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Technical Specification

**Digital cellular telecommunications system (Phase 2+);
Mobile Station (MS) conformance specification;
Part 4: Subscriber Identity Module (SIM) application toolkit
conformance test specification
(3GPP TS 51.010-4 version 4.6.0 Release 4)**



Reference

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650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
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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:

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

1 Scope

The present document describes the technical characteristics and methods of test for testing the SIM Application Toolkit implemented in Mobile Stations (MS) for the Pan European digital cellular communications system and Personal Communication Systems (PCS) operating in the 450 MHz, 480 MHz, 700 MHz, 750 MHz, 850 MHz, 900 MHz, 1 800 MHz and 1 900 MHz frequency band (GSM 400, GSM 700, GSM 750, GSM 850, GSM 900, DCS 1 800 and PCS 1 900) within the European 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 ETS 300 406 [20].

The present document is valid for MS implemented according to GSM Phase2+ R96, or R97, or R98, or R99.

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 GSM-series of technical specifications. The present document neither replaces any of the other GSM technical specifications or GSM related ETSs or ENs, nor is it created to provide full understanding of (or parts of) the GSM 400, GSM 700, GSM 850, GSM 900, DCS1800 and PCS1900 systems . The present document lists the requirements, and provides the methods of test for testing the SIM Application Toolkit implemented in a MS for conformance to the GSM standard.

For a full description of the system, reference should be made to all the GSM technical specifications or GSM related ETSs or ENs. Clause 2 provides a complete list of the GSM technical specifications, GSM related 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 GSM technical specification or GSM related ETS or EN, or 3GPP TS, then the other GSM technical specification or GSM related ETS or EN or 3GPP TS shall prevail.

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*.
 - For a GSM Phase 2+ Release 1999 MS, references to GSM documents are to version 8.x.y (for 01.-series to 12.-series) or (3.x.y for 21.-series to 35.-series), when available.
 - For a GSM Phase 2+ Release 1998 MS, references to GSM documents are to version 7.x.y, when available.
 - For a GSM Phase 2+ Release 1997 MS, references to GSM documents are to version 6.x.y, when available.
 - For a GSM Phase 2+ Release 1996 MS, references to GSM documents are to version 5.x.y, when available.

Note: 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.

EXAMPLE: References for a R99 MS shall be interpreted as:

[1] 3GPP TS 21.905 R99

[2] 3GPP TS 22.001 R99

etc.

- [1] 3GPP TS 01.04 (R96 to R98): "Abbreviations and acronyms".
3GPP TR 21.905 (R99 onwards): "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 02.01 (R96 to R98): "Principles of telecommunication services supported by a GSM Public Land Mobile Network (PLMN)".
3GPP TS 22.001 (R99 onwards): "Principles of circuit telecommunication services supported by a Public Land Mobile Network (PLMN)".
- [3] 3GPP TS 02.03 (R96 to R98): "Teleservices supported by a GSM Public Land Mobile Network (PLMN)".
3GPP TS 22.003 (R99 onwards): "Circuit Teleservices supported by a Public Land Mobile Network (PLMN)".
- [4] 3GPP TS 02.04 (R96 to R98): "General on supplementary services".
3GPP TS 22.004 (R99 onwards): "General on supplementary services".
- [5] 3GPP TS 02.06 (R96 to R98): "Types of Mobile Stations (MS)".
- [6] 3GPP TS 02.07 (R96 to R98): "Mobile Station (MS) features".
- [7] 3GPP TS 03.38 (R96 to R98): "Alphabets and language-specific information".
3GPP TS 23.038 (R99 onwards): "Alphabets and language-specific information".
- [8] 3GPP TS 03.40 (R96 to R98): "Technical realization of the Short Message Service (SMS); Point-to-Point (PP)".
3GPP TS 23.040 (R99 onwards): "Technical realization of the Short Message Service (SMS)".
- [9] 3GPP TS 03.41 (R96 to R98): "Technical realization of Cell Broadcast Service (CBS)".
3GPP TS 23.041 (R99 onwards): "Technical realization of Cell Broadcast Service (CBS)".
- [10] 3GPP TS 04.08 (R96 to R98): "Mobile radio interface; Layer 3 specification".
3GPP TS 24.008 (R99 onwards): "Mobile radio interface layer 3 specification; Core network protocols; Stage 3".
- [11] 3GPP TS 04.11 (R96 to R98): "Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface".
3GPP TS 24.011 (R99 onwards): "Point-to-Point (PP) Short Message Service (SMS) Support on mobile radio interface".
- [12] 3GPP TS 51.010-1 (Rel-5): "Mobile Station (MS) conformance specification; Part 1: Conformance specification".
- [13] 3GPP TS 11.11 (R96 to R99): "Specification of the Subscriber Identity Module - Mobile Equipment (SIM-ME) interface".
- [14] 3GPP TS 11.12 (R96): "Specification of the 3 Volt Subscriber Identity Module - Mobile Equipment (SIM-ME) interface".
- [15] 3GPP TS 11.14 (R96 to R99): "Specification of the SIM application toolkit for the Subscriber Identity Module - Mobile Equipment (SIM - ME) interface".
- [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 07.07 (R96 to R98): "AT command set for GSM Mobile Equipment (ME)"
3GPP TS 27.007 (R99 onwards): "AT command set for 3G 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 31.124: "Mobile Equipment (ME) conformance test specification; Universal Subscriber Identity Module Application Toolkit (USAT) conformance test specification".

3 Definitions and abbreviations

3.1 Mobile station definition and configurations

The mobile station definition and configurations specified in TS 51.010-1 [12] clause 3.1 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 SIM 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 51.010-1 [12] clause 3.2.3 shall apply, unless otherwise specified in the present clause.

See table B.1.

3.2.4 Definitions

For the purposes of the present document, the terms and definitions given in TS 51.010-1 [12], clause 3.3, 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 9x 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 "Terminal Profile" column gives a reference to the corresponding bit that needs to be present in the Terminal Profile.
- The "Recommendation for terminals also supporting USAT" column should be used in conjunction with the entry in the "Rel9x ME" column. The column indicates if the test is applicable or redundant providing that the equivalent USAT test has been performed with the terminal supporting SAT and USAT.

3.2.4.3 Status and notations

The "Release 9x ME" columns shows 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 "Recommendation for terminals also supporting USAT" column shows the status of the entries as follows:

| | |
|---|---|
| A | applicable - the test is applicable according to the corresponding entry in the "R9x ME" column |
| R | redundant – the test has to be considered as redundant when the corresponding TS 31.124 [21] test has been validated and executed. In that case the requirement may be verified by means of TS 31.124 [21]. |

AERi Additional test 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 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.

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

The support of letter classes, which specify mainly ME hardware dependent features, is optional for the ME and may supplement the SIM 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 | 0 | | O_Cap_Conf |
| 2 | Sustained text | 0 | | O_sust_text |
| 3 | UCS2 coding scheme for Entry | 0 | | O_Ucs2_Entry |
| 4 | Extended Text String | 0 | | O_Ext_Str |
| 5 | Help information | 0 | | O_Help |
| 6 | Icons | 0 | | O_Icons |
| 7 | Class A: Dual Slot | 0 | | O_Dual_Slot |
| 8 | Detachable reader | 0 | | O_Detach_Rdr |
| 9 | Class B: RUN AT | 0 | | O_Run_At |
| 10 | Class C: LAUNCH BROWSER | 0 | | O_LB |
| 11 | Class D: Soft keys | 0 | | O_Soft_key |
| 12 | Class E: B.I.P related to CSD | 0 | | O_BIP_CSD |
| 13 | Screen sizing parameters | 0 | | O_Scr_Siz |
| 14 | Screen Resizing | 0 | | O_Scr_Resiz |
| 15 | UCS2 coding scheme for Display | 0 | | O_Ucs2_Displ |
| 16 | Mobile supporting GPRS | 0 | | O_GPRS |
| 17 | Mobile supporting UDP | 0 | | O_UDP |
| 18 | Mobile supporting TCP | 0 | | O_TCP |
| 19 | Redial in Set Up Call | 0 | | O_Redial |
| 20 | Mobile decision to respond with "No response from user" in finite time | 0 | | O_D_NoResp |
| 21 | Class E: B.I.P related to GPRS | 0 | | O_BIP_GPRS |
| 22 | Mobile supporting Called Party Subaddress | 0 | | O_CP_Subaddr |
| 23 | Mobile supporting Fixed Dialling Numbers | 0 | | O_FDN |
| 24 | Mobile supporting Barred Dialling Numbers | 0 | | O_BDN |
| 25 | Mobile supporting "+CIMI" in combination with Run AT Command | 0 | | O_+CIMI |
| 26 | UCS2 in Cyrillic | 0 | | O_UCS2_Cyrillic |
| 27 | Mobile supporting '9EXX' response code for SIM data download error | 0 | | O_9EXX |
| 28 | Mobile supporting Envelope Call Control always sent to the SIM during automatic redial mode | 0 | | O_CC_Auto_Redial |
| 29 | Mobile supporting 2nd alpha identifier in SET UP CALL | 0 | | O_SetUp_Call_Sec_Alpha_Id |
| 30 | Mobile supporting Open Channel (GPRS) not containing a Network Access Name TLV when no default Access Point Name is set in the terminal configuration | 0 | | O_Open_Channel_GPRS_without_DefaultAPN |
| 31 | Preferred buffer size supported by the terminal for Open Channel command is greater than 0 byte and less than 65535 bytes | 0 | | O_BUFFER_SIZE |
| 32 | Terminal supports Dual Transfer Mode (allowing GPRS connection and call at the same time) | 0 | | O_DTM |
| 33 | Terminal supports Long ForwardToNumber | 0 | | O_longFTN |

| | | | | |
|----|---|---|--|---|
| 34 | Terminal executes User confirmation phase before sending PDP context activation request | O | | O_User_Confirm_Before_PDP_Context_Request |
| 35 | Terminal supports SAT and USAT | O | | O_SAT_USAT |
| 36 | ME requesting for user confirmation before sending the Envelope Call Control command | O | | O_UC_Before_EnvCC |
| 37 | ME requesting for user confirmation after sending the Envelope Call Control command | O | | O_UC_After_EnvCC |

3.4 Applicability table

Table B.1: Applicability of tests

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Terminal Profile | Support | Recommendation for terminals also supporting USAT |
|------|---|---------|-----------------------|-----------|-----------|-----------|-----------|-------------------------|---------|---|
| 1 | PROFILE DOWNLOAD 27.22.1 | R96 | 1 | M | M | M | M | E.1/1 | | |
| 2 | Contents of the TERMINAL PROFILE command 27.22.2 | R96 | | M | M | M | M | E.1/1 | | |
| 3 | Servicing of Proactive SIM Commands 27.22.3 | R96 | | M | M | M | M | | | |
| 4 | DISPLAY TEXT 27.22.4.1 | | | | | | | | | |
| | Unpacked | R96 | 1.1 | M | M | M | M | E.1/17 | | AER001 |
| | Screen busy | R96 | 1.2 | M | M | M | M | E.1/17 | | AER001 |
| | high priority | R96 | 1.3 | M | M | M | M | E.1/17 | | AER001 |
| | Packed | R96 | 1.4 | M | M | M | M | E.1/17 | | AER001 |
| | clear after delay | R96 | 1.5 | M | M | M | M | E.1/17 | | AER001 |
| | long text up to 160 bytes | R96 | 1.6 | M | M | M | M | E.1/17 | | AER001 |
| | Backwards move in SIM session | R96 | 1.7 | M | M | M | M | E.1/17 | | AER001 |
| | Session terminated by user | R96 | 1.8 | M | M | M | M | E.1/17 | | AER001 |
| | Command not understood by ME | R96 | 1.9 | M | M | M | M | E.1/17 | | AER001 |
| | no response from user | R96 | 2.1 | C120 | C120 | C120 | C120 | E.1/17 | | AER001 |
| | Extension Text | R98 | 3.1 | | | C106 | C106 | E.1/17 AND E.1/16 | | AER001 |
| | sustained text | R98 | 4.1, 4.2, 4.3, 4.4 | | | C104 | C104 | E.1/17 AND E.1/65 | | |
| | Icons | R98 | 5.1, 5.2, 5.3 | | | C108 | C108 | E.1/17 | | |
| | UCS2 display | R97 | 6.1 | | C118 | C118 | C118 | E.1/17 AND E.1/15 | | |
| 5 | GET INKEY 27.22.4.2 | | | | | | | | | |
| | prompt unpacked | R96 | 1.1 | M | M | M | M | E.1/18 | | AER001 |
| | prompt packed | R96 | 1.2 | M | M | M | M | E.1/18 | | AER001 |
| | digits only | R96 | 1.1 | M | M | M | M | E.1/18 | | AER001 |
| | Backwards move in SIM session | R96 | 1.3 | M | M | M | M | E.1/18 | | AER001 |
| | Session terminated by user | R96 | 1.4 | M | M | M | M | E.1/18 | | AER001 |
| | SMS alphabet | R96 | 1.5 | M | M | M | M | E.1/18 | | AER001 |
| | Long text up to 160 bytes | R96 | 1.6 | M | M | M | M | E.1/18 | | AER001 |
| | no response from user | R96 | 2.1 | C120 | C120 | C120 | C120 | E.1/18 | | AER001 |

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Terminal Profile | Support | Recommendation for terminals also supporting USAT |
|----------|---|---------|-----------------------|-----------|-----------|-----------|-----------|-------------------------|---------|---|
| | UCS2 display | R97 | 3.1 | | C118 | C118 | C118 | E.1/18 AND E.1/15 | | |
| | UCS2 display, Long text up to 70 chars | R97 | 3.2 | | C118 | C118 | C118 | E.1/18 AND E.1/15 | | |
| | UCS2 format of entry | R97 | 4.1 | | C105 | C105 | C105 | E.1/18 AND E.1/14 | | |
| | "Yes/No" response | R98 | 5.1 | | | M | M | E.1/18 AND E.1/60 | | AER001 |
| | Icons | R98 | 6.1, 6.2, 6.3, 6.4 | | | C108 | C108 | E.1/18 | | |
| | Help information | R97 | 7.1 | | C107 | C107 | C107 | E.1/18 | | AER001 |
| 6 | GET INPUT 27.22.4.3 | | | | | | | | | |
| | input unpacked | R96 | 1.1 | M | M | M | M | E.1/19 | | AER001 |
| | input packed | R96 | 1.2 | M | M | M | M | E.1/19 | | AER001 |
| | digits only | R96 | 1.1 | M | M | M | M | E.1/19 | | AER001 |
| | SMS alphabet | R96 | 1.3 | M | M | M | M | E.1/19 | | AER001 |
| | hidden input | R96 | 1.4 | M | M | M | M | E.1/19 | | AER001 |
| | min / max acceptable length | R96 | 1.5, 1.9 | M | M | M | M | E.1/19 | | AER001 |
| | Backwards move in SIM session | R96 | 1.6 | M | M | M | M | E.1/19 | | AER001 |
| | Session terminated by user | R96 | 1.7 | M | M | M | M | E.1/19 | | AER001 |
| | Prompt text up to 160 bytes | R96 | 1.8 | M | M | M | M | E.1/19 | | AER001 |
| | SMS default alphabet, ME to echo text, packing not required | R96 | 1.9 | M | M | M | M | E.1/19 | | AER001 |
| | Null length for the text string | R96 | 1.10 | M | M | M | M | E.1/19 | | AER001 |
| | no response from user | R96 | 2.1 | C120 | C120 | C120 | C120 | E.1/19 | | AER001 |
| | UCS2 display | R97 | 3.1, 3.2 | | C118 | C118 | C118 | E.1/19 AND E.1/15 | | |
| | UCS2 entry | R97 | 4.1, 4.2 | | C105 | C105 | C105 | E.1/19 AND E.1/14 | | |
| | default text for the input | R97 | 5.1, 5.2 | | M | M | M | E.1/19 | | AER001 |
| | icons | R98 | 6.1, 6.2, 6.3, 6.4 | | | C108 | C108 | E.1/19 | | |
| | help information | R97 | 7.1 | | C107 | C107 | C107 | E.1/19 | | |
| 7 | MORE TIME 27.22.4.4 | R96 | 1.1 | M | M | M | M | E.1/20 | | |
| 8 | PLAY TONE 27.22.4.5 | | | | | | | | | |
| | play all tones | R96 | 1.1 | M | M | M | M | E.1/21 | | |
| | display alpha | R96 | 1.1 | M | M | M | M | E.1/21 | | |

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Terminal Profile | Support | Recommendation for terminals also supporting USAT |
|-----------|--|---------|--------------------|-----------|-----------|-----------|-----------|-------------------------|---------|---|
| | user termination | R96 | 1.1 | M | M | M | M | E.1/21 | | |
| | superimpose | R96 | 1.1 | M | M | M | M | E.1/21 | | |
| | UCS2 display | R97 | TBD | | | | | E.1/21 AND E.1/15 | | |
| | icons | R98 | TBD | | | | | E.1/21 | | |
| 9 | POLL INTERVAL 27.22.4.6 | | | | | | | | | |
| | duration | R96 | 1.1 | M | M | M | M | E.1/22 | | AER001 |
| 10 | REFRESH 27.22.4.7 | | | | | | | | | |
| | SIM initialization, enabling FDN mode | R96 | 1.1 | C125 | C125 | C125 | C125 | E.1/24 | | |
| | file change notification of FDN file | R96 | 1.2 | C125 | C125 | C125 | C125 | E.1/24 | | |
| | SIM initialization and file change notification of PLMN | R96 | 1.3 | M | M | M | M | E.1/24 | | |
| | SIM initialization and full file change notification, enabling FDN mode | R96 | 1.4 | C125 | C125 | C125 | C125 | E.1/24 | | |
| | SIM reset | R96 | 1.5 | M | M | M | M | E.1/24 | | |
| | SIM Initialization after SMS-PP data download | R96 | 1.6 | C125 | C125 | C125 | C125 | E.1/24 | | |
| | IMSI Changing procedure, SIM Initialization and File Change Notification) | R98 | 2.1 | | | M | M | E.1/24 | | |
| | IMSI Changing procedure, SIM Initialization and Full File Change Notification) | R98 | 2.2 | | | M | M | E.1/24 | | |
| | IMSI Changing procedure, SIM Reset | R98 | 2.3 | | | M | M | E.1/24 | | |
| 11 | SET UP MENU 27.22.4.8 | | | | | | | | | |
| | Set up, menu selection, replace and remove menu | R96 | 1.1 | M | M | M | M | E.1/30 AND E.1/4 | | AER001 |
| | Large menu | R96 | 1.2 | M | M | M | M | E.1/30 AND E.1/4 | | AER001 |
| | help information | R97 | 2.1 | | C107 | C107 | C107 | E.1/30 AND E.1/4 | | AER001 |
| | next action indicator | R97 | 3.1 | | M | M | M | E.1/30 | | AER001 |
| | icons | R98 | 4.1, 4.2 | | | C108 | C108 | E.1/30 | | |
| | soft key access | R99 | 5.1 | | | | C112 | E.1/30 AND E.1/74 | | |
| 12 | SELECT ITEM 27.22.4.9 | | | | | | | | | |
| | Mandatory features | R96 | 1.1 | M | M | M | M | E.1/25 | | AER001 |
| | Large menu | R96 | 1.2, 1.3, 1.5, 1.6 | M | M | M | M | E.1/25 | | AER001 |

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Terminal Profile | Support | Recommendation for terminals also supporting USAT |
|-----------|---|---------|--------------------|-----------|-----------|-----------|-----------|-------------------------|---------|---|
| | Backwards move | R96 | 1.4 | M | M | M | M | E.1/25 | | AER001 |
| | user termination | R96 | 1.5 | M | M | M | M | E.1/25 | | AER001 |
| | next action indicator | R97 | 2.1 | | M | M | M | E.1/25 | | |
| | default selected item | R97 | 3.1 | | M | M | M | E.1/25 | | AER001 |
| | help information | R97 | 4.1 | | C107 | C107 | C107 | E.1/25 | | |
| | icons | R98 | 5.1, 5.2 | | | C108 | C108 | E.1/25 | | |
| | Presentation style | R98 | 6.1, 6.2 | | | M | M | E.1/25 | | |
| | Soft keys | R99 | 7.1 | | | | C112 | E.1/25 AND E.1/73 | | |
| | no response from user | R96 | 8.1 | C120 | C120 | C120 | C120 | E.1/25 | | AER001 |
| 13 | SEND SMS 27.22.4.10 | | | | | | | | | |
| | Packing not required | R96 | 1.1 | M | M | M | M | E.1/26 | | |
| | Packing required | R96 | 1.2, 1.4 | M | M | M | M | E.1/26 | | AER001 |
| | 8 bit data | R96 | 1.1, 1.2 | M | M | M | M | E.1/26 | | AER001 |
| | SMS default alphabet | R96 | 1.3, 1.4, 1.5 | M | M | M | M | E.1/26 | | AER001 |
| | 160 bytes length | R96 | 1.4, 1.5 | M | M | M | M | E.1/26 | | AER001 |
| | Alpha identifier | R96 | 1.6, 1.7, 1.8 | M | M | M | M | E.1/26 | | AER001 |
| | UCS2 SMS | R97 | 2.1 | | C118 | C118 | C118 | E.1/26 AND E.1/15 | | |
| | icons | R98 | 3.1, 3.2 | | | C108 | C108 | E.1/26 | | |
| 14 | SEND SS 27.22.4.11 | | | | | | | | | |
| | call forward unconditional, all bearers, successful | R96 | 1.1 | C129 | C129 | C129 | C129 | E.1/27 | | |
| | call forward unconditional, all bearers, Return Error | R96 | 1.2 | M | M | M | M | E.1/27 | | AER001 |
| | call forward unconditional, all bearers, Reject | R96 | 1.3 | M | M | M | M | E.1/27 | | AER001 |
| | call forward unconditional, all bearers, successful, SS request size limit | R96 | 1.4 | C129 | C129 | C129 | C129 | E.1/27 | | AER001 |
| | interrogate CLIR status, successful, alpha identifier limits | R96 | 1.5 | M | M | M | M | E.1/27 | | AER001 |
| | call forward unconditional, all bearers, successful, null data alpha identifier | R96 | 1.6 | C129 | C129 | C129 | C129 | E.1/27 | | AER001 |
| | call forward unconditional, all bearers, successful, icon support | R98 | 2.1, 2.2, 2.3, 2.4 | | | C108 | C108 | E.1/27 | | AER001 |
| | UCS2 display | R97 | 3.1 | | C118 | C118 | C118 | E.1/27 AND E.1/15 | | |
| 15 | SEND USSD 27.22.4.12 | | | | | | | | | |

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Terminal Profile | Support | Recommendation for terminals also supporting USAT |
|-----------|---|---------|--------------------|-----------|-----------|-----------|-----------|-------------------------|---------|---|
| | 7-bit data, successful | R96 | 1.1 | | | M | M | E.1/28 | | |
| | 8-bit data, successful | R96 | 1.2 | | | M | M | E.1/28 | | AER001 |
| | UCS2 data, successful | R96 | 1.3 | | | M | M | E.1/28 | | AER001 |
| | 7-bit data, unsuccessful | R96 | 1.4 | | | M | M | E.1/28 | | AER001 |
| | 7-bit data, unsuccessful | R96 | 1.5 | | | M | M | E.1/28 | | AER001 |
| | 256 octets, 7-bit data, successful, long alpha identifier | R96 | 1.6 | | | M | M | E.1/28 | | AER001 |
| | 7-bit data, successful, no alpha identifier | R96 | 1.7 | | | M | M | E.1/28 | | AER001 |
| | 7-bit data, successful, null length alpha identifier | R96 | 1.8 | | | M | M | E.1/28 | | AER001 |
| | icons | R98 | 2.1, 2.2, 2.3, 2.4 | | | C108 | C108 | E.1/28 | | |
| | UCS2 | R97 | 3.1 | | | C118 | C118 | E.1/28 AND E.1/15 | | |
| 16 | SET UP CALL 27.22.4.13 | | | | | | | | | |
| | Call confirmed by the user and connected | R96 | 1.1 | M | M | M | M | E.1/29 | | |
| | call rejected by the user | R96 | 1.2 | M | M | M | M | E.1/29 | | AER001 |
| | Void | | | | | | | | | |
| | putting all other calls on hold, ME busy | R96 | 1.4 | M | M | M | M | E.1/29 | | AER001 |
| | disconnecting all other calls, ME busy | R96 | 1.5 | M | M | M | M | E.1/29 | | AER001 |
| | only if not currently busy on another call, ME busy | R96 | 1.6 | M | M | M | M | E.1/29 | | AER001 |
| | putting all other calls on hold, call hold is not allowed | R96 | 1.7 | M | M | M | M | E.1/29 | | AER001 |
| | Capability configuration | R96 | 1.8 | C101 | C101 | C101 | C101 | E.1/29 | | AER001 |
| | long dialling number string | R96 | 1.9 | M | M | M | M | E.1/29 | | AER001 |
| | long first alpha identifier | R96 | 1.10 | M | M | M | M | E.1/29 | | AER001 |
| | Called party subaddress | R96 | 1.11 | C124 | C124 | C124 | C124 | E.1/29 | | AER001 |
| | maximum duration for the redial mechanism | R96 | 1.12 | C119 | C119 | C119 | C119 | E.1/29 | | AER001 |
| | second alpha identifier | R98 | 2.1 | | | M | M | E.1/29 AND E.1/63 | | |
| | UCS2 Display | R97 | TBD | | | | | E.1/29 AND E.1/15 | | |
| | icons | R98 | 3.1,3.2, 3.3, 3.4 | | | C108 | C108 | E.1/29 | | |
| 17 | POLLING OFF 27.22.4.14 | R96 | 1.1 | M | M | M | M | E.1/23 | | |
| 18 | PROVIDE LOCAL INFO 27.22.4.15 | | | | | | | | | |
| | location information | R96 | 1.1 | M | M | M | M | E.1/31 | | |
| | IMEI | R96 | 1.2 | M | M | M | M | E.1/31 | | AER001 |

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Terminal Profile | Support | Recommendation for terminals also supporting USAT |
|-----------|---|---------|-------------------|-----------|-----------|-----------|-----------|--|---------|---|
| | network measurement results and BCCH channel list | R98 | 1.3 | | | M | M | E.1/32 AND E.1/67 | | AER001 |
| | Date, time and time zone | R98 | 1.4 | | | M | M | E.1/59 | | AER001 |
| | language setting | R99 | 1.5 | | | | M | E.1/68 | | AER001 |
| | Timing advance | R99 | 1.6 | | | | M | E.1/69 | | AER001 |
| 19 | SET UP EVENT LIST 27.22.4.16 | | | | | | | | | |
| | Set up call connected event | R97 | 1.1 | | M | M | M | E.1/33 AND E.1/35 | | AER001 |
| | Replace by new event list | R97 | 1.2 | | M | M | M | E.1/33 AND E.1/35 AND E.1/36 | | AER001 |
| | Remove event | R97 | 1.3 | | M | M | M | E.1/33 AND E.1/35 | | AER001 |
| | Remove Event on ME Power Cycle | R97 | 1.4 | | M | M | M | E.1/33 AND E.1/35 | | AER001 |
| 20 | PERFORM CARD APDU 27.22.4.17 | | | | | | | | | |
| | Additional card inserted, Select MF and Get Response | R98 | 1.1 | | | C109 | C109 | E.1/51 | | |
| | Additional card inserted, Select DF GSM, Select EF PLMN , Update Binary, Read Binary on EF PLMN | R98 | 1.2 | | | C109 | C109 | E.1/51 | | |
| | Additional card inserted, card powered off | R98 | 1.3 | | | C109 | C109 | E.1/51 | | |
| | No card inserted, card powered off | R98 | 1.4 | | | C109 | C109 | E.1/51 | | |
| | Invalid card reader identifier | R98 | 1.5 | | | C109 | C109 | E.1/51 | | |
| | Detachable reader | R98 | 2.1 | | | C116 | C116 | E.1/51 | | |
| 21 | POWER OFF CARD 27.22.4.18 | | | | | | | | | |
| | Additional card inserted | R98 | 1.1 | | | C109 | C109 | E.1/50 | | |
| | No card inserted | R98 | 1.2 | | | C109 | C109 | E.1/50 | | |
| | Detachable reader | R98 | 2.1 | | | C116 | C116 | E.1/50 | | |
| 22 | POWER ON CARD 27.22.4.19 | | | | | | | | | |
| | Additional card inserted | R98 | 1.1 | | | C109 | C109 | E.1/49 | | |
| | No ATR | R98 | 1.2 | | | C109 | C109 | E.1/49 | | |
| | No card inserted | R98 | 1.3 | | | C109 | C109 | E.1/49 | | |
| | Detachable reader | R98 | 2.1 | | | C116 | C116 | E.1/49 | | |
| 23 | GET READER STATUS 27.22.4.20 | | | | | | | | | |
| | Additional card inserted, card powered | R98 | 1.1 | | | C109 | C109 | E.1/52 | | |
| | Additional card inserted, card not powered | R98 | 1.2 | | | C109 | C109 | E.1/52 | | |

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Terminal Profile | Support | Recommendation for terminals also supporting USAT |
|-----------|--|---------|-------------------|-----------|-----------|-----------|-----------|--|---------|---|
| | Additional card inserted, card not present | R98 | 1.3 | | | C109 | C109 | E.1/52 | | |
| | Detachable reader | R98 | 2.1 | | | C116 | C116 | E.1/52 | | |
| 24 | TIMER MANAGEMENT 27.22.4.21.1 | | | | | | | | | |
| | Start timer 1 several times, get the current value of the timer and deactivate the timer successfully | R98 | 1.1 | | | M | M | E.1/57 AND E.1/58 | | AER001 |
| | Start timer 2 several times, get the current value of the timer and deactivate the timer successfully | R98 | 1.2 | | | M | M | E.1/57 AND E.1/58 | | AER001 |
| | Start timer 8 several times, get the current value of the timer and deactivate the timer successfully | R98 | 1.3 | | | M | M | E.1/57 AND E.1/58 | | AER001 |
| | Try to get the current value of a timer which is not started: action in contradiction with the current timer state | R98 | 1.4 | | | M | M | E.1/57 AND E.1/58 | | AER001 |
| | Try to deactivate a timer which is not started: action in contradiction with the current timer state | R98 | 1.5 | | | M | M | E.1/57 AND E.1/58 | | AER001 |
| | Start 8 timers successfully | R98 | 1.6 | | | M | M | E.1/57 AND E.1/58 | | AER001 |
| 25 | ENVELOPE TIMER EXPIRATION 27.22.4.21.2 | | | | | | | | | |
| | Pending proactive SIM command | R98 | 2.1 | | | M | M | E.1/6 AND E.1/57 | | AER001 |
| | SIM application toolkit busy | R98 | 2.2 | | | M | M | E.1/6 AND E.1/57 AND E.1/20 | | AER001 |
| 26 | SET UP IDLE MODE TEXT 27.22.4.22 | | | | | | | | | |
| | Display idle mode text | R98 | 1.1 | | | M | M | E.1/61 AND E.1/33 AND E.1/39 | | |
| | Replace idle mode text | R98 | 1.2 | | | M | M | E.1/61 AND E.1/33 AND E.1/39 | | |

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Terminal Profile | Support | Recommendation for terminals also supporting USAT |
|-----------|--------------------------------------|---------|-------------------------------|-----------|-----------|-----------|-----------|---|---------|---|
| | Remove idle mode test | R98 | 1.3 | | | M | M | E.1/61 AND E.1/33 AND E.1/39 | | |
| | Competing information on ME display | R98 | 1.4 | | | M | M | E.1/61 AND E.1/33 AND E.1/39 | | |
| | ME powered cycled | R98 | 1.5 | | | M | M | E.1/61 AND E.1/33 AND E.1/39 | | |
| | Refresh with SIM initialization | R98 | 1.6 | | | M | M | E.1/61 AND E.1/24 AND E.1/33 AND E.1/39 | | |
| | Large text string | R98 | 1.7 | | | M | M | E.1/61 AND E.1/33 AND E.1/39 | | |
| | icons | R98 | 2.1, 2.2, 2.3, 2.4 | | | C108 | C108 | E.1/61 AND E.1/39 | | |
| | UCS2 display | R98 | 3.1 | | | C118 | C118 | E.1/61 AND E.1/15 AND E.1/39 | | |
| 27 | RUN AT COMMAND 27.22.4.23 | | | | | | | | | |
| | No alpha Identifier | R98 | 1.1 | | | C110 | C110 | E.1/62 | | |
| | null data alpha identifier presented | R98 | 1.2 | | | C110 | C110 | E.1/62 | | |
| | alpha identifier presented | R98 | 1.3 | | | C110 | C110 | E.1/62 | | |
| | icons | R98 | 2.1, 2.2, 2.3, 2.4, 2.5 | | | C114 | C114 | E.1/62 | | |
| 28 | SEND DTMF 27.22.4.24 | | | | | | | | | |
| | Normal | R98 | 1.1 | | | M | M | E.1/66 | | AER001 |

