217	Void	
C218	IF A.1/14 AND A.1/84 THEN M ELSE O.1	-- O_Scr_Resiz AND O_No_Type_ND
C219	Void	
C220	IF A.1/18 THEN M ELSE O.1	-- O_TCP
C221	IF A.1/17 THEN M ELSE O.1	-- O_UDP
C222	IF A.1/21 THEN M ELSE O.1	-- O_BIP_GPRS
C223	IF (A.1/12 OR A.1/21 OR A.1/148 OR A.1/132 OR A.1/133 OR (A.1/26 AND (A.1/27 OR A.1/28 OR A.1/29 OR A.1/30))) THEN M ELSE O.1	-- O_BIP_CSD OR O_BIP_GPRS OR O_UICC_ACCESS_IMS OR pc_BIP_eFDD OR pc_BIP_eTDD OR (O_BIP_Local AND (O_BT OR O_IrDA OR O_RS232 OR O_USB))
C224	IF (A1.26 AND (A.1/27 OR A.1/28 OR A.1/29 OR A.1/30)) THEN M ELSE O.1	-- O_BIP_Local AND (O_BT OR O_IrDA OR O_RS232 OR O_USB)
C225	IF A.1/26 AND A1.27 THEN M ELSE O.1	-- O_BIP_Local AND O_BT
C226	IF A.1/26 AND A1.28 THEN M ELSE O.1	-- O_BIP_Local AND O_IrDA
C227	IF A.1/26 AND A1.29 THEN M ELSE O.1	-- O_BIP_Local AND O_RS232
C228	IF (A.1/50 OR A.1/51 OR A.1/52 OR A.1/53 OR A.1/54 OR A.1/55 OR A.1/56 OR A.1/57 OR A.1/58 OR A.1/59 OR A.1/60 OR A.1/61 OR A.1/62) AND A.1/84 THEN M ELSE O.1	-- (O_TAT_AL OR O_TAT_AC OR O_TAT_AR OR O_TAT_FSN OR O_TAT_FSL OR O_TAT_FSS OR O_TAT_SN OR O_TAT_SB OR O_TAT_SI OR O_TAT_SU OR O_TAT_SS OR O_TAT_STFC OR O_TAT_STFB) AND O_No_Type_ND
C229	IF A.1/24 AND A.1/84 THEN M ELSE O.1	-- O_Duration AND O_No_Type_ND
C230	Void	
C231	IF (C229 OR (A.1/23 AND A.1/85)) AND A.1/5 THEN M ELSE O.1	-- O_Help AND ((O_Duration AND O_No_Type_ND) OR (O_Imm_Resp AND O_No_Type_NK))
C232	IF A.1/26 AND A.1/30 THEN M ELSE O.1	-- O_BIP_Local AND O_USB
C233	IF A.1/31 THEN M ELSE O.1	-- O_WML
C234	IF A.1/32 THEN M ELSE O.1	-- O_XHTML
C235	IF A.1/33 THEN M ELSE O.1	-- O_HTML
C236	IF A.1/34 THEN M ELSE O.1	-- O_CHTML
C237	IF A.1/37 AND A.1/84 THEN M ELSE O.1	-- O_Frames AND O_No_Type_ND
C238	IF A.1/38 THEN M ELSE O.1	-- O_MMS
C239	IF A.1/35 THEN M ELSE O.1	-- O_Batt
C240	IF A.1/36 AND A.1/84 AND A.1/85 AND A.1/87 THEN M ELSE O.1	-- O_Xmedia_Call AND O_No_Type_ND AND O_No_Type_NK AND O_No_Type_NS
C241	IF A.1/82 AND A.1/86 THEN M ELSE O.1	-- O_M_T_Tones AND O_No_Type_NA
C242	IF A.1/16 THEN M ELSE O.1	-- O_GPRS
C243	IF A.1/50 AND A.1/84 THEN M ELSE O.1	-- O_TAT_AL AND O_No_Type_ND
C244	IF A.1/51 AND A.1/84 THEN M ELSE O.1	-- O_TAT_AC AND O_No_Type_ND
C245	IF A.1/52 AND A.1/84 THEN M ELSE O.1	-- O_TAT_AR AND O_No_Type_ND
C246	IF A.1/53 AND A.1/84 THEN M ELSE O.1	-- O_TAT_FSN AND O_No_Type_ND
C247	IF A.1/54 AND A.1/84 THEN M ELSE O.1	-- O_TAT_FSL AND O_No_Type_ND

C248	IF A.1/55 AND A.1/84 THEN M ELSE O.1	-- O_TAT_FSS AND O_No_Type_ND
C249	IF A.1/56 AND A.1/84 THEN M ELSE O.1	-- O_TAT_SN AND O_No_Type_ND
C250	IF A.1/57 AND A.1/84 THEN M ELSE O.1	-- O_TAT_SB AND O_No_Type_ND
C251	IF A.1/58 AND A.1/84 THEN M ELSE O.1	-- O_TAT_SI AND O_No_Type_ND
C252	IF A.1/59 AND A.1/84 THEN M ELSE O.1	-- O_TAT_SU AND O_No_Type_ND
C253	IF A.1/60 AND A.1/84 THEN M ELSE O.1	-- O_TAT_SS AND O_No_Type_ND
C254	IF A.1/61 AND A.1/84 THEN M ELSE O.1	-- O_TAT_STFC AND O_No_Type_ND
C255	IF A.1/62 AND A.1/84 THEN M ELSE O.1	-- O_TAT_STFB AND O_No_Type_ND
C256	IF C237 THEN M for at least one of the bits 1 - 4 of byte 24	-- O_Frames AND O_No_Type_ND
C257	IF (A.1/12 OR A.1/21 OR A.1/132 OR A.1/133 OR A.1/148 OR (A1.26 AND (A.1/27 OR A.1/28 OR A.1/29 OR A.1/30))) THEN M for at least one of the bits 6 - 8 of byte 13	-- O_BIP_CSD OR O_BIP_GPRS OR pc_BIP_eFDD OR pc_BIP_eTDD OR O_UICC_ACCESS_IMS OR (O_BIP_Local AND (O_BT OR O_IrDA OR O_RS232 OR O_USB))
C258	IF A.1/66 THEN M ELSE O.1	-- O_HSDPA
C259	IF A.1/67 THEN M ELSE O.1	-- O_UTRAN_PS_Ext_Param
C260	IF A.1/70 THEN M ELSE O.1	-- O_I-WLAN
C261	IF A.1/71 THEN M ELSE O.1	-- O_Terminal_Applications
C262	IF A.1/72 THEN M ELSE O.1	-- O_TCP_UICC_ServerMode
C263	IF A.1/73 THEN M ELSE O.1	-- O_TCP_Terminal_ServerMode
C264	IF A.1/74 THEN M ELSE O.1	-- O_UDP_Terminal_ServerMode
C265	IF A.1/81 THEN M ELSE O.1	-- O_Geo_Location_Discovery
C266	IF A.1/83 THEN M ELSE O.1	-- O_Toolkit_GBA
C267	IF A.1/84 THEN M ELSE O.1	-- O_No_Type_ND
C268	IF A.1/85 THEN M ELSE O.1	-- O_No_Type_NK
C269	IF A.1/86 THEN M ELSE O.1	-- O_No_Type_NA
C270	IF A.1/87 THEN M ELSE O.1	-- O_No_Type_NS
C271	IF (A.1/88 AND A.1/161) THEN M ELSE O.1	-- O_No_Type_NL AND O_Lang_Select
C272	IF A.1/89 THEN M ELSE O.1	-- O_USSD_Data_DL
C273	Void	
C274	IF A.1/84 THEN O ELSE O.1	-- O_No_Type_ND
C275	IF (A.1/132 OR A.1/133) THEN M ELSE O.1	-- pc_BIP_eFDD OR pc_BIP_eTDD
C276	IF A.1/84 THEN O.1 ELSE M	-- O_No_Type_ND
C277	IF A.1/85 THEN O.1 ELSE M	-- O_No_Type_NK
C278	IF (A.1/134 OR A.1/139 OR A.1/140) THEN M ELSE O.1	-- O_UTRAN OR pc_eFDD OR pc_eTDD
C279	IF NOT A.1/135 THEN M ELSE O	-- NOT (O_EUTRAN_NO_UTRAN_NO_GERAN)
C280	IF A.1/64 THEN M ELSE O.1	-- O_GERAN
C281	IF A.1/136 THEN M ELSE O.1	-- O_Event_CSG_Cell_Selection
C282	IF A.1/137 THEN M ELSE O.1	-- O_CSG_Cell_Discovery
C283	IF (A.1/139 OR A.1/140) THEN M ELSE O.1	-- pc_eFDD OR pc_eTDD
C284	IF A.1/143 THEN M ELSE O.1	-- O_Direct_Com_Channel
C285	IF A.1/73 AND A.1/84 AND A.1/85 THEN M ELSE O.1	-- O_TCP_Terminal_ServerMode AND O_No_Type_ND AND O_No_Type_NK
C286	IF A.1/144 THEN M ELSE O.1	-- O_CC_IMS
C287	IF A.1/145 THEN M ELSE O.1	-- O_CAT_Modem_Interface
C288	IF A.1/146 THEN M ELSE O.1	-- O_Event_Incoming_IMS_Data
C289	IF A.1/147 THEN M ELSE O.1	-- O_Event_IMS_Registration
C290	IF A.1/148 THEN M ELSE O.1	-- O_UICC_ACCESS_IMS