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Terminal Profile | Support | Recommendation for terminals also supporting USAT |
|-----------|---|---------|-------------------|-----------|-----------|-----------|-----------|-------------------------|---------|---|
| | alpha identifier | R98 | 1.2, 1.3 | | | M | M | E.1/66 | | |
| | Mobile is not in a speech call | R98 | 1.4 | | | M | M | E.1/66 | | AER001 |
| | Icons | R98 | 2.1, 2.2, 2.3 | | | C108 | C108 | E.1/66 | | |
| | UCS2 display | R98 | 3.1 | | | C118 | C118 | E.1/66 AND E.1/15 | | |
| 29 | LANGUAGE NOTIFICATION 27.22.4.25 | | | | | | | | | |
| | Specific language notification | R99 | 1.1 | | | | M | E.1/70 | | |
| | Non specific language notification | R99 | 1.2 | | | | M | E.1/70 | | |
| 30 | LAUNCH BROWSER 27.22.4.26 | | | | | | | | | |
| | No session already launched: Connect to the default URL | R99 | 1.1 | | | | C111 | E.1/71 | | |
| | connect to the specified URL, alpha identifier length=0 | R99 | 1.2 | | | | C111 | E.1/71 | | |
| | Browser identity, no alpha identifier | R99 | 1.3 | | | | C111 | E.1/71 | | |
| | one bearer specified and gateway/proxy identity | R99 | 1.4 | | | | C122 | E.1/71 | | |
| | void | R99 | 1.5 | | | | void | void | | |
| | Interaction with current session | R99 | 2.1, 2.2 | | | | C111 | E.1/71 | | |
| | Interaction with current session | R99 | 2.3 | | | | C111 | E.1/71 | | AER001 |
| | UCS2 display | R99 | 3.1 | | | | C117 | E.1/71 AND E.1/15 | | |
| | icons | R99 | 4.1, 4.2 | | | | C115 | E.1/71 | | |
| 31 | OPEN CHANNEL 27.22.4.27 | | | | | | | | | |
| | Void | R99 | 1.1 - 1.10 | | | | Void | Void | | |
| | immediate link establishment, GPRS, no local address, no alpha identifier, no network access name | R99 | 2.1 | | | | C121 | E.1/89 AND E.1/98 | | |
| | immediate link establishment GPRS, no alpha identifier, with network access name | R99 | 2.2 | | | | C121 | E.1/89 AND E.1/98 | | |
| | immediate link establishment, GPRS, with alpha identifier | R99 | 2.3 | | | | C121 | E.1/89 AND E.1/98 | | |
| | immediate link establishment, GPRS, with null alpha identifier | R99 | 2.4 | | | | C121 | E.1/89 AND E.1/98 | | |
| | immediate link establishment, GPRS, command performed with modifications (buffer size) | R99 | 2.5 | | | | C127 | E.1/89 AND E.1/98 | | |

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Terminal Profile | Support | Recommendation for terminals also supporting USAT |
|-----------|---|---------|-------------------|-----------|-----------|-----------|-----------|--|---------|---|
| | Void | Void | 2.6 | | | | Void | Void | | |
| | immediate link establishment, GPRS, open command with alpha identifier, User did not accept the proactive command | R99 | 2.7 | | | | C130 | E.1/89 AND E.1/98 | | |
| | GPRS, ME busy on call | R99 | 2.8 | | | | C128 | E.1/89 AND E.1/98 | | |
| 32 | CLOSE CHANNEL 27.22.4.28 | | | | | | | | | |
| | successful | R99 | 1.1 | | | | C121 | E.1/89 AND E.1/90 | | |
| | with an invalid channel identifier | R99 | 1.2 | | | | C121 | E.1/89 AND E.1/90 | | AER001 |
| | on an already closed channel | R99 | 1.3 | | | | C121 | E.1/90 | | AER001 |
| 33 | RECEIVE DATA 27.22.4.29 | | | | | | | | | |
| | already opened channel | R99 | 1.1 | | | | C121 | E.1/89 AND E.1/91 AND E.1/92 | | |
| 34 | SEND DATA 27.22.4.30 | | | | | | | | | |
| | immediate mode | R99 | 1.1 | | | | C121 | E.1/89 AND E.1/92 | | |
| | Store mode | R99 | 1.2 | | | | C121 | E.1/89 AND E.1/92 | | AER001 |
| | Store mode, Tx buffer fully used | R99 | 1.3 | | | | C121 | E.1/89 AND E.1/92 | | AER001 |
| | 2 consecutive SEND DATA Store mode | R99 | 1.4 | | | | C121 | E.1/89 AND E.1/92 | | AER001 |
| | immediate mode with a bad channel identifier | R99 | 1.5 | | | | C121 | E.1/89 AND E.1/92 | | AER001 |
| | Void | Void | 1.6 | | | | Void | Void | | |
| 35 | GET CHANNEL STATUS 27.22.4.31 | | | | | | | | | |
| | without any BIP channel opened | R99 | 1.1 | | | | C121 | E.1/93 | | AER001 |
| | with a BIP channel currently opened | R99 | 1.2 | | | | C121 | E.1/89 AND E.1/93 | | |

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Terminal Profile | Support | Recommendation for terminals also supporting USAT |
|-----------|---|---------|----------------------------|-----------|-----------|-----------|-----------|---|---------|---|
| | after a link dropped | R99 | 1.3 | | | | C121 | E.1/89 AND E.1/93 | | AER001 |
| 36 | DATA DOWNLOAD TO SIM 27.22.5 | | | | | | | | | |
| 37 | SMS-PP DATA DOWNLOAD 27.22.5.1 | | | | | | | | | |
| | [void] | | 1.1 | | | | | | | |
| | SIM responds with '91 XX' | R96 | 1.2 | M | M | M | M | E.1/2 | | |
| | More time | R96 | 1.3 | M | M | M | M | E.1/2 | | |
| | 8 bit alphabet | R96 | 1.4 | M | M | M | M | E.1/2 | | |
| | [void] | | 1.5 | | | | | | | |
| | Data coding / message class | R96 | 1.6 | M | M | M | M | E.1/2 | | |
| 38 | SMS-CB DATA DOWNLOAD 27.22.5.2 | | | | | | | | | |
| | ME does not display message | R96 | 1.1 | M | M | M | M | E.1/3 | | |
| | More time | R96 | 1.2 | M | M | M | M | E.1/3 AND E.1/20 | | |
| | ME displays message | R96 | 1.3 | M | M | M | M | E.1/3 | | |
| 39 | CALL CONTROL BY SIM 27.22.6 | | | | | | | | | |
| | Procedure for MO calls (Cell identity in envelope call control) | R97 | 1.1, 1.2, 1.4, 1.8 to 1.14 | | M | M | M | E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 | | AER001 |
| | Procedure for MO calls (Cell identity in envelope call control) | R97 | 1.3 A, 1.5 A | | C131 | C131 | C131 | E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 | | AER001 |
| | Procedure for MO calls (Cell identity in envelope call control) | R97 | 1.3 B, 1.5 B | | C132 | C132 | C132 | E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 | | AER001 |

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Terminal Profile | Support | Recommendation for terminals also supporting USAT |
|-----------|---|---------|-------------------------|-----------|-----------|-----------|-----------|---|---------|---|
| | Procedure for MO calls (Cell identity in envelope call control) | R97 | 1.6 | | M | M | M | E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 | | |
| | Procedure for MO calls (Cell identity in envelope call control) | R97 | 1.7 A | | C131 | C131 | C131 | E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 | | |
| | Procedure for MO calls (Cell identity in envelope call control) | R97 | 1.7 B | | C132 | C132 | C132 | E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 | | |
| | Procedure for SS (Cell identity in envelope call control) | R97 | 2.1, 2.2, 2.3, 2.4 | | M | M | M | E.1/10 AND E.1/11 | | |
| | Interaction with FDN (Cell identity in envelope call control) | R97 | 3.1, 3.2, 3.3, 3.4, 3.5 | | C125 | C125 | C125 | E.1/10 | | |
| | Support of BDN service (Cell identity in envelope call control) | R97 | 4.1, 4.2, 4.3, 4.4 | | C126 | C126 | C126 | E.1/10 | | |
| 40 | EVENT DOWNLOAD 27.22.7 | | | | | | | | | |
| | 27.22.7.1: MT call event | R97 | 1.1 | | M | M | M | E.1/34 AND E.1/33 | | AER001 |
| | 27.22.7.2.1: call connected event | R97 | 1.1 | | M | M | M | E.1/35 AND E.1/33 | | AER001 |
| | 27.22.7.2.2: ME supporting SET UP CALL | R97 | 2.1 | | M | M | M | E.1/35 AND E.1/29 AND E.1/33 | | |
| | 27.22.7.3: call disconnected event | R97 | 1.1 | | M | M | M | E.1/36 AND E.1/33 | | AER001 |

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Terminal Profile | Support | Recommendation for terminals also supporting USAT |
|-----------|---|---------|-------------------|-----------|-----------|-----------|-----------|--|---------|---|
| | 27.22.7.4: location status event | R97 | 1.1 | | M | M | M | E.1/37 AND E.1/33 | | |
| | 27.22.7.5: user activity event | R97 | 1.1 | | M | M | M | E.1/38 AND E.1/33 | | AER001 |
| | 27.22.7.6: idle screen available event | R97 | 1.1 | | M | M | M | E.1/39 AND E.1/33 | | AER001 |
| | 27.22.7.7.1: Card reader status normal | R98 | 1.1 | | | C109 | C109 | E.1/40 AND E.1/33 | | |
| | 27.22.7.7.2: Detachable card reader | R98 | 2.1 | | | C116 | C116 | E.1/40 AND E.1/33 | | |
| | 27.22.7.8: language selection event | R99 | 1.1 | | | | M | E.1/41 AND E.1/33 | | |
| | 27.22.7.9: Browser termination event | R99 | 1.1 | | | | C111 | E.1/42 AND E.1/33 | | AER001 |
| | 27.22.7.10: Data available event | R99 | 1.1 | | | | C121 | E.1/43 AND E.1/89 AND E.1/33 | | AER001 |
| | 27.22.7.11: Channel status event | R99 | 1.1 | | | | C121 | E.1/44 AND E.1/89 AND E.1/33 | | AER001 |
| 41 | MO SMS Control by SIM 27.22.8 | | | | | | | | | |
| | With proactive command, Allowed , no modification | R98 | 1.1 | | | M | M | E1/12 AND E.1/26 | | |
| | With user SMS, Allowed , no modification | R98 | 1.2 | | | M | M | E1/12 | | |
| | With proactive command, Not allowed | R98 | 1.3 | | | M | M | E1/12 AND E.1/26 | | |
| | With user SMS, Not allowed | R98 | 1.4 | | | M | M | E1/12 | | |
| | With proactive command, Allowed, with modifications | R98 | 1.5 | | | M | M | E1/12 AND E.1/26 | | |

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Terminal Profile | Support | Recommendation for terminals also supporting USAT |
|------|---|---------|-------------------|-----------|-----------|-----------|-----------|------------------------|---------|---|
| | With user SMS, Allowed, with modifications | R98 | 1.6 | | | M | M | E1/12 | | |
| | With Proactive command, the SIM responds with '90 00', Allowed, no modification | R98 | 1.7 | | | M | M | E1/12 AND E.1/26 | | |
| | Send Short Message attempt by user, the SIM responds with '90 00', Allowed, no modification | R98 | 1.8 | | | M | M | E1/12 | | |
| | Void | | | | | | | | | |

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Terminal Profile | Support | Recommendation for terminals also supporting USAT |
|--------|--|---------|---|-----------|-----------|-----------|-----------|------------------|---------|---|
| 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.1/26 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 OR O.2) 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.1/25) THEN M ELSE N/A | | -- O_Run_At AND O_+CIMI | | | | | | | |
| C111 | IF A.1/10 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 M 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 A1/7 AND A.1/8 THEN M ELSE N/A | | -- O_Dual_Slot AND O_Detach_Rdr | | | | | | | |
| C117 | IF C111 AND C118 THEN M ELSE N/A | | -- O_LB AND O_Ucs2_Disp AND O_UCS2_Cyrillic | | | | | | | |
| C118 | IF A.1/15 AND A.1/26 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_FDN | | | | | | | |
| C126 | IF A. 1/24 THEN M ELSE N/A | | -- O_BDN | | | | | | | |
| C127 | IF C121 AND A.1/31 THEN M ELSE N/A | | -- O_BIP_GPRS AND O_UDP AND O_BUFFER_SIZE | | | | | | | |
| C128 | IF C121 AND (NOT A.1/32) THEN M ELSE N/A | | -- O_BIP_GPRS AND O_UDP AND (NOT O_DTM) | | | | | | | |
| C129 | IF A.1/33 THEN test x.A M ELSE test x.B M | | -- O_longFTN | | | | | | | |
| C130 | IF (C121 AND A.1/34) THEN test x.A M ELSE O_User_Confirm_Before_PDP_Context_Request) OR (O_BIP_GPRS AND O_UDP AND (NOT O_User_Confirm_Before_PDP_Context_Request) IF (C121 AND NOT A.1/34) test x.B M AND O_UDP AND NOT O_User_Confirm_Before_PDP_Context_Request) | | | | | | | | | |
| C131 | IF A.1/36 THEN M ELSE N/A | | -- O_UC_Before_EnvCC | | | | | | | |
| C132 | IF A.1/37 THEN M ELSE N/A | | -- O_UC_After_EnvCC | | | | | | | |
| O.1 | IF (the ME supports icons as defined in record 1 of EF(IMG), tests x.1A M ELSE tests x.1B M (where x is the expected sequence number value) | | | | | | | | | |
| O.2 | IF the ME supports icons as defined in record 2 of EF(IMG), tests x.2A M ELSE x.2B M (where x is the expected sequence number value) | | | | | | | | | |
| O.3 | IF (A.1/21 AND A.1/12) tests (x.A AND x.C) M ELSE IF A.1/12 test x.1B M (where x is the expected sequence number value) | | | | | | | | | |
| AER001 | IF (A.1/35) THEN R ELSE A-- O_SAT_USAT | | | | | | | | | |

3.5 Conventions for mathematical notations

The conventions for mathematical notations specified in TS 51.010-1 [12] clause 3.4 shall apply, unless otherwise specified in the present clause.

3.6 Conventions on electrical terms

The conventions on electrical terms specified in TS 51.010-1 [12] clause 3.5 shall apply, unless otherwise specified in the present clause.

3.7 Terms on test conditions

The terms on test conditions specified in TS 51.010-1 [12] clause 3.6 shall apply, unless otherwise specified in the present clause.

4 Test equipment

The test equipment is specified in TS 51.010-1 [12] clause 4.

5 Testing methodology in general

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 test interfaces and facilities specified in TS 51.010-1 [12] clause 5.2 shall apply, unless otherwise specified in the present clause.

The SIM interface provides the main test interface for the purpose of performing conformance tests.

5.3 Different protocol layers

The different protocol layers specified in TS 51.010-1 [12] clause 5.3 shall apply, unless otherwise specified in the present clause.

5.4 Information to be provided by the apparatus supplier

The information to be provided by the apparatus supplier specified in TS 51.010-1 [12] clause 5.4 shall apply, unless otherwise specified in the present clause.

In addition, the apparatus supplier shall provide the information with respect 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 | 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 | | | |

5.5 Definitions of transmit and receive times

The definitions of transmit and receive times specified in TS 51.010-1 [12] clause 5.5 shall apply, unless otherwise specified in the present clause.

6 Reference test methods

The reference test methods specified in TS 51.010-1 [12] clause 6 shall apply, unless otherwise specified.

7 Implicit testing

For some GSM 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 3v and 5v operation.

Some SIM 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.

8 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".

9 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

10 Generic call set up procedures

The generic call set up procedure specified in TS 51.010-1 [12] clause 10 shall apply, unless otherwise specified in the present clause.

11 - 26 Not used

27 Testing of the SIM/ME interface

This clause is an addition to TS 51.010-1 [12] clause 27 to confirm the correct interpretation of the SIM Application Toolkit commands and the correct operation of the Toolkit facilities.

The definitions, declarations and default values specified in TS 51.010-1 [12] clause 27 shall apply, unless otherwise specified in the present clause.

Note: As defined in TS 51.010-1 [12] clause 27 the term PCS 1900 defines the tests applicable for GSM 700, GSM 850 and PCS 1900 MS.

A SIM Simulator with the appropriate SIM Application Toolkit functionality will be required. The SIM 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 11.14 [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 11.14 [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 TLV in the Terminal Responses shall be ignored.

27.1 - 27.21 Void

27.22 SIM Application Toolkit

27.22.1A General Test purpose

Testing of functional conformance to SIM Application Toolkit commands, including pro-active SIM 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 SIM 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 SIM command.

Note: The sequence of SIM Application Toolkit commands are specific to the Toolkit Application being executed within the SIM, 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 SIM Application Toolkit testing

A SIM 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 SIM follow, as defined in:

- TS 51.010-1 [12], clause 27.

Note 1: Bx represents byte x of the coding.

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

EFSST (SIM Service Table)

Logically:

| | |
|--------------|--|
| (Service 2) | Abbreviated Dialling Numbers allocated and activated |
| (Service 3) | Fixed Dialling Numbers allocated and activated |
| (Service 10) | Extension 1 allocated and activated |
| (Service 11) | Extension 2 allocated and activated |
| (Service 12) | SMS Parameters allocated and activated |
| (Service 14) | Cell Broadcast Message Identifier allocated and activated |
| (Service 25) | Data download via SMS-CB allocated and activated |
| (Service 26) | Data download via SMS-PP allocated and activated |
| (Service 27) | Menu selection allocated and activated |
| (Service 28) | Call control allocated and not activated |
| (Service 29) | Proactive SIM allocated and activated |
| (Service 30) | Cell Broadcast Message Identifier Ranges allocated and activated |
| (Service 31) | Barred Dialling Numbers allocated and not activated |
| (Service 32) | Extension4 allocated and activated |
| (Service 37) | Mobile Originated Short Message control by SIM allocated and not activated |
| (Service 39) | Image (IMG) allocated and activated |
| (Service 41) | USSD string data object supported in Call Control allocated and activated |
| (Service 42) | RUN AT COMMAND command allocated and activated |
| (Service 48) | Extended Capability Configuration Parameters allocated and activated |

| | | | | |
|---------|----------|----------|----------|----------|
| Coding: | B1 | B2 | B3 | B4 |
| | xx1111xx | xxxxxxxx | 111111xx | xxxx11xx |
| | B5 | B6 | B7 | B8 |
| | xxxxxxxx | xxxxxxxx | 01111111 | 11011111 |
| | B9 | B10 | B11 | B12 |
| | xxxxxxxx | xx11xx01 | xxxx1111 | 11xxxxxx |

EF_{Phase} (SIM Phase Identification)

Logically: Phase 2+

| | |
|---------|------|
| Coding: | '03' |
|---------|------|

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_{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:

At least 10 records

Record 1:
 Length of alpha identifier: 32 characters
 Alpha identifier: "ABC"
 Length of BCD number: "03"
 TON and NPI: Telephony and Unknown
 Dialed number: 123
 CCI: None
 Ext2: None

| | | | | | | | | | | | | | |
|-----------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Coding: | B1 | B2 | B3 | B4 | ... | B32 | B33 | B34 | B35 | B36 | B37 | ... | B46 |
| Record 1: | 41 | 42 | 43 | FF | ... | FF | 03 | 81 | 21 | F3 | FF | ... | FF |

Record 2:
 Length of alpha identifier: 32 characters
 Alpha identifier: "DEF"
 Length of BCD number: "04"
 TON and NPI: Telephony and Unknown
 Dialed number: 9876
 CCI: None
 Ext2: None

| | | | | | | | | | | | | | |
|-----------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Coding: | B1 | B2 | B3 | B4 | ... | B32 | B33 | B34 | B35 | B36 | B37 | ... | B46 |
| Record 1: | 44 | 45 | 46 | FF | ... | FF | 03 | 81 | 89 | 67 | FF | ... | FF |

EF_{BDN} (Barred Dialling Numbers)

Logically:

At least 10 records

Record 1:
 Length of alpha identifier: 32 characters
 Alpha identifier: "CBA"
 Length of BCD number: "03"
 TON and NPI: Telephony and Unknown
 Dialed number: 321
 CCI: None
 Ext4: None
 Comprehension Method Info: None

| | | | | | | | | | | | | | |
|-----------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Coding: | B1 | B2 | B3 | B4 | ... | B32 | B33 | B34 | B35 | B36 | B37 | ... | B47 |
| Record 1: | 43 | 42 | 41 | FF | ... | FF | 03 | 81 | 23 | F1 | FF | ... | FF |

Note: EF_{BDN} shall be invalidated unless otherwise stated, i.e. by indicating that Barred Dialling Numbers service is enabled.

EF_{ECC} (Emergency Call Codes)

Logically:

Emergency Call Code 1: '1020'

| | | | | | | | | | | | | |
|---------|--|--|----|--|----|--|----|--|--|--|--|--|
| Coding: | | | 01 | | 02 | | FF | | | | | |
|---------|--|--|----|--|----|--|----|--|--|--|--|--|

Emergency Call Code 2: '112'

| | | | | | | | | | | | | |
|---------|--|--|----|--|----|--|----|--|--|--|--|--|
| Coding: | | | 11 | | F2 | | 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"
 Dialed 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:

- Under the DF Telecom: creation of DF Graphics (5F50);
- Under the DF 5F50: creation of EF_{Img} (4F20, linear fixed file) and EF_{Instance} (4FXX, transparent file).

EF_{Img} (Image, 4F20)

Record 1:

Logically:

Number of Actual Images Instances: 01
 Image Instance Width: 08
 Image Instance Height: 08
 Image Coding Scheme: 11 (basic image)
 Image Instance File Identifier: 4F 04 (EF_{Instance})
 Offset into Image Instance File: 00 00
 Length of Image Instance Data: 00 0A

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | 01 | 08 | 08 | 11 | 4F | 04 | 00 | 00 | 00 | 0A | FF | FF |
| | FF | FF | FF | FF | FF | FF | FF | FF | | | | |

Record 2:

Logically:

Number of Actual Images Instances: 01
 Image Instance Width: 08
 Image Instance Height: 08
 Image Coding Scheme: 21 (colour image)
 Image Instance File Identifier: 4F 02(EF_{Instance})
 Offset into Image Instance File: 00 00
 Length of Image Instance Data: 00 16

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | 01 | 08 | 08 | 21 | 4F | 02 | 00 | 00 | 00 | 16 | FF | FF |
| | FF | FF | FF | FF | FF | FF | FF | FF | | | | |

Record 3:

Logically:

Number of Actual Images Instances: 01
 Image Instance Width: 18
 Image Instance Height: 10
 Image Coding Scheme: 11 (basic image)
 Image Instance File Identifier: 4F 03 (EF_{Instance})
 Offset into Image Instance File: 00 00
 Length of Image Instance Data: 00 32

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | 01 | 18 | 10 | 11 | 4F | 03 | 00 | 00 | 00 | 32 | FF | FF |
| | FF | FF | FF | FF | FF | FF | FF | FF | | | | |

Record 4:

Logically:

Number of Actual Images Instances: 01
 Image Instance Width: 2E
 Image Instance Height: 28
 Image Coding Scheme: 11 (basic image)
 Image Instance File Identifier: 4F 01 ($EF_{Instance}$)
 Offset into Image Instance File: 00 00
 Length of Image Instance Data: 00 E8

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | 01 | 2E | 28 | 11 | 4F | 01 | 00 | 00 | 00 | E8 | FF | FF |
| | FF | FF | FF | FF | FF | FF | FF | FF | | | | |

Record 5:

Logically:

Number of Actual Images Instances: 01
 Image Instance Width: 05
 Image Instance Height: 05
 Image Coding Scheme: 11 (basic image)
 Image Instance File Identifier: 4F 05 ($EF_{Instance}$)
 Offset into Image Instance File: 00 00
 Length of Image Instance Data: 00 08

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | 01 | 05 | 05 | 11 | 4F | 05 | 00 | 00 | 00 | 08 | FF | FF |
| | FF | FF | FF | FF | FF | FF | | | | | | |

$EF_{Instance}$ (4F01)

Logically:

Image Instance Data: see below

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | 2E | 28 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | FF | 80 |
| | 00 | 00 | 00 | 0F | FF | 00 | 00 | 00 | 00 | 77 | FE | 00 |
| | 00 | 00 | 01 | BF | F8 | 00 | 00 | 00 | 06 | FF | E0 | 00 |
| | 00 | 00 | 1A | 03 | 80 | 00 | 00 | 00 | 6B | F6 | BC | 00 |
| | 00 | 01 | AF | D8 | 38 | 00 | 00 | 06 | BF | 60 | 20 | 00 |
| | 00 | 1A | FD | 80 | 40 | 00 | 00 | 6B | F6 | 00 | 80 | 00 |
| | 01 | A0 | 1F | 02 | 00 | 00 | 06 | FF | E4 | 04 | 00 | 00 |
| | 1B | FF | 90 | 10 | 00 | 00 | 6D | EE | 40 | 40 | 00 | 01 |
| | BF | F9 | 01 | 00 | 00 | 6F | FF | E4 | 04 | 00 | 00 | 1B |

| | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|
| FF | 90 | 10 | 00 | 00 | 6F | FE | 40 | 40 | 00 | 01 | BF |
| F9 | 01 | 00 | 00 | 06 | FF | E6 | 04 | 00 | 00 | 1B | FF |
| 88 | 10 | 00 | 00 | 6F | FE | 20 | 40 | 00 | 01 | BF | F8 |
| 66 | 00 | 00 | 06 | FF | E0 | F0 | 00 | 00 | 1B | FF | 80 |
| 80 | 00 | 00 | 7F | FE | 00 | 00 | 00 | 03 | 00 | 0C | 00 |
| 00 | 00 | 1F | FF | F8 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| 1C | 21 | 08 | 44 | EE | 00 | 48 | C4 | 31 | 92 | 20 | 01 |
| 25 | 11 | 45 | 50 | 80 | 07 | 14 | 45 | 15 | 43 | 80 | 12 |
| 71 | 1C | 4D | 08 | 00 | 4A | 24 | 89 | 32 | 20 | 01 | C8 |
| 9E | 24 | 4E | E0 | | | | | | | | |

EF_{Instance} (4F02)

Logically:

Image Instance Data:

Image width: 08
Image length: 08
Bits per raster image point: 02
Number of CLUT entries: 03
Location of CLUT: 00 16
Image body: see below

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | 08 | 08 | 02 | 03 | 00 | 16 | AA | AA | 80 | 02 | 85 | 42 |
| | 81 | 42 | 81 | 42 | 81 | 52 | 80 | 02 | AA | AA | FF | 00 |
| | 00 | 00 | FF | 00 | 00 | 00 | FF | | | | | |

EF_{Instance} (4F03)

Logically:

Image Instance Data: see below

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | 18 | 10 | FF | FF | FF | 80 | 00 | 01 | 80 | 00 | 01 | 80 |
| | 00 | 01 | 8F | 3C | F1 | 89 | 20 | 81 | 89 | 20 | 81 | 89 |
| | 20 | F1 | 89 | 20 | 11 | 89 | 20 | 11 | 89 | 20 | 11 | 8F |
| | 3C | F1 | 80 | 00 | 01 | 80 | 00 | 01 | 80 | 00 | 01 | FF |
| | FF | FF | | | | | | | | | | |

EF_{Instance} (4F04)

Logically:

Image Instance Data: see below

Coding:

| | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|
| Coding: | 08 | 08 | FF | 03 | A5 | 99 | 99 | A5 | C3 | FF |
|---------|----|----|----|----|----|----|----|----|----|----|

EF_{Instance} (4F05)

Logically:

Image Instance Data: see below

Coding:

| | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|
| Coding: | 05 | 05 | FE | EB | BF | FF | FF | FF |
|---------|----|----|----|----|----|----|----|----|

27.22.1 Initialization of SIM Application Toolkit Enabled SIM by SIM 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 11.14 [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 SIM Simulator. All elementary files are coded as the default Toolkit personalization, with the CHV1 enabled.

27.22.1.4.2 Procedure

Expected Sequence 1 (PROFILE DOWNLOAD)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|---|
| 1 | USER → ME | Power on ME | |
| 2 | ME → USER | PIN entry request | |
| 3 | USER → ME | Enter "1111" | |
| ... | | | |
| 4 | ME → SIM | VERIFY CHV1 1.1A | [CHV1 code: "1111"] |
| 5 | SIM → ME | VERIFY CHV ATTEMPT UNSUCCESSFUL 1.1A | |
| ... | | | |
| 6 | ME → USER | PIN entry request | |
| 7 | USER → ME | Enter "1234" | |
| 8 | ME → SIM | VERIFY CHV1 1.1B | [CHV1 code: "1234"] |
| 9 | SIM → ME | NORMAL ENDING OF COMMAND 1.1A | |
| 10 | ME → SIM | TERMINAL PROFILE 1.4 | The ME shall have read EF PHASE prior to the Profile Download |
| 11 | SIM → ME | NORMAL ENDING OF COMMAND 1.1A | |
| 12 | ME → SIM | SELECT EF IMSI 1.5 or SELECT EF LOCI 1.6 | |

VERIFY CHV1 : 1.1A

Logically:

Coding:

| | | | | | | | | | |
|----------|--------|--------|-------|-------|-------|----|----|----|--|
| APDU: | CLA=A0 | INS=20 | P1=00 | P2=01 | P3=08 | | | | |
| DATA IN: | 31 | 31 | 31 | 31 | FF | FF | FF | FF | |

VERIFY CHV1 ATTEMPT UNSUCCESSFUL: 1.1A

Logically:

Coding:

| | |
|--------|--------|
| SW1=98 | SW2=04 |
|--------|--------|

VERIFY CHV1: 1.1B

Logically:

Coding:

| | | | | | | | | | |
|----------|--------|--------|-------|-------|-------|----|----|----|--|
| APDU: | CLA=A0 | INS=20 | P1=00 | P2=01 | P3=08 | | | | |
| DATA IN: | 31 | 32 | 33 | 34 | FF | FF | FF | FF | |

NORMAL ENDING OF COMMAND: 1.1A

Logically:

Coding:

| | |
|--------|--------|
| SW1=90 | SW2=00 |
|--------|--------|

TERMINAL PROFILE: 1.4

Logically:

Coding:

| | | | | | |
|----------|--------|--------|-------|-------|-------|
| APDU: | CLA=A0 | 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 SIM Toolkit commands supported by the ME, and with YY, ZZ, ... representing here the bytes of the TERMINAL PROFILE data, as specified in TS 11.14 [15], clause 5.2.

SELECT EF IMSI: 1.5

Logically:

Coding:

| | | | | | |
|----------|--------|--------|-------|-------|-------|
| APDU: | CLA=A0 | INS=A4 | P1=00 | P2=00 | P3=02 |
| DATA IN: | 6F | 07 | | | |

SELECT EF LOCI: 1.6

Logically:

Coding:

| | | | | | |
|----------|--------|--------|-------|-------|-------|
| APDU: | CLA=A0 | INS=A4 | P1=00 | P2=00 | P3=02 |
| DATA IN: | 6F | 7E | | | |

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.

27.22.2.2 Conformance requirement

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

- TS 11.14 [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 SIM 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 SIM Simulator. All elementary files are coded as the default SIM 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 SIM Simulator, the SIM Simulator shall record the content of the TERMINAL PROFILE.
- c) The SIM 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 SIM Simulator.

27.22.2.5 Test requirement

- 1) After step a) the ME shall send the TERMINAL PROFILE command to the SIM Simulator with bit 1 of the first byte set to 1 (facility supported by ME).
- 2) In table E.1 for the corresponding ME Sim 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 present release shall be ignored.

27.22.3 Servicing of proactive SIM commands

27.22.3.1 Definition and applicability

See clause 3.2.2.

27.22.3.2 Conformance requirement

On detection of a pending SIM Application Toolkit command from the SIM the ME shall perform the FETCH command to retrieve the proactive SIM command. The result of the executed command shall be transmitted from the ME to the SIM 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 SIM Application Toolkit facility.

- TS 11.14 [15] clause 6.3.

27.22.3.3 Test purpose

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

To verify that the ME transmits the result of execution of the proactive SIM command to the SIM 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 SIM Simulator.

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

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

The SIM Simulator is configured to monitor the SIM - 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 SIM Simulator indicates that a Proactive SIM Command is pending with SW1 / SW2 of '91 0B'.
- c) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 2.1: MORE TIME.

27.22.3.5 Test requirement

- 1) After step b) the ME shall send the FETCH command to the SIM.
- 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 SIM 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 11.14 [15], clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.31.

27.22.4.1.1.3 Test purpose

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

27.22.4.1.1.4 Method of test

27.22.4.1.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 1.1.1 | [Normal priority, wait for user to clear message, unpacked, 8 bit data] |
| 4 | ME → USER | Display "Toolkit Test 1" | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 1.1.1 | [Command performed successfully] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: DISPLAY TEXT 1.1.1

Logically:

Command details

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

Device identities

Source device: SIM
 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 1.1.1

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: SIM

Result

General Result: Command performed successfully

Coding:

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

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | USER → ME | Set the ME screen to a display mode other than the normal stand-by display | The ME will be set to a mode so that normal priority text commands shall be rejected. [Normal priority] [ME currently unable to process command - screen busy] |
| 2 | SIM → ME | PROACTIVE COMMAND | |
| 3 | ME → SIM | PENDING: DISPLAY TEXT 1.2.1 | |
| 4 | SIM → ME | FETCH | |
| 5 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 1.2.1 | |
| 6 | ME → USER | No change of the currently being used display. | |
| 7 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 1.2.1 | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: DISPLAY TEXT 1.2.1: same as 1.1.1

TERMINAL RESPONSE: DISPLAY TEXT 1.2.1

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: SIM

Result

- General Result: ME currently unable to process command
- Additional information: Screen is busy

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 02 | 20 |
| | 01 | | | | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND | The ME screen is in a mode other than the normal stand by display. [High priority] |
| 2 | ME → SIM | PENDING: DISPLAY TEXT 1.3.1 | |
| 3 | SIM → ME | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 1.3.1 | |
| 5 | ME → USER | Display "Toolkit Test 2" | |
| 6 | USER → ME | Clear Message | |
| 7 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 1.3.1 | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | Set the ME screen back to normal stand-by display | |

PROACTIVE COMMAND: DISPLAY TEXT 1.3.1

Logically:

Command details

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

Device identities

Source device: SIM
 Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Toolkit Test 2"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 21 | 81 | 82 | 02 | 81 | 02 | 8D |
| | 0F | 04 | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 54 | 65 |
| | 73 | 74 | 20 | 32 | | | | | | | | |

TERMINAL RESPONSE: DISPLAY TEXT 1.3.1

Logically:

Command details

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

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 1.4.1 | [Packed, SMS default alphabet] |
| 4 | ME → USER | Display "Toolkit Test 3" | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 1.4.1 | [Command performed successfully] |

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: SIM
 Destination device: Display

Text string

Data coding scheme: packed, SMS default alphabet
 Text: "Toolkit Test 3"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 19 | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0E | 00 | D4 | F7 | 9B | BD | 4E | D3 | 41 | D4 | F2 | 9C |
| | 0E | 9A | 01 | | | | | | | | | |

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: SIM

Result

General Result: Command performed successfully

Coding:

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

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 1.5.1 | [Clear message after a delay] |
| 4 | ME → USER | Display "Toolkit Test 4" and clear this message after a short delay | |
| 5 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 1.5.1 | [Command performed successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: DISPLAY TEXT 1.5.1

Logically:

Command details

Command number: 1
 Command type: DISPLAY TEXT
 Command qualifier: normal priority, clear message after a delay

Device identities

Source device: SIM
 Destination device: Display

Text string

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

Coding:

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

TERMINAL RESPONSE: DISPLAY TEXT 1.5.1

Logically:

Command details

Command number: 1
Command type: DISPLAY TEXT
Command qualifier: normal priority, clear message after a delay

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: DISPLAY TEXT 1.6.1 | |
| 3 | SIM → ME | PROACTIVE COMMAND: | [Text string with 160 bytes - maximum for non extension text] |
| 4 | ME → USER | DISPLAY TEXT 1.6.1 Display "This command instructs the ME to display a text message. It allows the SIM to define the priority of that message, and the text string format. Two types of prio" | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 1.6.1 | Command performed successfully |

PROACTIVE COMMAND: DISPLAY TEXT 1.6.1

Logically:

Command details

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

Device identities

Source device: SIM
Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data
Text: "This command instructs the ME to display a text message. It allows the SIM to define the priority of that message, and the text string format. Two types of prio"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | AD | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 |
| | 8D | 81 | A1 | 04 | 54 | 68 | 69 | 73 | 20 | 63 | 6F | 6D |
| | 6D | 61 | 6E | 64 | 20 | 69 | 6E | 73 | 74 | 72 | 75 | 63 |
| | 74 | 73 | 20 | 74 | 68 | 65 | 20 | 4D | 45 | 20 | 74 | 6F |
| | 20 | 64 | 69 | 73 | 70 | 6C | 61 | 79 | 20 | 61 | 20 | 74 |
| | 65 | 78 | 74 | 20 | 6D | 65 | 73 | 73 | 61 | 67 | 65 | 2E |
| | 20 | 49 | 74 | 20 | 61 | 6C | 6C | 6F | 77 | 73 | 20 | 74 |
| | 68 | 65 | 20 | 53 | 49 | 4D | 20 | 74 | 6F | 20 | 64 | 65 |
| | 66 | 69 | 6E | 65 | 20 | 74 | 68 | 65 | 20 | 70 | 72 | 69 |
| | 6F | 72 | 69 | 74 | 79 | 20 | 6F | 66 | 20 | 74 | 68 | 61 |
| | 74 | 20 | 6D | 65 | 73 | 73 | 61 | 67 | 65 | 2C | 20 | 61 |
| | 6E | 64 | 20 | 74 | 68 | 65 | 20 | 74 | 65 | 78 | 74 | 20 |
| | 73 | 74 | 72 | 69 | 6E | 67 | 20 | 66 | 6F | 72 | 6D | 61 |
| | 74 | 2E | 20 | 54 | 77 | 6F | 20 | 74 | 79 | 70 | 65 | 73 |
| | 20 | 6F | 66 | 20 | 70 | 72 | 69 | 6F | | | | |

TERMINAL RESPONSE: DISPLAY TEXT 1.6.1

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: SIM

Result

General Result: Command performed successfully

Coding:

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

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.7.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 1.7.1 | |
| 4 | ME → USER | Display "<GO-BACKWARDS>" | |
| 5 | USER → ME | Indicate the need to go backwards in the proactive SIM application session | |
| 6 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 1.7.1 | [Backward move in the proactive SIM session requested by the user] |

PROACTIVE COMMAND: DISPLAY TEXT 1.7.1

Logically:

Command details

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

Device identities

Source device: SIM
 Destination device: Display

Text string

Data coding scheme: unpacked, 8 bit data
Text: "<GO-BACKWARDS>"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0F | 04 | 3C | 47 | 4F | 2D | 42 | 41 | 43 | 4B | 57 | 41 |
| | 52 | 44 | 53 | 3E | | | | | | | | |

TERMINAL RESPONSE: DISPLAY TEXT 1.7.1

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: SIM

Result

General Result: Backward move in the proactive SIM session requested by the user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: DISPLAY TEXT 1.8.1 | |
| 3 | SIM → ME | FETCH | |
| 4 | ME → USER | PROACTIVE COMMAND: DISPLAY TEXT 1.8.1 | |
| 5 | USER → ME | Display "<ABORT>" | |
| 6 | ME → SIM | Indicate the need to end the proactive SIM application session | |
| 7 | SIM → ME | TERMINAL RESPONSE: DISPLAY TEXT 1.8.1 PROACTIVE SIM SESSION ENDED | [Proactive SIM session terminated by the user] |

PROACTIVE COMMAND: DISPLAY TEXT 1.8.1

Logically:

Command details

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

Device identities

Source device: SIM
Destination device: Display

Text string

Data coding scheme: unpacked, 8 bit data
Text: "<ABORT>"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 13 | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 08 | 04 | 3C | 41 | 42 | 4F | 52 | 54 | 3E | | | |

TERMINAL RESPONSE: DISPLAY TEXT 1.8.1

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: SIM

Result

General Result: Proactive SIM session terminated by the user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 10 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.9.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 1.9.1 | Including icon identifier, icon shall be displayed together with the alpha text string, but no text string given [Command data not understood by ME (clause 6.5.4)] |
| 4 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 1.9.1 | |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: DISPLAY TEXT 1.9.1

Logically:

Command details

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

Device identities

Source device: SIM
 Destination device: Display

Text string

Contents: null data object

Icon Identifier:

Icon qualifier: icon is self-explanatory
 Icon Identifier: record 1 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0F | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 00 | 9E | 02 | 00 | 01 | | | | | | | |

TERMINAL RESPONSE: DISPLAY TEXT 1.9.1

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: SIM

Result

General Result: Command data not understood by ME

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 32 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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 11.14 [15] clause 5.2, clause 6.4.1, clause 6.6.1, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2 and clause 12.15.3.

27.22.4.1.2.3 Test purpose

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

27.22.4.1.2.4 Method of test

27.22.4.1.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM 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.

The SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 2.1.1 | [Normal priority, wait for user to clear message, unpacked, 8 bit data] |
| 4 | ME → USER | Display "<TIME-OUT>" | |
| 6 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 2.1.1 | [No response from user] within 5 s after the end of that defined period of time |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: DISPLAY TEXT 2.1.1

Logically:

Command details

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

Device identities

Source device: SIM
 Destination device: Display

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "<TIME-OUT>"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 16 | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0B | 04 | 3C | 54 | 49 | 4D | 45 | 2D | 4F | 55 | 54 | 3E |

TERMINAL RESPONSE: DISPLAY TEXT 2.1.1

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: SIM

Result

General Result: No response from user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 12 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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 11.14 [15] clause 5.2, clause 6.4.1, clause 6.6.1, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2 and clause 12.15.3.

27.22.4.1.3.3 Test purpose

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

27.22.4.1.3.4 Method of test

27.22.4.1.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 3.1.1 | [Text string with the maximum of 240 bytes] |
| 4 | ME → USER | Display "This command instructs the ME to display a text message, and/or an icon (see clause 6.5.4). It allows the SIM to define the priority of that message, and the text string format. Two types of priority are defined:- display normal priority text and/" | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 3.1.1 | [Command performed successfully] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: DISPLAY TEXT 3.1.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
 Destination device: Display
 Text String
 Data coding scheme: unpacked, 8 bit data
 Text: "This command instructs the ME to display a text message and/or an icon (see clause 6.5.4). It allows the SIM to define the priority of that message, and the text string format. Two types of priority are defined:- display normal priority text and/"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FD | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 |
| | 8D | 81 | F1 | 04 | 54 | 68 | 69 | 73 | 20 | 63 | 6F | 6D |
| | 6D | 61 | 6E | 64 | 20 | 69 | 6E | 73 | 74 | 72 | 75 | 63 |
| | 74 | 73 | 20 | 74 | 68 | 65 | 20 | 4D | 45 | 20 | 74 | 6F |
| | 20 | 64 | 69 | 73 | 70 | 6C | 61 | 79 | 20 | 61 | 20 | 74 |
| | 65 | 78 | 74 | 20 | 6D | 65 | 73 | 73 | 61 | 67 | 65 | 2C |
| | 20 | 61 | 6E | 64 | 2F | 6F | 72 | 20 | 61 | 6E | 20 | 69 |
| | 63 | 6F | 6E | 20 | 28 | 73 | 65 | 65 | 20 | 36 | 2E | 35 |
| | 2E | 34 | 29 | 2E | 20 | 49 | 74 | 20 | 61 | 6C | 6C | 6F |
| | 77 | 73 | 20 | 74 | 68 | 65 | 20 | 53 | 49 | 4D | 20 | 74 |
| | 6F | 20 | 64 | 65 | 66 | 69 | 6E | 65 | 20 | 74 | 68 | 65 |
| | 20 | 70 | 72 | 69 | 6f | 72 | 69 | 74 | 79 | 20 | 6F | 66 |
| | 20 | 74 | 68 | 61 | 74 | 20 | 6D | 65 | 73 | 73 | 61 | 67 |
| | 65 | 2C | 20 | 61 | 6E | 64 | 20 | 74 | 68 | 65 | 20 | 74 |
| | 65 | 78 | 74 | 20 | 73 | 74 | 72 | 69 | 6E | 67 | 20 | 66 |
| | 6F | 72 | 6D | 61 | 74 | 2E | 20 | 54 | 77 | 6F | 20 | 74 |
| | 79 | 70 | 65 | 73 | 20 | 6F | 66 | 20 | 70 | 72 | 69 | 6F |
| | 72 | 69 | 74 | 79 | 20 | 61 | 72 | 65 | 20 | 64 | 65 | 66 |
| | 69 | 6E | 65 | 64 | 3A | 2D | 20 | 64 | 69 | 73 | 70 | 6C |
| | 61 | 79 | 20 | 6E | 6F | 72 | 6D | 61 | 6C | 20 | 70 | 72 |
| | 69 | 6F | 72 | 69 | 74 | 79 | 20 | 74 | 65 | 78 | 74 | 20 |
| | 61 | 6E | 64 | 2F | | | | | | | | |

TERMINAL RESPONSE: DISPLAY TEXT 3.1.1

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: SIM

Result

General Result: Command performed successfully

Coding:

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

27.22.4.1.3.5 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 11.14 [15] clause 5.2, clause 6.4.1, clause 6.6.1, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.43.

27.22.4.1.4.3 Test purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive SIM command, returns a successful result in the TERMINAL RESPONSE command send to the SIM 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 SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table. The elementary files are coded as SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: DISPLAY TEXT 4.1.1 | |
| 3 | SIM → ME | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 4.1.1 | [Normal priority, wait for user to clear message, unpacked, 8 bit data] |
| 6 | ME → USER | Display "Toolkit Test 1" | |
| 6 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 4.1.1 | [Command performed successfully] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 8 | ME → USER | Display of "Toolkit Test 1" shall sustain | Text shall sustain until - a subsequent proactive command is received containing display data. |

PROACTIVE COMMAND: DISPLAY TEXT 4.1.1

Logically:

Command details

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

Device identities

Source device: SIM
 Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Toolkit Test 1"

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 | 31 | AB | 00 | | | | | | |

TERMINAL RESPONSE: DISPLAY TEXT 4.1.1

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: SIM

Result

General Result: Command performed successfully

Coding:

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

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 4.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 4.2.1 | [Clear message after a delay] |
| 4 | ME → USER | Display "Toolkit Test 2" | |
| 5 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 4.2.1 | [Command performed successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | ME → USER | Display "Toolkit Test 2" | Text shall sustain until - the expiration of a short delay. |

PROACTIVE COMMAND: DISPLAY TEXT 4.2.1

Logically:

Command details

Command number: 1
 Command type: DISPLAY TEXT
 Command qualifier: normal priority, clear message after a delay

Device identities

Source device: SIM
 Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Toolkit Test 2"

Immediate Response

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 21 | 00 | 82 | 02 | 81 | 02 | 8D |
| | 0F | 04 | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 54 | 65 |
| | 73 | 74 | 20 | 32 | AB | 00 | | | | | | |

TERMINAL RESPONSE: DISPLAY TEXT 4.2.1

Logically:

Command details

Command number: 1
 Command type: DISPLAY TEXT
 Command qualifier: normal priority, clear message after a delay

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 4.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 4.3.1 | [wait for user to clear message] |
| 4 | ME → USER | Display "Toolkit Test 3" | |
| 5 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 4.3.1 | [Command performed successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | ME → USER | Display of "Toolkit Test 3" | Text shall sustain until - a user MMI action. |
| 8 | USER → ME | Clear message | |

PROACTIVE COMMAND: DISPLAY TEXT 4.3.1

Logically:

Command details

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

Device identities

Source device: SIM
 Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Toolkit Test 3"

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 | 33 | AB | 00 | | | | | | |

TERMINAL RESPONSE: DISPLAY TEXT 4.3.1

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: SIM

Result

General Result: Command performed successfully

Coding:

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

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

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

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 11.14 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.31.

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 SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.1.5.4 Method of test

27.22.4.1.5.4.1 Initial conditions

The ME is connected to the SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 5.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 5.1.1 | [BASIC-ICON, self-explanatory] |
| 4 | ME → USER | Display the BASIC-ICON | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 5.1.1A | [Command performed successfully] |

PROACTIVE COMMAND: DISPLAY TEXT 5.1.1

Logically:

Command details

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

Device identities

Source device: SIM

Destination device: Display
 Text String
 Data coding scheme: unpacked, 8 bit data
 Text: "Basic Icon"
 Icon Identifier:
 Icon qualifier: icon is self-explanatory
 Icon Identifier: record 1 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0B | 04 | 42 | 61 | 73 | 69 | 63 | 20 | 49 | 63 | 6F | 6E |
| | 9E | 02 | 00 | 01 | | | | | | | | |

TERMINAL RESPONSE: DISPLAY TEXT 5.1.1A

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: SIM

Result

General Result: Command performed successfully

Coding:

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

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 5.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 5.1.1 | [BASIC-ICON, self-explanatory] |
| 4 | ME → USER | Display "Basic Icon" without icon | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 5.1.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE: DISPLAY TEXT 5.1.1B

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: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 5.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 5.2.1 | [COLOUR-ICON] |
| 4 | ME → USER | Display the COLOUR-ICON | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 5.2.1A | [Command performed successfully] |

PROACTIVE COMMAND: DISPLAY TEXT 5.2.1

Logically:

Command details

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

Device identities

Source device: SIM
 Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Colour Icon"

Icon Identifier:

Icon qualifier: icon is self-explanatory
 Icon Identifier: record 2 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0C | 04 | 43 | 6F | 6C | 6F | 75 | 72 | 20 | 49 | 63 | 6F |
| | 6E | 9E | 02 | 00 | 02 | | | | | | | |

TERMINAL RESPONSE: DISPLAY TEXT 5.2.1A

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: SIM

Result

General Result: Command performed successfully

Coding:

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

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 5.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 5.2.1 | [COLOUR-ICON] |
| 4 | ME → USER | Display "Colour Icon" without the icon | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 5.2.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE: DISPLAY TEXT 5.2.1B

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: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 5.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 5.3.1 | [BASIC-ICON, not self-explanatory] |
| 4 | ME → USER | Display the BASIC-ICON And Display "Basic Icon" | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 5.3.1A | [Command performed successfully] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: DISPLAY TEXT 5.3.1

Logically:

Command details

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

Device identities

Source device: SIM
 Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Basic Icon"

Icon Identifier:

Icon qualifier: icon is not self-explanatory
 Icon Identifier: record 1 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0B | 04 | 42 | 61 | 73 | 69 | 63 | 20 | 49 | 63 | 6F | 6E |
| | 9E | 02 | 01 | 01 | | | | | | | | |

TERMINAL RESPONSE: DISPLAY TEXT 5.3.1A

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: SIM

Result

General Result: Command performed successfully

Coding:

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

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 5.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 5.3.1 | [BASIC-ICON, not self-explanatory] |
| 4 | ME → USER | Display "Basic Icon" without the icon | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 5.3.1B | [Command performed successfully, but requested icon could not be displayed] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

TERMINAL RESPONSE: DISPLAY TEXT 5.3.1B

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: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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 supported)

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 11.14 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.31.

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 SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.1.6.4 Method of test

27.22.4.1.6.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 6.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 6.1.1 | [Normal priority, wait for user to clear message, UCS2 coded] |
| 4 | ME → USER | Display " ЗДРАВСТВУЙТЕ " | ["Hello" in Russian] |
| 5 | USER → ME | Clear message | |
| 6 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 6.1.1 | |

PROACTIVE COMMAND: DISPLAY TEXT 6.1.1

Logically:

Command details

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

Device identities
 Source device: SIM
 Destination device: Display

Text String
 Data coding scheme: UCS2 (16bit)
 Text: "ЗДРАВСТВУЙТЕ"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 24 | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 19 | 08 | 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: DISPLAY TEXT 6.1.1

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: SIM

Result
 General Result: Command performed successfully

Coding:

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

27.22.4.1.6.5 Test requirement

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

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 11.14 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2 and clause 12.15.3.

27.22.4.2.1.3 Test purpose

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

27.22.4.2.1.4 Method of test

27.22.4.2.1.4.1 Initial conditions

The ME is connected to the SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 1.1.1 | [digits only, no help info available] |
| 4 | ME → USER | Display "Enter "+" | |
| 5 | USER → ME | Enter the input "+" and completion | Text string coding in unpacked format |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 1.1.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INKEY 1.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Enter "+" "

Coding:

| BER-TLV: | D0 | 15 | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| | 0A | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 22 | 2B | 22 | |

TERMINAL RESPONSE: GET INKEY 1.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 1.2.1 | [digits only, no help info available] |
| 4 | ME → USER | Display "Enter "0"" | Text string coding in packed format |
| 5 | USER → ME | Enter the input "0" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 1.2.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INKEY 1.2.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: SMS default alphabet
 Text: "Enter "0""

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 14 | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 09 | 00 | 45 | 37 | BD | 2C | 07 | 89 | 60 | 22 | | |

TERMINAL RESPONSE: GET INKEY 1.2.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "0"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 30 | | | | | | | | |

Expected Sequence 1.3 (GET INKEY, backward move)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 1.3.1 | [digits only, no help information available] |
| 4 | ME → USER | Display "<GO-BACKWARDS>" | Text string coding in unpacked format |
| 5 | USER → ME | Backwards move MMI action | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 1.3.1 | [backward move in the proactive SIM session requested by the user] |

PROACTIVE COMMAND: GET INKEY 1.3.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "<GO-BACKWARDS>"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0F | 04 | 3C | 47 | 4F | 2D | 42 | 41 | 43 | 4B | 57 | 41 |
| | 52 | 44 | 53 | 3E | | | | | | | | |

TERMINAL RESPONSE: GET INKEY 1.3.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: backward move in the proactive SIM session requested by the user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.4 (GET INKEY, abort)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 1.4.1 | [digits only, no help information available] |
| 4 | ME → USER | Display "<ABORT>" | Text string coding in unpacked format |
| 5 | USER → ME | Terminate the Proactive SIM session MMI action | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 1.4.1 | [Proactive SIM session terminated by the user] |

PROACTIVE COMMAND: GET INKEY 1.4.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "<ABORT>"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 13 | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 08 | 04 | 3C | 41 | 42 | 4F | 52 | 54 | 3E | | | |

TERMINAL RESPONSE: GET INKEY 1.4.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Proactive SIM session terminated by the user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 10 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 1.5.1 | [characters from SMS default alphabet, no help info available] |
| 4 | ME → USER | Display "Enter "q"" | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "q" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 1.5.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INKEY 1.5.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: SMS default alphabet, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Enter "q""

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 15 | 81 | 03 | 01 | 22 | 01 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 22 | 71 | 22 | |

TERMINAL RESPONSE: GET INKEY 1.5.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: SMS default alphabet, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "q"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 71 | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: GET INKEY 1.6.1 FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 1.6.1 | [digits only, no help info available] |
| 4 | ME → USER | Display "Enter "x". This command instructs the ME to display text, and to expect the user to enter a single character. Any response entered by the user shall be passed t" | 160 characters Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "x" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 1.6.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INKEY 1.6.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: SMS default alphabet, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Enter "x". This command instructs the ME to display text, and to expect the user to enter a single character. Any response entered by the user shall be passed t"

Coding:

| BER-TLV: | D0 | 81 | AD | 81 | 03 | 01 | 22 | 01 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| | 8D | 81 | A1 | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 22 | 78 |
| | 22 | 2E | 20 | 54 | 68 | 69 | 73 | 20 | 63 | 6F | 6D | 6D |
| | 61 | 6E | 64 | 20 | 69 | 6E | 73 | 74 | 72 | 75 | 63 | 74 |
| | 73 | 20 | 74 | 68 | 65 | 20 | 4D | 45 | 20 | 74 | 6F | 20 |
| | 64 | 69 | 73 | 70 | 6C | 61 | 79 | 20 | 74 | 65 | 78 | 74 |
| | 2C | 20 | 61 | 6E | 64 | 20 | 74 | 6F | 20 | 65 | 78 | 70 |
| | 65 | 63 | 74 | 20 | 74 | 68 | 65 | 20 | 75 | 73 | 65 | 72 |
| | 20 | 74 | 6F | 20 | 65 | 6E | 74 | 65 | 72 | 20 | 61 | 20 |
| | 73 | 69 | 6E | 67 | 6C | 65 | 20 | 63 | 68 | 61 | 72 | 61 |
| | 63 | 74 | 65 | 72 | 2E | 20 | 41 | 6E | 79 | 20 | 72 | 65 |
| | 73 | 70 | 6F | 6E | 73 | 65 | 20 | 65 | 6E | 74 | 65 | 72 |
| | 65 | 64 | 20 | 62 | 79 | 20 | 74 | 68 | 65 | 20 | 75 | 73 |
| | 65 | 72 | 20 | 73 | 68 | 61 | 6C | 6C | 20 | 62 | 65 | 20 |
| | 70 | 61 | 73 | 73 | 65 | 64 | 20 | 74 | | | | |

TERMINAL RESPONSE: GET INKEY 1.6.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: SMS default alphabet, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text String

Data coding scheme: unpacked, 8 bit data
Text: "x"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 78 | | | | | | | | |

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 11.14 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2 and clause 12.15.3.

27.22.4.2.2.3 Test purpose

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

27.22.4.2.2.4 Method of test

27.22.4.2.2.4.1 Initial conditions

The ME is connected to the SIM 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.

The SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 2.1.1 | [digits only, no help information available] |
| 4 | ME → USER | Display "<TIME-OUT>" | Text string coding in unpacked format |
| 5 | USER | Waiting and no completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 2.1.1 | [No response from user] within 5 s after the end of that defined period of time |
| 7 | USER | Check the delay of TERMINAL RESPONSE is reasonable or not | |

PROACTIVE COMMAND: GET INKEY 2.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "<TIME-OUT>"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 16 | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0B | 04 | 3C | 54 | 49 | 4D | 45 | 2D | 4F | 55 | 54 | 3E |

TERMINAL RESPONSE: GET INKEY 2.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: No response from user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 12 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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 format display)

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 11.14 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2 and clause 12.15.3.

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 SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.2.3.4 Method of test

27.22.4.2.3.4.1 Initial conditions

The ME is connected to the SIM 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, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 3.1.1 | [Digits only, no help information available] |
| 4 | ME → USER | Display "ЗДРАВСТВУЙТЕ " | Text string "Hello" in Russian coding in 16 bits UCS2 alphabet format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 3.1.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INKEY 3.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: 16 bit data UCS2 alphabet format

Text: "ЗДРАВСТВУЙТЕ "

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 24 | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 19 | 08 | 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: GET INKEY 3.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 3.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 3.2.1 | [digits only, no help information available] |
| 4 | ME → USER | Display "ЗДРАВСТВУЙТЕЗДРАВСТВУ ЙТЕЗДРАВСТВУЙТЕЗДРАВСТ ВУЙТЕЗДРАВСТВУЙТЕЗДРАВ СТВУЙ" | Text string length 70 characters, coding in 16 bits UCS2 alphabet format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 3.2.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INKEY 3.2.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: 16 bit data UCS2 alphabet format
 Text: "ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ"

ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ
ЗДРАВСТВУЙТЕЗДРАВСТВУЙ"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | 99 | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 |
| | 8D | 81 | 8D | 08 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |

TERMINAL RESPONSE: GET INKEY 3.2.1

Logically:

Command details

Command number: 1
Command type: GET INKEY
Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data
Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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 format of entry)

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 11.14 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2 and clause 12.15.3.

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 SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.2.4.4 Method of test

27.22.4.2.4.4.1 Initial conditions

The ME is connected to the SIM 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, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 4.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 4.1.1 | [characters from UCS2 alphabet, no help information available] |
| 4 | ME → USER | Display "Enter" | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "Д" and completion | Russian character, coding in UCS2 format |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 4.1.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INKEY 4.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: characters from UCS2 alphabet, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Enter"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 22 | 03 | 82 | 02 | 81 | 82 | 8D |
| | 06 | 04 | 45 | 6E | 74 | 65 | 72 | | | | | |

TERMINAL RESPONSE: GET INKEY 4.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: characters from UCS2 alphabet, no help information available

Device identities

Source device: ME

Destination device: SIM
 Result
 General Result: Command performed successfully
 Text String:
 Data coding scheme: 16 bit data UCS2 alphabet format
 Text: "Д"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 03 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 03 | 08 | 04 | 14 | | | | | | | |

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 11.14 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2 and clause 12.15.3.

27.22.4.2.5.3 Test purpose

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

27.22.4.2.5.4 Method of test

27.22.4.2.5.4.1 Initial conditions

The ME is connected to the SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 5.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 5.1.1 | ["Yes/No" Response, no help information available] |
| 4 | ME → USER | Display "Enter YES " | Text string coding in unpacked format |
| 5 | USER → ME | Choice "Yes" and Completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 5.1.1 | [command performed successfully] Check if it is in accordance with the user choice (value '01' in the Text String data object) |
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 5.1.2 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND: GET INKEY 5.1.2 | ["Yes/No" Response, no help information available] |
| 10 | ME → USER | Display "Enter NO:" | Text string coding in unpacked format |
| 11 | USER → ME | Choice "No" and Completion | |
| 12 | ME → SIM | TERMINAL RESPONSE: GET INKEY 5.1.2 | [command performed successfully] Check if it is in accordance with the user choice (value '00' in the Text String data object) |

PROACTIVE COMMAND: GET INKEY 5.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: "Yes/No" Response, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Enter YES"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 15 | 81 | 03 | 01 | 22 | 04 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 59 | 45 | 53 | |

TERMINAL RESPONSE: GET INKEY 5.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: "Yes/No" Response, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data
 Text: 01 (hex)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 04 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 01 | | | | | | | | |

PROACTIVE COMMAND: GET INKEY 5.1.2:

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: "Yes/No" Response, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Enter NO"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 14 | 81 | 03 | 01 | 22 | 04 | 82 | 02 | 81 | 82 | 8D |
| | 09 | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 4E | 4F | | |

TERMINAL RESPONSE: GET INKEY 5.1.2

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: "Yes/No" Response, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data
 Text: 00 (hex)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 04 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 00 | | | | | | | | |

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 11.14 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.31.