C291	IF A.1/84 AND A.1/85 AND A.1/87 AND (NOT A.1/135) THEN M ELSE O	-- O_No_Type_ND AND O_No_Type_NK AND O_No_Type_NS AND (NOT O_EUTRAN_NO_UTRAN_NO_GERAN)
C292	IF A.1/162 THEN M ELSE O.1	-- O_Provide_Local_LS
C293	IF A.1/88 AND A.1/163 THEN M ELSE O.1	-- O_No_Type_NL AND O_Lang_Notif
C294	IF A.1/84 AND A.1/164 THEN M ELSE O.1	-- O_No_Type_ND AND O_Refresh_AlphaIdentifier
C295	IF A.1/165 THEN M ELSE O.1	-- O_ProSE
C296	IF A.1/166 THEN M ELSE O.1	-- O_WLAN_Access_Status
C297	IF A.1/167 THEN M ELSE O.1	-- O_WLAN_Bearer
C298	IF A.1/168 THEN M ELSE O.1	-- O_I-WLAN_OR_WLAN
C299	IF A.1/150 AND A.1/179 THEN M ELSE O.1	-- O_IMS AND O_SM-over-IP_without_MSISDN
C300	IF A.1/150 AND A.1/84 AND A.1/85 AND A.1/87 AND A.1/180 THEN M ELSE O.1	-- O_IMS AND O_No_Type_ND AND O_No_Type_NK AND O_No_Type_NS AND O_Voice_Call_with_URI
C301	IF A.1/169 THEN M ELSE O.1	-- O_Media_Type_Voice
C302	IF A.1/170 THEN M ELSE O.1	-- O_Media_Type_Video
C303	Void	
C304	IF A.1/87 THEN M ELSE O	-- O_No_Type_NS
C305	IF (A.1/64 OR A.1/134) THEN M ELSE O.1	-- O_GERAN OR O_UTRAN
C306	IF A.1/186 THEN O ELSE M	-- O_NB-IoT_only
C307	IF A.1/189 THEN M ELSE O.1	-- O_PLI_HeNB_IP_Address
C308	IF A.1/190 THEN M ELSE O.1	-- O_PLI_HeNB_Sur_Macrocells
C309	Void	
C310	IF A.1/187 THEN M ELSE O.1	-- pc_NG_RAN
C311	IF A.1/192 THEN M ELSE O.1	-- O_NIDD
C312	Void	
C313	IF (NOT A.1/135) AND A.1/78 THEN M ELSE O.1	-- (NOT O_EUTRAN_NO_UTRAN_NO_GERAN) AND O_AddInfo_SS
C314	IF (A.1/187 AND A.1/196) THEN M ELSE O.1	-- pc_NG_RAN AND pc_CAG
C315	IF A.1/197 THEN M ELSE O.1	-- pc_nonTerrestrialNetwork_r17
C316	IF (A.1/199 AND A.1/187) THEN M ELSE O.1	-- pc_NG_RAN AND pc_SORCMCI
C317	IF (A.1/187 AND A.1/200) THEN M ELSE O.1	-- pc_NG_RAN AND O_Slice_Status_change_Event
O.1	Allowed: Bit value ="0" or bit not present	

Annex C (informative): Change history

Meeting	Meeting	CP-doc	CR	REV	CAT	SUBJECT	NEW_VERS
2.0.0	2.0.0	TP-050016	-	-		Approved TP-27, March 2005	6.0.0
CT-28	CT-28	CP-050144	0001	-	F	Correction of coding in MT Call Event	6.1.0
CT-28	CT-28	CP-050144	0002	-	F	Correction of applicability table	6.1.0
CT-28	CT-28	CP-050144	0003	-	F	Essential Corrections	6.1.0
CT-28	CT-28	CP-050144	0004	-	F	Correction of coding in MT Call Event	6.1.0
CT-28	CT-28	CP-050144	0005	-	F	Removal of GET RESPONSE references	6.1.0
CT-29	CT-29	CP-050447	0006	-	F	Rel-6: Correction of release dependent EF values	6.2.0
CT-29	CT-29	CP-050447	0007	-	F	Correction of applicability and terminal profile support tables	6.2.0
CT-29	CT-29	CP-050447	0008	-	F	Correction of EF_BDN coding	6.2.0
CT-29	CT-29	CP-050447	0009	-	F	Incorrect Dialling Number string in clause 27.22.4.13.1 SEQ 1.9 for PCS 1900	6.2.0
CT-29	CT-29	CP-050447	0010	-	f	Essential corrections in display icons Setup Menu and Select Item	6.2.0
CT-29	CT-29	CP-050447	0011	-	F	Incorrect Ti Flag value for SET UP 1.4.1 in clause 27.22.4.16.1	6.2.0
CT-29	CT-29	CP-050447	0012	-	F	Correction of TP-MR (TP Message Reference) of the SMS SUBMIT TPDU submitted to the USS (Network)	6.2.0
CT-29	CT-29	CP-050447	0013	-	F	Corrections in the Logical description and BER encoding in clause 27.22.6.2 and 27.22.4.11	6.2.0
CT-29	CT-29	CP-050447	0014	-	F	Incorrect DCS in SMS-CB data download tests	6.2.0
CT-29	CT-29	CP-050447	0015	-	F	Essential Corrections in clause 27.22.8 MO SHORT MESSAGE CONTROL BY USIM	6.2.0
CT-29	CT-29	CP-050447	0016	-	B	Introduction of BDN tests for terminals not supporting BDN	6.2.0
CT-29	CT-29	CP-050447	0017	-	F	Essential Corrections	6.2.0
CT-29	CT-29	CP-050447	0018	-	F	Incorrect SMS-PP 1.4.1 TPDU in clause 27.22.4.22.1	6.2.0
CT-29	CT-29	CP-050447	0019	-	F	Missing interactions in Bearer Independent Protocol test cases	6.2.0
CT-29	CT-29	CP-050447	0020	-	F	Correction of Refresh tests	6.2.0
CT-29	CT-29	CP-050447	0022	-	F	Applicability of TC 27.22.4.7.1 and TCs related to FDN and BDN	6.2.0
CT-29	CT-29	CP-050447	0023	-	F	Essential correction to Terminal Profile table E.1	6.2.0
CT-29	CT-29	CP-050447	0024	-	F	Correction of CB message identifier	6.2.0
CT-29	CT-29	CP-050447	0025	-	B	Rel-6: Addition of new UCS2 Tests	6.2.0
CT-29	CT-29	CP-050447	0027	-	F	Incorrect Coding of SMS-PP (Data download) Message in clause 27.22.4.7.1 and 27.22.5.1	6.2.0
-	-	-	-	-	-	2005-10: Editorial corrections due to the CRs approved at CP-29	6.2.1
CT-30	CT-30	CP-050495	0028	-	F	Correction of Send SS (UCS2) tests	6.3.0
CT-30	CT-30	CP-050495	0029	-	F	Essential Corrections in clause 27.22.4.11	6.3.0
CT-30	CT-30	CP-050495	0030	-	F	Corrections to Select Item (icons support)	6.3.0
CT-30	CT-30	CP-050495	0031	-	F	27.22.7.4.1 Location Status Event (normal)	6.3.0
CT-30	CT-30	CP-050495	0032	-	F	Essential Corrections of Set Up Menu test	6.3.0
CT-30	CT-30	CP-050495	0033	-	F	Correction of applicability table and related addition of missing test sequences	6.3.0
CT-30	CT-30	CP-050495	0034	-	F	Correction in SMS-PP 1.4.1 TPDU of clause 27.22.4.22.1	6.3.0
CT-30	CT-30	CP-050495	0035	-	F	Essential Corrections of SMS-PP download message in Refresh test case	6.3.0
CT-30	CT-30	CP-050495	0036	-	F	Essential Correction in MO SHORT MESSAGE CONTROL BY USIM Deletion of sequence 1.9	6.3.0
CT-30	CT-30	CP-050495	0037	-	F	Deletion of SEQ 1.3 in clause 27.22.4.13.1	6.3.0
CT-31	CT-31	CP-060013	0041	-	F	Deletion of Send Data test sequence	6.4.0
CT-31	CT-31	CP-060013	0042	-	F	Essential correction of Provide Local Information (IMEI) test	6.4.0
CT-31	CT-31	CP-060013	0044	-	F	Essential Correction in SEQ 1.8 of clause 27.22.8	6.4.0
CT-31	CT-31	CP-060013	0045	-	F	Essential correction on 27.22.7.3.1 Call Disconnected Event	6.4.0
CT-31	CT-31	CP-060013	0050	-	F	Essential correction of Channel Data length in clause 27.22.4.30	6.4.0
CT-31	CT-31	CP-060014	0048	-	F	Essential Corrections in clause 27.22.4.11	6.4.0
CT-31	CT-31	CP-060014	0052	-	F	Essential Corrections in clause 27.22.8 MO SHORT MESSAGE CONTROL BY SIM	6.4.0
CT-31	CT-31	CP-060014	0049	-	F	Essential correction in SEQ 1.4 of clause 27.22.4.11.1 SEND SS (normal)	6.4.0
CT-31	CT-31	CP-060014	0047	-	F	Essential corrections of Run AT Command tests	6.4.0
CT-31	CT-31	CP-060014	0053	-	F	Essential corrections to SET UP CALL test sequences	6.4.0
CT-31	CT-31	CP-060015	0055	-	F	Essential Correction in TERMINAL RESPONSE coding of clause 27.22.4.31	6.4.0
CT-31	CT-31	CP-060015	0056	-	F	Essential corrections to Timer Expiration tests	6.4.0
CT-31	CT-31	CP-060015	0054	-	F	BER-TLV suppressions	6.4.0
CT-31	CT-31	CP-060157	0059	-	B	Add SMS PP Data Download RP-ERROR Test Case	6.4.0
CT-31	CT-31	CP-060022	0043	-	F	Essential Correction in SEQ 1.7 of clause 27.22.4.13.1	6.4.0
CT-31	CT-31	CP-060022	0046	-	F	Essential correction of Refresh test	6.4.0
CT-31	CT-31	CP-060022	0051	-	F	Essential correction of Channel Data length in Result TLV of clause 27.22.4.30	6.4.0