27.22.4.2.6.3 Test purpose

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

27.22.4.2.6.4 Method of test

27.22.4.2.6.4.1 Initial conditions

The ME is connected to the SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 6.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 6.1.1 | [BASIC-ICON self-explanatory for the Text string] |
| 4 | ME → USER | Display the BASIC-ICON for the prompt | Text string coding in unpacked format |
| 5 | USER → ME | Enter "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 6.1.1A | Command performed successfully] |

PROACTIVE COMMAND: GET INKEY 6.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "<NO-ICON>"

Icon Identifier

Icon qualifier: self-explanatory
 Icon identifier: 1 (number of record in EF_{Img})

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 19 | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 3C | 4E | 4F | 2D | 49 | 43 | 4F | 4E | 3E | 1E |
| | 02 | 00 | 01 | | | | | | | | | |

TERMINAL RESPONSE: GET INKEY 6.1.1A

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 6.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 6.1.1 | [BASIC-ICON self-explanatory for the Text string] |
| 4 | ME → USER | Display "<NO-ICON>" for the prompt without the icon | Text string coding in unpacked format |
| 5 | USER → ME | Enter "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 6.1.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE: GET INKEY 6.1.1B

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Text String:

Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: GET INKEY 6.2.1 FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 6.2.1 | [BASIC-ICON non self-explanatory for the Text string] |
| 4 | ME → USER | Display "<BASIC-ICON>" and Display the BASIC-ICON for the prompt | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 6.2.1A | [Command performed successfully] |

PROACTIVE COMMAND: GET INKEY 6.2.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "<BASIC-ICON>"

Icon Identifier

Icon qualifier: not self-explanatory
 Icon identifier: 1 (number of record in EF_{Img})

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0D | 04 | 3C | 42 | 41 | 53 | 49 | 43 | 2D | 49 | 43 | 4F |
| | 4E | 3E | 1E | 02 | 01 | 01 | | | | | | |

TERMINAL RESPONSE: GET INKEY 6.2.1A

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 6.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 6.2.1 | [BASIC-ICON non self-explanatory for the Text string] |
| 4 | ME → USER | Display "<BASIC-ICON>" for the prompt without the icon | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 6.2.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE: GET INKEY 6.2.1B

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Text String:

Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 6.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 6.3.1 | [COLOUR-ICON self-explanatory for the Text string] |
| 4 | ME → USER | Display the COLOUR-ICON for the prompt | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 6.3.1A | [Command performed successfully] |

PROACTIVE COMMAND: GET INKEY 6.3.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "<NO-ICON>"
 Icon Identifier
 Icon qualifier: self-explanatory
 Icon identifier: 2 (number of record in EF_{Img})

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 19 | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 3C | 4E | 4F | 2D | 49 | 43 | 4F | 4E | 3E | 1E |
| | 02 | 00 | 02 | | | | | | | | | |

TERMINAL RESPONSE: GET INKEY 6.3.1A

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 6.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 6.3.1 | [COLOUR-ICON self-explanatory for the Text string] |
| 4 | ME → USER | Display "<NO-ICON>" for the prompt without the icon | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 6.3.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE: GET INKEY 6.3.1B

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Text String:

Data coding scheme: unpacked, 8 bit data
Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 6.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 6.4.1 | [COLOUR-ICON non self-explanatory for the Text string] |
| 4 | ME → USER | Display "<COLOUR-ICON>" and Display the COLOUR-ICON for the prompt | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 6.4.1A | [Command performed successfully] |

PROACTIVE COMMAND: GET INKEY 6.4.1

Logically:

Command details

Command number: 1
Command type: GET INKEY
Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
Text: "<COLOUR-ICON>"

Icon Identifier

Icon qualifier: not self-explanatory
Icon identifier: 2 (number of record in EF_{Img})

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0E | 04 | 3C | 43 | 4F | 4C | 4F | 55 | 52 | 2D | 49 | 43 |
| | 4F | 4E | 3E | 1E | 02 | 01 | 02 | | | | | |

TERMINAL RESPONSE: GET INKEY 6.4.1A

Logically:

Command details

Command number: 1
Command type: GET INKEY
Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 6.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 6.4.1 | [COLOUR-ICON non self-explanatory for the Text string] |
| 4 | ME → USER | Display "<COLOUR-ICON>" for the prompt without the icon | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 6.4.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE: GET INKEY 6.4.1B

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Text String:

Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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 11.14 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.31.

27.22.4.2.7.3 Test purpose

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

27.22.4.2.7.4 Method of test

27.22.4.2.7.4.1 Initial conditions

The ME is connected to the SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 7.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INKEY 7.1.1 | [digits only, help information available] |
| 4 | ME → USER | Display "Enter "+" | Text string coding in unpacked format |
| 5 | USER → ME | Press "help" key | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INKEY 7.1.1 | [help info required] |
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 7.1.1 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND: DISPLAY TEXT 7.1.1 | |
| 10 | ME → USER | Display 'Help information' | Text string coded in unpacked format |
| 11 | USER → ME | Clear Message | |
| 12 | ME → SIM | TERMINAL RESPONSE: DISPLAY TEXT 7.1.1 | |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 7.1.2 | |
| 14 | ME → SIM | FETCH | |
| 15 | SIM → ME | PROACTIVE COMMAND: GET INKEY 7.1.2 | [digits only, help information available] |
| 16 | ME → USER | Display "Enter "+" | Repetition of get inkey |
| 17 | USER → ME | Enter the input "+" and completion | |
| 18 | ME → SIM | TERMINAL RESPONSE: GET INKEY 7.1.2 | [Command performed successfully] |

PROACTIVE COMMAND: GET INKEY 7.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Enter "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 15 | 81 | 03 | 01 | 22 | 80 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 22 | 2B | 22 | |

TERMINAL RESPONSE: GET INKEY 7.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Help information required by the user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 13 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND : DISPLAY TEXT 7.1.1

Logically:

Command details

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

Device identities

Source device: SIM
 Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Help information"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 11 | 04 | 48 | 65 | 6C | 70 | 20 | 69 | 6E | 66 | 6F | 72 |
| | 6D | 61 | 74 | 69 | 6F | 6E | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 7.1.1

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: SIM

Result

General Result: Command performed successfully

Coding:

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

PROACTIVE COMMAND: GET INKEY 7.1.2

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Enter "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 15 | 81 | 03 | 01 | 22 | 80 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 22 | 2B | 22 | |

TERMINAL RESPONSE: GET INKEY 7.1.2

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

27.22.4.2.7.5 Test requirement

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

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 11.14 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.13.

27.22.4.3.1.3 Test purpose

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

27.22.4.3.1.4 Method of test

27.22.4.3.1.4.1 Initial conditions

The ME is connected to the SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 1.1.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help info available] |
| 4 | ME → USER | Display "Enter 12345" | Range of expected length is 5-5 Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "12345" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 1.1.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INPUT 1.1.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Enter 12345"

Response length

Minimum length: 5
 Maximum length: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0C | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 31 | 32 | 33 | 34 |
| | 35 | 91 | 02 | 05 | 05 | | | | | | | |

TERMINAL RESPONSE: GET INPUT 1.1.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "12345"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 06 | 04 | 31 | 32 | 33 | 34 | 35 | | | | |

Expected Sequence 1.2 (GET INPUT, digits only, SMS default alphabet, ME to echo text, packing SMS Point-to-point required by ME)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 1.2.1 | [digits only, SMS default alphabet, ME to echo text, packing required, no help information available] |
| 4 | ME → USER | Display "Enter 67*#+" | Range of expected length is 5-5 Text string coding in packed format |
| 5 | USER → ME | Enter the input "67*#+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 1.2.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INPUT 1.2.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in packed SMS format, ME to echo text, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: SMS default alphabet
 Text: "Enter 67*#+"

Response length

Minimum length: 5
 Maximum length: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 23 | 08 | 82 | 02 | 81 | 82 | 8D |
| | 0B | 00 | 45 | 37 | BD | 2C | 07 | D9 | 6E | AA | D1 | 0A |
| | 91 | 02 | 05 | 05 | | | | | | | | |

TERMINAL RESPONSE: GET INPUT 1.2.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in packed SMS format, ME to echo text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: packed SMS format
 Text: "67*#+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 08 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 06 | 00 | B6 | 9B | 6A | B4 | 02 | | | | |

Expected Sequence 1.3 (GET INPUT, character set, SMS Default Alphabet, ME to echo text, ME supporting 8 bit data Message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: GET INPUT 1.3.1 | |
| 3 | SIM → ME | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 1.3.1 | [character set, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "Enter AbCdE" | Range of expected length is 5-5 |
| 5 | USER → ME | Enter the input "AbCdE" and completion | Text string coding in unpacked format |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 1.3.1 | The ME may echo the input |
| | | | [command performed successfully] |

PROACTIVE COMMAND: GET INPUT 1.3.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: Character set, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Enter AbCdE"

Response length

Minimum length: 5
 Maximum length: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 23 | 01 | 82 | 02 | 81 | 82 | 8D |
| | 0C | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 41 | 62 | 43 | 64 |
| | 45 | 91 | 02 | 05 | 05 | | | | | | | |

TERMINAL RESPONSE: GET INPUT 1.3.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: Character set, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "AbCdE"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 06 | 04 | 41 | 62 | 43 | 64 | 45 | | | | |

Expected Sequence 1.4 (GET INPUT, digits only, SMS default alphabet, ME to hide text, ME supporting 8 bit data Message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 1.4.1 | [digits only, SMS default alphabet, ME to hide text, packing not required, no help information available] |
| 4 | ME → USER | Display "Password 1<SEND>2345678" | Range of expected length is 4-8 Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "2345678" and completion | User's input not to be revealed at any time, optionally indication of key entries such as by displaying "***" |
| 6 | ME → USER | Input not revealed | optionally indication of key entries such as by displaying "***" |
| 7 | ME → SIM | TERMINAL RESPONSE: GET INPUT 1.4.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INPUT 1.4.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to hide text, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Password 1<SEND>2345678"

Response length

Minimum length: 4
 Maximum length: 8

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 27 | 81 | 03 | 01 | 23 | 04 | 82 | 02 | 81 | 82 | 8D |
| | 18 | 04 | 50 | 61 | 73 | 73 | 77 | 6F | 72 | 64 | 20 | 31 |
| | 3C | 53 | 45 | 4E | 44 | 3E | 32 | 33 | 34 | 35 | 36 | 37 |
| | 38 | 91 | 02 | 04 | 08 | | | | | | | |

TERMINAL RESPONSE: GET INPUT 1.4.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to hide text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "2345678"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 04 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 08 | 04 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | | |

Expected Sequence 1.5 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 1.5.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "Enter 1..9,0..9,0(1)" | Range of expected length is 1-20 Text string coding in unpacked format |
| 5 | USER → ME | Completion without input | |
| 6 | ME → USER | The ME MMI takes action to manage the entry of correct numbers of characters. | |
| 7 | USER → ME | Enter "12345678901234567890" and completion | |
| 8 | ME → SIM | TERMINAL RESPONSE: GET INPUT 1.5.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INPUT 1.5.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM

Destination device: ME
Text String
Data coding scheme: unpacked, 8 bit data
Text: "Enter 1..9,0..9,0(1)"
Response length
Minimum length: 1
Maximum length: 20

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 24 | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 15 | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 31 | 2E | 2E | 39 |
| | 2C | 30 | 2E | 2E | 39 | 2C | 30 | 28 | 31 | 29 | 91 | 02 |
| | 01 | 14 | | | | | | | | | | |

TERMINAL RESPONSE: GET INPUT 1.5.1

Logically:

Command details

Command number: 1
Command type: GET INPUT
Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data
Text: "12345678901234567890"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 15 | 04 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 |
| | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 30 | |

Expected Sequence 1.6 (GET INPUT, backwards move)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 1.6.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "<GO-BACKWARDS>" | Range of expected length is 0-8 Text string coding in unpacked format |
| 5 | USER → ME | Backwards move MMI action | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 1.6.1 | [backward move in the proactive SIM session requested by the user] |

PROACTIVE COMMAND: GET INPUT 1.6.1

Logically:

Command details

Command number: 1
Command type: GET INPUT
Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM
Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data
Text: "<GO-BACKWARDS>"

Response length

Minimum length: 0
Maximum length: 8

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0F | 04 | 3C | 47 | 4F | 2D | 42 | 41 | 43 | 4B | 57 | 41 |
| | 52 | 44 | 53 | 3E | 91 | 02 | 00 | 08 | | | | |

TERMINAL RESPONSE: GET INPUT 1.6.1

Logically:

Command details

Command number: 1
Command type: GET INPUT
Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: backward move in the proactive SIM session requested by the user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.7 (GET INPUT, abort)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.7.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 1.7.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "<ABORT>" | Range if expected length is 0-8 Text string coding in unpacked format |
| 5 | USER → ME | Terminate the Proactive SIM session MMI action | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 1.7.1 | [Proactive SIM session terminated by the user] |

PROACTIVE COMMAND: GET INPUT 1.7.1

Logically:

Command details

Command number: 1
Command type: GET INPUT
Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM
Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "<ABORT>"

Response length

Minimum length: 0
 Maximum length: 8

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 17 | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 08 | 04 | 3C | 41 | 42 | 4F | 52 | 54 | 3E | 91 | 02 | 00 |
| | 08 | | | | | | | | | | | |

TERMINAL RESPONSE: GET INPUT 1.7.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Proactive SIM session terminated by the user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 10 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.8 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.8.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 1.8.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display ****111111111111####222222 222###**3333333333###**44 444444444####**555555555## #**6666666666####**777777 777###**8888888888####**99 99999999####**000000000## #" | Range of length expected is 160-160 Text string coding in unpacked format |
| 5 | USER → ME | Enter the input ****111111111111####222222 222###**3333333333###**44 444444444####**555555555## #**6666666666####**777777 777###**8888888888####**99 99999999####**000000000## #" | |
| 6 | ME → SIM | and completion TERMINAL RESPONSE: GET INPUT 1.8.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INPUT 1.8.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "***111111111###***222222222###***333333333###***444444444###***555555555###***666666666###***777777777###***888888888###***999999999###***000000000###"

Response length

Minimum length: 160
 Maximum length: 160

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | B1 | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 |
| | 8D | 81 | A1 | 04 | 2A | 2A | 2A | 31 | 31 | 31 | 31 | 31 |
| | 31 | 31 | 31 | 31 | 31 | 23 | 23 | 23 | 2A | 2A | 2A | 32 |
| | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |
| | 33 | 23 | 23 | 23 | 2A | 2A | 2A | 34 | 34 | 34 | 34 | 34 |
| | 34 | 34 | 34 | 34 | 34 | 23 | 23 | 23 | 2A | 2A | 2A | 35 |
| | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 |
| | 36 | 23 | 23 | 23 | 2A | 2A | 2A | 37 | 37 | 37 | 37 | 37 |
| | 37 | 37 | 37 | 37 | 37 | 23 | 23 | 23 | 2A | 2A | 2A | 38 |
| | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| | 39 | 23 | 23 | 23 | 2A | 2A | 2A | 30 | 30 | 30 | 30 | 30 |
| | 30 | 30 | 30 | 30 | 30 | 23 | 23 | 23 | 91 | 02 | A0 | A0 |

TERMINAL RESPONSE: GET INPUT 1.8.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "***111111111###***222222222###***333333333###***444444444###***555555555###***666666666###***777777777###***888888888###***999999999###***000000000###"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 81 | A1 | 04 | 2A | 2A | 2A | 31 | 31 | 31 | 31 | 31 |
| | 31 | 31 | 31 | 31 | 31 | 23 | 23 | 23 | 2A | 2A | 2A | 32 |
| | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |
| | 33 | 23 | 23 | 23 | 2A | 2A | 2A | 34 | 34 | 34 | 34 | 34 |
| | 34 | 34 | 34 | 34 | 34 | 23 | 23 | 23 | 2A | 2A | 2A | 35 |
| | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 |
| | 36 | 23 | 23 | 23 | 2A | 2A | 2A | 37 | 37 | 37 | 37 | 37 |
| | 37 | 37 | 37 | 37 | 37 | 23 | 23 | 23 | 2A | 2A | 2A | 38 |
| | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| | 39 | 23 | 23 | 23 | 2A | 2A | 2A | 30 | 30 | 30 | 30 | 30 |
| | 30 | 30 | 30 | 30 | 30 | 23 | 23 | 23 | | | | |

Expected Sequence 1.9 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.9.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 1.9.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "<SEND>" | Range of expected length is 0-1 Text string coding in unpacked format |
| 5 | USER → ME | Completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 1.9.1A Or TERMINAL RESPONSE: GET INPUT 1.9.1B | [command performed successfully] |

PROACTIVE COMMAND: GET INPUT 1.9.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "<SEND>"

Response length

Minimum length: 0
 Maximum length: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 16 | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 07 | 04 | 3C | 53 | 45 | 4E | 44 | 3E | 91 | 02 | 00 | 01 |

TERMINAL RESPONSE: GET INPUT 1.9.1A

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data
 Text: empty string

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 01 | 04 | | | | | | | | | |

TERMINAL RESPONSE: GET INPUT 1.9.1B

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text string

Contents: Null data object

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 00 | | | | | | | | | | |

Expected Sequence 1.10 (GET INPUT, null length for the text string, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.10.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 1.10.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help info available] |
| 4 | ME → USER | Request for input | Range of expected length is 1-5 Null Text string |
| 5 | USER → ME | Enter the input "12345" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 1.10.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INPUT 1.10.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text string

Text: length null (00).

Response length

Minimum length: 1
 Maximum length: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0F | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 00 | 91 | 02 | 01 | 05 | | | | | | | |

TERMINAL RESPONSE: GET INPUT 1.10.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "12345"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 06 | 04 | 31 | 32 | 33 | 34 | 35 | | | | |

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 11.14 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.13.

27.22.4.3.2.3 Test purpose

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

27.22.4.3.2.4 Method of test

27.22.4.3.2.4.1 Initial conditions

The ME is connected to the SIM 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.

The SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 2.1.1 | [digits only, SMS default alphabet ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "<TIME-OUT>" | Range of expected length is 0-10 Text string coding in unpacked format |
| 5 | USER | Waiting and no completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 2.1.1 | [No response from user] within 5 s after the end of that defined period of time |

PROACTIVE COMMAND: GET INPUT 2.1.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "<TIME-OUT>"

Response length

Minimum length: 0
 Maximum length: 10

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0B | 04 | 3C | 54 | 49 | 4D | 45 | 2D | 4F | 55 | 54 | 3E |
| | 91 | 02 | 00 | 0A | | | | | | | | |

TERMINAL RESPONSE: GET INPUT 2.1.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: No response from user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 12 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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 format display)

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 11.14 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.13.

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 SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.3.3.4 Method of test

27.22.4.3.3.4.1 Initial conditions

The ME is connected to the SIM 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, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 3.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display " ЗДРАВСТВУЙТЕ " | Range of expected length is 5-5 Text string "Hello" in Russian coding in 16 bits UCS2 alphabet format |
| 5 | USER → ME | Enter the input "HELLO" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 3.1.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INPUT 3.1.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: alphabet set, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: 16 bit data UCS2 alphabet format
 Text: " ЗДРАВСТВУЙТЕ "

Response length

Minimum length: 5
 Maximum length: 5

Coding:

| BER-TLV: | D0 | 28 | 81 | 03 | 01 | 23 | 01 | 82 | 02 | 81 | 82 | 8D |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| | 19 | 08 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 | 04 | 12 |
| | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 | 04 | 22 |
| | 04 | 15 | 91 | 02 | 05 | 05 | | | | | | |

TERMINAL RESPONSE: GET INPUT 3.1.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: alphabet set, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "HELLO"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 06 | 04 | 48 | 45 | 4C | 4C | 4F | | | | |

Expected Sequence 3.2 (GET INPUT, max length for the text string coding in UCS2, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: GET INPUT 3.2.1 | |
| 3 | SIM → ME | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 3.2.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ" | Range of expected length is 5-5 Text string length 70 characters, coding in 16 bits UCS2 alphabet format |
| 5 | USER → ME | Enter the input "HELLO" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 3.2.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INPUT 3.2.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: alphabet set, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: 16 bit data UCS2 alphabet format
 Text: "ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ
 ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ
 ЗДРАВСТВУЙТЕЗДРАВСТВУЙ"

Response length

Minimum length: 5
 Maximum length: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | 9D | 81 | 03 | 01 | 23 | 01 | 82 | 02 | 81 | 82 |
| | 8D | 81 | 8D | 08 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 91 | 02 | 05 | 05 | | | | | | | | |

TERMINAL RESPONSE: GET INPUT 3.2.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: alphabet set, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "HELLO"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 06 | 04 | 48 | 45 | 4C | 4C | 4F | | | | |

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 format of entry)

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 11.14 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.13.

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 SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.3.4.4 Method of test

27.22.4.3.4.4.1 Initial conditions

The ME is connected to the SIM 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, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 4.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 4.1.1 | [character set, UCS2 alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "Enter Hello" | Range of expected length is 12-12 Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "ЗДРАВСТВУЙТЕ " | "Hello" in Russian, coding in UCS2 format |
| 6 | ME → SIM | and completion TERMINAL RESPONSE: GET INPUT 4.1.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INPUT 4.1.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: character set, UCS2 alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Enter Hello"

Response length

Minimum length: 12
 Maximum length: 12

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 23 | 03 | 82 | 02 | 81 | 82 | 8D |
| | 0C | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 48 | 65 | 6C | 6C |
| | 6F | 91 | 02 | 0C | 0C | | | | | | | |

TERMINAL RESPONSE: GET INPUT 4.1.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: character set, UCS2 alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: UCS2
 Text: "ЗДРАВСТВУЙТЕ"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 03 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 19 | 08 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 | 04 |
| | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 | 04 |
| | 22 | 04 | 15 | | | | | | | | | |

Expected Sequence 4.2 (GET INPUT, character set from UCS2 alphabet, Max length for the input, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 4.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 4.2.1 | [character set, UCS2 alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "Enter Hello" | Range of expected length is no limit |
| 5 | USER → ME | Enter the input "ЗДРАВСТВУЙТЕЗДРАВСТВУ ЙТЕ ЗДРАВСТВУЙТЕЗДРАВСТВУЙ ТЕ ЗДРАВСТВУЙТЕЗДРАВСТВУЙ and completion | Text string coding in unpacked format Input length 70 characters, coding in UCS2 format |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 4.2.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INPUT 4.2.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: character set, UCS2 alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Enter Hello"

Response length

Minimum length: 5
 Maximum length: No maximum length requirement

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 23 | 03 | 82 | 02 | 81 | 82 | 8D |
| | 0C | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 48 | 65 | 6C | 6C |
| | 6F | 91 | 02 | 05 | FF | | | | | | | |

TERMINAL RESPONSE: GET INPUT 4.2.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: character set, UCS2 alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully
 Data coding scheme: UCS2
 Text: "ЗДРАВСТВУЙТЕ...ЗДРАВСТВУЙ" (70 chars)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 03 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 81 | 8D | 08 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |

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 11.14 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.13.

27.22.4.3.5.3 Test purpose

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

27.22.4.3.5.4 Method of test

27.22.4.3.5.4.1 Initial conditions

The ME is connected to the SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 5.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 5.1.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "Enter 12345" Display "12345" | Range of expected length is 5-5 Text string coding in unpacked format Default text coding in unpacked format |
| 5 | USER → ME | Completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 5.1.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INPUT 5.1.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Enter 12345"

Response length

Minimum length: 5
 Maximum length: 5

Default Text

Data coding scheme: unpacked, 8 bit data
 Text: "12345"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 23 | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0C | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 31 | 32 | 33 | 34 |
| | 35 | 91 | 02 | 05 | 05 | 17 | 06 | 04 | 31 | 32 | 33 | 34 |
| | 35 | | | | | | | | | | | |

TERMINAL RESPONSE: GET INPUT 5.1.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "12345"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 06 | 04 | 31 | 32 | 33 | 34 | 35 | | | | |

Expected Sequence 5.2 (GET INPUT, default text for the input with max length, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 5.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 5.2.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "Enter:" Display default text input: "***1111111111###**22222222 22###**3333333333###**4444 444444###**5555555555###** 6666666666###**7777777777# ###**8888888888###**9999999 999###**0000000000###" | Range of expected length is 160-160 Text string coding in unpacked format Default text length 160 bytes coding in unpacked format |
| 5 | USER → ME | Completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 5.2.1 | [command performed successfully] |

PROACTIVE COMMAND: GET INPUT 5.2.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Enter:"

Response length

Minimum length: 160
 Maximum length: 160

Default Text

Data coding scheme: unpacked, 8 bit data
 Text: "***1111111111###**2222222222###**3333333333###**4444444444###**
 5555555555###**6666666666###**7777777777###**8888888888###**9999
 999999###**0000000000###"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | BA | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 |
| | 8D | 07 | 04 | 45 | 6E | 74 | 65 | 72 | 3A | 91 | 02 | A0 |
| | A0 | 17 | 81 | A1 | 04 | 2A | 2A | 2A | 31 | 31 | 31 | 31 |
| | 31 | 31 | 31 | 31 | 31 | 31 | 23 | 23 | 23 | 2A | 2A | 2A |
| | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 23 | 23 |
| | 23 | 2A | 2A | 2A | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |
| | 33 | 33 | 23 | 23 | 23 | 2A | 2A | 2A | 34 | 34 | 34 | 34 |
| | 34 | 34 | 34 | 34 | 34 | 34 | 23 | 23 | 23 | 2A | 2A | 2A |
| | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 23 | 23 |
| | 23 | 2A | 2A | 2A | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 |
| | 36 | 36 | 23 | 23 | 23 | 2A | 2A | 2A | 37 | 37 | 37 | 37 |
| | 37 | 37 | 37 | 37 | 37 | 37 | 23 | 23 | 23 | 2A | 2A | 2A |
| | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 23 | 23 |
| | 23 | 2A | 2A | 2A | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| | 39 | 39 | 23 | 23 | 23 | 2A | 2A | 2A | 30 | 30 | 30 | 30 |
| | 30 | 30 | 30 | 30 | 30 | 30 | 23 | 23 | 23 | | | |

TERMINAL RESPONSE: GET INPUT 5.2.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "***11111111111111111111###**2222222222###**3333333333###**4444444444###**5555555555###**6666666666###**7777777777###**8888888888###**9999999999###**0000000000###"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 81 | A1 | 04 | 2A | 2A | 2A | 31 | 31 | 31 | 31 | 31 |
| | 31 | 31 | 31 | 31 | 31 | 23 | 23 | 23 | 2A | 2A | 2A | 32 |
| | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |
| | 33 | 23 | 23 | 23 | 2A | 2A | 2A | 34 | 34 | 34 | 34 | 34 |
| | 34 | 34 | 34 | 34 | 34 | 23 | 23 | 23 | 2A | 2A | 2A | 35 |
| | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 |
| | 36 | 23 | 23 | 23 | 2A | 2A | 2A | 37 | 37 | 37 | 37 | 37 |
| | 37 | 37 | 37 | 37 | 37 | 23 | 23 | 23 | 2A | 2A | 2A | 38 |
| | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| | 39 | 23 | 23 | 23 | 2A | 2A | 2A | 30 | 30 | 30 | 30 | 30 |
| | 30 | 30 | 30 | 30 | 30 | 23 | 23 | 23 | | | | |

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 11.14 [15] clause 5.2, clause 6.4.3, clause 6.5.4, clause 6.6.3, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3, clause 12.13 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 SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.3.6.4 Method of test

27.22.4.3.6.4.1 Initial conditions

The ME is connected to the SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 6.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 6.1.1 | [BASIC-ICON self-explanatory for the Text string] |
| 4 | ME → USER | Display "<NO-ICON>" for the prompt without the icon | Text string coding in unpacked format |
| 5 | USER → ME | Enter "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 6.1.1A | Command performed successfully] |

PROACTIVE COMMAND: GET INPUT 6.1.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "<NO-ICON>"

Response length
 Minimum length: 0
 Maximum length: 10
 Icon Identifier
 Icon qualifier: self-explanatory
 Icon identifier: 1 (number of record in EF_{Img})

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 3C | 4E | 4F | 2D | 49 | 43 | 4F | 4E | 3E | 91 |
| | 02 | 00 | 0A | 1E | 02 | 00 | 01 | | | | | |

TERMINAL RESPONSE: GET INPUT 6.1.1A

Logically:

Command details
 Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, no help information available
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully
 Text string
 Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 6.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 6.1.1 | [BASIC-ICON self-explanatory for the Text string] |
| 4 | ME → USER | Display "<NO-ICON>" for the prompt without the icon | Text string coding in unpacked format |
| 5 | USER → ME | Enter "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 6.1.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE: GET INPUT 6.1.1B

Logically:

Command details
 Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, no help information available
 Device identities
 Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Text string

Data coding scheme: unpacked, 8 bit data
Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 6.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 6.2.1 | [BASIC-ICON non self-explanatory for the Text string] |
| 4 | ME → USER | Display "<BASIC-ICON>" and Display the BASIC-ICON for the prompt | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 6.2.1A | [Command performed successfully] |

PROACTIVE COMMAND: GET INPUT 6.2.1

Logically:

Command details

Command number: 1
Command type: GET INPUT
Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
Text: "<BASIC-ICON>"

Response length

Minimum length: 0
Maximum length: 10

Icon Identifier

Icon qualifier: not self-explanatory
Icon identifier: 1 (number of record in EF_{img})

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 20 | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0D | 04 | 3C | 42 | 41 | 53 | 49 | 43 | 2D | 49 | 43 | 4F |
| | 4E | 3E | 91 | 02 | 00 | 0A | 1E | 02 | 01 | 01 | | |

TERMINAL RESPONSE: GET INPUT 6.2.1A

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, no help information available
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully
 Text string
 Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 6.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 6.2.1 | [BASIC-ICON non self-explanatory for the Text string] |
| 4 | ME → USER | Display "<BASIC-ICON>" for the prompt without the icon | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 6.2.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE: GET INPUT 6.2.1B

Logically:

Command details
 Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, no help information available
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully but requested icon could not be displayed
 Text string
 Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND | [COLOUR-ICON self-explanatory for the Text string] Text string coding in unpacked format [Command performed successfully] |
| 2 | ME → SIM | PENDING: GET INPUT 6.3.1 FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 6.3.1 | |
| 4 | ME → USER | Display the COLOUR-ICON for the prompt | |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 6.3.1A | |

PROACTIVE COMMAND: GET INPUT 6.3.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "<NO-ICON>"

Response length

Minimum length: 0
 Maximum length: 10

Icon Identifier

Icon qualifier: self-explanatory
 Icon identifier: 2 (number of record in EF_{Img})

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 3C | 4E | 4F | 2D | 49 | 43 | 4F | 4E | 3E | 91 |
| | 02 | 00 | 0A | 1E | 02 | 00 | 02 | | | | | |

TERMINAL RESPONSE: GET INPUT 6.3.1A

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 6.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 6.3.1 | [COLOUR-ICON self-explanatory for the Text string] |
| 4 | ME → USER | Display "<NO-ICON>" for the prompt without the icon | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 6.3.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE: GET INPUT 6.3.1B

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 6.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 6.4.1 | [COLOUR-ICON non self-explanatory for the Text string] |
| 4 | ME → USER | Display "<COLOUR-ICON>" and Display the COLOUR-ICON for the prompt | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 6.4.1A | [Command performed successfully] |

PROACTIVE COMMAND: GET INPUT 6.4.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "<COLOUR-ICON>"

Response length

Minimum length: 0
 Maximum length: 10

Icon Identifier

Icon qualifier: not self-explanatory
 Icon identifier: 2 (number of record in EF_{Img})

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 21 | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0E | 04 | 3C | 43 | 4F | 4C | 4F | 55 | 52 | 2D | 49 | 43 |
| | 4F | 4E | 3E | 91 | 02 | 00 | 0A | 1E | 02 | 01 | 02 | |

TERMINAL RESPONSE: GET INPUT 6.4.1A

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND | [COLOUR-ICON non self-explanatory for the Text string] Text string coding in unpacked format [Command performed successfully, but requested icon could not be displayed] |
| 2 | ME → SIM | PENDING: GET INPUT 6.4.1 FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 6.4.1 | |
| 4 | ME → USER | Display "<COLOUR-ICON>" for the prompt without the icon | |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 6.4.1B | |

TERMINAL RESPONSE: GET INPUT 6.4.1B

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "+"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

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 11.14 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.13.