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CT-31	CT-31	CP-060022	0060	-	F	CR 31.124 Rel-6: Insertion of missing REFRESH (IMSI changing procedure) test cases	6.4.0
CT-31	CT-31	CP-060022	0057	-	F	Essential corrections of references	6.4.0
CT-32	CT-32	CP-060241	0061	-		Proposal to the TS 31.124 Split by referencing the relevant USAT Test procedures to TS 102 384	6.5.0
CT-32	CT-32	CP-060241	0062	-		Essential corrections on test cases 27.22.6.3 and 27.22.6.4 using record 2 in EF FDN	6.5.0
CT-32	CT-32	CP-060241	0063	-		Essential corrections on TC 27.22.6.4 sequence 4.1	6.5.0
CT-32	CT-32	CP-060241	0064	-		Essential corrections on SEND SHORT MESSAGE test cases	6.5.0
CT-32	CT-32	CP-060241	0065	-		Essential correction of text attributes tests	6.5.0
CT-32	CT-32	CP-060241	0066	-		Definition of appropriate QoS in BIP test cases related to GPRS for 3G	6.5.0
CT-32	CT-32	CP-060241	0071	-		Essential correction of Refresh test in 27.22.7.4.2, seq. 2.4	6.5.0
CT-32	CT-32	CP-060241	0074	-		Essential corrections of RUN AT Command tests	6.5.0
CT-32	CT-32	CP-060241	0067	-		Essential correction of tables B.1 and E.1	6.5.0
CT-32	CT-32	CP-060242	0068	-	F	Essential Correction in REGISTER 1.2B message coding of clause 27.22.4.11.1 SEND SS (normal)	6.5.0
CT-32	CT-32	CP-060242	0069	-	F	Essential correction of 27.22.4.13.1 SET UP CALL, seq 1.4	6.5.0
CT-32	CT-32	CP-060242	0070	-	F	Essential correction of second card reader test applicability	6.5.0
CT-32	CT-32	CP-060242	0072	-	F	Correction of TON/NPI coding for Call Control Test case	6.5.0
CT-32	CT-32	CP-060242	0073	-	F	Essential corrections on 27.22.4.11.1 sequence. 1.2	6.5.0
CT-32	CT-32	CP-060242	0075	-	F	Essential correction of BIP tests	6.5.0
CT-33	CT-33	CP-060389	0082	1	F	Wrong reference inside test requirement of TC 27.22.7.2.2	6.6.0
CT-33	CT-33	CP-060389	0087	1	F	Essential corrections of applicability table	6.6.0
CT-33	CT-33	CP-060389	0088	1	F	Essential correction of IMEISV coding for Provide Local Information	6.6.0
CT-33	CT-33	CP-060389	0089	1	F	Essential corrections of text attribute tests for Send USSD and Close channel	6.6.0
CT-33	CT-33	CP-060389	0090	1	F	Proposal to the TS 31.124 Split by referencing the relevant USAT Test procedures to TS 102 384	6.6.0
CT-33	CT-33	CP-060389	0091	1	F	Correction to the UCS2 coding in Setup Call test	6.6.0
CT-33	CT-33	CP-060389	0092	1	F	Essential correction of RUN AT Command for text attribute tests	6.6.0
CT-33	CT-33	CP-060389	0095	1	F	Correction of RECEIVE DATA tests	6.6.0
CT-33	CT-33	CP-060389	0096	1	F	Correction of terminology for USIM Service Table	6.6.0
CT-33	CT-33	CP-060389	0097	1	F	Correction of 2nd alpha identifier usages in SET UP CALL tests	6.6.0
CT-33	CT-33	CP-060389	0098	1	F	Correction of various typographical errors	6.6.0
CT-33	CT-33	CP-060389	0101	1	F	Essential corrections to OPEN CHANNEL text attribute test sequences	6.6.0
CT-33	CT-33	CP-060389	0078	1	F	Correction of 'Precedence class' values in Bearer Independent Protocol test cases	6.6.0
CT-33	CT-33	CP-060389	0076	1	F	Essential corrections on PROVIDE LOCAL INFORMATION test sequences	6.6.0
CT-33	CT-33	CP-060389	0080	2	F	Essential corrections on test sequences using the TLV data object Location Information	6.6.0
CT-33	CT-33	CP-060389	0100	2	F	Essential corrections to SET UP CALL (UCS2 Display) test sequences	6.6.0
CT-33	CT-33	CP-060389	0081	3	F	Essential corrections to REFRESH(normal) test sequence	6.6.0
CT-33	CT-33	CP-060389	0102	1	F	Essential corrections to SEND SS display tests concerning longForwardedToNumber	6.6.0
CT-33	CT-33	CP-060475	0086	1	F	Essential corrections of MMI entries in table E.1	6.6.0
CT-33	CT-33	CP-060475	0077	2	F	Corrections to SET UP CALL test case 27.22.4.13.1	6.6.0
CT-33	CT-33	CP-060475	0099	1	F	Essential corrections to SEND SS concerning longForwardedToNumber	6.6.0
CT-33	CT-33	CP-060475	0094	2	F	Corrections to MO SHORT MESSAGE CONTROL BY USIM tests	6.6.0
CT-33	CT-33	CP-060517	0084	1	F	Essential corrections Set Up Call, seq. 1.9	6.6.0
CT-34	CT-34	CP-060540	0103	-	F	Correction of APN Coding in Open Channel test case	6.7.0
CT-34	CT-34	CP-060540	0085	2	F	Essential corrections of BIP entries in table E.1	6.7.0
CT-34	CT-34	CP-060540	0110	2	F	Essential correction of Result TLV handling	6.7.0
CT-34	CT-34	CP-060540	0111	-	F	Essential correction of expected sequence in OPEN CHANNEL test case	6.7.0
CT-34	CT-34	CP-060727	0105	-	F	Some of the Applicability table content is missing when printed or in Print Layout mode	6.7.0
CT-34	CT-34	CP-060727	0106	1	F	Correction to SET UP CALL	6.7.0
CT-34	CT-34	CP-060727	0107	-	F	Correction to SEND SS	6.7.0
CT-34	CT-34	CP-060727	0058	1	B	Addition of REFRESH USIM Application Reset	6.7.0
CT-34	CT-34	CP-060727	0108	-	F	Essential corrections on SEND SS (UCS2 display) test cases	6.7.0
CT-34	CT-34	CP-060727	0109	-	F	Essential corrections on REFRESH TC 27.22.4.7.1	6.7.0
CT-34	CT-34	CP-060727	0104	1	F	Corrections in the interpretation of Katakana Character	6.7.0
CT-35	CT-35	CP-070063	0115	-	F	Essential correction of 27.22.5.2	6.8.0
CT-35	CT-35	CP-070063	0113	1	F	Essential correction of Terminal Profile Support table	6.8.0
CT-35	CT-35	CP-070063	0112	1	F	Essential correction of 27.22.4.13.1 Expected Sequence 1.7	6.8.0
CT-35	CT-35	CP-070065	0116	-	F	Essential correction of 27.22.4.7, seq. 1.7	6.8.0
CT-35	CT-35	CP-070065	0119	-	F	Essential correction of TC 27.22.7.4.1	6.8.0
CT-35	CT-35	CP-070065	0120	-	F	CR implementation error correction for 27.22.6.2 SEQ 2.2	6.8.0
CT-35	CT-35	CP-070065	0121	-	F	CR implementation error correction for 27.22.4.11.1 SEQ 1.4A	6.8.0

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CT-35	CT-35	CP-070065	0117	1	F	Essential clarification of Network Simulator selection	6.8.0
CT-35	CT-35	CP-070065	0122	1	F	Essential correction of 27.22.4.7.2 SEQ 2.2	6.8.0
CT-35	CT-35	CP-070065	0124	2	C	Addition of new expected sequence to the SMS-PP Data Download test case	6.8.0
CT-35	CT-35	CP-070065	0125	2	F	Addition of a new expected sequence to the SMS-CB Data Download test case	6.8.0
CT-36	CT-36	CP-070297	0127	2	F	Essential correction of test case applicability	6.9.0
CT-36	CT-36	CP-070297	0128	-	F	Correction of 27.22.4.2 applicability	6.9.0
CT-36	CT-36	CP-070297	0129	1	A	Essential correction of test case applicability for 27.22.6.1	6.9.0
CT-36	CT-36	CP-070297	0130	1	A	Essential correction on 27.22.8	6.9.0
CT-36	CT-36	CP-070297	0131	-	F	Essential correction on 27.22.5.1	6.9.0
CT-36	CT-36	CP-070297	0132	-	F	Essential correction on 27.22.4.11.1 sequence. 1.4 B	6.9.0
CT-36	CT-36	CP-070297	0133	-	A	Correction of reference to ISO/IEC 7816-3	6.9.0
2007-06	2007-06	-	-	-	-	Update to Rel-7 version (MCC)	7.0.0
CT-37	CT-37	CP-070610	0136	1	F	Essential Correction to 27.22.6.2	7.1.0
CT-37	CT-37	CP-070619	0137	-	F	Essential correction of variable timeout test case applicability	7.1.0
CT-37	CT-37	CP-070610	0138	-	F	Essential correction to 27.22.4.13.1, seq. 1.9	7.1.0
CT-37	CT-37	CP-070619	0139	-	F	Essential Correction to 27.22.6.1, Seq. 1.1	7.1.0
CT-37	CT-37	CP-070619	0140	-	F	Essential correction of references	7.1.0
CT-37	CT-37	CP-070619	0141	1	F	Essential correction of 27.22.4.13.1, sequence 1.7	7.1.0
CT-37	CT-37	CP-070619	0142	1	F	Test Cases dependant on Radio Access Clarification	7.1.0
CT-37	CT-37	CP-070619	0143	-	F	Essential correction of 27.22.4.7.1, sequence 1.6	7.1.0
CT-38	CT-38	CP-070843	0145	1	A	Essential correction of 27.22.8, sequence 1.3 in order to remove verification of the Alpha Identifier	7.2.0
CT-38	CT-38	CP-070843	0154	1	A	Essential correction of 27.22.4.7.1, sequence 1.6 caring of the missing requirements in TS 31.111	7.2.0
CT-38	CT-38	CP-070843	0146	1	A	Essential correction of 27.22.4.26.2.4.2, seq. 2.2 in order to remove the possibility of retrieving a deleted previously visited URL	7.2.0
CT-38	CT-38	CP-070843	0155	-	A	Correction to add optional support of Call Hold Supplementary Service	7.2.0
CT-38	CT-38	CP-070847	0147	-	F	Essential correction terminal profile indication for Local Connection Event	7.2.0
CT-38	CT-38	CP-070847	0149	-	F	Essential correction on test case 27.22.4.5.1	7.2.0
CT-38	CT-38	CP-070847	0150	-	F	Definition of test sequence 1.7 in test case 27.22.4.15	7.2.0
CT-38	CT-38	CP-070847	0151	-	F	Definition of test sequence 1.12 and 1.13 in test case 27.22.4.15	7.2.0
CT-38	CT-38	CP-070847	0152	-	F	Essential correction on test case 27.22.4.28.2.1 correcting wrong implementation of CR 0078 rev1 in C6-060547	7.2.0
CT-38	CT-38	CP-070847	0148	1	F	Introduction of Rel-7 test case applicability	7.2.0
CT-39	CT-39	CP-080172	0156	-	F	Essential correction to 27.22.4.15	7.3.0
CT-39	CT-39	CP-080172	0157	-	F	Essential correction of 27.22.8, seq. 1.3	7.3.0
CT-39	CT-39	CP-080172	0158	1	F	Essential correction regarding terminal capabilities	7.3.0
CT-39	CT-39	CP-080172	0159	-	F	Essential correction to network dependency of several tests	7.3.0
CT-40	CT-40	CP-080388	0160	1	F	Essential correction of icon test case applicability	7.4.0
CT-40	CT-40	CP-080388	0161	2	F	Essential correction to 27.22.6.4	7.4.0
CT-40	CT-40	CP-080388	0163	3	F	Essential correction of test case applicability of 27.22.6.2 and 27.22.4.11	7.4.0
CT-41	CT-41	CP-080588	0164	-	F	Essential correction of TC 27.22.4.12.1 Seq. 1.6	7.5.0
CT-41	CT-41	CP-080588	0165	-	F	Essential correction of test case applicability	7.5.0
CT-41	CT-41	CP-080588	0166	-	F	Essential correction of TC 27.22.7.8.1	7.5.0
CT-42	CT-42	CP-080906	0168	-	F	Essential correction of TC 27.22.6.5 seq. 5.1 applicability	7.6.0
CT-42	CT-42	CP-080906	0169	-	F	Essential correction of bearer parameters in browser tests	7.6.0
CT-42	CT-42	CP-080948	0170	3	A	Pre-conditions for Launch browser	7.6.0
CT-42	CT-42	CP-080948	0171	-	A	Essential correction of 27.22.4.26.2 Seq. 2.2	7.6.0
SP-42	SP-42	----------	-	-	-	Upgrade to Rel-8	8.0.0
CT-43	CT-43	CP-090194	0173	1	F	Inclusion of Rel-8 test case applicability and Rel-8 feature indication in the terminal profile content	8.1.0
CT-43	CT-43	CP-090194	0174	-	F	Essential correction of tables B.1 and E.1	8.1.0
CT-43	CT-43	CP-090194	0176	1	A	Essential correction to BIP tests - usage of ME's default channel identifier	8.1.0
CT-44	CT-44	CP-090459	0175	3	B	Introduction of steering of roaming test cases	8.2.0
CT-44	CT-44	CP-090460	0177	1	F	Test case and test case applicability changes for terminals with reduced USAT capabilities	8.2.0
CT-45	CT-45	CP-090718	0178	3	F	Essential correction to icon test applicability	8.3.0
CT-45	CT-45	CP-090718	0179	1	F	Update of table E.1 regarding E-UTRAN support indication	8.3.0
CT-45	CT-45	CP-090718	0180	1	F	Essential correction of 27.22.6.1 sequence 1.9	8.3.0
CT-45	CT-45	CP-090718	0181	-	F	Essential correction of 27.22.4.7.3, Seq. 3.2	8.3.0
CT-45	CT-45	CP-090718	0182	-	F	Essential correction of applicability and terminal profile table	8.3.0
-	-	----------	-	-	-	Correction of inconsistency spotted at implementation	8.3.1
CT-46	CT-46	CP-090999	0186	1	F	Essential correction of 27.22.4.7.3	8.4.0
CT-46	CT-46	CP-091000	0187	1	F	Update of TS 31.124 for terminals supporting E-UTRAN	8.4.0
CT-46	CT-46	CP-091000	0188	2	F	Introduction of OPEN CHANNEL tests for E-UTRAN	8.4.0

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SA-46	SA-46	----------	-	-	-	Upgrade to Rel-9	9.0.0
CT-47	CT-47	CP-100192	0189	1	B	Introduction of BIP tests for E-UTRAN	9.1.0
CT-47	CT-47	CP-100192	0190	1	B	Introduction of Network Rejection Event test	9.1.0
CT-47	CT-47	CP-100192	0191	1	B	Introduction of Provide Local Information tests for E-UTRAN	9.1.0
CT-47	CT-47	CP-100192	0192	1	B	Introduction of Event Download – Location Status tests for E-UTRAN	9.1.0
CT-47	CT-47	CP-100191	0194	-	F	Introduction of Rel-9 test case applicability	9.1.0
CT-47	CT-47	CP-100179	0195	1	A	Correction of typo error	9.1.0
CT-47	CT-47	CP-100191	0196	2	B	Dual Open Channel tests in TCP mode	9.1.0
CT-47	CT-47	CP-100191	0197	1	B	Open Channel tests for TCP mode and Default Bearer	9.1.0
CT-47	CT-47	CP-100191	0198	1	F	Correction of optional features table	9.1.0
CT-47	CT-47	CP-100179	0199	3	A	Correction of applicability for 'no alpha identifier presented' sequences	9.1.0
CT-47	CT-47	CP-100179	0200	-	A	Essential correction to the condition table	9.1.0
CT-48	CT-48	CP-100395	0202	-	F	Essential correction of 27.22.4.31.1 Seq. 1.5	9.2.0
CT-48	CT-48	CP-100395	0205	-	F	Essential correction of Table E.1 regarding Width reduction when in a menu	9.2.0
CT-48	CT-48	CP-100395	0207	-	F	Correction to TAC coding in Provide Local Information test	9.2.0
CT-48	CT-48	CP-100395	0201	1	B	Essential correction of table E.1	9.2.0
CT-48	CT-48	CP-100395	0204	1	F	Essential correction of 27.22.4.27.2 Seq 2.10 test case applicability	9.2.0
CT-48	CT-48	CP-100395	0206	1	F	Correction to applicability table	9.2.0
CT-48	CT-48	CP-100395	0208	1	B	Network Search mode test	9.2.0
CT-48	CT-48	CP-100395	0209	1	B	Event download, Network Search mode test	9.2.0
CT-48	CT-48	CP-100396	0203	1	B	Introduction of Steering of Roaming test for E-UTRAN	9.2.0
CT-49	CT-49	CP-100591	0218	3	A	Essential correction to Open Channel 27.22.4.27.2 sequence 2.4 test	9.3.0
CT-49	CT-49	CP-100592	0212	1	F	Update of references	9.3.0
CT-49	CT-49	CP-100593	0220	1	F	Essential correction to test case applicability of letter class C features	9.3.0
CT-49	CT-49	CP-100593	0214	1	F	Correction of 27.22.4.28.3. Seq 3.2	9.3.0
CT-49	CT-49	CP-100593	0219	1	F	Essential correction to SET UP CALL 27.22.4.13 sequence 1.1	9.3.0
CT-49	CT-49	CP-100613	0215	3	B	Addition of Access Technology change event download tests for E-UTRAN	9.3.0
CT-49	CT-49	CP-100613	0216	3	C	Addition of Open Channel test related to E-UTRAN network	9.3.0
CT-49	CT-49	CP-100613	0222	1	B	Addition of Call Control tests for E-UTRAN	9.3.0
CT-49	CT-49	CP-100620	0221	2	F	Essential correction of test 27.22.4.9.3	9.3.0
CT-50	CT-50	CP-100835	0242	1	B	Addition of Provide local information test , discovery of surrounding CSG cell	9.4.0
CT-50	CT-50	CP-100833	0234	1	F	Clarification of 'ELSE' parts in Table E.1	9.4.0
CT-50	CT-50	CP-100834	0235	1	F	Correction of TCP/UDP referencing errors in Table E.1	9.4.0
CT-50	CT-50	CP-100834	0236	1	F	LTE test cases - specifying that default E-UTRAN UICC should be used	9.4.0
CT-50	CT-50	CP-100834	0238	1	F	Correction of SET UP CALL sequence 1.1	9.4.0
CT-50	CT-50	CP-100830	0233	1	B	Definition of E-UTRAN/EPC ISIM-UICC for ISIM related testing	9.4.0
CT-50	CT-50	CP-100834	0239	1	F	Correction of references to non-existent data items in CLOSE CHANNEL(E-UTRAN/EPC)	9.4.0
					-	Correction of errors in implementation of CR 234 (MCC).	9.4.1
CT-51	CT-51	CP-110231	0217	4	B	Addition of Provide Local Information tests for multiple access technologies	9.5.0
CT-51	CT-51	CP-110230	0243	4	B	Introduction ISIM related SMS-PP Data Download tests	9.5.0
CT-51	CT-51	CP-110230	0244	6	B	Introduction ISIM related Send Short Message tests	9.5.0
CT-51	CT-51	CP-110231	0245	2	C	Optimization of SEND SMS test cases	9.5.0
CT-51	CT-51	CP-110231	0246	1	C	Optimization of SMS PP Download test case	9.5.0
CT-51	CT-51	CP-110231	0248		B	Introduction of Polling Off test for E-UTRAN	9.5.0
CT-51	CT-51	CP-110231	0250	1	F	Essential correction on BIP TCs for E-UTRAN/EPC	9.5.0
SP-51	SP-51					Automatic upgrade from previous version 9.5.0	10.0.0
CT-52	CT-52	CP-110503	0241	3	F	Addition of Event download test, CSG cell Selection	10.1.0
CT-52	CT-52	CP-110504	0252		F	Introduction ISIM related SMS-PP Data Download tests	10.1.0
CT-52	CT-52	CP-110504	0253	1	F	Introduction ISIM related Send Short Message tests	10.1.0
CT-53	CT-53	CP-110719	0255	3	F	Essential correction of the Terminal Profile entries in table E.1	10.2.0
CT-53	CT-53	CP-110719	0258	1	F	Essential correction of Send Short message tests	10.2.0
CT-53	CT-53	CP-110592	0259	1	A	Essential correction of Data Destination Address settings in BIP and Launch Browser tests	10.2.0
CT-53	CT-53	CP-110719	0261	1	F	Essential Correction to Tag length in Provide Local Information test	10.2.0
CT-53	CT-53	CP-110719	0262	1	F	Essential Correction to Network Rejection Event test	10.2.0
						Correction of implementation error in CR 255r3 (MCC)	10.2.1
CT-54	CT-54	CP-110904	0263		F	Essential correction of SMS-PP Data Download test cases	10.3.0
CT-54	CT-54	CP-110904	0265	1	F	Essential correction to Channel Status After Link Dropped in E-UTRA	10.3.0
CT-54	CT-54	CP-110904	0266	1	F	Correction to test sequence content 4.3 and 4.4 for test case 27.22.4.1 of Table B.1	10.3.0
CT-54	CT-54	CP-110904	0256	2	F	Essential correction to Steering of Roaming test case	10.3.0
CT-54	CT-54	CP-110906	0264	1	A	Essential correction to SMS-CB Applicability	10.3.0
CT-54	CT-54	CP-110906	0257	2	A	Essential correction to Play Tone test	10.3.0
CT-54	CT-54	CP-110907	0267		F	Correction of incorrect implementation of CR 255r3	10.3.0