27.22.4.3.7.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive SIM command, and returns a 'help information required by the user' result value in the TERMINAL RESPONSE command sent to the SIM 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 SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 7.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET INPUT 7.1.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, help information available] |
| 4 | ME → USER | Display "Enter 12345" | Range of expected length is 5-5 Text string coding in unpacked format |
| 5 | USER → ME | Press "help" | |
| 6 | ME → SIM | TERMINAL RESPONSE: GET INPUT 7.1.1 | [command performed, help information required by user] |

PROACTIVE COMMAND: GET INPUT 7.1.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, help information available

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
 Text: "Enter 12345"

Response length

Minimum length: 5
 Maximum length: 5

Coding:

| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 23 | 80 | 82 | 02 | 81 | 82 | 8D |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| | 0C | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 31 | 32 | 33 | 34 |
| | 35 | 91 | 02 | 05 | 05 | | | | | | | |

TERMINAL RESPONSE: GET INPUT 7.1.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Help information required by the user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 13 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.3.7.5 Test requirement

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

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 11.14 [15] clause 6.4.4, clause 6.6.4, clause 5.2, clause 12.6 and clause 12.7.

27.22.4.4.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (OK) to the SIM after the ME receives the MORE TIME proactive SIM command.

27.22.4.4.4 Method of test

27.22.4.4.4.1 Initial conditions

The ME is connected to the SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: MORE TIME 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: MORE TIME 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: MORE TIME 1.1.1 | [Command performed successfully] |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: MORE TIME 1.1.1

Logically:

Command details

Command number: 1
 Command type: MORE TIME
 Command qualifier: "00"

Device identities

Source device: SIM
 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: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 02 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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 Definition and applicability

See clause 3.2.2.

27.22.4.5.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.5, clause 6.6.5, clause 5.2, clause 12.6, clause 12.7, clause 12.2, clause 12.16 and clause 12.8.

27.22.4.5.3 Test purpose

To verify that the ME plays an audio tone of a type and duration contained in the PLAY TONE proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME plays the requested audio tone through the external ringer 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 SIM command.

27.22.4.5.4 Method of test

27.22.4.5.4.1 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. 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 Procedure

Expected Sequence 1.1 (PLAY TONE)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SIM | TERMINAL RESPONSE: PLAY TONE 1.1.1 | [Command performed successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.2 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → 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 → SIM | TERMINAL RESPONSE: PLAY TONE 1.1.2 | [Command performed successfully] |
| 12 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.3 | |
| 14 | ME → SIM | FETCH | |
| 15 | SIM → ME | PROACTIVE COMMAND: PLAY TONE 1.1.3 | |
| 16 | ME → USER | Display "Congestion" Play a standard supervisory congestion tone for a duration of 5 s | |
| 17 | ME → SIM | TERMINAL RESPONSE: PLAY TONE 1.1.3 | [Command performed successfully] |
| 18 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 19 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.4 | |
| 20 | ME → SIM | FETCH | |
| 21 | SIM → ME | PROACTIVE COMMAND: PLAY TONE 1.1.4 | |
| 22 | ME → USER | Display "RP Ack" Play a standard supervisory radio path acknowledgement tone | |
| 23 | ME → SIM | TERMINAL RESPONSE: PLAY TONE 1.1.4 | [Command performed successfully] |
| 24 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 25 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.5 | |
| 26 | ME → SIM | FETCH | |
| 27 | SIM → ME | PROACTIVE COMMAND: PLAY TONE 1.1.5 | |

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 28 | ME → USER | Display "No RP" | |
| | | Play a standard supervisory radio path not available / call dropped tone for a duration of 5 s | |
| 29 | ME → SIM | TERMINAL RESPONSE: PLAY TONE 1.1.5 | [Command performed successfully] |
| 30 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 31 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.6 | |
| 32 | ME → SIM | FETCH | |
| 33 | SIM → 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 → SIM | TERMINAL RESPONSE: PLAY TONE 1.1.6 | [Command performed successfully] |
| 36 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 37 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.7 | |
| 38 | ME → SIM | FETCH | |
| 39 | SIM → 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 → SIM | TERMINAL RESPONSE: PLAY TONE 1.1.7 | [Command performed successfully] |
| 42 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 43 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.8 | |
| 44 | ME → SIM | FETCH | |
| 45 | SIM → 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 | |
| 47 | ME → SIM | TERMINAL RESPONSE: PLAY TONE 1.1.8 | [Command performed successfully] |
| 48 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 49 | USER → ME | Set up a voice call | [User dials 123456789 to connect to the network manually] |
| 50 | ME → SS | Establish voice call | [Voice call is established] |
| 51 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.9 | |
| 52 | ME → SIM | FETCH | |
| 53 | SIM → ME | PROACTIVE COMMAND: PLAY TONE 1.1.9 | |
| 54 | ME → USER | Display "Dial Tone" | |
| | | Superimpose the standard supervisory dial tone on the audio downlink for the duration of 5 s | |
| 55 | ME → SIM | TERMINAL RESPONSE: PLAY TONE 1.1.9 | [Command performed successfully] |
| 56 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 57 | USER → ME | The user ends the call | |

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 58 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.10 | |
| 59 | ME → SIM | FETCH | |
| 60 | SIM → ME | PROACTIVE COMMAND: PLAY TONE 1.1.10 | |
| 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" | |
| 62 | ME → SIM | Play a general beep TERMINAL RESPONSE: PLAY TONE 1.1.10a or TERMINAL RESPONSE: PLAY TONE 1.1.10b | [Command performed successfully] or [Command beyond ME's capabilities] |
| 63 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 64 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.11 | |
| 65 | ME → SIM | FETCH | |
| 66 | SIM → ME | PROACTIVE COMMAND: PLAY TONE 1.1.11 | |
| 67 | ME → USER | Display "Beep" | |
| 68 | ME → SIM | Play a ME proprietary general beep TERMINAL RESPONSE: PLAY TONE 1.1.11a Or TERMINAL RESPONSE: PLAY TONE 1.1.11b | [Command performed successfully] or [Command beyond ME's capabilities] |
| 69 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 70 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.12 | |
| 71 | ME → SIM | FETCH | |
| 72 | SIM → ME | PROACTIVE COMMAND: PLAY TONE 1.1.12 | |
| 73 | ME → USER | Display "Positive" | |
| 74 | ME → SIM | Play a ME proprietary positive acknowledgement tone TERMINAL RESPONSE: PLAY TONE 1.1.12a or TERMINAL RESPONSE: PLAY TONE 1.1.12b | [Command performed successfully] or [Command beyond ME's capabilities] |
| 75 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 76 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.13 | |
| 77 | ME → SIM | FETCH | |
| 78 | SIM → ME | PROACTIVE COMMAND: PLAY TONE 1.1.13 | |
| 79 | ME → USER | Display "Negative" | |
| | | Play a ME proprietary negative acknowledgement tone | |

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 80 | ME → SIM | TERMINAL RESPONSE: PLAY TONE 1.1.13a | [Command performed successfully] |
| | | or | or |
| | | TERMINAL RESPONSE: PLAY TONE 1.1.13b | [Command beyond ME's capabilities] |
| 81 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 82 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.14 | |
| 83 | ME → SIM | FETCH | |
| 84 | SIM → ME | PROACTIVE COMMAND: PLAY TONE 1.1.14 | |
| 85 | ME → USER | Display "Quick" | |
| | | Play a ME proprietary general beep | |
| 86 | ME → SIM | TERMINAL RESPONSE: PLAY TONE 1.1.14a | [Command performed successfully] |
| | | or | or |
| | | TERMINAL RESPONSE: PLAY TONE 1.1.14b | [Command beyond ME's capabilities] |
| 87 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 88 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.15 | |
| 89 | ME → SIM | FETCH | |
| 90 | SIM → ME | PROACTIVE COMMAND: PLAY TONE 1.1.15 | |
| 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 → SIM | TERMINAL RESPONSE: PLAY TONE 1.1.15 | [Proactive SIM session terminated by the user] |
| 93 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 94 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.16 | |
| 95 | ME → SIM | FETCH | |
| 96 | SIM → ME | PROACTIVE COMMAND: PLAY TONE 1.1.16 | [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 → SIM | TERMINAL RESPONSE: PLAY TONE 1.1.16 | [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] |
| 99 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: PLAY TONE 1.1.1

Logically:

Command details

Command number: 1
Command type: PLAY TONE
Command qualifier: "00"

Device identities

Source device: SIM

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 | | | | | | | |

PROACTIVE COMMAND: PLAY TONE 1.1.2

Logically:

Command details

Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Earpiece
 Alpha identifier: "Sub. Busy"
 Tone: Standard supervisory tones: called subscriber busy

Duration

Time unit: Seconds
 Time interval: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 09 | 53 | 75 | 62 | 2E | 20 | 42 | 75 | 73 | 79 | 8E | 01 |
| | 02 | 84 | 02 | 01 | 05 | | | | | | | |

PROACTIVE COMMAND: PLAY TONE 1.1.3

Logically:

Command details

Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Earpiece
 Alpha identifier: "Congestion"
 Tone: Standard supervisory tones: congestion

Duration

Time unit: Seconds
 Time interval: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 0A | 43 | 6F | 6E | 67 | 65 | 73 | 74 | 69 | 6F | 6E | 8E |
| | 01 | 03 | 84 | 02 | 01 | 05 | | | | | | |

PROACTIVE COMMAND: PLAY TONE 1.1.4

Logically:

Command details

Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Earpiece
 Alpha identifier: "RP Ack"
 Tone: Standard supervisory tones: radio path acknowledge

Duration

Time unit: Seconds
 Time interval: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 18 | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 06 | 52 | 50 | 20 | 41 | 63 | 6B | 8E | 01 | 04 | 84 | 02 |
| | 01 | 05 | | | | | | | | | | |

PROACTIVE COMMAND: PLAY TONE 1.1.5

Logically:

Command details

Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Earpiece
 Alpha identifier: "No RP"
 Tone: Standard supervisory tones: radio path not available

Duration

Time unit: Seconds
 Time interval: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 17 | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 05 | 4E | 6F | 20 | 52 | 50 | 8E | 01 | 05 | 84 | 02 | 01 |
| | 05 | | | | | | | | | | | |

PROACTIVE COMMAND: PLAY TONE 1.1.6

Logically:

Command details

Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Earpiece
 Alpha identifier: "Spec Info"
 Tone: Standard supervisory tones: Error/ special information

Duration

Time unit: Seconds
 Time interval: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 09 | 53 | 70 | 65 | 63 | 20 | 49 | 6E | 66 | 6F | 8E | 01 |
| | 06 | 84 | 02 | 01 | 05 | | | | | | | |

PROACTIVE COMMAND: PLAY TONE 1.1.7

Logically:

Command details

Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Earpiece
 Alpha identifier: "Call Wait"
 Tone: Standard supervisory tones: call waiting tone

Duration

Time unit: Seconds
 Time interval: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 09 | 43 | 61 | 6C | 6C | 20 | 57 | 61 | 69 | 74 | 8E | 01 |
| | 07 | 84 | 02 | 01 | 05 | | | | | | | |

PROACTIVE COMMAND: PLAY TONE 1.1.8

Logically:

Command details

Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Earpiece
 Alpha identifier: "Ring Tone"
 Tone: Standard supervisory tones: ringing tone

Duration

Time unit: Seconds
 Time interval: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 09 | 52 | 69 | 6E | 67 | 20 | 54 | 6F | 6E | 65 | 8E | 01 |
| | 08 | 84 | 02 | 01 | 05 | | | | | | | |

PROACTIVE COMMAND: PLAY TONE 1.1.9

Logically:

Command details

Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"

Device identities

Source device: SIM
 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 | | | | | | | |

PROACTIVE COMMAND: PLAY TONE 1.1.10

Logically:

Command details

Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Earpiece
 Alpha identifier: "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"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FD | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 |
| | 85 | 81 | F1 | 54 | 68 | 69 | 73 | 20 | 63 | 6F | 6D | 6D |
| | 61 | 6E | 64 | 20 | 69 | 6E | 73 | 74 | 72 | 75 | 63 | 74 |
| | 73 | 20 | 74 | 68 | 65 | 20 | 4D | 45 | 20 | 74 | 6F | 20 |
| | 70 | 6C | 61 | 79 | 20 | 61 | 6E | 20 | 61 | 75 | 64 | 69 |
| | 6F | 20 | 74 | 6F | 6E | 65 | 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 | 63 | 68 | 65 | 63 | 6B | 20 | 69 | 66 | 20 | 69 |
| | 74 | 20 | 69 | 73 | 20 | 63 | 75 | 72 | 72 | 65 | 6E | 74 |
| | 6C | 79 | 20 | 69 | 6E | 2C | 20 | 6F | 72 | 20 | 69 | 6E |
| | 20 | 74 | 68 | 65 | 20 | 70 | 72 | 6F | 63 | 65 | 73 | 73 |
| | 20 | 6F | 66 | 20 | 73 | 65 | 74 | 74 | 69 | 6E | 67 | 20 |
| | 75 | 70 | 20 | 28 | 53 | 45 | 54 | 2D | 55 | 50 | 20 | 6D |
| | 65 | 73 | 73 | 61 | 67 | 65 | 20 | 73 | 65 | 6E | 74 | 20 |
| | 74 | 6F | 20 | 74 | 68 | 65 | 20 | 6E | 65 | 74 | 77 | 6F |
| | 72 | 6B | 2C | 20 | 73 | 65 | 65 | 20 | 47 | 53 | 4D | 22 |
| | 30 | 34 | 2E | 30 | 38 | 22 | 28 | 38 | 29 | 29 | 2C | 20 |
| | 61 | 20 | 73 | 70 | 65 | 65 | 63 | 68 | 20 | 63 | 61 | 6C |
| 6C | 2E | 20 | 2D | 20 | 49 | 66 | 20 | 74 | 68 | 65 | 20 | |
| 4D | 45 | 20 | 49 | | | | | | | | | |

PROACTIVE COMMAND: PLAY TONE 1.1.11

Logically:

Command details

Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Earpiece
 Alpha identifier: "Beep"
 Tone: ME proprietary tones: general beep

Duration

Time unit: Seconds
 Time interval: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 16 | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 04 | 42 | 65 | 65 | 70 | 8E | 01 | 10 | 84 | 02 | 01 | 01 |

PROACTIVE COMMAND: PLAY TONE 1.1.12

Logically:

Command details

Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Earpiece
 Alpha identifier: "Positive"
 Tone: ME proprietary tones: positive acknowledgement tone

Duration

Time unit: Seconds
 Time interval: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 08 | 50 | 6F | 73 | 69 | 74 | 69 | 76 | 65 | 8E | 01 | 11 |
| | 84 | 02 | 01 | 01 | | | | | | | | |

PROACTIVE COMMAND: PLAY TONE 1.1.13

Logically:

Command details

Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Earpiece
 Alpha identifier: "Negative"
 Tone: ME proprietary tones: negative acknowledgement tone

Duration

Time unit: Seconds
 Time interval: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 08 | 4E | 65 | 67 | 61 | 74 | 69 | 76 | 65 | 8E | 01 | 12 |
| | 84 | 02 | 01 | 01 | | | | | | | | |

PROACTIVE COMMAND: PLAY TONE 1.1.14

Logically:

Command details

Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"
 Device identities
 Source device: SIM
 Destination device: Earpiece
 Alpha identifier: "Quick"
 Tone: ME proprietary tones: general beep
 Duration
 Time unit: Tenths of seconds
 Time interval: 2

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 17 | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 05 | 51 | 75 | 69 | 63 | 6B | 8E | 01 | 10 | 84 | 02 | 02 |
| | 02 | | | | | | | | | | | |

PROACTIVE COMMAND: PLAY TONE 1.1.15

Logically:

Command details
 Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"
 Device identities
 Source device: SIM
 Destination device: Earpiece
 Alpha identifier: "<ABORT>"
 Tone: Standard supervisory tones: Error / Special information
 Duration
 Time unit: Minutes
 Time interval: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 19 | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 07 | 3C | 41 | 42 | 4F | 52 | 54 | 3E | 8E | 01 | 06 | 84 |
| | 02 | 00 | 01 | | | | | | | | | |

PROACTIVE COMMAND: PLAY TONE 1.1.16

Logically:

Command details
 Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"
 Device identities
 Source device: SIM
 Destination device: Earpiece

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|--|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | |
| | | | | | | | | | | | | |

TERMINAL RESPONSE: PLAY TONE 1.1.1 ... 1.1.9, 1.1.16

Logically:

Command details

Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: PLAY TONE 1.1.10a ... 1.1.14a

Logically:

Command details
 Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: PLAY TONE 1.1.10b ..1.1.14b

Logically:

Command details
 Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command beyond ME's capabilities

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 30 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: PLAY TONE 1.1.15

Logically:

Command details
 Command number: 1
 Command type: PLAY TONE
 Command qualifier: "00"
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Proactive SIM session terminated by user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 10 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

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 11.14 [15] clause 6.1, clause 6.4.6, clause 6.6.6, clause 5.2, clause 12.6, clause 12.7 and clause 12.8.

27.22.4.6.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (OK) to the SIM after the ME receives the POLL INTERVAL proactive SIM command.

To verify that the ME gives a valid response to the polling interval requested by the SIM.

To verify that the ME sends STATUS commands to the SIM at an interval no longer than the interval negotiated by the SIM.

27.22.4.6.4 Method of test

27.22.4.6.4.1 Initial conditions

The ME is connected to the SIM 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

Expected Sequence 1.1 (POLL INTERVAL, Seconds)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POLL INTERVAL 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POLL INTERVAL 1.1.1 | [Duration: 20 seconds] |
| 4 | ME → SIM | TERMINAL RESPONSE: POLL INTERVAL 1.1.1 | [Command performed successfully, duration depends on the ME"s capabilities] |
| 5 | ME → SIM | ME polls in intervals as stated in the duration TLV of TERMINAL RESPONSE: POLL INTERVAL 1.1.1 | |

PROACTIVE COMMAND: POLL INTERVAL 1.1.1

Logically:

Command details

Command number: 1

Command type: POLL INTERVAL
 Command qualifier: "00"
 Device identities
 Source device: SIM
 Destination device: ME
 Duration
 Time unit: Seconds
 Time interval: 20

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0D | 81 | 03 | 01 | 03 | 00 | 82 | 02 | 81 | 82 | 84 |
| | 02 | 01 | 14 | | | | | | | | | |

TERMINAL RESPONSE: POLL INTERVAL 1.1.1

Logically:

Command details
 Command number: 1
 Command type: POLL INTERVAL
 Command qualifier: "00"
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully
 Duration
 Time unit: Seconds
 Time interval: 20

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 03 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 84 | 02 | 01 | 14 | | | | | | | | |

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 11.14 [13], subclause 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 11.14 [15] clause 6.1, clause 6.4.7, clause 6.6.13, clause 5.2, clause 12.6, clause 12.7 and clause 12.18.

27.22.4.7.1.3 Test purpose

To verify that the ME performs the SIM initialization and / or re-reads the contents and structure of the EFs on the SIM that have been changed and / or restarts the card session by resetting the ME, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

27.22.4.7.1.4 Method of test

27.22.4.7.1.4.1 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. 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 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, SIM Initialization)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: REFRESH 1.1.1 | |
| 4 | SIM | Invalidate EF IMSI, EF LOCI and EF ADN | [Restricted dialling feature is enabled] |
| 5 | ME → SIM | SIM Initialization | [ME performs SIM initialization] |
| 6 | ME → SIM | TERMINAL RESPONSE: REFRESH 1.1.1A Or TERMINAL RESPONSE: REFRESH 1.1.1B | [additional EFs read] |
| 7 | SIM → ME | PROACTIVE SIM 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 → SS | 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: SIM Initialization

Device identities

Source device: SIM
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: SIM Initialization
 Device identities
 Source device: ME
 Destination device: SIM
 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: SIM Initialization
 Device identities
 Source device: ME
 Destination device: SIM
 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 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: REFRESH 1.2.1 | |
| 3 | SIM → ME | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND: REFRESH 1.2.1 | |
| 5 | SIM | Update EF FDN RECORD 1 | [EF FDN record 1 updated to contain the dialling string "0123456789"] |
| 6 | ME → SIM | TERMINAL RESPONSE: REFRESH 1.2.1A | [normal ending] |
| 7 | ME → SIM | Or | |
| 8 | ME → SIM | TERMINAL RESPONSE: REFRESH 1.2.1B | [additional EFs read] |
| 9 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 10 | USER → ME | Call setup to "123" | |
| 11 | ME → USER | Call set up not allowed | |
| 12 | USER → ME | Call setup to "0123456789" | |
| 13 | ME → SS | 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: SIM

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 | 10 | 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: SIM

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: SIM

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, SIM Initialization and File Change Notification)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: REFRESH 1.3.1 | |
| 4 | SIM | Update EF PLMN | [EF PLMN to contain the PLMN code "98798" as the first PLMN code] |
| 5 | ME → SIM | SIM initialization and READ BINARY: EF PLMN | |
| 6 | ME → SIM | TERMINAL RESPONSE: REFRESH 1.3.1A Or TERMINAL RESPONSE: REFRESH 1.3.1B | [normal ending] [additional EFs read] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: REFRESH 1.3.1

Logically:

Command details

Command number: 1
 Command type: REFRESH
 Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: SIM
 Destination device: ME
 File List: EF PLMN

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 01 | 02 | 82 | 02 | 81 | 82 | 92 |
| | 07 | 01 | 3F | 00 | 7F | 20 | 6F | 30 | | | | |

TERMINAL RESPONSE: REFRESH 1.3.1A

Logically:

Command details

Command number: 1
 Command type: REFRESH
 Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME
 Destination device: SIM

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: SIM Initialization and File Change Notification

Device identities

Source device: ME
 Destination device: SIM

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, SIM Initialization and Full File Change Notification)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: REFRESH 1.4.1 | |
| 4 | SIM | Invalidate EF IMSI, EF LOCI and EF ADN | [Restricted dialling feature is enabled] |
| 5 | SIM | Update EF FDN | [EF FDN record 1 updated to contain the dialling string "0123456789"] |
| 6 | ME → SIM | SIM Initialization | [ME performs SIM initialization] |
| 7 | ME → SIM | TERMINAL RESPONSE: REFRESH 1.4.1A Or TERMINAL RESPONSE: REFRESH 1.4.1B | [additional EFs read] |
| 8 | SIM → ME | PROACTIVE SIM 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 → SS | 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: SIM Initialization and Full File Change Notification

Device identities

Source device: SIM
 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: SIM Initialization and Full File Change Notification

Device identities

Source device: ME
 Destination device: SIM

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: SIM Initialization and Full File Change Notification

Device identities

Source device: ME
 Destination device: SIM

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, SIM Reset)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|----------------------------------|------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: REFRESH 1.5.1 | |
| 3 | SIM → ME | FETCH | |
| 4 | ME → SIM | PROACTIVE COMMAND: REFRESH 1.5.1 | |
| 5 | ME → SIM | GSM Termination Procedure | |
| 6 | ME → SIM | GSM Activation Procedure | |
| 7 | ME → SIM | SIM Initialization | |
| | | | [NO TERMINAL RESPONSE] |

PROACTIVE COMMAND: REFRESH 1.5.1

Logically:

Command details

Command number: 1
 Command type: REFRESH
 Command qualifier: SIM Reset

Device identities

Source device: SIM
 Destination device: ME

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|--|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 01 | 04 | 82 | 02 | 81 | 82 | |
|----------|----|----|----|----|----|----|----|----|----|----|----|--|

Expected Sequence 1.6 (REFRESH, SIM 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 system Simulator, if the SIM responds with '90 00'] |
| 2 | SS → 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 → SIM | ENVELOPE: SMS-PP DOWNLOAD 1.6.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 1.1.1 | |
| 6 | ME → SS | RP-ACK | |
| 7 | ME → SIM | FETCH | |
| 8 | SIM → ME | PROACTIVE COMMAND: REFRESH 1.1.1 | |
| 9 | SIM | Invalidate EF IMSI, EF LOCI and EF ADN | [Restricted dialling feature is enabled] |
| 10 | ME → SIM | SIM Initialization | [ME performs SIM initialization] |
| 11 | ME → SIM | TERMINAL RESPONSE: REFRESH 1.1.1A Or TERMINAL RESPONSE: REFRESH 1.1.1B | [additional EFs read] |
| 12 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 13 | USER → ME | Call setup to "321" | |
| 14 | ME → USER | Call set up not allowed | |
| 15 | USER → ME | Call setup to "123" | |
| 16 | ME → SS | 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 | SIM Data download |
| TP-DCS | |
| Coding Group | General Data Coding |
| Compression | Text is uncompressed |
| Message Class | Class 2 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: SIM

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 SIM Data download

TP-DCS

Coding Group General Data Coding

Compression Text is uncompressed

Message Class Class 2 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 | |

27.22.4.7.1.5 Test requirement

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

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 11.14 [15] clause 6.1, clause 6.4.7, clause 6.6.13, clause 5.2, clause 12.6, clause 12.7 and clause 12.18.

Additionally the ME shall support the SIM Initialization procedure as defined in:

- TS 11.11 [13] clause 12.2.1.

27.22.4.7.2.3 Test purpose

To verify that the ME performs the SIM initialization and / or re-reads the contents and structure of the EFs on the SIM that have been changed and / or restarts the card session by resetting the ME, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

27.22.4.7.2.4 Method of test

27.22.4.7.2.4.1 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. The elementary files are coded as SIM 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 L3-RR SYSTEM INFORMATION TYPE 3 message on the BCCH is set to "MSs shall apply IMSI attach and detach procedure" for Expected Sequences 2.2 and 2.3.

27.22.4.7.2.4.2 Procedure

Expected Sequence 2.1 (REFRESH, SIM Initialization and File Change Notification)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: REFRESH 2.1.1 | |
| 4 | ME | Invoke MM Restart Procedure | |
| 5 | ME → SIM | SIM INITIALIZATION and the SIM will update EF IMSI, EF LOCI and EF KC after phase request | [Update the contents of EF IMSI to "001010123456788", set the update status inside EF LOCI to not updated, Temporary Mobile Subscriber Identity (TMSI) in EF LOCI to "FF FF FF FF" and EF KC to not valid, ME performs SIM initialization; including reading EF IMSI, EF LOCI and EF KC] |
| 6 | ME → SIM | TERMINAL RESPONSE: REFRESH 2.1.1A Or TERMINAL RESPONSE: REFRESH 2.1.1B | [normal] [additional EFs read] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 8 | ME → SS | Location updating request (type "normal location updating") | [Send IMSI of "001010123456788" to System Simulator] |

PROACTIVE COMMAND: REFRESH 2.1.1

Logically:

Command details

Command number: 1
 Command type: REFRESH
 Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: SIM
 Destination device: ME

File List

File 1: EF IMSI
 File 2: EF LOCI
 File 3: EF KC

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 01 | 02 | 82 | 02 | 81 | 82 | 92 |
| | 13 | 03 | 3F | 00 | 7F | 20 | 6F | 07 | 3F | 00 | 7F | 20 |
| | 6F | 7E | 3F | 00 | 7F | 20 | 6F | 20 | | | | |

TERMINAL RESPONSE: REFRESH 2.1.1A

Logically:

Command details

Command number: 1
 Command type: REFRESH
 Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 01 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: REFRESH 2.1.1B

Logically:

Command details

Command number: 1
 Command type: REFRESH
 Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME
 Destination device: SIM

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 2.2 (REFRESH, SIM Initialization and Full File Change Notification)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: REFRESH 2.2.1 | |
| 4 | ME | Invoke MM Restart Procedure | [including IMSI DETACH] |
| 5 | ME → SIM | SIM INITIALIZATION and the SIM will update EF IMSI and EF LOCI after phase request | [Update the contents of EF IMSI to "001010123456787", Temporary Mobile Subscriber Identity (TMSI) in EF LOCI be set to"FF FF FF FF"; ME performs SIM initialization; including reading EF IMSI, EF LOCI and EF KC] |
| 6 | ME → SIM | TERMINAL RESPONSE: REFRESH 2.2.1A Or TERMINAL RESPONSE: REFRESH 2.2.1B | [normal] [additional EFs read] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 8 | ME → SS | IMSI ATTACH | [Send IMSI of "001010123456787" to System Simulator] |

PROACTIVE COMMAND: REFRESH 2.2.1

Logically:

Command details

Command number: 1
 Command type: REFRESH
 Command qualifier: SIM Initialization and Full File Change Notification

Device identities

Source device: SIM
 Destination device: ME

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 01 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: REFRESH 2.2.1A

Logically:

Command details

Command number: 1
 Command type: REFRESH
 Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 01 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: REFRESH 2.2.1B

Logically:

Command details

Command number: 1
 Command type: REFRESH
 Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME
 Destination device: SIM

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 2.3 (REFRESH, SIM Reset)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: REFRESH 2.3.1 | |
| 4 | ME → SIM | GSM Session Termination Procedure | |
| 5 | ME → SS | IMSI DETACH | |
| 6 | ME → SIM | SIM Initialization and the SIM will update EF IMSI and EF LOCI after phase request | [Update the contents of EF IMSI to "001010123456786", Temporary Mobile Subscriber Identity (TMSI) in EF LOCI be set to "FF FF FF FF"; ME performs SIM initialization; including reading EF IMSI, EF LOCI and EF KC] |
| 7 | ME → SS | IMSI ATTACH | [Send IMSI of "001010123456786" to System Simulator] |

PROACTIVE COMMAND: REFRESH 2.3.1

Logically:

Command details

Command number: 1
 Command type: REFRESH
 Command qualifier: SIM Reset

Device identities

Source device: SIM
 Destination device: ME

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 01 | 04 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.7.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.3.

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 11.14 [15] clause 5, clause 6.4.8, clause 6.6.7, clause 6.8, clause 6.11, clause 12.6, clause 12.9 and clause 13.4.

The ME shall support MENU SELECTION as defined in:

- TS 11.14 [15] clause 4.4, clause 5.2, clause 6.4.8, clause 6.9, clause 8, clause 12.7 and clause 12.10.

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 SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

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 SIM using the ENVELOPE (MENU SELECTION) command.