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CT-55	CT-55	CP-120151	0269	1	A	Test applicability correction of Open Channel with user rejection tests	10.4.0
CT-55	CT-55	CP-120152	0271	2	F	Essential correction to test 27.22.4.15 Seq. 1.15	10.4.0
CT-55	CT-55	CP-120153	0268	3	B	Introduction of REFRESH with AID test	10.4.0
CT-56	CT-56	CP-120394	0270	2	A	Test applicability correction for terminals operating in PS mode	10.5.0
CT-56	CT-56	CP-120394	0275	1	A	Correction of expected Terminal Reponse for unsuccessful Open Channel commands	10.5.0
CT-56	CT-56	CP-120395	0277		F	Essential corrections to the Network Rejection Event test cases	10.5.0
CT-56	CT-56	CP-120395	0279		B	Introduction of test cases for Send Short Message and SMS PP data download over SGs (E-UTRAN)	10.5.0
CT-56	CT-56	CP-120395	0276	1	F	Essential correction of Open Channel with Bearer type 0B tests	10.5.0
CT-56	CT-56	CP-120395	0278	1	C	Test modification for Provide Local Information IMEI and IMEISV testing	10.5.0
CT-57	CT-57	CP-120629	0282	2	A	Essential correction of Launch Browser tests	10.6.0
CT-57	CT-57	CP-120629	0286	2	A	Essential correction of Launch Browser tests	10.6.0
CT-57	CT-57	CP-120630	0283		F	Correction of Terminal Profile entries in table E.1	10.6.0
CT-57	CT-57	CP-120630	0281	1	F	Correction of test sequence for PROVIDE LOCAL INFORMATION, Discovery of surrounding CSG cells	10.6.0
CT-57	CT-57	CP-120631	0280	1	F	Corrections to test sequence 27.22.7.18.1 for CSG Cell Selection	10.6.0
CT-57	CT-57	CP-120632	0284		F	Correction of network simulator dependencies of the tests in 27.22.7.4	10.6.0
CT-57	CT-57	CP-120633	0272	5	B	Addition of UICC Access to IMS tests	10.6.0
SP-57	SP-57					Automatic upgrade to Rel-11	11.0.0
CT-58	CT-58	CP-120875	0287	1	F	TERMINAL RESPONSE in steering of roaming test steps	11.1.0
CT-59	CT-59	CP-130149	0290	1	A	Applicability of tests for MEs with reduced capabilities	11.2.0
CT-60	CT-60	CP-130370	0285	6	B	Superseding of OPEN CHANNEL test sequence 2.1 by Default Bearer test sequence	11.3.0
CT-60	CT-60	CP-130370	0291	1	F	Removal of applicability condition C102	11.3.0
CT-60	CT-60	CP-130370	0292		F	Correction to the applicability of test case 27.22.4.7 seq. 4.1	11.3.0
CT-60	CT-60	CP-130370	0293		F	Correction to the applicability of test case 27.22.8 seq. 1.4	11.3.0
CT-60	CT-60	CP-130371	0296	2	F	Correction of test sequence for PROVIDE LOCAL INFORMATION, E-UTRAN Intra-Frequency and Inter-Frequency Measurements	11.3.0
CT-60	CT-60	CP-130370	0297	1	F	Change of test sequence for SMS-PP data download	11.3.0
CT-60	CT-60	CP-130373	0298	2	A	Changes in LAUNCH BROWSER test cases	11.3.0
CT-60	CT-60	CP-130370	0299	2	F	Correction of test sequence for PROVIDE LOCAL INFORMATION, NMR, UTRAN	11.3.0
CT-60	CT-60	CP-130370	0300	2	F	Essential correction to the applicability and test procedure of test case 27.22.4.10 Seq 1.9 & 27.22.5.1 Seq 1.9	11.3.0
CT-61	CT-61	CP-130532	0301	1	F	Correction of Terminal Profile evaluation	11.4.0
CT-61	CT-61	CP-130532	0304	1	F	Correction of chapter numbering in 27.22.7.15	11.4.0
CT-61	CT-61	CP-130532	0305	1	F	Correction to applicability information of test case 27.22.4.15 seq 1.10	11.4.0
CT-62	CT-62	CP-130791	0302	1	F	Correction of Terminal Profile evaluation for SET UP CALL bit	11.5.0
CT-62	CT-62	CP-130791	0307		F	Correction to test case 27.22.5.2 seq. 1.7	11.5.0
CT-62	CT-62	CP-130791	0308		F	Update the status of A.1/154	11.5.0
CT-62	CT-62	CP-130791	0309		F	Update of the Generic Test Procedure 1 (SMS-PP Data Download)	11.5.0
CT-63	CT-63	CP-140173	0310	1	F	Usage of URL in test cases for LAUNCH BROWSER command	11.6.0
CT-64	CT-64	CP-140428	0313	1	F	Clarification on test case for PROVIDE LOCAL INFORMATION, E-UTRAN Inter-Frequency Measurements	11.7.0
CT-64	CT-64	CP-140426	0311	2	B	Changes for validation of TI value	12.0.0
CT-64	CT-64	CP-140433	0314	1	F	Modification to test case 27.22.4.28.3 SEQ 3.2 (step 5)	12.0.0
CT-65	CT-65	CP-140705	0317	1	F	Open channel terminal response in case of modified parameters	12.1.0
CT-65	CT-65	CP-140705	0321	3	F	Change of test sequence for LAUNCH BROWSER with default URL	12.1.0
CT-65	CT-65	CP-140709	0316		F	Removal of applicability condition C133, C135, C136, C137 and C138	12.1.0
CT-65	CT-65	CP-140710	0315		F	Correction of Network Dependency of the TBD test sequence	12.1.0
CT-66	CT-66	CP-140965	0324	1	F	Change of test sequence for LAUNCH BROWSER with default URL	12.2.0
CT-66	CT-66	CP-140966	0323	3	F	Correction of usage of TP-Message-Reference (TP-MR) in Send Short Message 1.9	12.2.0
CT-67	CT-67	CP-150164	0411		B	Added column for Rel.12 in applicability table	12.3.0
CT-67	CT-67	CP-150164	0412	1	F	Update of reference to ETSI TS 102 221 and release scope	12.3.0
CT-67	CT-67	CP-150164	0416		F	Correction of OPEN CHANNEL Alpha Identifier handling and introduction of new alternative Terminal Response for GET CHANNEL STATUS Sequences 1.4 and 1.5 and CLOSE CHANNEL Sequence 3.2.	12.3.0
CT-67	CT-67	CP-150164	0417		F	Correction of usage of TP-Message-Reference (TP-MR) in remaining Send Short Message test cases	12.3.0
CT-68	CT-68	CP-150387	0419	3	C	Removal of mandatory clause	13.0.0
CT-68	CT-68	CP-150386	0420	3	C	Making features optional	13.0.0
CT-69	CT-69	CP-150562	0423		F	Typo in the Option A.1/74 for Class E: Terminal supports UDP, Terminal in Server Mode	13.1.0
CT-69	CT-69	CP-150562	0422	1	B	Addition of Rel.13 column to applicability table	13.1.0
CT-69	CT-69	CP-150562	0427	1	F	Correction of technical handling of features made optional by TR 31.901 within applicability table and terminal profile.	13.1.0

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CT-69	CT-69	CP-150562	0428	1	F	Correction to PLI, Inter-frequency UTRAN Measurements test case	13.1.0
CT-69	CT-69	CP-150562	0424	3	B	USAT Testing Enhancement by addition of REFRESH with IMSI changing procedure test sequences	13.1.0
CT-69	CT-69	CP-150562	0425	3	B	USAT Testing Enhancement by addition of REFRESH with IMSI changing procedure test sequences for E-UTRAN	13.1.0
CT-70	CT-70	CP-150828	0430	1	F	Correction of applicability table for Short Message Service (SMS) over SGs	13.2.0
CT-71	CT-71	CP-160144	0434		F	Correction of test case for Location status and access technology change events	13.3.0
CT-71	CT-71	CP-160144	0431	1	F	Correction of TERMINAL RESPONSE coding in 27.22.4.7.2 sequence 2.3	13.3.0
CT-71	CT-71	CP-160144	0432	1	D	Editorial corrections of 27.22.4.11.1 – Expected Sequence 1.5	13.3.0
CT-71	CT-71	CP-160144	0433	2	F	Inclusion of Rel-12 and Rel-13 feature indication in the terminal profile support in Annex B	13.3.0
CT-72	CT-72	C6-160214	0435		F	Addition of execution parameter to the applicability of TC 27.22.4.28.3 sequence 3.2	13.4.0
CT-72	CT-72	C6-160333	0441		F	Clarification of ME behavior after 3G session reset for E-UTRAN	13.4.0
CT-72	CT-72	C6-160237	0440		F	Correction to Test Case 27.22.4.15	13.4.0
CT-72	CT-72	C6-160262	0437	2	F	Addition of note to TC 27.22.4.7.2 Seq. 2.6/7 and TC 27.22.4.7.5 Seq. 5.1/2	13.4.0
CT-72	CT-72	C6-160266	0439	1	F	Correction of test case for Location status and access technology change events	13.4.0
CT-72	CT-72	C6-160278	0438	2	F	Essential correction of test case 27.22.4.14 for E-UTRAN	13.4.0
CT-72	CT-72	C6-160280	0436	1	F	Clarification of ME behavior after 3G session reset	13.4.0
CT-73	CT-73	C6-160402	0442	1	F	Essential correction of test case 27.22.4.14 Sequence 1.1	13.5.0
CT-73	CT-73	C6-160386	0443	1	F	Essential corrections on test case 27.22.4.7.3	13.5.0
CT-73	CT-73	C6-160373	0444	1	F	Clarification of ME behaviour after 3G session reset	13.5.0
CT-73	CT-73	C6-160393	0445		F	Essential correction to number of BIP channels	13.5.0
CT-73	CT-73	C6-160402	0446	1	F	Definition of expected EVENT DOWNLOAD - Location Status content in test case 27.22.7.4	13.5.0
CT-74	CT-74	C6-160515	0447		F	Bit in Terminal Profile for call control functionality	13.6.0
CT-74	CT-74	C6-160562	0449		F	Essential correction to test case on PROVIDE LOCAL INFORMATION	13.6.0
CT-74	CT-74	C6-160595	0448	1	F	Correction in initial conditions for test case for Open Channel (related to E-UTRAN)	13.6.0
CT-75	CT-75	C6-170090	0451	1	B	Modification of test cases 27.22.4.10.8 and 27.22.5.4 to test NB-IoT	13.7.0
CT-75	CT-75	C6-170097	0450	3	B	Updating some E-UTRAN test cases applicability to cover NB-IoT implementations	13.7.0
CT-75	CT-75	C6-170044	0452	-	B	Modification of E-UTRAN test sequences under cl. 27.22.4.15 and 27.22.4.14 to cover NB-IoT	13.7.0
0453	0453	C6-17045	0453	-	B	Modification of E-UTRAN test sequences under cl. 27.22.4.7.3 and 27.22.4.7.5 to test NB-IoT	13.7.0
SA-75	SA-75		-	-	13.7.0	Update to Rel-14 version (MCC)	14.0.0
					14.0.0	Correction of implementation error	14.0.1
CT-76	CT-76	C6-170246	0460	-	B	Modification of E-UTRAN BIP test sequences to verify NB-IoT	14.1.0
CT-76	CT-76	C6-170270	0459	1	B	Modification of E-UTRAN test sequences under cl. 27.22.7.4 and 27.22.7.17 to test NB-IoT	14.1.0
CT-76	CT-76	C6-170290	0461	2	B	Introduction of new test case for Call Control on EPS PDN connection	14.1.0
CT-77	CT-77	C6-170421	0466	-	F	Essential correction to test sequences related to Steering of roaming	14.2.0
CT-77	CT-77	C6-170422	0467	-	F	Conditions for URI support in SEND SHORT MESSAGE command	14.2.0
CT-77	CT-77	C6-170423	0468	-	F	Correction of AT Response in test cases for RUN AT COMMAND	14.2.0
CT-77	CT-77	C6-170520	0469	-	F	Essential correction to the applicability of URI support in SET UP CALL	14.2.0
CT-77	CT-77	C6-170480	0470	1	F	Clarification on the requested address during execution of test cases for OPEN CHANNEL	14.2.0
CT-77	CT-77	C6-170488	0471	3	F	Correction of wrong implementation of CRs in TS 31.124	14.2.0
CT-77	CT-77	C6-170504	0473	2	B	Introduction of new test sequences for EVENT DOWNLOAD in E-UTRAN	14.2.0
CT-77	CT-77	C6-170505	0474	3	F	Corrections of test case 27.22.10	14.2.0
CT-77	CT-77	C6-170506	0475	3	B	Adding content to FFS test sequences under 27.22.10	14.2.0
CT-78	CT-78	C6-170743	0476	5	B	Introduction of new test case for Call Control on PDP Context Activation	14.3.0
CT-78	CT-78	C6-170698	0477	1	F	Correction of AT Command in test cases for RUN AT COMMAND	14.3.0
CT-78	CT-78	C6-170634	0478	-	B	Usage of programmed USIM for execution of test cases	14.3.0
CT-78	CT-78	C6-170693	0479	1	F	Fixed applicability table for Call Control on EPS PDN connection	14.3.0
CT-78	CT-78	C6-170637	0480	-	F	Correction of call flow for CALL CONTROL on EPS PDN Connection	14.3.0
CT-78	CT-78	C6-170647	0481	-	F	Correction of wrong implemention of CR 0471	14.3.0
CT-78	CT-78	C6-170747	0482	3	D	Introduction of note about applicability of some test cases	14.3.0
CT-78	CT-78	C6-170724	0483	1	D	Clause number correction of TC 27.22.10	14.3.0
CT-78	CT-78	C6-170725	0484	1	F	Introduction of general definition and environment for E-UTRAN in NB-S1 mode	14.3.0
CT-78	CT-78	C6-170721	0485	1	F	Clarification on the requested address during execution of TC 27.22.4.31 and 27.22.7.10	14.3.0

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CT-79	CT-79	C6-180079	0487	4	B	Introduction of new test cases on UICC interface in PSM & eDRX	14.4.0
CT-79	CT-79	C6-180061	0488	1	F	Correction of wrong implemenation of CR 0471	14.4.0
CT-80	CT-80	C6-180160	0489	2	B	Introduction of new test cases on change eCall mode	14.5.0
CT-80	CT-80	C6-180118	0490	-	B	Inclusion of Rel-14 feature indication in the terminal profile support in Annex B	14.5.0
CT-80	CT-80	C6-180164	0491	1	F	Correct incorrectly implemented conditions for testcases.	14.5.0
CT-80	CT-80					Update to release 15	
2018-09	CT#81	C6-180554	0497	1	F	Correction to expression of C291 in Table E.1	15.1.0
2018-09	CT#81	C6-180555	0498	1	F	Correction to TC 27.22.4.28 Seq. 3.2	15.1.0
2018-09	CT#81	C6-180556	0499	1	F	Correction to test case 27.22.5.4 Seq 4.1	15.1.0
2018-09	CT#81	C6-180557	0500	1	F	Correction to applicability of TC 27.22.8.1 Seq 1.10 to Seq. 1.17	15.1.0
2018-09	CT#81	C6-180558	0501	1	F	Correction to applicability of TC 27.22.4.15 Seq. 1.17	15.1.0
2018-09	CT#81	C6-180562	0502	1	F	TS 31.124: Adding applicability for Rel.15 terminals	15.1.0
2018-09	CT#81	C6-180331	0493	2	B	Addition of new test case to cl. 27.22.7.12	15.2.0
2018-09	CT#81	C6-180330	0494	-	F	Addition of Terminal Response verification to Test Sequences 1.3, 1.4 and 1.5 under 27.22.7.10	15.2.0
2018-09	CT#81	C6-180380	0495	1	B	Addition of new test cases for 3GPP PS Data Off	15.2.0
2018-09	CT#81	C6-180565	0496	3	B	Introduction of new test cases for Data Connection Status Change event	15.2.0
2018-09	CT#81	C6-180218	0492	-	D	Remove ambiquity in Location Status Event and Access Technology Change Event testcases.	15.2.0
2018-12	CT#82	C6-180678	0504	1	F	Correction to Network Rejection event code for E-UTRAN	15.3.0
2018-12	CT#82	C6-180634	0505	-	F	Correction of wrong implementation of CR 0488	15.3.0
2019-03	CT#83	C6-190027	0506	-	F	Correction of applicability of test case 27.22.7.4 Seq. 1.1	15.4.0
2019-03	CT#83	C6-190062	0507	2	F	Close channel with Command qualifier Set to 1	15.4.0
2019-03	CT#83	C6-190078	0508	3	F	Verify the maximum number of Open Channel requests handled by UE	15.4.0
2019-06	CT#84	C6-191017	0511	1	B	Extend the scope of 31.124 to cover 5G aspects	15.5.0
2019-12	CT#86	C6-190355	0513	1	F	Correction of wrong reference in TC 27.22.7.10.1 Seq 1.4	15.6.0
2019-12	CT#86	C6-190356	0514	1	F	Update test spec to correctly reflect global phonebook support for certain devices	15.6.0
2019-12	CT#86	C6-190444	0516	2	F	Update on Exceptions for NB-IoT	15.6.0
2019-12	CT#86	C6-190448	0518	2	F	Correction of conditional expected values in the TERMINAL PROFILE	15.6.0
2019-12	CT#86	CP-193263	0520	-	F	Correction of terminal profile support in Annex B	15.6.0
2020-03	CT#87e	CP-200085	0522	2	B	27.22.7.4 Seq 1.3_EVENT DOWNLOAD-LOCATION STATUS, NG-RAN	15.7.0
2020-03	CT#87e	CP-200085	0523	3	B	27.22.4.15 Seq 1.22_PLI_LOCATION_INFORMATION_NG-RAN	15.7.0
2020-03	CT#87e	CP-200085	0524	-	B	27.22.7.12 Seq 1.4_EVENT DOWNLOAD-Access Tech Event, NG-RAN	15.7.0
2020-03	CT#87e	CP-200085	0525	-	B	27.22.4.15 Seq 1.23_PLI_Acces_Technology_NG-RAN	15.7.0
2020-03	CT#87e	CP-200085	0526	-	B	27.22.7.17 Seq 1.3&1.4_EVENT DOWNLOAD-Registration_Reject Event, NG-RAN	15.7.0
2020-03	CT#87e	CP-200085	0527	-	B	T27.22.4.27.8_Open_Channel_related to NG-RAN	15.7.0
2020-06	CT#88e	CP-201142	0528	1	F	Correction of EF_AD in the default ISIM values	15.8.0
2020-06	CT#88e	CP-201142	0543	1	F	Correction of 27.22.7.12	15.8.0
2020-06	CT#88e	CP-201140	0529	1	F	Update the scope of 31.124 to cover 5G aspects	15.8.0
2020-06	CT#88e	CP-201140	0530	-	F	Cleanup of the feature options and applicability tables	15.8.0
2020-06	CT#88e	CP-201140	0531	-	F	Correction to TC 27.22.4.15	15.8.0
2020-06	CT#88e	CP-201140	0532	-	F	Correction to TC 27.22.4.27.8	15.8.0
2020-06	CT#88e	CP-201140	0533	1	F	Correction to TC 27.22.7.4	15.8.0
2020-06	CT#88e	CP-201140	0535	-	F	Correction to TC 27.22.7.17	15.8.0
2020-06	CT#88e	CP-201140	0536	-	F	Correction to TC 27.22.7.12	15.8.0
2020-06	CT#88e	CP-201140	0544	-	F	Correction to TC 27.22.4.7.5	15.8.0
2020-06	CT#88e	CP-201140	0545	-	F	Correction to TC 27.22.4.7.3	15.8.0
2020-06	CT#88e	CP-201152	0537	1	F	T27.22.4.27.8 Open_Channel_related to NG-RAN Correction to Applicability Table	15.8.0
2020-06	CT#88e	CP-201152	0538	2	B	Testcase 27.22.13 CALL CONTROL EVENT on PDU Session Establishment for NG-RAN (allowed and not allowed sequences)	15.8.0
2020-06	CT#88e	CP-201152	0539	3	B	Testcase 27.22.13 CALL CONTROL EVENT on PDU Session Establishment for NG-RAN (allowed with modification sequences)	15.8.0
2020-06	CT#88e	CP-201152	0540	1	B	TestCase 27.22.13 CALL CONTROL EVENT on PDU Session Establishment by OPEN CHANNEL for NG-RAN and which is allowed by the USIM.	15.8.0
2020-06	CT#88e	CP-201324	0541	4	B	Test Case Steering Of Roaming via DL NAS TRANSPORT message passed to USIM	15.8.0
2020-06	CT#88e	CP-201325	0542	3	B	Test Case Routing Indicator Data update via NAS message passed to USIM	15.8.0
2020-07	CT#88e	-	-	-	-	Update to Rel-16 version (MCC)	16.0.0
2020-09	CT#89e	CP-202135	0564	-	A	Test Case 27.22.4.27.8 / 27.22.13 - Correction on the coding of PDU session Type from Bearer description for NG-RAN in OPEN CHANNEL / TERMINAL RESPONSE	16.1.0
2020-09	CT#89e	CP-202135	0549	1	A	Correction to TC 27.22.14	16.1.0