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 SIM 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 SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP MENU 1.1.1 | [First Set Up Menu] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 1.1.1 | |
| 4 | ME → USER | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" and "Item 4" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 1.1.1 | [Command Performed Successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | |
| 8 | ME → USER | Display "Item 1", "Item 2", "Item 3", "Item 4" | |
| 9 | USER → ME | Select the "Item 2" Menu entry | |
| 10 | ME → SIM | Send the ENVELOPE 1.1.1: MENU SELECTION (Identifier of item: 2) | |
| 11 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP MENU 1.1.2 | [Second Set Up Menu, REPLACE Old Menu] |
| 12 | ME → SIM | FETCH | |
| 13 | SIM → ME | PROACTIVE COMMAND SET UP MENU 1.1.2 | |
| 14 | ME → USER | Integrate the new menu header of "Toolkit Menu" into its menu system and have the menu items of "One" and "Two" under this header. | |
| 15 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 1.1.2 | [Command Performed Successfully] |
| 16 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 17 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | |
| 18 | ME → USER | Display "One", "Two" | |
| 19 | USER → ME | Select the "Two" menu entry | |
| 20 | ME → SIM | Send the ENVELOPE 1.1.2: MENU SELECTION (Identifier of item: 12) | |
| 21 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP MENU 1.1.3 with SW1 / SW2 of '91 0F'. | [Third Set Up Menu, REMOVE Toolkit Menu] |
| 22 | ME → SIM | FETCH | |
| 23 | SIM → ME | PROACTIVE COMMAND SET UP MENU 1.1.3 | |
| 24 | ME → USER | Remove the menu "Toolkit Menu" from its menu system. | |
| 25 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 1.1.3 | [Command Performed Successfully] |
| 26 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 27 | USER → ME | Has to unsuccessfully find the Toolkit Menu | |

PROACTIVE COMMAND: SET UP MENU 1.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1
 Text string of item: "Item 1"

Item

Identifier of item: 2
 Text string of item: "Item 2"

Item

Identifier of item: 3
 Text string of item: "Item 3"

Item

Identifier of item: 4
 Text string of item: "Item 4"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3B | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0C | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 4D | 65 | 6E |
| | 75 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 | 8F | 07 |
| | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 | 49 | 74 |
| | 65 | 6D | 20 | 33 | 8F | 07 | 04 | 49 | 74 | 65 | 6D | 20 |
| | 34 | | | | | | | | | | | |

PROACTIVE COMMAND: SET UP MENU 1.1.2

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Toolkit Menu"

Item

Identifier of item: "11"
 Text string of item: "One"

Item

Identifier of item: "12"
 Text string of item: "Two"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 23 | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0C | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 4D | 65 | 6E |
| | 75 | 8F | 04 | 11 | 4F | 6E | 65 | 8F | 04 | 12 | 54 | 77 |
| | 6F | | | | | | | | | | | |

PROACTIVE COMMAND: SET UP MENU 1.1.3

Logically:

Command details

Command number: 1
 Command type: SET UP MENU

Command qualifier: "00"
 Device identities
 Source device: SIM
 Destination device: ME
 Item: Empty

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0D | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 00 | 8F | 00 | | | | | | | | | |

TERMINAL RESPONSE: SET UP MENU 1.1.1, 1.1.2 and 1.1.3

Logically:

Command details
 Command number: 1
 Command type: SET UP MENU
 Command qualifier: "no help information available"
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE 1.1.1: MENU SELECTION

Logically:

Menu selection
 Device identities
 Source device: Keypad
 Destination device: SIM
 Item identifier: 02

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D3 | 07 | 82 | 02 | 01 | 81 | 90 | 01 | 02 |
|----------|----|----|----|----|----|----|----|----|----|

ENVELOPE 1.1.2: MENU SELECTION

Logically:

Menu selection
 Device identities
 Source device: Keypad
 Destination device: SIM
 Item identifier: 12

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D3 | 07 | 82 | 02 | 01 | 81 | 90 | 01 | 12 |
|----------|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.2 (SET UP MENU, Large Menu with many items or with large items or with Large Alpha Identifier)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND | [First Large Menu with many items, Fetch of FF bytes] |
| 2 | ME → SIM | PENDING: SET UP MENU 1.2.1 FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 1.2.1 | |
| 4 | ME → USER | Integrate the new menu header of "LargeMenu1" into its menu system and have the menu items of "Zero", "One", "Two", "Three", "Four", "Five", "Six", "Seven", "Eight", "Nine", "Alpha", "Bravo", "Charlie", "Delta", "Echo", "Fox-trot", "Black", "Brown", "Red", "Orange", "Yellow", "Green", "Blue", "Violet", "Grey", "White", "milli", "micro", "nano" and "pico" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 1.2.1 | [Command Performed Successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit "LargeMenu1" | |
| 8 | ME → USER | Display "Zero", "One", "Two" ... "pico" | |
| 9 | USER → ME | Select the "Orange" menu entry | |
| 10 | ME → SIM | Send the ENVELOPE 1.2.1: MENU SELECTION (Identifier of item: 0x3D) | |
| 11 | SIM → ME | PROACTIVE COMMAND | [Second Large Menu with large items, Fetch of F6 bytes] |
| 12 | ME → SIM | PENDING: SET UP MENU 1.2.2 FETCH | |
| 13 | SIM → ME | PROACTIVE COMMAND SET UP MENU 1.2.2 | |
| 14 | ME → USER | Integrate the new menu header of "LargeMenu2" into its menu system and have the menu items of "1 Call Forward Unconditional", "2 Call Forward On User Busy", "3 Call Forward On No Reply", "4 Call Forward On User Not Reachable", "5 Barring Of All Outgoing Calls", "6 Barring Of All Outgoing Int Calls" and "7 CLI Presentation" under this header. | |
| 15 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 1.2.2 | [Command Performed Successfully] |
| 16 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 17 | USER → ME | Select the Toolkit Menu "LargeMenu2" | |
| 18 | ME → USER | Display "1 Call Forward Unconditional", "2 Call Forward On User Busy", "3 Call Forward On No Reply", "4 Call Forward On User Not Reachable", "5 Barring Of All Outgoing Calls", "6 Barring Of All Outgoing Int Calls", "7 CLI Presentation" | |
| 19 | USER → ME | Select the "5 Barring Of All Outgoing Calls" menu entry | |
| 20 | ME → SIM | Send the ENVELOPE 1.2.2: MENU SELECTION (Identifier of item: 0xFB) | |

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 21 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP MENU 1.2.3 | [Third Large Menu with a Large Alpha Identifier and only one Short Item, Fetch of FF bytes] |
| 22 | ME → SIM | FETCH | |
| 23 | SIM → ME | PROACTIVE COMMAND SET UP MENU 1.2.3 | |
| 24 | ME → USER | Integrate the new menu header of " The SIM shall supply a set of menu items, which shall be integrated with the menu system (or other MMI facility) in order to give the user the opportunity to choose one of these menu items at his own discretion. Each item comprises a sh" into it's menu system and have a menu item of "Y" under this header. | |
| 25 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 1.2.3 | [Command Performed Successfully] |
| 26 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 27 | USER → ME | Select the Toolkit Menu "The SIM shall supply a set of menu items, which shall be integrated with the menu system (or other MMI facility) in order to give the user the opportunity to choose one of these menu items at his own discretion. Each item comprises a sh". | |
| 28 | ME → USER | Display "Y" | |
| 29 | USER → ME | Select the item "Y" | |
| 30 | ME → SIM | Send the ENVELOPE 1.2.3: MENU SELECTION (Identifier of item: 1) | |

PROACTIVE COMMAND: SET UP MENU 1.2.1

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha Identifier: "LargeMenu1"

Item

Identifier of item: "50"
 Text string of item: "Zero"

Item

Identifier of item: "4F"
 Text string of item: "One"

Item

Identifier of item: "4E"
 Text string of item: "Two"

Item

Identifier of item: "4D"
 Text string of item: "Three"

Item

Identifier of item: "4C"
 Text string of item: "Four"

Item

Identifier of item: "4B"

| | | |
|------|----------------------|------------|
| | Text string of item: | "Five" |
| Item | Identifier of item: | "4A" |
| | Text string of item: | "Six" |
| Item | Identifier of item: | "49" |
| | Text string of item: | "Seven" |
| Item | Identifier of item: | "48" |
| | Text string of item: | "Eight" |
| Item | Identifier of item: | "47" |
| | Text string of item: | "Nine" |
| Item | Identifier of item: | "46" |
| | Text string of item: | "Alpha" |
| Item | Identifier of item: | "45" |
| | Text string of item: | "Bravo" |
| Item | Identifier of item: | "44" |
| | Text string of item: | "Charlie" |
| Item | Identifier of item: | "43" |
| | Text string of item: | "Delta" |
| Item | Identifier of item: | "42" |
| | Text string of item: | "Echo" |
| Item | Identifier of item: | "41" |
| | Text string of item: | "Fox-trot" |
| Item | Identifier of item: | "40" |
| | Text string of item: | "Black" |
| Item | Identifier of item: | "3F" |
| | Text string of item: | "Brown" |
| Item | Identifier of item: | "3E" |
| | Text string of item: | "Red" |
| Item | Identifier of item: | "3D" |
| | Text string of item: | "Orange" |
| Item | Identifier of item: | "3C" |
| | Text string of item: | "Yellow" |
| Item | Identifier of item: | "3B" |
| | Text string of item: | "Green" |
| Item | Identifier of item: | "3A" |
| | Text string of item: | "Blue" |
| Item | Identifier of item: | "39" |
| | Text string of item: | "Violet" |
| Item | Identifier of item: | "38" |
| | Text string of item: | "Grey" |
| Item | Identifier of item: | "37" |
| | Text string of item: | "White" |
| Item | | |

- Item Identifier of item: "36"
Text string of item: "milli"
- Item Identifier of item: "35"
Text string of item: "micro"
- Item Identifier of item: "34"
Text string of item: "nano"
- Item Identifier of item: "33"
Text string of item: "pico"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FC | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 |
| | 85 | 0A | 4C | 61 | 72 | 67 | 65 | 4D | 65 | 6E | 75 | 31 |
| | 8F | 05 | 50 | 5A | 65 | 72 | 6F | 8F | 04 | 4F | 4F | 6E |
| | 65 | 8F | 04 | 4E | 54 | 77 | 6F | 8F | 06 | 4D | 54 | 68 |
| | 72 | 65 | 65 | 8F | 05 | 4C | 46 | 6F | 75 | 72 | 8F | 05 |
| | 4B | 46 | 69 | 76 | 65 | 8F | 04 | 4A | 53 | 69 | 78 | 8F |
| | 06 | 49 | 53 | 65 | 76 | 65 | 6E | 8F | 06 | 48 | 45 | 69 |
| | 67 | 68 | 74 | 8F | 05 | 47 | 4E | 69 | 6E | 65 | 8F | 06 |
| | 46 | 41 | 6C | 70 | 68 | 61 | 8F | 06 | 45 | 42 | 72 | 61 |
| | 76 | 6F | 8F | 08 | 44 | 43 | 68 | 61 | 72 | 6C | 69 | 65 |
| | 8F | 06 | 43 | 44 | 65 | 6C | 74 | 61 | 8F | 05 | 42 | 45 |
| | 63 | 68 | 6F | 8F | 09 | 41 | 46 | 6F | 78 | 2D | 74 | 72 |
| | 6F | 74 | 8F | 06 | 40 | 42 | 6C | 61 | 63 | 6B | 8F | 06 |
| | 3F | 42 | 72 | 6F | 77 | 6E | 8F | 04 | 3E | 52 | 65 | 64 |
| | 8F | 07 | 3D | 4F | 72 | 61 | 6E | 67 | 65 | 8F | 07 | 3C |
| | 59 | 65 | 6C | 6C | 6F | 77 | 8F | 06 | 3B | 47 | 72 | 65 |
| | 65 | 6E | 8F | 05 | 3A | 42 | 6C | 75 | 65 | 8F | 07 | 39 |
| | 56 | 69 | 6F | 6C | 65 | 74 | 8F | 05 | 38 | 47 | 72 | 65 |
| | 79 | 8F | 06 | 37 | 57 | 68 | 69 | 74 | 65 | 8F | 06 | 36 |
| | 6D | 69 | 6C | 6C | 69 | 8F | 06 | 35 | 6D | 69 | 63 | 72 |
| | 6F | 8F | 05 | 34 | 6E | 61 | 6E | 6F | 8F | 05 | 33 | 70 |
| | 69 | 63 | 6F | | | | | | | | | |

PROACTIVE COMMAND: SET UP MENU 1.2.2

Logically:

Command details

- Command number: 1
- Command type: SET UP MENU
- Command qualifier: "00"

Device identities

- Source device: SIM
- Destination device: ME
- Alpha Identifier: "LargeMenu2"

Item

- Identifier of item: "FF"
- Text string of item: "1 Call Forward Unconditional"

Item

- Identifier of item: "FE"
- Text string of item: "2 Call Forward On User Busy"

Item

- Identifier of item: "FD"
- Text string of item: "3 Call Forward On No Reply"

Item

- Identifier of item: "FC"
- Text string of item: "4 Call Forward On User Not Reachable"

Item

- Identifier of item: "FB"

Text string of item: "5 Barring Of All Outgoing Calls"
 Item Identifier of item: "FA"
 Text string of item: "6 Barring Of All Outgoing Int Calls"
 Item Identifier of item: "F9"
 Text string of item: "7 CLI Presentation"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | F3 | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 |
| | 85 | 0A | 4C | 61 | 72 | 67 | 65 | 4D | 65 | 6E | 75 | 32 |
| | 8F | 1D | FF | 31 | 20 | 43 | 61 | 6C | 6C | 20 | 46 | 6F |
| | 72 | 77 | 61 | 72 | 64 | 20 | 55 | 6E | 63 | 6F | 6E | 64 |
| | 69 | 74 | 69 | 6F | 6E | 61 | 6C | 8F | 1C | FE | 32 | 20 |
| | 43 | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 | 61 | 72 | 64 |
| | 20 | 4F | 6E | 20 | 55 | 73 | 65 | 72 | 20 | 42 | 75 | 73 |
| | 79 | 8F | 1B | FD | 33 | 20 | 43 | 61 | 6C | 6C | 20 | 46 |
| | 6F | 72 | 77 | 61 | 72 | 64 | 20 | 4F | 6E | 20 | 4E | 6F |
| | 20 | 52 | 65 | 70 | 6C | 79 | 8F | 25 | FC | 34 | 20 | 43 |
| | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 | 61 | 72 | 64 | 20 |
| | 4F | 6E | 20 | 55 | 73 | 65 | 72 | 20 | 4E | 6F | 74 | 20 |
| | 52 | 65 | 61 | 63 | 68 | 61 | 62 | 6C | 65 | 8F | 20 | FB |
| | 35 | 20 | 42 | 61 | 72 | 72 | 69 | 6E | 67 | 20 | 4F | 66 |
| | 20 | 41 | 6C | 6C | 20 | 4F | 75 | 74 | 67 | 6F | 69 | 6E |
| | 67 | 20 | 43 | 61 | 6C | 6C | 73 | 8F | 24 | FA | 36 | 20 |
| | 42 | 61 | 72 | 72 | 69 | 6E | 67 | 20 | 4F | 66 | 20 | 41 |
| | 6C | 6C | 20 | 4F | 75 | 74 | 67 | 6F | 69 | 6E | 67 | 20 |
| | 49 | 6E | 74 | 20 | 43 | 61 | 6C | 6C | 73 | 8F | 13 | F9 |
| | 37 | 20 | 43 | 4C | 49 | 20 | 50 | 72 | 65 | 73 | 65 | 6E |
| | 74 | 61 | 74 | 69 | 6F | 6E | | | | | | |

PROACTIVE COMMAND: SET UP MENU 1.2.3

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha Identifier: "The SIM shall supply a set of menu items, which shall be integrated with the menu system (or other MMI facility) in order to give the user the opportunity to choose one of these menu items at his own discretion. Each item comprises a sh"

Item

Identifier of item: "01"
 Text string of item: "Y"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FC | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 |
| | 85 | 81 | EC | 54 | 68 | 65 | 20 | 53 | 49 | 4D | 20 | 73 |
| | 68 | 61 | 6C | 6C | 20 | 73 | 75 | 70 | 70 | 6C | 79 | 20 |
| | 61 | 20 | 73 | 65 | 74 | 20 | 6F | 66 | 20 | 6D | 65 | 6E |
| | 75 | 20 | 69 | 74 | 65 | 6D | 73 | 2C | 20 | 77 | 68 | 69 |
| | 63 | 68 | 20 | 73 | 68 | 61 | 6C | 6C | 20 | 62 | 65 | 20 |
| | 69 | 6E | 74 | 65 | 67 | 72 | 61 | 74 | 65 | 64 | 20 | 77 |
| | 69 | 74 | 68 | 20 | 74 | 68 | 65 | 20 | 6D | 65 | 6E | 75 |
| | 20 | 73 | 79 | 73 | 74 | 65 | 6D | 20 | 28 | 6F | 72 | 20 |
| | 6F | 74 | 68 | 65 | 72 | 20 | 4D | 4D | 49 | 20 | 66 | 61 |
| | 63 | 69 | 6C | 69 | 74 | 79 | 29 | 20 | 69 | 6E | 20 | 6F |
| | 72 | 64 | 65 | 72 | 20 | 74 | 6F | 20 | 67 | 69 | 76 | 65 |
| | 20 | 74 | 68 | 65 | 20 | 75 | 73 | 65 | 72 | 20 | 74 | 68 |
| | 65 | 20 | 6F | 70 | 70 | 6F | 72 | 74 | 75 | 6E | 69 | 74 |
| | 79 | 20 | 74 | 6F | 20 | 63 | 68 | 6F | 6F | 73 | 65 | 20 |
| | 6F | 6E | 65 | 20 | 6F | 66 | 20 | 74 | 68 | 65 | 73 | 65 |
| | 20 | 6D | 65 | 6E | 75 | 20 | 69 | 74 | 65 | 6D | 73 | 20 |
| | 61 | 74 | 20 | 68 | 69 | 73 | 20 | 6F | 77 | 6E | 20 | 64 |
| | 69 | 73 | 63 | 72 | 65 | 74 | 69 | 6F | 6E | 2E | 20 | 45 |
| | 61 | 63 | 68 | 20 | 69 | 74 | 65 | 6D | 20 | 63 | 6F | 6D |
| | 70 | 72 | 69 | 73 | 65 | 73 | 20 | 61 | 20 | 73 | 68 | 8F |
| | 02 | 01 | 59 | | | | | | | | | |

TERMINAL RESPONSE: SET UP MENU 1.2.1, 1.2.2 and 1.2.3

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: "no help information available"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE 1.2.1: MENU SELECTION

Logically:

Menu selection

Device identities
 Source device: Keypad
 Destination device: SIM
 Item identifier: 3D

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D3 | 07 | 82 | 02 | 01 | 81 | 90 | 01 | 3D |
|----------|----|----|----|----|----|----|----|----|----|

ENVELOPE 1.2.2: MENU SELECTION

Logically:

Menu selection

Device identities
 Source device: Keypad
 Destination device: SIM
 Item identifier FB

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D3 | 07 | 82 | 02 | 01 | 81 | 90 | 01 | FB |
|----------|----|----|----|----|----|----|----|----|----|

ENVELOPE 1.2.3: MENU SELECTION

Logically:

Menu selection

Device identities
 Source device: Keypad
 Destination device: SIM
 Item identifier 01

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D3 | 07 | 82 | 02 | 01 | 81 | 90 | 01 | 01 |
|----------|----|----|----|----|----|----|----|----|----|

The following table details the test requirements with relation to the tested features:

| Proactive SIM Command Number | Proactive SIM Command Facilities | | |
|------------------------------|----------------------------------|-----------------|------------------------|
| | 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 11.14 [15] clause 12.21.

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 SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

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 SIM 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 SIM 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 SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP MENU 2.1.1 | [First Set Up Menu] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 2.1.1 | |
| 4 | ME → USER | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" and "Item 4" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 2.1.1 | [Command Performed Successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | |
| 8 | ME → USER | Display "Item 1", "Item 2", "Item 3", "Item 4" | |
| 9 | USER → ME | Select the Help Request on "Item 2" Menu entry | |
| 10 | ME → SIM | Send the ENVELOPE 2.1.1: MENU SELECTION (Identifier of item: 2) | |

PROACTIVE COMMAND: SET UP MENU 2.1.1

Logically:

Command details

Command number: 1
Command type: SET UP MENU
Command qualifier: "80"

Device identities

Source device: SIM
Destination device: ME
Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1
Text string of item: "Item 1"

Item

Identifier of item: 2
Text string of item: "Item 2"

Item

Identifier of item: 3
 Text string of item: "Item 3"
 Item
 Identifier of item:4
 Text string of item: "Item 4"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3B | 81 | 03 | 01 | 25 | 80 | 82 | 02 | 81 | 82 | 85 |
| | 0C | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 4D | 65 | 6E |
| | 75 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 | 8F | 07 |
| | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 | 49 | 74 |
| | 65 | 6D | 20 | 33 | 8F | 07 | 04 | 49 | 74 | 65 | 6D | 20 |
| | 34 | | | | | | | | | | | |

TERMINAL RESPONSE: SET UP MENU 2.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: " help information available"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 25 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE 2.1.1: MENU SELECTION

Logically:

Menu selection

Device identities

Source device: Keypad
 Destination device: SIM

Item identifier 02

Help request tag

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D3 | 09 | 82 | 02 | 01 | 81 | 90 | 01 | 02 | 15 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

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 SIM 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 11.14 [15] clause 12.24.

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 SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

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 SIM 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 SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP MENU 3.1.1 | [First Set Up Menu] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 3.1.1 | |
| 4 | ME → USER | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" and "Item 4" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 3.1.1 | [Command Performed Successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | |
| 8 | ME → USER | Display "Item 1", "Item 2", "Item 3", "Item 4" | The ME may indicate to the user the consequences of performing the selection of an item. |
| 9 | USER → ME | Navigate in the items, then select "Item 2". | The ME may indicate to the user the consequences of performing the selection of an item. |
| 10 | ME → SIM | Send the ENVELOPE 3.1.1: MENU SELECTION (Identifier of item: 2) | |

ENVELOPE 3.1.1: MENU SELECTION

Logically:

Menu selection

Device identities
 Source device: Keypad
 Destination device: SIM
 Item identifier 02

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|--|--|
| BER-TLV: | D3 | 07 | 82 | 02 | 01 | 81 | 90 | 01 | 02 | | |
|----------|----|----|----|----|----|----|----|----|----|--|--|

PROACTIVE COMMAND: SET UP MENU 3.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1
 Text string of item: "Item 1"

Item

Identifier of item: 2
 Text string of item: "Item 2"

Item

Identifier of item: 3
 Text string of item: "Item 3"

Item

Identifier of item: 4
 Text string of item: "Item 4"

Items next action indicator list

List: "Send SM", "Set Up Call", "Launch Browser", "Provide Local Information"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 41 | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0C | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 4D | 65 | 6E |
| | 75 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 | 8F | 07 |
| | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 | 49 | 74 |
| | 65 | 6D | 20 | 33 | 8F | 07 | 04 | 49 | 74 | 65 | 6D | 20 |
| | 34 | 18 | 04 | 13 | 10 | 15 | 26 | | | | | |

TERMINAL RESPONSE: SET UP MENU 3.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: "no help information available"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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:

- TS 11.14 [15] clause 6.5.4, 12.31 and 12.32.

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 SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

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 SIM 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 SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP MENU 4.1.1 | [First Set Up Menu] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 4.1.1 | |
| 4 | ME → USER | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 4.1.1A | [Command Performed Successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | Verify the icon is displayed with alpha id. |
| 8 | ME → USER | Display "Item 1", "Item 2", "Item 3". | |
| 9 | USER → ME | Navigate in the items, then select "Item 2". | Verify icons are displayed for each item. |
| 10 | ME → SIM | Send the ENVELOPE 3.1.1: MENU SELECTION (Identifier of item: 2) | |

PROACTIVE COMMAND: SET UP MENU 4.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1
 Text string of item: "Item 1"

Item

Identifier of item: 2
 Text string of item: "Item 2"

Item

Identifier of item: 3
 Text string of item: "Item 3"

Icon identifier

Icon qualifier: icon is not self explanatory
 Icon identifier: record 1 EF (IMG)

Item icon identifier list

Icon qualifier: icon is not self explanatory
 Icon identifier list: record 5 EF (IMG), record 5 EF (IMG), record 5 EF (IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3C | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0C | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 4D | 65 | 6E |
| | 75 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 | 8F | 07 |
| | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 | 49 | 74 |
| | 65 | 6D | 20 | 33 | 9E | 02 | 01 | 01 | 9F | 04 | 01 | 05 |
| | 05 | 05 | | | | | | | | | | |

TERMINAL RESPONSE: SET UP MENU 4.1.1A

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: "no help information available"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND | [First Set Up Menu] |
| 2 | ME → SIM | PENDING: SET UP MENU 4.1.1 | |
| 3 | SIM → ME | FETCH | |
| 4 | ME → USER | PROACTIVE COMMAND SET UP MENU 4.1.1 | |
| 5 | ME → SIM | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header. | |
| 6 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 4.1.1B | [Command performed successfully, but requested icon could not be displayed] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 8 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | |
| 9 | ME → USER | Display "Item 1", "Item 2", "Item 3" under the header 'Toolkit Menu'. | Verify that either for the header or for each of the items no icon is displayed |
| 10 | USER → ME | Navigate in the items, then select "Item 2". | |
| 10 | ME → SIM | Send the ENVELOPE 3.1.1: MENU SELECTION (Identifier of item: 2) | |

TERMINAL RESPONSE: SET UP MENU 4.1.1B

Logically:

Command details

Command number: 1
 Command type: SET UP MENU

Command qualifier: "no help information available"
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully but requested icon could not be displayed

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 4.2A (SET UP MENU, BASIC ICON SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP MENU 4.2.1 | [First Set Up Menu] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 4.2.1 | |
| 4 | ME → USER | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 4.2.1A | [Command Performed Successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | Verify the icon is displayed in alpha id. |
| 8 | ME → USER | Display "Item 1", "Item 2", "Item 3". | |
| 9 | USER → ME | Navigate in the items, then select "Item 2". | Verify icons are displayed for each item. |
| 10 | ME → SIM | Send the ENVELOPE 3.1.1: MENU SELECTION (Identifier of item: 2) | |

PROACTIVE COMMAND: SET UP MENU 4.2.1

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1
 Text string of item: "Item 1"

Item

Identifier of item: 2
 Text string of item: "Item 2"

Item

Identifier of item: 3
 Text string of item: "Item 3"

Icon identifier

Icon qualifier: icon is self explanatory
 Icon identifier: record 1 EF (IMG)

Item icon identifier list

Icon qualifier: icon is self explanatory
 Icon identifier list: record 5 EF (IMG), record 5 EF (IMG), record 5 EF (IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3C | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0C | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 4D | 65 | 6E |
| | 75 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 | 8F | 07 |
| | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 | 49 | 74 |
| | 65 | 6D | 20 | 33 | 9E | 02 | 00 | 01 | 9F | 04 | 00 | 05 |
| | 05 | 05 | | | | | | | | | | |

TERMINAL RESPONSE: SET UP MENU 4.2.1A

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: "no help information available"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 4.2B (SET UP MENU, BASIC ICON SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP MENU 4.2.1 | [First Set Up Menu] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 4.2.1 | |
| 4 | ME → USER | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 4.2.1B | [Command Performed Successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | |
| 8 | ME → USER | Display "Item 1", "Item 2", "Item 3" under the header 'Toolkit Menu'. | Verify that either for the header or for each of the items no icon is displayed |
| 9 | USER → ME | Navigate in the items, then select "Item 2". | |
| 10 | ME → SIM | Send the ENVELOPE 3.1.1: MENU SELECTION (Identifier of item: 2) | |

TERMINAL RESPONSE: SET UP MENU 4.2.1B

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: "no help information available"
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully but requested icon could not be displayed

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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 SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

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 SIM 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 SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP MENU 5.1.1 | [First Set Up Menu] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 5.1.1 | |
| 4 | ME → USER | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 5.1.1 | [Command Performed Successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | |
| 8 | ME → USER | Display "Item 1", "Item 2" | |
| 9 | USER → ME | Navigate in the items, then select "Item 2". | Verify we can select items through soft keys |
| 10 | ME → SIM | Send the ENVELOPE 3.1.1: MENU SELECTION (Identifier of item: 2) | |

PROACTIVE COMMAND: SET UP MENU 5.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: '01' (selection using soft key preferred)

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1
 Text string of item: "Item 1"

Item

Identifier of item: 2
 Text string of item: "Item 2"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 29 | 81 | 03 | 01 | 25 | 01 | 82 | 02 | 81 | 82 | 85 |
| | 0C | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 4D | 65 | 6E |
| | 75 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 | 8F | 07 |
| | 02 | 49 | 74 | 65 | 6D | 20 | 32 | | | | | |

TERMINAL RESPONSE: SET UP MENU 5.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: '01' (selection using soft key preferred)

Device identities

Source device: ME

Destination device: SIM
 Result
 General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 25 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.8.5.5 Test requirement

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

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 SIM: Select Item facility as defined in the following technical specifications:

- TS 11.14 [15] clause 5, clause 6.4.9, clause 6.6.8, clause 6.8, clause 12.6, clause 13.4 and clause 14.

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 SIM command, and returns a TERMINAL RESPONSE command to the SIM with the identifier of the item chosen.

To verify that the ME allows a SELECT ITEM proactive SIM command within the maximum 255 byte BER-TLV boundary.

To verify that the ME returns a TERMINAL RESPONSE with "Proactive SIM application session terminated by the user", if the user has indicated the need to end the proactive SIM session.

To verify that the ME returns a TERMINAL RESPONSE with "Backwards move in the proactive SIM application session requested by the user", if the user has indicated the need to go backwards in the proactive SIM 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 SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 1.1.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2", "Item 3" and "Item 4" under the header of "Toolkit Select". | |
| 5 | USER → ME | Select "Item 2". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 1.1.1 | Command performed successfully |

PROACTIVE COMMAND: SELECT ITEM 1.1.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Toolkit Select"

Item

Identifier of item: 1
 Text string of item: "Item 1"

Item

Identifier of item: 2
 Text string of item: "Item 2"

Item

Identifier of item: 3
 Text string of item: "Item 3"

Item

Identifier of item: 4
 Text string of item: "Item 4"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3D | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | 8F | 07 | 04 | 49 | 74 | 65 |
| | 6D | 20 | 34 | | | | | | | | | |

TERMINAL RESPONSE: SELECT ITEM 1.1.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 02

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | 01 | 02 | | | | | | | | | |

Expected Sequence 1.2 (SELECT ITEM, large menu, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: SELECT ITEM 1.2.1 | |
| 3 | SIM → ME | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: | |
| 4 | ME → USER | SELECT ITEM 1.2.1 | |
| 4 | ME → USER | Present the items of "Zero", "One", "Two", "Three", "Four", "Five", "Six", "Seven", "Eight", "Nine", "Alpha", "Bravo", "Charlie", "Delta", "Echo", "Fox-trot", "Black", "Brown", "Red", "Orange", "Yellow", "Green", "Blue", "Violet", "Grey", "White", "milli", "micro", "nano" and "pico" under the header of "LargeMenu1" | |
| 5 | USER → ME | Select item "Orange". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 1.2.1 | Command performed successfully |

PROACTIVE COMMAND: SELECT ITEM 1.2.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "LargeMenu1"

Item

Identifier of item: "50"
 Text string of item: "Zero"

Item

Identifier of item: "4F"
 Text string of item: "One"

Item

Identifier of item: "4E"
 Text string of item: "Two"

Item

Identifier of item: "4D"
 Text string of item: "Three"

Item

Identifier of item: "4C"
 Text string of item: "Four"

Item

Identifier of item: "4B"
 Text string of item: "Five"

Item

Identifier of item: "4A"
 Text string of item: "Six"

| | | |
|------|----------------------|------------|
| Item | Identifier of item: | "49" |
| | Text string of item: | "Seven" |
| Item | Identifier of item: | "48" |
| | Text string of item: | "Eight" |
| Item | Identifier of item: | "47" |
| | Text string of item: | "Nine" |
| Item | Identifier of item: | "46" |
| | Text string of item: | "Alpha" |
| Item | Identifier of item: | "45" |
| | Text string of item: | "Bravo" |
| Item | Identifier of item: | "44" |
| | Text string of item: | "Charlie" |
| Item | Identifier of item: | "43" |
| | Text string of item: | "Delta" |
| Item | Identifier of item: | "42" |
| | Text string of item: | "Echo" |
| Item | Identifier of item: | "41" |
| | Text string of item: | "Fox-trot" |
| Item | Identifier of item: | "40" |
| | Text string of item: | "Black" |
| Item | Identifier of item: | "3F" |
| | Text string of item: | "Brown" |
| Item | Identifier of item: | "3E" |
| | Text string of item: | "Red" |
| Item | Identifier of item: | "3D" |
| | Text string of item: | "Orange" |
| Item | Identifier of item: | "3C" |
| | Text string of item: | "Yellow" |
| Item | Identifier of item: | "3B" |
| | Text string of item: | "Green" |
| Item | Identifier of item: | "3A" |
| | Text string of item: | "Blue" |
| Item | Identifier of item: | "39" |
| | Text string of item: | "Violet" |
| Item | Identifier of item: | "38" |
| | Text string of item: | "Grey" |
| Item | Identifier of item: | "37" |
| | Text string of item: | "White" |
| Item | Identifier of item: | "36" |
| | Text string of item: | "milli" |
| Item | Identifier of item: | "35" |