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2020-09	CT#89e	CP-202135	0550	1	A	Correction to applicability of TC 27.22.4.27.8	16.1.0
2020-09	CT#89e	CP-202135	0548	1	A	Correction to TC 27.22.13	16.1.0
2020-09	CT#89e	CP-202135	0563	2	A	Correction to 31.124, clause 27.22.2D.1 Definition of NG-RAN UICC	16.1.0
2020-09	CT#89e	CP-202135	0547	1	A	Update of test requirement of some cases	16.1.0
2020-12	CT#90e	CP-203090	0569	-	A	Correction of TC 27.22.13.1	16.2.0
2020-12	CT#90e	CP-203090	0571	-	A	Correction of TC 27.22.7.12 Seq 1.4	16.2.0
2020-12	CT#90e	CP-203090	0590	-	A	Re-introduction of C6-200666	16.2.0
2020-12	CT#90e	CP-203090	0582	3	A	Update of test case 27.22.4.29-RECEIVE DATA	16.2.0
2020-12	CT#90e	CP-203090	0584	3	A	Update of test case 27.22.4.31,GET STATUS-after a link dropped during receiving data	16.2.0
2020-12	CT#90e	CP-203095	0573	1	A	Correction of EF_EPSNSC in clause 27.22.2B.1	16.2.0
2020-12	CT#90e	CP-203095	0576	-	A	Correction of Test case – TC 27_22_7_21	16.2.0
2020-12	CT#90e	CP-203095	0578	-	A	Correction of length bytes in TC 27.22.14.x	16.2.0
2021-03	CT#91e	CP-210080	0591	1	F	Correction of test case 27.22.4.29.1- RECEIVE DATA, the length of receive data exceeding the buffer size	16.3.0
2021-03	CT#91e	CP-210080	0592	1	B	Add a Expected sequence of TC 27.22.4.29.1- RECEIVE DATA, receiving 65535 Bytes of data	16.3.0
2021-03	CT#91e	CP-210080	0593	1	B	Add a Expected sequence of TC 27.22.4.29.1- RECEIVE DATA, send refresh after receiving data	16.3.0
2021-03	CT#91e	CP-210080	0594	1	B	Add TC- SEND DATA(NG-RAN)	16.3.0
2021-03	CT#91e	CP-210080	0595	1	F	Changes for event registration step required for the test cases verifying EVENT DOWNLOAD envelops to support programmable SIM defined in 27.0.	16.3.0
2021-03	CT#91e	CP-210082	0580	1	B	Test Case Steering Of Roaming via DL NAS TRANSPORT long message passed to USIM in several commands (Rel16)	16.3.0
2021-06	CT#92e	CP-211096	0598	1	F	Corrections to 5G USAT test cases	16.4.0
2021-06	CT#92e	CP-211096	0601	2	B	Test Case Steering Of Roaming via REGISTRATION ACCEPT message passed to USIM in ENVELOPE SMS-PP Data Download command(s)	16.4.0
2021-06	CT#92e	CP-211096	0602	2	B	Add a Expected sequence of TC 27.22.4.29.1- RECEIVE DATA, UICC in Server mode	16.4.0
2021-06	CT#92e	CP-211096	0603	-	B	Add a Expected sequence of TC 27.22.4.29.1- RECEIVE DATA, 2 consecutive RECEIVE DATA	16.4.0
2021-06	CT#92e	CP-211097	0599	-	F	Correction of the table of optional feature	16.4.0
2021-06	CT#92e	CP-211097	0600	1	F	Correction the Mnemonic of AER002	16.4.0
2021-09	CT#93e	CP-212087	0605	1	D	Update of TC 27.22.4.29.1	16.5.0
2021-09	CT#93e	CP-212087	0604	1	F	Correction of TC 27.22.4.29.1 Seq 1.4	16.5.0
2021-12	CT#94e	CP-213162	0607	1	F	Correction of TC 27.22.4.27.8 Seq 8.4	16.6.0
2021-12	CT#94e	CP-213162	0607	1	F	Correction of TC 27.22.4.29.1 Seq 1.3 and 1.4	16.6.0
2021-12	CT#94e	CP-213162	0609	1	F	Correction of TC 27.22.13.1	16.6.0
2021-12	CT#94e	CP-213162	0610	1	F	Correction of TC 27.22.14.1	16.6.0
2021-12	CT#94e	CP-213162	0611	-	F	Correction of TC 27.22.14.2	16.6.0
2021-12	CT#94e	CP-213162	0612	-	F	Correction of TC 27.22.14.3	16.6.0
2021-12	CT#94e	CP-213162	0614	1	F	Correction to TC 27.22.4.27.8 OPEN CHANNEL Seq 8.3	16.6.0
2021-12	CT#94e	CP-213162	0615	1	F	Correction to TC 27.22.13.1 CALL CONTROL Seq 1.6	16.6.0
2021-12	CT#94e	CP-213162	0615	1	F	Remove a Expected sequence of TC 27.22.4.29.1- RECEIVE DATA, UICC in Server Mode	16.6.0
2021-12	CT#94e	CP-213166	0616	-	F	Correction of terminal response in TC 27.22.7.10 Seq 1.3, 1.4 and 1.5	16.6.0
2021-12	CT#94e	CP-213166	0617	1	F	Correction of Table E.1 Terminal Profile	16.6.0
2022-02	-	-	-	-	-	MCC Editorial update to overcome processing problems and reformat some large tables	16.6.1
2022-03	CT#95e	CP-220129	0625	-	F	Correction of the Applicability table	16.7.0
2022-03	CT#95e	CP-220129	0627	1	F	Correction on TC 27.22.4.7.5 Seqence 5.1	16.7.0
2022-03	CT#95e	CP-220128	0606	4	B	Addition of TC 27.22.14.2 sequence 2.X	16.7.0
2022-03	CT#95e	CP-220128	0621	1	F	Update of Always-on PDU session cases	16.7.0
2022-03	CT#95e	CP-220128	0622	-	F	Update of the USAT applicability table	16.7.0
2022-03	CT#95e	CP-220128	0623	3	B	Add a TC for 27.22.4.7- REFRESH (IMSI changing procedure, NG-RAN)	16.7.0
2022-03	CT#95e	CP-220128	0624	2	B	Add a Expected sequence of TC 27.22.4.26-LAUNCH BROSWER,only NG-RAN bearer specified and gateway proxy identity	16.7.0
2022-03	CT#95e	CP-220128	0626	1	B	Add a TC for 27.22.4.7- REFRESH (SUPI_NAI changing procedure, NG-RAN)	16.7.0
2022-03	CT#95e	CP-220128	0628	1	F	Changes for command numbering in RECEIVE DATA test cases	16.7.0
2022-06	CT#96	CP-221162	0636	1	F	Correction of the Applicability Table B.1 and Annex Table E.1	16.8.0
2022-06	CT#96	CP-221163	0631	3	C	Correction of TC 27.22.14.2	16.8.0
2022-06	CT#96	CP-221163	0632	-	F	Correction of TC 27.22.4.29.1 Seq 1.4	16.8.0
2022-06	CT#96	CP-221163	0633	-	D	Alignment of EF_UST descriptions in 27.22.2x clauses	16.8.0
2022-06	CT#96	CP-221163	0630	-	F	SSC mode corrections for BIP test cases (related to NG-RAN)	16.8.0
2022-09	CT#97e	CP-222078	0638	1	F	Update of TC 27.22.4.31 Seq 1.6	16.9.0
2022-09	CT#97e	CP-222078	0639	1	F	Update of TC 27.22.14.2 Seq 2.3	16.9.0

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2022-09	CT#97e	CP-222078	0640	1	F	Update of applicability for TC 27.22.4.26 Seq. 8.1 and TC 27.22.4.7 Seq. 6.1 and 6.2	16.9.0
2022-09	CT#97e	CP-222078	0641	1	F	Update length of 5G-GUTI in EF5GS3GPPLOCI	16.9.0
2022-09	CT#97e	CP-222078	0643	-	F	Correction of Table E.1: TERMINAL PROFILE	16.9.0
2022-09	CT#97e	CP-222078	0644	1	F	Correction of TC 27.22.14.2	16.9.0
2022-09	CT#97e	CP-222078	0648	-	F	Update of TC 27.22.4.26 Seq 8.1	16.9.0
2022-09	CT#97e	CP-222078	0654	2	F	Correction of the tests in cl. 27.22.13	16.9.0
2022-09	CT#97e	CP-222080	0646	2	F	Correction to TC 27.22.14.2	16.9.0
2022-09	CT#97e	CP-222080	0647	2	F	Correction to TC 27.22.14.3	16.9.0
2022-12	CT#98e	CP-223077	0656	1	F	Correction to TC 27.22.14.2 and 27.22.14.3	16.10.0
2022-12	CT#98e	CP-223077	0657	1	F	Correction to TC 27.22.14.1 Seqs 1.2 and 1.3	16.10.0
2022-12	CT#98e	CP-223077	0658	2	F	Correction to the service 127 in initial conditions of the TC 27.22.14.2	16.10.0
2022-12	CT#98e	CP-223080	0655	1	F	Correction of NAI test case 27.22.4.7.7	16.10.0
2022-12	CT#98e	CP-223080	0660	1	F	Correction of test case 27.22.14.2 Seq 2.3	16.10.0
2022-12	CT#98e	CP-223080	0661	1	F	Coding correction of EFRouting_Indicator in 31.124	16.10.0
2022-12	CT#98e	CP-223080	0662	-	D	Editorial Correction in Applicability Table B.1	16.10.0
2022-12	CT#98e	CP-223151	0663	2	F	Update Table E.1 TERMINAL PROFILE support	16.10.0
2022-12	CT#98e	CP-223080	0664	-	F	Correction of test case 27.22.4.7.6	16.10.0
2022-12	CT#98e	CP-223080	0665	2	B	Add a Expected sequence-Trigger LAUNCH BROWSER by CALL CONTROL	16.10.0
2022-12	CT#98e	CP-223080	0666	1	B	Add a Expected sequence-Trigger LAUNCH BROWSER by MT Call event	16.10.0
2022-12	CT#98e	CP-223080	0667	3	B	Add a Expected sequence-Trigger LAUNCH BROWSER during mobile originated call	16.10.0
2022-12	CT#98e	CP-223080	0668	3	B	Add a Expected sequence-Trigger LAUNCH BROWSER during mobile terminated call	16.10.0
2022-12	CT#98e	CP-223080	0669	1	F	Correction in test 27.22.14.2 Seq. 2.3	16.10.0
2022-12	CT#98e	CP-223260	0659	3	B	Test case on PROVIDE LOCAL INFORMATION to get Slice(s) information	16.10.0
2023-03	CT#99	CP-230103	0670	1	F	Update of Table E.1 TERMINAL PROFILE support	16.11.0
2023-03	CT#99	CP-230103	0672	2	F	Update of SOR TC 27.22.14.2	16.11.0
2023-03	CT#99	CP-230103	0673	1	F	Update of TC 27.22.14.3 Seq. 3.3	16.11.0
2023-03	CT#99	CP-230103	0675	-	F	Update applicability of TC 27.22.4.26.8	16.11.0
2023-03	CT#99	CP-230103	0678	-	F	Correction in the applicability of test 27.22.4.7 Seq. 6.1 and 6.2	16.11.0
2023-03	CT#99	CP-230103	0679	-	D	Correction of TC 27.22.4.27.8	16.11.0
2023-03	CT#99	CP-230103	0680	2	F	Correction of Table E.1 Terminal Profile	16.11.0
2023-03	CT#99	CP-230103	0681	-	D	Correction of test 27.22.4.28.1	16.11.0
2023-03	CT#99	CP-230103	0682	-	F	Correction to TC 27.22.4.26.8 Seq 8.4	16.11.0
2023-03	CT#99	CP-230103	0683	-	F	Correction of TC 27.22.4.26.8 Seq 8.5	16.11.0
2023-03	CT#99	CP-230103	0688	1	F	Update of TC 27.22.7.9 Seq. 1.1	16.11.0
2023-03	CT#99	CP-230104	0684	2	F	Correction to SoR TC 27.22.14.2 seq 2.3	16.11.0
2023-03	CT#99	CP-230104	0689	-	B	Test case on PROVIDE LOCAL INFORMATION to get Slice(s) information - test without or with several Served NSSAI	16.11.0
2023-03	CT#99	CP-230104	0690	4	B	Test sequence for 27.22.4.7- REFRESH (steering of roaming in NG-RAN context)	16.11.0
2023-03	CT#99	CP-230104	0691	1	F	Definition of default ISIM values of NG-RAN ISIM-UICC	16.11.0
2023-04						Editorial corrections in sections 3.4 and 27.22.4.15.4	16.11.1
2023-06	CT#100	CP-231098	0692	-	F	Correction of Table E.1	16.12.0
2023-06	CT#100	CP-231098	0693	1	F	Correction of TC 27.22.4.26 seq 8.2	16.12.0
2023-06	CT#100	CP-231098	0694	-	F	Correction of the initial conditions for 27.22.4.26.8 test sequences	16.12.0
2023-06	CT#100	CP-231098	0695	2	D	Separation of NG-RAN UICC and NG-RAN ISIM-UICC	16.12.0
2023-06	CT#100	CP-231098	0696	1	F	Correction of Table E.1: TERMINAL PROFILE (for SS)	16.12.0
2023-06	CT#100	CP-231098	0700	1	D	27.22.5.3 Editorial correction incorrect Reference	16.12.0
2023-06	CT#100	CP-231098	0701	1	F	Correcting applicability of TC 27.22.4.10 (seq 7.2) and 27.22.5.3 (seq 3.2) dependent on SMS over IMS_UTRAN	16.12.0
2023-06	CT#100	CP-231098	0707	1	F	Correcting applicability of TC 27.22.13_sequence 1.5	16.12.0
2023-06	CT#100	CP-231100	0697	1	B	Test case on PROVIDE LOCAL INFORMATION to get Timing Advance in NG-RAN	16.12.0
2023-06	CT#100	CP-231100	0699	2	F	Correction to clause 27.22.4.7.7.4.1	16.12.0
2023-06	CT#100	CP-231100	0702	3	F	Modification to TC 27.22.4.26.8 seq 8.3 - Launch Browser, MT calls	16.12.0
2023-06	CT#100	CP-231100	0703	2	F	Correction to TC 27.22.13	16.12.0
2023-06	CT#100	CP-231100	0704	2	F	Correction to TC 27.22.10	16.12.0
2023-06	CT#100	CP-231100	0705	3	F	Correction to TC 27.22.11	16.12.0
2023-06	CT#100	CP-231100	0706	2	F	Correction to Applicability table	16.12.0
2023-06						Editorial correction in chapter 27.22.4.15.5	16.12.1
2023-07						ENVELOPE CALL CONTROL 8.2.1 coding table fixed	16.12.2
2023-09	CT#101	CP232080	0711	-	F	Correction to TC 27.22.4.7.3 REFRESH (Steering of roaming)	16.13.0
2023-09	CT#101	CP-232137	0719	-	B	Add Expected sequence of PROVIDE LOCAL INFORMATION about NG-RAN Intra-Frequency Measurements	16.13.0

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2023-09	CT#101	CP-232137	0720	-	B	Add Expected sequence of PROVIDE LOCAL INFORMATION about NG-RAN Inter-Frequency Measurements	16.13.0
2023-09	CT#101	CP-232142	0716	3	B	New Applicability table for Rel-17 of TS 31.124	17.0.0
2023-12	CT#102	CP-233101	0723	2	F	Correction of test 27.22.7.21	17.1.0
2023-12	CT#102	CP-233103	0727	1	B	Test case on PROVIDE LOCAL INFORMATION to get CAG information list and corresponding human-readable network name	17.1.0
2023-12	CT#102	CP-233103	0721	1	F	Correction to TC 27.22.4.15 seq 1.28 and 1.29	17.1.0
2023-12	CT#102	CP-233103	0722	1	F	Correction to Table B.1	17.1.0
2023-12	CT#102	CP-233103	0728	2	B	Test case for Event Dowload CAG Cell selection	17.1.0
2023-12	CT#102	CP-233312	0724	2	F	Correction required for TC 27.22.14.2 (Seq 2.3)	17.1.0
2023-12	CT#102	CP-233117	0730	-	F	TC 27.22.5.3 - Correction of coding in ENVELOPE: SMS-PP DOWNLOAD 3.1.3	17.1.0
2024-03	CT#103	CP-240136	0735	-	F	Corrections in TC 27.22.7.22	17.2.0
2024-03	CT#103	CP-240136	0737	-	F	Correction of Table E.1 TERMINAL PROFILE	17.2.0
2024-03	CT#103	CP-240136	0739	-	F	Correction of TC 27.22.4.26.8	17.2.0
2024-03	CT#103	CP-240136	0745	-	F	Correction to Table E.1	17.2.0
2024-03	CT#103	CP-240136	0734	1	F	Corrections for TC 27.22.4.15 Seq 1.30	17.2.0
2024-03	CT#103	CP-240136	0733	1	F	Corrections in test 27.22.7.21	17.2.0
2024-03	CT#103	CP-240136	0743	1	F	Correction to Table B.1	17.2.0
2024-03	CT#103	CP-240144	0742		F	Correction to TC 27.22.4.7.3 Seq 3_4	17.2.0
2024-03	CT#103	CP-240144	0732	2	F	Corrections in the NG-RAN UICC settings	17.2.0
2024-06	CT#104	CP-241206	0749	-	F	Correction to test purpose of TC 27.22.8	17.3.0
2024-06	CT#104	CP-241206	0756	1	F	TS 31.124 Correction to TC 27.22.4.26.8 Launch Browser NG-RAN	17.3.0
2024-06	CT#104	CP-241210	0747	-	F	Correction to Testcase 27.22.7.21	17.3.0
2024-06	CT#104	CP-241210	0752	-	D	Clarification of Test procedure in 27.22.4.7.3_seq_3.4	17.3.0
2024-06	CT#104	CP-241210	0753	-	D	removal of hyperlink from few test cases	17.3.0
2024-06	CT#104	CP-241210	0754	1	C	Applicability extension for Redcap UEs in TS 31.124	17.3.0
2024-06	CT#104	CP-241210	0755	1	B	Open Channel related to NG-RAN with bearer types 0x02 and 0x0B	17.3.0
2024-06	CT#104	CP-241210	0757	-	F	TS 31.124 Correction to PLI-NMR TC 27.22.4.15 seq 1.28 and 1.29	17.3.0
2024-06	CT#104	CP-241210	0750	2	F	Correction of TC 27.22.7.22.1	17.3.0
2024-09	CT#105	CP-242076	0760	-	F	Correction of TestCase 27.22.4.15 seq 1.29	17.4.0
2024-09	CT#105	CP-242079	0775	1	D	Correction of Table B.1	17.4.0
2024-09	CT#105	CP-242079	0777	1	F	Update of references to ETSi specifications	17.4.0
2024-09	CT#105	CP-242079	0779	-	F	correcting PLI slice info test cases 27.22.4.15 seq 1.24, 1.25, 1.26 to handle certain UE implementations	17.4.0
2024-09	CT#105	CP-242082	0764	-	B	Open Channel related to satellite NG-RAN with Bearer Type values 0x02, 0x03, 0x0B and 0x0C	17.4.0
2024-09	CT#105	CP-242082	0761	1	B	Test cases on PROVIDE LOCAL INFORMATION to get Primary Timing Advance in Satellite NG-RAN and PROVIDE LOCAL INFORMATION in Satellite NG-RAN Access Technology	17.4.0
2024-09	CT#105	CP-242082	0763	4	F	Correction to TC 27.22.4.7.3 REFRESH (Steering of roaming)	17.4.0
2024-09	CT#105	CP-242090	0766	1	B	Add testcase of IMSI changing procedure with USIM Application Reset for NG-RAN	17.4.0
2024-09	CT#105	CP-242090	0767	1	B	Add testcase of EFSUPI_NAI changing procedure with USIM Application Reset for NG-RAN	17.4.0
2024-09	CT#105	CP-242090	0768	1	B	Add testcase of reject 3G Session Reset for EFSUPI_NAI Changing procedure during mobile originated call in 5G	17.4.0
2024-09	CT#105	CP-242090	0769	1	B	Add testcase of reject 3G Session Reset for IMSI Changing procedure during mobile originated call in 5G	17.4.0
2024-09	CT#105	CP-242090	0770	1	B	Add testcase about SEND DATA	17.4.0
2024-09	CT#105	CP-242090	0771	1	B	Add testcase of POLLING OFF for NG-RAN	17.4.0
2024-09	CT#105	CP-242090	0774	1	B	Add testcase of Geographical location information discovery in 5G	17.4.0
2024-09	CT#105	CP-242090	0772	2	B	Add testcase of REFRESH for Generic Bootstrapping Procedure Request	17.4.0
2024-09	CT#105	CP-242089	0778	-	B	CAG Test Case correction for Rel 18 devices that support already available CAG cell information	18.0.0
2024-12	CT#106	CP-243151	0785	-	D	Correction of Applicability Table B.1	18.1.0
2024-12	CT#106	CP-243151	0786	-	F	Correction of CLOSE CHANNEL testcase 27.22.4.28 seq 4.2	18.1.0
2024-12	CT#106	CP-243151	0787	-	F	Update Geo location info method for 27.22.15 seq 1.1	18.1.0
2024-12	CT#106	CP-243151	0790	-	F	Correction of Applicability on Open Channel testcases related to satellite NG-RAN	18.1.0
2024-12	CT#106	CP-243151	0791	1	F	Correction to TC 27.22.14.2	18.1.0
2024-12	CT#106	CP-243151	0788	2	F	Correction of TC 27.22.4.15 seq 1.27 and 1.31	18.1.0
2024-12	CT#106	CP-243155	0789	-	F	Correction to Table E.1 TERMINAL PROFILE	18.1.0
2024-12	CT#106	CP-243155	0794	1	F	Correction of Table E.1	18.1.0
2024-12	CT#106	CP-243158	0780	-	B	PLI slice info tests 27.22.4.15 seq 1.24, 1.25, 1.26 to handle Rel 18 implementation	18.1.0
2024-12	CT#106	CP-243158	0783	-	B	Test Cases for Slices Status Change event	18.1.0
2024-12	CT#106	CP-243158	0792	-	B	Definition of NG-RAN UICC supporting Rel-18 features	18.1.0

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2024-12	CT#106	CP-243158	0782	1	B	PLI slice info test cases to handle allowed slices with mapping information	18.1.0
2024-12	CT#106	CP-243158	0784	4	B	Refresh SOR-CMCI	18.1.0
2024-12	CT#106	CP-243171	0781	3	B	PLI rejected slice info test case	18.1.0

History

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