Text string of item: "micro"
 Item
 Identifier of item: "34"
 Text string of item: "nano"
 Item
 Identifier of item: "33"
 Text string of item: "pico"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FC | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 |
| | 85 | 0A | 4C | 61 | 72 | 67 | 65 | 4D | 65 | 6E | 75 | 31 |
| | 8F | 05 | 50 | 5A | 65 | 72 | 6F | 8F | 04 | 4F | 4F | 6E |
| | 65 | 8F | 04 | 4E | 54 | 77 | 6F | 8F | 06 | 4D | 54 | 68 |
| | 72 | 65 | 65 | 8F | 05 | 4C | 46 | 6F | 75 | 72 | 8F | 05 |
| | 4B | 46 | 69 | 76 | 65 | 8F | 04 | 4A | 53 | 69 | 78 | 8F |
| | 06 | 49 | 53 | 65 | 76 | 65 | 6E | 8F | 06 | 48 | 45 | 69 |
| | 67 | 68 | 74 | 8F | 05 | 47 | 4E | 69 | 6E | 65 | 8F | 06 |
| | 46 | 41 | 6C | 70 | 68 | 61 | 8F | 06 | 45 | 42 | 72 | 61 |
| | 76 | 6F | 8F | 08 | 44 | 43 | 68 | 61 | 72 | 6C | 69 | 65 |
| | 8F | 06 | 43 | 44 | 65 | 6C | 74 | 61 | 8F | 05 | 42 | 45 |
| | 63 | 68 | 6F | 8F | 09 | 41 | 46 | 6F | 78 | 2D | 74 | 72 |
| | 6F | 74 | 8F | 06 | 40 | 42 | 6C | 61 | 63 | 6B | 8F | 06 |
| | 3F | 42 | 72 | 6F | 77 | 6E | 8F | 04 | 3E | 52 | 65 | 64 |
| | 8F | 07 | 3D | 4F | 72 | 61 | 6E | 67 | 65 | 8F | 07 | 3C |
| | 59 | 65 | 6C | 6C | 6F | 77 | 8F | 06 | 3B | 47 | 72 | 65 |
| | 65 | 6E | 8F | 05 | 3A | 42 | 6C | 75 | 65 | 8F | 07 | 39 |
| | 56 | 69 | 6F | 6C | 65 | 74 | 8F | 05 | 38 | 47 | 72 | 65 |
| | 79 | 8F | 06 | 37 | 57 | 68 | 69 | 74 | 65 | 8F | 06 | 36 |
| | 6D | 69 | 6C | 6C | 69 | 8F | 06 | 35 | 6D | 69 | 63 | 72 |
| | 6F | 8F | 05 | 34 | 6E | 61 | 6E | 6F | 8F | 05 | 33 | 70 |
| | 69 | 63 | 6F | | | | | | | | | |

TERMINAL RESPONSE: SELECT ITEM 1.2.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 3D

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | 01 | 3D | | | | | | | | | |

Expected Sequence 1.3 (SELECT ITEM, call options, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: SELECT ITEM 1.3.1 | |
| 3 | SIM → ME | FETCH | |
| 4 | ME → USER | PROACTIVE COMMAND: SELECT ITEM 1.3.1 Present the items of " Call Forwarding Unconditional", "Call Forwarding On User Busy", "Call Forwarding On No Reply", "Call Forwarding On User Not Reachable", "Barring Of All Outgoing Calls", "Barring Of All Outgoing International Calls" and "CLI Presentation" under the header of " LargeMenu2 | |
| 5 | USER → ME | Select item "Barring Of All Outgoing Calls". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 1.3.1 | Command performed successfully |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : SELECT ITEM 1.3.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "LargeMenu2"

Item

Identifier of item: "FF"
 Text string of item: "Call Forwarding Unconditional"

Item

Identifier of item: "FE"
 Text string of item: "Call Forwarding On User Busy"

Item

Identifier of item: "FD"
 Text string of item: "Call Forwarding On No Reply"

Item

Identifier of item: "FC"
 Text string of item: "Call Forwarding On User Not Reachable"

Item

Identifier of item: "FB"
 Text string of item: "Barring Of All Outgoing Calls"

Item

Identifier of item: "FA"
 Text string of item: "Barring Of All Outgoing International Calls"

Item

Identifier of item: "F9"
 Text string of item: "CLI Presentation"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FB | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 |
| | 85 | 0A | 4C | 61 | 72 | 67 | 65 | 4D | 65 | 6E | 75 | 32 |
| | 8F | 1E | FF | 43 | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 |
| | 61 | 72 | 64 | 69 | 6E | 67 | 20 | 55 | 6E | 63 | 6F | 6E |
| | 64 | 69 | 74 | 69 | 6F | 6E | 61 | 6C | 8F | 1D | FE | 43 |
| | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 | 61 | 72 | 64 | 69 |
| | 6E | 67 | 20 | 4F | 6E | 20 | 55 | 73 | 65 | 72 | 20 | 42 |
| | 75 | 73 | 79 | 8F | 1C | FD | 43 | 61 | 6C | 6C | 20 | 46 |
| | 6F | 72 | 77 | 61 | 72 | 64 | 69 | 6E | 67 | 20 | 4F | 6E |
| | 20 | 4E | 6F | 20 | 52 | 65 | 70 | 6C | 79 | 8F | 26 | FC |
| | 43 | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 | 61 | 72 | 64 |
| | 69 | 6E | 67 | 20 | 4F | 6E | 20 | 55 | 73 | 65 | 72 | 20 |
| | 4E | 6F | 74 | 20 | 52 | 65 | 61 | 63 | 68 | 61 | 62 | 6C |
| | 65 | 8F | 1E | FB | 42 | 61 | 72 | 72 | 69 | 6E | 67 | 20 |
| | 4F | 66 | 20 | 41 | 6C | 6C | 20 | 4F | 75 | 74 | 67 | 6F |
| | 69 | 6E | 67 | 20 | 43 | 61 | 6C | 6C | 73 | 8F | 2C | FA |
| | 42 | 61 | 72 | 72 | 69 | 6E | 67 | 20 | 4F | 66 | 20 | 41 |
| | 6C | 6C | 20 | 4F | 75 | 74 | 67 | 6F | 69 | 6E | 67 | 20 |
| | 49 | 6E | 74 | 65 | 72 | 6E | 61 | 74 | 69 | 6F | 6E | 61 |
| | 6C | 20 | 43 | 61 | 6C | 6C | 73 | 8F | 11 | F9 | 43 | 4C |
| | 49 | 20 | 50 | 72 | 65 | 73 | 65 | 6E | 74 | 61 | 74 | 69 |
| | 6F | 6E | | | | | | | | | | |

TERMINAL RESPONSE: SELECT ITEM 1.3.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: FB

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | 01 | FB | | | | | | | | | |

Expected Sequence 1.4 (SELECT ITEM, backward move by user, successful)

| Step | Direction | MESSAGE / Action | Comments | |
|------|-----------|--|----------|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 1.4.1 | [| |
| 2 | ME → SIM | FETCH | | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 1.4.1 | | |
| 4 | ME → USER | Present the items of "One" and "Two" under the header of "Select Item". | | |
| 5 | USER → ME | Indicate to go backwards in the proactive SIM application session. | | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 1.4.1A or TERMINAL RESPONSE: SELECT ITEM 1.4.1B | | Backward move in the proactive SIM application session requested by user |
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 1.4.2 | | |
| 8 | ME → SIM | FETCH | | |
| 9 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 1.4.2 | | |
| 10 | ME → USER | Present the items of "One" and "Two" under the header of "Select Item". | | |
| 11 | USER → ME | Indicate to end the proactive SIM application and return the ME to normal operation. | | |
| 12 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 1.4.2A or TERMINAL RESPONSE: SELECT ITEM 1.4.2B | | Proactive SIM application terminated by the user |
| 13 | SIM → ME | PROACTIVE SIM SESSION ENDED | | |

PROACTIVE COMMAND: SELECT ITEM 1.4.1 and 1.4.2

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Select Item"

Item

Identifier of item: "11"
 Text string of item: "One"

Item

Identifier of item: "12"
 Text string of item: "Two"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0B | 53 | 65 | 6C | 65 | 63 | 74 | 20 | 49 | 74 | 65 | 6D |
| | 8F | 04 | 11 | 4F | 6E | 65 | 8F | 04 | 12 | 54 | 77 | 6F |

TERMINAL RESPONSE: SELECT ITEM 1.4.1A

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: backward move in the proactive SIM session requested by the user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: SELECT ITEM 1.4.1B

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: backward move in the proactive SIM session requested by the user

Item identifier

Identifier of item chosen: XX

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 11 |
| | 90 | 01 | XX | | | | | | | | | |

TERMINAL RESPONSE: SELECT ITEM 1.4.2A

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: proactive SIM session terminated by the user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 10 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: SELECT ITEM 1.4.2B

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM

Command qualifier: "00"
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: proactive SIM session terminated by the user
 Item identifier
 Identifier of item chosen: XX

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 10 |
| | 90 | 01 | XX | | | | | | | | | |

Expected Sequence 1.5 (SELECT ITEM, "Y", successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 1.5.1 | |
| 4 | ME → USER | Present the items of "Y" under the header of "The SIM shall supply a set of items from which the user may choose one. Each item comprises a short identifier (used to indicate the selection) and a text string. Optionally the SIM may include an alpha identifier. The alpha identifier i". | |
| 5 | USER → ME | Select item "Y" | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 1.5.1 | Command performed successfully |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: SELECT ITEM 1.5.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "The SIM shall supply a set of items from which the user may choose one. Each item comprises a short identifier (used to indicate the selection) and a text string. Optionally the SIM may include an alpha identifier. The alpha identifier i"

Item

Identifier of item: "01"
 Text string of item: "Y"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FD | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 |
| | 85 | 81 | ED | 54 | 68 | 65 | 20 | 53 | 49 | 4D | 20 | 73 |
| | 68 | 61 | 6C | 6C | 20 | 73 | 75 | 70 | 70 | 6C | 79 | 20 |
| | 61 | 20 | 73 | 65 | 74 | 20 | 6F | 66 | 20 | 69 | 74 | 65 |
| | 6D | 73 | 20 | 66 | 72 | 6F | 6D | 20 | 77 | 68 | 69 | 63 |
| | 68 | 20 | 74 | 68 | 65 | 20 | 75 | 73 | 65 | 72 | 20 | 6D |
| | 61 | 79 | 20 | 63 | 68 | 6F | 6F | 73 | 65 | 20 | 6F | 6E |
| | 65 | 2E | 20 | 45 | 61 | 63 | 68 | 20 | 69 | 74 | 65 | 6D |
| | 20 | 63 | 6F | 6D | 70 | 72 | 69 | 73 | 65 | 73 | 20 | 61 |
| | 20 | 73 | 68 | 6F | 72 | 74 | 20 | 69 | 64 | 65 | 6E | 74 |
| | 69 | 66 | 69 | 65 | 72 | 20 | 28 | 75 | 73 | 65 | 64 | 20 |
| | 74 | 6F | 20 | 69 | 6E | 64 | 69 | 63 | 61 | 74 | 65 | 20 |
| | 74 | 68 | 65 | 20 | 73 | 65 | 6C | 65 | 63 | 74 | 69 | 6F |
| | 6E | 29 | 20 | 61 | 6E | 64 | 20 | 61 | 20 | 74 | 65 | 78 |
| | 74 | 20 | 73 | 74 | 72 | 69 | 6E | 67 | 2E | 20 | 4F | 70 |
| | 74 | 69 | 6F | 6E | 61 | 6C | 6C | 79 | 20 | 74 | 68 | 65 |
| | 20 | 53 | 49 | 4D | 20 | 6D | 61 | 79 | 20 | 69 | 6E | 63 |
| | 6C | 75 | 64 | 65 | 20 | 61 | 6E | 20 | 61 | 6C | 70 | 68 |
| | 61 | 20 | 69 | 64 | 65 | 6E | 74 | 69 | 66 | 69 | 65 | 72 |
| | 2E | 20 | 54 | 68 | 65 | 20 | 61 | 6C | 70 | 68 | 61 | 20 |
| | 69 | 64 | 65 | 6E | 74 | 69 | 66 | 69 | 65 | 72 | 20 | |
| | 69 | 8F | 02 | 01 | 59 | | | | | | | |

TERMINAL RESPONSE: SELECT ITEM 1.5.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 01

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | 01 | 01 | | | | | | | | | |

Expected Sequence 1.6 (SELECT ITEM, Large menu, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: SELECT ITEM 1.6.1 | |
| 3 | SIM → ME | FETCH | |
| 4 | ME → USER | PROACTIVE COMMAND: SELECT ITEM 1.6.1 Present the items of "1 Call Forward Unconditional", "2 Call Forward On User Busy", "3 Call Forward On No Reply", "4 Call Forward On User Not Reachable", "5 Barring Of All Outgoing Calls", "6 Barring Of All Outgoing Int Calls" and "7 CLI Presentation" under the header of "0LargeMenu". | |
| 5 | USER → ME | Select item "5 Barring Of All Outgoing Calls". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 1.6.1 | Command performed successfully |

PROACTIVE COMMAND : SELECT ITEM 1.6.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "0LargeMenu"

Item

Identifier of item: "FF"
 Text string of item: "1 Call Forward Unconditional"

Item

Identifier of item: "FE"
 Text string of item: "2 Call Forward On User Busy"

Item

Identifier of item: "FD"
 Text string of item: "3 Call Forward On No Reply"

Item

Identifier of item: "FC"
 Text string of item: "4 Call Forward On User Not Reachable"

Item

Identifier of item: "FB"
 Text string of item: "5 Barring Of All Outgoing Calls"

Item

Identifier of item: "FA"
 Text string of item: "6 Barring Of All Outgoing Int Calls"

Item

Identifier of item: "F9"
 Text string of item: "7 CLI Presentation"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | F3 | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 |
| | 85 | 0A | 30 | 4C | 61 | 72 | 67 | 65 | 4D | 65 | 6E | 75 |
| | 8F | 1D | FF | 31 | 20 | 43 | 61 | 6C | 6C | 20 | 46 | 6F |
| | 72 | 77 | 61 | 72 | 64 | 20 | 55 | 6E | 63 | 6F | 6E | 64 |
| | 69 | 74 | 69 | 6F | 6E | 61 | 6C | 8F | 1C | FE | 32 | 20 |
| | 43 | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 | 61 | 72 | 64 |
| | 20 | 4F | 6E | 20 | 55 | 73 | 65 | 72 | 20 | 42 | 75 | 73 |
| | 79 | 8F | 1B | FD | 33 | 20 | 43 | 61 | 6C | 6C | 20 | 46 |
| | 6F | 72 | 77 | 61 | 72 | 64 | 20 | 4F | 6E | 20 | 4E | 6F |
| | 20 | 52 | 65 | 70 | 6C | 79 | 8F | 25 | FC | 34 | 20 | 43 |
| | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 | 61 | 72 | 64 | 20 |
| | 4F | 6E | 20 | 55 | 73 | 65 | 72 | 20 | 4E | 6F | 74 | 20 |
| | 52 | 65 | 61 | 63 | 68 | 61 | 62 | 6C | 65 | 8F | 20 | FB |
| | 35 | 20 | 42 | 61 | 72 | 72 | 69 | 6E | 67 | 20 | 4F | 66 |
| | 20 | 41 | 6C | 6C | 20 | 4F | 75 | 74 | 67 | 6F | 69 | 6E |
| | 67 | 20 | 43 | 61 | 6C | 6C | 73 | 8F | 24 | FA | 36 | 20 |
| | 42 | 61 | 72 | 72 | 69 | 6E | 67 | 20 | 4F | 66 | 20 | 41 |
| | 6C | 6C | 20 | 4F | 75 | 74 | 67 | 6F | 69 | 6E | 67 | 20 |
| | 49 | 6E | 74 | 20 | 43 | 61 | 6C | 6C | 73 | 8F | 13 | F9 |
| | 37 | 20 | 43 | 4C | 49 | 20 | 50 | 72 | 65 | 73 | 65 | 6E |
| | 74 | 61 | 74 | 69 | 6F | 6E | | | | | | |

TERMINAL RESPONSE: SELECT ITEM 1.6.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: FB

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | 01 | FB | | | | | | | | | |

The following table details the test commands with relation to the tested features:

| Proactive SIM Command Facilities | | | |
|--|-------------------------|-----------------|------------------------|
| Proactive SIM 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 SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 2.1.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | The ME may indicate to the user the consequences of performing the selection of an item. |
| 5 | USER → ME | Navigate in the items, then select "Item 2". | The ME may indicate to the user the consequences of performing the selection of an item. |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 2.1.1 | Command performed successfully |

PROACTIVE COMMAND: SELECT ITEM 2.1.1

Logically:

Command details

Command number: 1
Command type: SELECT ITEM
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME
Alpha identifier: "Toolkit Select"

Item

Identifier of item: 1
Text string of item: "Item 1"

Item

Identifier of item: 2
Text string of item: "Item 2"

Item

Identifier of item: 3

Text string of item: "Item 3"
 Items next action indicator
 Items list "Send SM", "Set Up Call", "Provide Local Info."

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 39 | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | 18 | 03 | 13 | 10 | 26 | |

TERMINAL RESPONSE: SELECT ITEM 2.1.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 02

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | 01 | 02 | | | | | | | | | |

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 SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 3.1.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | Check that "Item 2" is selected by default. |
| 5 | USER → ME | Navigate in the items, then select "Item 3". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 3.1.1 | Command performed successfully |

PROACTIVE COMMAND : SELECT ITEM 3.1.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01
 Text string of item: "Item 1"

Item

Identifier of item: 02
 Text string of item: "Item 2"

Item

Identifier of item: 03
 Text string of item: "Item 3"

Item identifier

Identifier of item chosen 02

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 37 | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | 90 | 01 | 02 | | | |

TERMINAL RESPONSE: SELECT ITEM 3.1.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 03

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | 01 | 03 | | | | | | | | | |

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 SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: SELECT ITEM 4.1.1 | |
| 3 | SIM → ME | FETCH | |
| 4 | ME → USER | PROACTIVE COMMAND: SELECT ITEM 4.1.1 | [Help information available] |
| 5 | USER → ME | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | |
| 6 | USER → ME | Navigate in the items until "Item 1". | |
| 7 | ME → SIM | Select the Help Request on "Item 1" Menu entry | |
| | | TERMINAL RESPONSE: SELECT ITEM 4.1.1 | [Help information required by the user] |

PROACTIVE COMMAND : SELECT ITEM 4.1.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "80" help information available

Device identities

Source device: SIM

Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01

Text string of item: "Item 1"

Item

Identifier of item: 02

Text string of item: "Item 2"

Item

Identifier of item: 03

Text string of item: "Item 3"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 34 | 81 | 03 | 01 | 24 | 80 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | | | | | | |

TERMINAL RESPONSE: SELECT ITEM 4.1.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "80"

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Help information required by the user

Item identifier

Identifier of item chosen: 01

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 13 |
| | 90 | 01 | 01 | | | | | | | | | |

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 11.14 [15] clause 12.31 and clause 12.32.

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 SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 5.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 5.1.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | Verify icons are displayed in the alpha identifier and in the 3 items. |
| 5 | USER → ME | Navigate in the items, then select "Item 1". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 5.1.1 A | [command performed successfully] |

PROACTIVE COMMAND: SELECT ITEM 5.1.1

Logically:

Command details

Command number: 1
Command type: SELECT ITEM
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME
Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01
Text string of item: "Item 1"

Item

Identifier of item: 02
Text string of item: "Item 2"

Item

Identifier of item: 03
Text string of item: "Item 3"

Icon Identifier:

Icon qualifier: "01" (icon is not self-explanatory)
Icon Identifier: record 1 in EF_(IMG)

Item icon identifier list:

Icon qualifier: "01" (icon is not self-explanatory)
Icon Identifier: record 5 in EF_(IMG) , record 5 in EF_(IMG), record 5 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3E | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | 9E | 02 | 01 | 01 | 9F | 04 |
| | 01 | 05 | 05 | 05 | | | | | | | | |

TERMINAL RESPONSE: SELECT ITEM 5.1.1A

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 01

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | 01 | 01 | | | | | | | | | |

Expected Sequence 5.1B (SELECT ITEM, BASIC ICON NOT SELF EXPLANATORY, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: SELECT ITEM 5.1.1 | |
| 3 | SIM → ME | FETCH | |
| 4 | ME → USER | PROACTIVE COMMAND: SELECT ITEM 5.1.1 | |
| 5 | USER → ME | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | Verify that either for the header or for each of the items no icon is displayed.. |
| 6 | ME → SIM | Navigate in the items, then select "Item 1" under the header 'Toolkit Select'. | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 5.1.1 B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE: SELECT ITEM 5.1.1B

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Item identifier

Identifier of item chosen: 01

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 90 | 01 | 01 | | | | | | | | | |

Expected Sequence 5.2A (SELECT ITEM, BASIC ICON SELF EXPLANATORY, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: SELECT ITEM 5.2.1 | |
| 3 | SIM → ME | FETCH | |
| 4 | ME → USER | PROACTIVE COMMAND: SELECT ITEM 5.2.1 | Verify icons are displayed without text as alpha id and for the all 3 items. |
| 5 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | |
| 5 | USER → ME | Navigate in the items, then select "Item 1". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 5.2.1 A | [command performed successfully] |

PROACTIVE COMMAND: SELECT ITEM 5.2.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01
 Text string of item: "Item 1"

Item

Identifier of item: 02
 Text string of item: "Item 2"

Item

Identifier of item: 03
 Text string of item: "Item 3"

Icon Identifier:

Icon qualifier: "00" (icon is self-explanatory)
 Icon Identifier: record 1 in EF_(IMG)

Item icon identifier list:

Icon qualifier: "00" (icon is self-explanatory)
 Icon Identifier: record 5 in EF_(IMG), record 5 in EF_(IMG), record 5 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3E | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | 9E | 02 | 00 | 01 | 9F | 04 |
| | 00 | 05 | 05 | 05 | | | | | | | | |

TERMINAL RESPONSE: SELECT ITEM 5.2.1A

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 01

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | 01 | 01 | | | | | | | | | |

Expected Sequence 5.2B (SELECT ITEM, BASIC ICON SELF EXPLANATORY, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 5.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 5.2.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | Verify that either for the header or for each of the items no icon is displayed. |
| 5 | USER → ME | Navigate in the items, then select "Item 1" under the header "Toolkit Select". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 5.2.1B | [command performed successfully but requested icon could not be displayed] |

TERMINAL RESPONSE: SELECT ITEM 5.2.1B

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Item identifier

Identifier of item chosen: 01

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 90 | 01 | 01 | | | | | | | | | |

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 SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 6.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 6.1.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | Verify if presentation style appears. |
| 5 | USER → ME | Navigate in the items, then select "Item 1". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 6.1.1 | [command performed successfully] |

PROACTIVE COMMAND : SELECT ITEM 6.1.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "03" (presentation as a choice of navigation options)

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01
 Text string of item: "Item 1"

Item

Identifier of item: 02
 Text string of item: "Item 2"

Item

Identifier of item: 03

Text string of item: "Item 3"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 34 | 81 | 03 | 01 | 24 | 03 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | | | | | | |

TERMINAL RESPONSE: SELECT ITEM 6.1.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "03" (presentation as a choice of navigation options)

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 01

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 03 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | 01 | 01 | | | | | | | | | |

Expected Sequence 6.2 (SELECT ITEM, PRESENTATION AS A CHOICE OF DATA VALUES, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 6.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 6.2.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | Verify if presentation style appears |
| 5 | USER → ME | Navigate in the items, then select "Item 1". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 6.2.1 | [command performed successfully] |

PROACTIVE COMMAND: SELECT ITEM 6.2.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "01" (presentation as a choice of data values)

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01
 Text string of item: "Item 1"

Item

Identifier of item: 02
Text string of item: "Item 2"

Item

Identifier of item: 03
Text string of item: "Item 3"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 34 | 81 | 03 | 01 | 24 | 01 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | | | | | | |

TERMINAL RESPONSE: SELECT ITEM 6.2.1

Logically:

Command details

Command number: 1
Command type: SELECT ITEM
Command qualifier: "01"(presentation as a choice of data values)

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 01

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | 01 | 01 | | | | | | | | | |

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 SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 7.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 7.1.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" under the header of "Toolkit Select". | |
| 5 | USER → ME | Navigate in the items, then select "Item 1". | Verify that we can choose an item through soft keys |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 7.1.1 | [command performed successfully] |

PROACTIVE COMMAND: SELECT ITEM 7.1.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "04" (selection using soft keys preferred)

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01
 Text string of item: "Item 1"

Item

Identifier of item: 02
 Text string of item: "Item 2"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 2B | 81 | 03 | 01 | 24 | 04 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | | | |

TERMINAL RESPONSE: SELECT ITEM 7.1.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "04" (selection using soft keys preferred)

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 01

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 04 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | 01 | 01 | | | | | | | | | |

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 SIM.

27.22.4.9.8.4 Method of test

27.22.4.9.8.4.1 Initial conditions

The ME is connected to the SIM 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.

The SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: SELECT ITEM 8.1.1 | |
| 3 | SIM → ME | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 8.1.1 | |
| 5 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "<TIME-OUT>". | |
| 6 | USER | Waiting and no completion | |
| 7 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 8.1.1 | [No response from user] within 5 s after the end of that defined period of time |
| 7 | USER | Check if the delay of TERMINAL RESPONSE is reasonable or not | |

PROACTIVE COMMAND : SELECT ITEM 8.1.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "<TIME-OUT>"

Item

Identifier of item: 01
 Text string of item: "Item 1"

Item

Identifier of item: 02
 Text string of item: "Item 2"

Item

Identifier of item: 03
 Text string of item: "Item 3"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 30 | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0A | 3C | 54 | 49 | 4D | 45 | 2D | 4F | 55 | 54 | 3E | 8F |
| | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 | 8F | 07 | 02 | 49 |
| | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 | 49 | 74 | 65 | 6D |
| | 20 | 33 | | | | | | | | | | |

TERMINAL RESPONSE: SELECT ITEM 8.1.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: No response from user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 12 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.9.8.5 Test requirement

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

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 SIM: SEND SHORT MESSAGE facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 12.6, clause 12.7, clause 12.2, clause 12.1, clause 12.13, clause 12.31 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 (System Simulator) as indicated in the SEND SHORT MESSAGE proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM 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 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 and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.1.4.2 Procedure

Expected Sequence 1.1 (SEND SHORT MESSAGE, packing not required, 8-bit data, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1 | [packing not required, 8-bit data] |
| 4 | ME → USER | Display "Send SM" | [Alpha Identifier] |
| 5 | ME → SS | Send SMS-PP (SEND SHORT MESSAGE) Message 1.1 | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE: SEND SHORT MESSAGE 1.1.1 | [Command performed successfully] |

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: SIM
 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 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 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: SIM

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 (SEND SHORT MESSAGE, packing required, 8-bit data, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SHORT MESSAGE 1.2.1 | [packing required, 8-bit data] |
| 4 | ME → USER | Display "Send SM" | [Alpha Identifier] |
| 5 | ME → SS | Send SMS-PP (SEND SHORT MESSAGE) Message 1.2 | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE: SEND SHORT MESSAGE 1.2.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND SHORT MESSAGE 1.2.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing required

Device identities

Source device: SIM
 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 7
 TP-UD "Send SM"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 32 | 81 | 03 | 01 | 13 | 01 | 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 | 13 | 01 | 00 | 09 |
| | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F4 | 07 | 53 | 65 | 6E |
| | 64 | 20 | 53 | 4D | | | | | | | | |

SMS-PP (SEND SHORT MESSAGE) Message 1.2

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 | SMS default alphabet |
| Message class | class 0 |
| TP-UDL | 7 |
| TP-UD | "Send SM" |

Coding:

| | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding | 01 | 01 | 09 | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F0 | 07 |
| | D3 | B2 | 9B | 0C | 9A | 36 | 01 | | | | | |

TERMINAL RESPONSE: SEND SHORT MESSAGE 1.2.1

Logically:

Command details

| | |
|--------------------|--------------------|
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing required |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 13 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.3 (SEND SHORT MESSAGE, packing not required, SMS default alphabet, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SHORT MESSAGE 1.3.1 | [packing not required, SMS default alphabet] |
| 4 | ME → USER | Display "Short Message" | [Alpha Identifier] |
| 5 | ME → SS | Send SMS-PP (SEND SHORT MESSAGE) Message 1.3 | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE: SEND SHORT MESSAGE 1.3.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND SHORT MESSAGE 1.3.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing not required

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier: "Short Message"

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 13
 TP-UD "Short Message"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3D | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 0D | 53 | 68 | 6F | 72 | 74 | 20 | 4D | 65 | 73 | 73 | 61 |
| | 67 | 65 | 86 | 09 | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 |
| | F8 | 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 1.3

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 | "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 1.3.1

Logically:

Command details

| | |
|--------------------|----------------------|
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing not required |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.4 (SEND SHORT MESSAGE, packing required, 8 bit data, message of 160 characters user data, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.4. 1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SHORT MESSAGE 1.4.1 | [packing required, 8 bit data] |
| 4 | ME → USER | Display "The address data object holds the RP_Destination_Address" | [Alpha Identifier] |
| 5 | ME → SS | Send SMS-PP(SEND SHORT MESSAGE) Message 1.4 | [message of 140 bytes user data] |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE: SEND SHORT MESSAGE 1.4.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND SHORT MESSAGE 1.4.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing required

Device identities

Source device: SIM
 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 1.4

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 | "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 | 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 | 01 | 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 1.4.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing required

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 13 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.5 (SEND SHORT MESSAGE, packing not required, SMS default alphabet, message of 160 characters user data, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SHORT MESSAGE 1.5.1 | [packing not required, SMS default alphabet] |
| 4 | ME → USER | Display "The address data object holds the RP Destination Address " | [Alpha Identifier] |
| 5 | ME → SS | Send SMS-PP (SEND SHORT MESSAGE) Message 1.5 | [message of 140 bytes user data] |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE: SEND SHORT MESSAGE 1.5.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND SHORT MESSAGE 1.5.1

Logically:

Command details

Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required

Device identities

Source device: SIM
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 1.5

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 | "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 | 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 | 01 | 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 1.5.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing not required

Device identities

Source device: ME
 Destination device: SIM

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 (SEND SHORT MESSAGE, alpha identifier 160 bytes long, SMS default alphabet, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SHORT MESSAGE 1.6.1 | [packing not required, SMS default alphabet] |
| 4 | ME → USER | Display "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 transparently; - A short message to be sent to the network in an SMS-SUBMIT " | [Alpha Identifier of 160 bytes] |
| 5 | ME → SS | Send SMS-PP (SEND SHORT MESSAGE) Message 1.6 | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE: SEND SHORT MESSAGE 1.6.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND SHORT MESSAGE 1.6.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing not required

Device identities

Source device: SIM

Destination device: Network
 Alpha identifier: "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 transparently; - A short message to be sent to the network in an SMS-SUBMIT"

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 | 81 | FD | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 81 | 83 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| | 85 | 81 | E6 | 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 | 61 | 72 | 65 | 6E | 74 |
| | 6C | 79 | 3B | 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 | 8B | 09 | 01 | 00 | 02 | 91 | 10 |
| | 40 | F0 | 01 | 20 | | | | | | | | |

SMS-PP (SEND SHORT MESSAGE) Message 1.6

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 |
|--------|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: SEND SHORT MESSAGE 1.6.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing not required

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.7(SEND SHORT MESSAGE, alpha identifier length '00', packing not required, 8-bit data, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.7.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SHORT MESSAGE 1.7.1 | [packing not required, 8-bit data] |
| 4 | ME | No information to user | [Alpha identifier length '00'] |
| 5 | ME → SS | Send SMS-PP (SEND SHORT MESSAGE) Message 1.7 | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE: SEND SHORT MESSAGE 1.7.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND SHORT MESSAGE 1.7.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing not required

Device identities

Source device: SIM
 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 1.7

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 1.7.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing not required

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.8 (SEND SHORT MESSAGE, packing not required, 8-bit data, no alpha identifier, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.8.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SHORT MESSAGE 1.8.1 | [packing not required, 8-bit data] |
| 4 | ME → USER | May give information to user concerning what is happening | [No Alpha Identifier] |
| 5 | ME → SS | Send SMS-PP (SEND SHORT MESSAGE) Message 1.8 | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE: SEND SHORT MESSAGE 1.8.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND SHORT MESSAGE 1.8.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing not required

Device identities

Source device: SIM
 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 1.8

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 1.8.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing not required

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.10.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.8.

27.22.4.10.2 SEND SHORT MESSAGE (UCS2 support)

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 SIM: SEND SHORT MESSAGE facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 12.6, clause 12.7, clause 12.2, clause 12.1, clause 12.13, clause 12.31 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 (System Simulator) as indicated in the SEND SHORT MESSAGE proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM 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 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 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))

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SHORT MESSAGE 2.1.1 | [packing not required, 16-bit data] |
| 4 | ME → USER | Display "Send SM" | [Alpha Identifier] |
| 5 | ME → SS | Send SMS-PP (SEND SHORT MESSAGE) Message 2.1 | ["ЗДРАВСТВУЙТЕ" = "Hello" in Russian] |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE: SEND SHORT MESSAGE 2.1.1 | [Command performed successfully] |

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: SIM

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 16-bit data
 Message class class 0
 TP-UDL 24
 TP-UD "ЗДРАВСТВУЙТЕ"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 43 | 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 | 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 |

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: SIM

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 (System Simulator) as indicated in the SEND SHORT MESSAGE proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM 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 SIM Simulator and only connected to the System Simulator if the System Simulator 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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | Send SMS-PP (SEND SHORT MESSAGE) Message 3.1 | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | 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: SIM
 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 Qualifier 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 | 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: | SIM |

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | Send SMS-PP (SEND SHORT MESSAGE) Message 3.1 | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | Send SMS-PP (SEND SHORT MESSAGE) Message 3.2 | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | 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: SIM
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 Qualifier non-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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | Send SMS-PP (SEND SHORT MESSAGE) Message 3.2 | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | 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: SIM

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.

27.22.4.11 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 SIM: Send SS facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 12.12.1, clause 5.2, clause 12.6, clause 12.7, clause 12.2, clause 12.14, clause 12.31 and clause 6.5.4.

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 SIM command to the system Simulator.

To verify that the ME returns a TERMINAL RESPONSE command to the SIM 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 SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table.

The elementary files are coded as SIM 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 System Simulator.

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SS 1.1.1 | |
| 4 | ME → USER | Display "Call Forward" | |
| 5 | ME → SS | REGISTER 1.1A | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1A | [Successful] |
| 7 | ME → SIM | 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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SS 1.1.1 | |
| 4 | ME → USER | Display "Call Forward" | |
| 5 | ME → SS | REGISTER 1.1B | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1B | [Successful] |
| 7 | ME → SIM | 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: SIM
 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:

| | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding | 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:

| | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding | 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

ForwardedToNumber

- 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: SIM

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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SS 1.1.1 | |
| 4 | ME → USER | Display "Call Forward" | |
| 5 | ME → SS | REGISTER 1.1A Or REGISTER 1.1B | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN ERROR) 1.1 | [Return Error] |
| 7 | ME → SIM | 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SS 1.1.1 | |
| 4 | ME → USER | Display "Call Forward" | |
| 5 | ME → SS | REGISTER 1.1A Or REGISTER 1.1B | |
| 6 | SS → ME | RELEASE COMPLETE (SS REJECT) 1.1. | [Reject] |
| 7 | ME → SIM | 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SS 1.4.1 | |
| 4 | ME → USER | Display "Call Forward" | |
| 5 | ME → SS | REGISTER 1.2A | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.2A | [Successful] |
| 7 | ME → SIM | 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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SS 1.4.1 | |
| 4 | ME → USER | Display "Call Forward" | |
| 5 | ME → SS | REGISTER 1.2B | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.2B | [Successful] |
| 7 | ME → SIM | 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: SIM
 Destination device: Network
 Alpha identifier: "Call Forward"

SS String

TON: International
 NPI: "ISDN / telephone numbering plan"
 SS string: "***21*0123456789012345678901234567*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: 0123456789012345678901234567
 longFTN-Supported

Coding:

| | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|--------|----|----|----|----|
| Coding | 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: 0123456789012345678901234567
 longFTN-Supported

Coding:

| | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|--------|----|----|----|----|
| Coding | 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"

RELEASE COMPLETE (SS RETURN RESULT) 1.2A

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: 0123456789012345678901234567

Coding:

| | | | | | | | | | | | | |
|---------|--------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 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:

| | | | | | | | | | | | | |
|---------|--------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 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: SIM
 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: SIM
 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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | REGISTER 1.3 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.3 | [Successful] |
| 7 | ME → SIM | 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: SIM
 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 | 6E | 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:

| | | | | | |
|--------|----|----|----|----|----|
| Coding | 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | REGISTER 1.1A | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1A | [Successful] |
| 7 | ME → SIM | 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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | REGISTER 1.1B | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1B | [Successful] |
| 7 | ME → SIM | 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: SIM
 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 SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

In addition to verify that if an icon is provided by the SIM, 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 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 System Simulator.

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | REGISTER 1.1A Or REGISTER 1.1B | Option A applies if A.1/33 is supported, Option B applies if A.1/33 is not supported |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1A or RELEASE COMPLETE (SS RETURN RESULT) 1.1B | [Successful] Option A applies if A.1/33 is supported, Option B applies if A.1/33 is not supported |
| 7 | ME → SIM | TERMINAL RESPONSE: SEND SS 2.1.1AA or TERMINAL RESPONSE: SEND SS 2.1.1AB | [Command performed successfully] Option AA applies if A.1/33 is supported, Option AB applies if A.1/33 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: SIM
 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: SIM

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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SS 2.1.1 | [BASIC-ICON, self-explanatory] |
| 4 | ME → USER | Display "Basic Icon" without the icon | |
| 5 | ME → SS | REGISTER 1.1A Or REGISTER 1.1B | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1A or RELEASE COMPLETE (SS RETURN RESULT) 1.1B | [Successful] Option A applies if A.1/33 is supported, Option B applies if A.1/33 is not supported |
| 7 | ME → SIM | 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.1/33 is supported, Option BB applies if A.1/33 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: SIM

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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SS 2.2.1 | [COLOUR-ICON, self-explanatory] |
| 4 | ME → USER | Display the colour icon without the alpha identifier | |
| 5 | ME → SS | REGISTER 1.1A Or REGISTER 1.1B | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | [Successful] Option A applies if A.1/33 is supported, Option B applies if A.1/33 is not supported |
| 7 | ME → SIM | TERMINAL RESPONSE: SEND SS 2.1.1AA or TERMINAL RESPONSE: SEND SS 2.1.1AB | [Command performed successfully] Option AA applies if A.1/33 is supported, Option AB applies if A.1/33 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: SIM
 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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SS 2.2.1 | [COLOUR-ICON, self-explanatory] |
| 4 | ME → USER | Display "Colour Icon" without the icon | |
| 5 | ME → SS | REGISTER 1.1A Or REGISTER 1.1B | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1A or RELEASE COMPLETE (SS RETURN RESULT) 1.1B | [Successful] Option A applies if A.1/33 is supported, Option B applies if A.1/33 is not supported |
| 7 | ME → SIM | 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.1/33 is supported, Option BB applies if A.1/33 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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | REGISTER 1.1A Or REGISTER 1.1B | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1A or RELEASE COMPLETE (SS RETURN RESULT) 1.1B | [Successful] Option A applies if A.1/33 is supported, Option B applies if A.1/33 is not supported |
| 7 | ME → SIM | TERMINAL RESPONSE: SEND SS 2.1.1AA or TERMINAL RESPONSE: SEND SS 2.1.1AB | [Command performed successfully] Option AA applies if A.1/33 is supported, Option AB applies if A.1/33 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: SIM
 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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SS 2.3.1 | [BASIC-ICON, non self-explanatory] |
| 4 | ME → USER | Display "Basic Icon" without the icon | |
| 5 | ME → SS | REGISTER 1.1A Or REGISTER 1.1B | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1A or RELEASE COMPLETE (SS RETURN RESULT) 1.1B | [Successful] Option A applies if A.1/33 is supported, Option B applies if A.1/33 is not supported |
| 7 | ME → SIM | 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.1/33 is supported, Option BB applies if A.1/33 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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 2.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SS 2.4.1 | [BASIC-ICON, non self-explanatory] |
| 4 | ME → SIM | 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: SIM
 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: SIM
 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 support)

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 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 SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.11.3.4 Method of test

27.22.4.11.3.4.1 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.

The elementary files are coded as SIM 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 System Simulator.

27.22.4.11.3.4.2 Procedure

Expected Sequence 3.1 (SEND SS, call forward unconditional, all bearers, successful, UCS2 text)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SS 3.1.1 | |
| 4 | ME → USER | Display "ЗДРАВСТВУЙТЕ" | ["Hello" in Russian] |
| 5 | ME → SS | REGISTER 1.1A Or REGISTER 1.1B | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1A or RELEASE COMPLETE (SS RETURN RESULT) 1.1B | [Successful] Option A applies if A.1/33 is supported, Option B applies if A.1/33 is not supported |
| 7 | ME → SIM | TERMINAL RESPONSE: SEND SS 1.1.1A or TERMINAL RESPONSE: SEND SS 1.1.1B | [Command performed successfully] Option A applies if A.1/33 is supported, Option B applies if A.1/33 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: SIM
 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.

27.22.4.12 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 SIM: Send USSD facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 12.12.7, clause 5.2, clause 12.6, clause 12.7, clause 12.2, clause 12.17, clause 12.31 and clause 6.5.4.
- TS 03.38 [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 SIM command to the system Simulator.

To verify that the ME returns a TERMINAL RESPONSE command to the SIM 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 SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table.

The elementary files are coded as SIM 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 System Simulator.

27.22.4.12.1.4.2 Procedure

Expected Sequence 1.1 (SEND USSD, 7-bit data, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND USSD 1.1.1 | |
| 4 | ME → USER | Display "7-bit USSD" | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | ["USSD string received from SS"] |
| 7 | ME → SIM | 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: SIM
Destination device: Network
Alpha identifier: "7-bit USSD"

USSD String

Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-
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 | 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 1.1

Logically (only USSD argument)

ProcessUnstructuredSS-Request ARGUMENT

USSD-DataCodingScheme:

- 7-bit default, no message class

USSD string:

- "ABCDEFGHGIJKLMNOPQRSTUVWXYZ-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) 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:

| | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding | 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: SIM
 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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND USSD 1.2.1 | |
| 4 | ME → USER | Display "8-bit USSD" | |
| 5 | ME → SS | REGISTER 1.2 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.2 | ["USSD string received from SS"] |
| 7 | ME → SIM | 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: SIM
 Destination device: Network
 Alpha identifier: "8-bit USSD"

USSD String

Data coding scheme: Uncompressed, no message class meaning, 8-bit data
 USSD string: "ABCDEFGHJKLMNOPQRSTUVWXYZ-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:
- "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-1234567890"

Coding:

| | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding | 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:

| | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding | 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: SIM
- 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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND USSD 1.3.1 | |
| 4 | ME → USER | Display "UCS2 USSD" | |
| 5 | ME → SS | REGISTER 1.3 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.3 | ["USSD string received from SS"] |
| 7 | ME → SIM | 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: SIM
 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:

| | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding | 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:

| | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding | 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND USSD 1.1.1 | |
| 4 | ME → USER | Display "7-bit USSD" | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN ERROR) 1.1 | Return Error |
| 7 | ME → SIM | 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND USSD 1.1.1 | |
| 4 | ME → USER | Display "7-bit USSD" | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS REJECT) 1.1 | Reject |
| 7 | ME → SIM | 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | ["USSD string received from SS"] |
| 7 | ME → SIM | 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: SIM
 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: "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-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 | 61 | 69 | 6E | 69 | 6E | 67 | 20 | 74 | 68 |
| | 65 | 20 | 55 | 53 | 53 | 44 | 20 | 52 | 65 | 74 | 75 | 72 |
| | 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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.7.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND USSD 1.7.1 | |
| 4 | ME → USER | Optionally display an informative message | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | ["USSD string received from SS"] |
| 7 | ME → SIM | 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: SIM
 Destination device: Network

USSD String

Data coding scheme: 7-bit default, no message class
 USSD string: "ABCDEFGHJKLMNPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 44 | 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 | E5 | 60 | | |

Expected Sequence 1.8 (SEND USSD, 7-bit data, successful, null length alpha identifier)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.8.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | ["USSD string received from SS"] |
| 7 | ME → SIM | 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: SIM
 Destination device: Network
 Alpha identifier: ""

USSD String

Data coding scheme: 7-bit default, no message class
 USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-1234567890"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 46 | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 00 | 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 |

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 SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

In addition to verify that if an icon is provided by the SIM, 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 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 System Simulator

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND USSD 2.1.1 | [BASIC-ICON, self-explanatory] |
| 4 | ME → USER | Display BASIC ICON | |
| 5 | ME → SS | REGISTER 2.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 2.1 | ["USSD string received from SS"] |
| 7 | ME → SIM | 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: SIM
 Destination device: Network
 Alpha identifier: "Basic Icon"

USSD String

Data coding scheme: 7-bit default, no message class
 USSD string: "ABCDEFGHJKLMNPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-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 | 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 | 9E | 02 |
| | 00 | 01 | | | | | | | | | | |

REGISTER 2.1

Logically (only USSD argument)

ProcessUnstructuredSS-Request ARGUMENT
 USSD-DataCodingScheme:
 - 7-bit default, no message class

USSD string:

- "ABCDEFGHJKLMNOPQRSTUVWXYZ-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) 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:

| | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding | 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND USSD 2.1.1 | [BASIC-ICON, self-explanatory] |
| 4 | ME → USER | Display "Basic Icon" without the icon | |
| 5 | ME → SS | REGISTER 2.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 2.1 | ["USSD string received from SS"] |
| 7 | ME → SIM | 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | REGISTER 2.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 2.1 | ["USSD string received from SS"] |
| 7 | ME → SIM | 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: SIM
 Destination device: Network
 Alpha identifier: "Color Icon"

USSD String

Data coding scheme: 7-bit default, no message class
 USSD string: "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-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 | 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 | 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 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: SEND USSD 2.3.1 | |
| 3 | SIM → ME | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND USSD 2.3.1 | [BASIC-ICON, non self-explanatory] |
| 4 | ME → USER | Display "Basic Icon" and BASIC-ICON | |
| 5 | ME → SS | REGISTER 2.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 2.1 | ["USSD string received from SS"] |
| 7 | ME → SIM | 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: SIM
 Destination device: Network
 Alpha identifier: "Basic Icon"

USSD String

Data coding scheme: 7-bit default, no message class
 USSD string: "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-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 | E5 | 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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND USSD 2.3.1 | [BASIC-ICON, non self-explanatory] |
| 4 | ME → USER | Display "Basic Icon" without the icon | |
| 5 | ME → SS | REGISTER 2.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 2.1 | ["USSD string received from SS"] |
| 7 | ME → SIM | 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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 2.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND USSD 2.4.1 | [BASIC-ICON, non self-explanatory] |
| 4 | ME → SIM | 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: SIM
 Destination device: Network

USSD String

Data coding scheme: 7-bit default, no message class
 USSD string: "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-

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 | E5 | 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: SIM

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 support)

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 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 SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.12.3.4 Method of test

27.22.4.12.3.4.1 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. The elementary files are coded as SIM 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 System Simulator.

27.22.4.12.3.4.2 Procedure

Expected Sequence 3.1 (SEND USSD, 7-bit data, successful, UCS2 text)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND USSD 3.1.1 | |
| 4 | ME → USER | Display "ЗДРАВСТВУЙТЕ" | ["Hello" in Russian] |
| 5 | ME → SS | REGISTER 3.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 3.1 | [Successful] |
| 7 | ME → SIM | 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: SIM
 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: "ABCDEFGHJKLMNOPQRSTUVWXYZ-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:
 - "ABCDEFGHJKLMNOPQRSTUVWXYZ-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) 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:

| | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding | 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: SIM

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.

27.22.4.13 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 SIM: Set Up Call facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 12.6, clause 12.7, clause 12.12, clause 12.12.3 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 SIM Simulator and the System Simulator.

The elementary files are coded as SIM 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 system simulator.

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | The ME attempts to set up a call to "+012340123456" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | [The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way] |
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 1.1.1 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 to idle mode. | |

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: SIM
 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | The active call is put on hold | |
| 7 | ME → SS | The ME attempts to set up a call to "+012340123456" | |
| 8 | SS → ME | The ME receives the CONNECT message from the system simulator. | [The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way] |
| 9 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM
 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | The ME disconnects the active call | |
| 7 | ME → SS | The ME attempts to set up a call to "+012340123456" | |
| 8 | SS → ME | The ME receives the CONNECT message from the system simulator. | [The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way] |
| 9 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM
 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 | 63 | 6F | 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP CALL 1.1.1 | [only if not currently busy on another call] |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM

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 system simulator shall be configured to not allow Call Hold.

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | The ME attempts to put the active call on hold | |
| 7 | SS → ME | The ME receives the HOLD REJECT message from the system simulator | [SS sends "Facility Rejected" as cause value] |
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 1.7.1A OR TERMINAL RESPONSE: SET UP CALL 1.7.1B | [Network currently unable to process command] |

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: SIM

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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.8.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | The ME attempts to set up a call to "+012340123456" using the capability configuration parameters supplied by SIM | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | [The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way] |
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM
 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.9.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | The ME attempts to set up a call to "+01234567890123456789012345 678901" | |
| 6 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 7 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM
 Destination device: Network

Address

TON: International
 NPI: ISDN / telephone numbering plan
 Dialling number string: "01234567890123456789012345678901"

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 | | | | | | |

Note: The maximum BCD number length is limited as dependencies of the lower-layer type of access, e.g. PCS 1900, GSM 900, GSM 850, UMTS FDD shall be taken into account.

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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.10.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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, " | |
| 5 | USER → ME | The user confirms the set up call | [user confirmation] |
| 6 | ME → SS | The ME attempts to set up a call to "+01" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM
 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 | 63 | 6F | 6E | 6E | 65 | 63 | 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 | 66 | 69 | 72 | 73 | 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.11.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | The ME attempts to set up a call to "+012340123456" with the called party subaddress information | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | [The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way] |
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.11.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP CALL 1.11.1 | [set up a call with called party subaddress] |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM
 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: SIM

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: SIM

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 system simulator shall be configured such that call set up requests will be rejected with cause "User Busy".

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.12.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | 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 → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM
 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: SIM

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 SIM Simulator and the System Simulator.

The elementary files are coded as SIM 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 system simulator.

27.22.4.13.2.4.2 Procedure

Expected Sequence 2.1 (SET UP CALL, two alpha identifiers)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | The ME attempts to set up a call to "+012340123456". The ME displays "CALL" if the ME supports 2 nd alpha identifier or otherwise the ME may display "CONFIRMATION" | [second alpha identifier] |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | [The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way] |
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM
 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: SIM
 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 SIM Simulator and the System Simulator.

The elementary files are coded as SIM 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 system simulator.

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 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: SET UP CALL 3.1.1 FETCH | |
| 3 | SIM → 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→SS | The ME attempts to set up a call to "+012340123456" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | [The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way] |
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM
- 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: SIM
 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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | The ME attempts to set up a call to "+012340123456" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | [The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way] |
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 3.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | The ME attempts to set up a call to "+012340123456" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | [The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way] |
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM
 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 | 63 | 6F | 6E | 20 | 33 | 2E | 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: SIM

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 | SIM → ME | PROACTIVE COMMAND | |
| 2 | ME → SIM | PENDING: SET UP CALL 3.2.1 | |
| 3 | SIM → ME | FETCH | |
| 4 | ME → USER | PROACTIVE COMMAND: SET UP CALL 3.2.1 | Including icon identifier, icon shall be displayed instead of the first alpha identifier |
| 5 | ME → USER | ME display "Set up call Icon 3.2.1" without the icon | |
| 6 | USER → ME | The user confirms the set up call | [user confirmation] |
| 7 | ME → SS | The ME attempts to set up a call to "+012340123456" | |
| 8 | SS → ME | The ME receives the CONNECT message from the system simulator. | [The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way] |
| 9 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 3.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | The ME attempts to set up a call to "+012340123456" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | [The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way] |
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM
 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 3.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | The ME attempts to set up a call to "+012340123456" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | [The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way] |
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 3.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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→SS | 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 | SS → ME | The ME receives the CONNECT message from the system simulator. | [The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way] |
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM
 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 3.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | 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 | SS → ME | The ME receives the CONNECT message from the system simulator. | [The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way] |
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 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: SIM

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.

27.22.4.14 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 11.14 [15] clause 5.2, clause 6.4.14, clause 6.6.14, clause 6.8, clause 6.11, clause 12.6 and clause 12.7.

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 SIM presence detection.

27.22.4.14.4 Method of test

27.22.4.14.4.1 Initial conditions

The ME is connected to the SIM Simulator.

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 | SIM → ME | PROACTIVE COMMAND PENDING: POLL INTERVAL 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POLL INTERVAL 1.1.1 | Interval = 1 min |
| 4 | ME → SIM | 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 | SIM → ME | PROACTIVE COMMAND PENDING: POLLING OFF 1.1.2 | |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND: POLLING OFF 1.1.2 | |
| 8 | ME → SIM | TERMINAL RESPONSE: POLLING OFF 1.1.2 | [command performed successfully] |
| 9 | USER → SIM | Call to be set up | |
| 10 | ME → SIM | Periods of inactivity on the SIM-ME interfaceshall not exceed 30 seconds | |
| 11 | USER → SIM | 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: SIM
 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: SIM

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: SIM

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 11.14 [15], subclause 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: SIM
 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: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 04 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.14.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

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 11.14 [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;

if the local information is stored in the ME; otherwise, sends the correct error code to the SIM in the TERMINAL RESPONSE.

27.22.4.15.4 Method of tests

27.22.4.15.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The ME is connected to the System Simulator and has performed the location update procedure.

The GSM 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.

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

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

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 | SIM → ME | PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.1.1 | |
| 4 | ME → SIM | 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 system simulator, option A shall apply for GSM parameters] [Command performed successfully, MCC MNC LAC and Cell Identity as system simulator, 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: SIM
 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: SIM

Result

General Result: Command performed successfully
 Location Information
 MCC & MNC: MCC = 001, MNC = 01
 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 | F1 | 10 | 00 | 01 | 00 | 01 | | | |

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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.2.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.2.1 | [Command performed successfully, IMEI as system simulator, 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: SIM
 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: SIM

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.

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 04.08 [10], clause 10.5.1..

Expected Sequence 1.3 (PROVIDE LOCAL INFORMATION, Network Measurement Results (NMR))

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.3.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.3.1 | [Command performed successfully, NMR as system simulator] |

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: SIM
 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: SIM

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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.4.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.4.1 | [Command performed successfully] |

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.4.1

Logically:

Command details

Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier: "03" Date Time and Time Zone

Device identities

Source device: SIM
 Destination device: ME

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 26 | 03 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.4.1

Logically:

Command details

Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier: "03" Date Time and Time Zone

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully
 Date-Time and Time Zone: date an time set by the user: 7th May 2002, 14h 08mn 17s, no time zone information, as an example in TLV

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 26 | 03 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A6 | 07 | 20 | 50 | 70 | 41 | 80 | 71 | FF | | | |

Expected Sequence 1.5 (PROVIDE LOCAL INFORMATION, Language setting)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.5.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.5.1 | [Command performed successfully] |

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.5.1

Logically:

Command details

Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier: "04" Language setting

Device identities

Source device: SIM
 Destination device: ME

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 26 | 04 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.5.1

Logically:

Command details

Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier: "04" Language setting

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully
 Language: English ("en") as an example for TLV

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 26 | 04 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | AD | 02 | 65 | 6E | | | | | | | | |

Expected Sequence 1.6 (PROVIDE LOCAL INFORMATION, Timing advance)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING PROVIDE LOCAL INFORMATION 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.6.1 | |
| 4 | ME → SIM | 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: SIM
 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: SIM

Result

General Result: Command performed successfully

Timing Advance

ME status: "00" ME is in idle state Idle State
 Timing Advance: 0

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 26 | 05 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | AE | 02 | 00 | 00 | | | | | | | | |

27.22.4.15.5 Test requirement

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

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 SIM: Set Up Event List facility as defined in:

- TS 11.14 [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 11.14 [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 SIM, 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 SIM 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 SIM Simulator and the System Simulator.

The elementary files are coded as SIM 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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 6 | SS → ME | SETUP 1.1.1 | [Incoming call alert] |
| 7 | USER → ME | User shall accept the incoming call | |
| 8 | ME → SS | CONNECT 1.1.1 | |
| 9 | ME → SIM | ENVELOPE: EVENT DOWNLOAD CALL CONNECTED 1.1.1 | [Call Connected Event] |
| 10 | SIM → ME | PROACTIVE SIM 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: SIM
 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: SIM
 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: SIM
 Transaction identifier
 Ti value: 0 (bit 5-7)
 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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1 | [Call Connected and Call Disconnected Events] |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.2.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.2.2 | |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.2.2 | [Call Disconnected Event] |
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.2.2 | |
| 9 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 10 | SS → ME | SETUP 1.2.2 | [Incoming call alert] |
| 11 | USER → ME | User shall accept the incoming call | |
| 12 | ME → SS | CONNECT 1.2.2 | |
| 13 | SS → ME | DISCONNECT 1.2.2 | |
| 14 | ME → SIM | ENVELOPE: EVENT DOWNLOAD CALL DISCONNECT 1.2.2A or ENVELOPE: EVENT DOWNLOAD CALL DISCONNECT 1.2.2B | [Call Disconnect Event] |
| 15 | SIM → ME | PROACTIVE SIM 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: SIM
 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: SIM

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: SIM
 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: SIM

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: SIM
 Transaction identifier
 Ti value: 0 (bit 5-7)
 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: SIM
 Transaction identifier
 Ti value: 0 (bit 5-7)
 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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.3.1 | [Call Connected Event] |
| | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.3.1 | |
| 4 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.3.2 | |
| 5 | ME → SIM | FETCH | |
| 6 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.3.2 | [Remove Event] |
| 7 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.3.2 | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 10 | SS → ME | SETUP 1.3.2 | [Incoming call alert] |
| 11 | USER → ME | User shall accept the incoming call | |
| 12 | ME → SS | CONNECT 1.3.2 | |
| 13 | ME → SIM | No ENVELOPE: EVENT DOWNLOAD (call connected) sent | |
| 14 | SS → 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: SIM
 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: SIM

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: SIM
 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.4.1 | [Call Connected Event] |
| | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.4.1 | |
| 4 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 5 | User → ME | Power off ME | |
| 6 | User → ME | Power on ME | |
| 7 | SS → ME | SETUP 1.4.1 | [Incoming call alert] |
| 8 | USER → ME | User shall accept the incoming call | |
| 9 | ME → SS | CONNECT 1.4.1 | |
| 10 | ME → SIM | No ENVELOPE: EVENT DOWNLOAD (call connected) sent | |
| 11 | SS → 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: SIM

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: SIM
 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 SIM: Perform Card APDU facility as defined in:

- TS 11.14 [15] clause 6.1, clause 5.2, clause 6.4.17, clause 6.6.17, clause 6.8, clause 12.6, clause 12.7, clause 12.35, clause 12.36 and clause 12.12.9.

Additionally the ME shall support multiple card operation as defined in:

- TS 11.14 [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 SIM command, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

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 D).

27.22.4.17.1.4 Method of test

27.22.4.17.1.4.1 Initial conditions

The ME is connected to the SIM 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 D. Another card with different parameters may be used as TestSIM to execute these tests. In this case the SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POWER ON CARD 1.1.1 | [Power on card reader 1] |
| 4 | ME → SIM2 | RESET CARD | [Perform electrical initialization] |
| 5 | SIM2 → ME | ANSWER TO RESET 1.1 | [ATR] |
| 6 | ME → SIM | TERMINAL RESPONSE: POWER ON CARD 1.1.1 | [ATR] |
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.1.1 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.1.1 | [Select Masterfile] |
| 10 | ME → SIM2 | C-APDU: SELECT 1.1 | [Select Masterfile] |
| 11 | SIM2 → ME | R-APDU: SELECT 1.1 | [Command performed successfully - length '1B' of response data] |
| 12 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.1.1 | |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.1.2 | |
| 14 | ME → SIM | FETCH | |
| 15 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.1.2 | [Get Response with length '1B'] |
| 16 | ME → SIM2 | C-APDU: GET RESPONSE 1.1 | [Get Response with length '1B'] |
| 17 | SIM2 → ME | R-APDU: GET RESPONSE 1.1 | [Response data with length '1B'] |
| 18 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.1.2 | [Response data with length '1B'] |

PROACTIVE COMMAND POWER ON CARD 1.1.1

Logically:

Command details

Command number: 1
 Command type: POWER ON CARD
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Card reader 1

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 81 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

ANSWER TO RESET 1.1

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 |
|---------|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: POWER ON CARD 1.1.1

Logically:

Command details

Command number: 1
 Command type: POWER ON CARD
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Card ATR

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:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A1 | 09 | 3B | 86 | 00 | 91 | 99 | 00 | 12 | C1 | 00 | |

PROACTIVE COMMAND PERFORM CARD APDU 1.1.1

Logically:

Command details

Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Card Reader 1

C-APDU

Class: 'A0'
 Instruction: SELECT
 P1 parameter: '00'
 P2 parameter: '00'
 Lc: '02'
 Data: Master File

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 07 | A0 | A4 | 00 | 00 | 02 | 3F | 00 | | | | |

C-APDU: SELECT 1.1

Logically:

C-APDU

Class: 'A0'
 Instruction: SELECT
 P1 parameter: '00'
 P2 parameter: '00'
 Lc: '02'
 Data: Master File

Coding:

| | | | | | | | |
|---------|----|----|----|----|----|----|----|
| Coding: | A0 | A4 | 00 | 00 | 02 | 3F | 00 |
|---------|----|----|----|----|----|----|----|

R-APDU: SELECT 1.1

Logically:

Status Words

SW1 / SW2: Command performed successfully - length '1B' of response data

Coding:

| | | |
|---------|----|----|
| Coding: | 9F | 1B |
|---------|----|----|

TERMINAL RESPONSE: PERFORM CARD APDU 1.1.1

Logically:

Command details

Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

R-APDU

Status Words

SW1 / SW2: Command performed successfully - length '1B' of response data

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A3 | 02 | 9F | 1B | | | | | | | | |

PROACTIVE COMMAND PERFORM CARD APDU 1.1.2

Logically:

Command details

Command number: 1
 Command type: PERFORM CARD APDU

Command qualifier: '00'
 Device identities
 Source device: SIM
 Destination device: Card Reader 1
 C-APDU
 Class: 'A0'
 Instruction: GET RESPONSE
 P1 parameter: '00'
 P2 parameter: '00'
 Le: '1B'

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 10 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 05 | A0 | C0 | 00 | 00 | 1B | | | | | | |

C-APDU: GET RESPONSE 1.1

Logically:

C-APDU
 Class: 'A0'
 Instruction: GET RESPONSE
 P1 parameter: '00'
 P2 parameter: '00'
 Le: '1B'

Coding:

| | | | | | |
|---------|----|----|----|----|----|
| Coding: | A0 | C0 | 00 | 00 | 1B |
|---------|----|----|----|----|----|

R-APDU: GET RESPONSE 1.1

Logically:

R-APDU data
 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 | | | | | | | |

TERMINAL RESPONSE: PERFORM CARD APDU 1.1.2

Logically:

Command details
 Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"

Device identities
 Source device: ME
 Destination device: SIM

Result
 General Result: Command performed successfully

R-APDU data
 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:
 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:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A3 | 0F | 00 | 00 | 02 | 8D | 3F | 00 | 01 | 00 | 00 | 22 |
| | FF | 01 | 0E | 90 | 00 | | | | | | | |

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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|-------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POWER ON CARD 1.1.1 | [Power on card reader 1] |
| 4 | ME → SIM2 | RESET CARD | [Perform electrical initialization] |
| 5 | SIM2 → ME | ANSWER TO RESET 1.1 | [ATR] |
| 6 | ME → SIM | TERMINAL RESPONSE: POWER ON CARD 1.1.1 | [ATR] |
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.2.1 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.2.1 | [Select GSM] |
| 10 | ME → SIM2 | C-APDU: SELECT 1.2a | [Select GSM] |
| 11 | SIM2 → ME | R-APDU: SELECT 1.2a | |
| 12 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.2.1 | |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.2.2 | |
| 14 | ME → SIM | FETCH | |
| 15 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.2.2 | [Select PLMN] |
| 16 | ME → SIM2 | C-APDU: SELECT 1.2b | [Select PLMN] |
| 17 | SIM2 → ME | R-APDU: SELECT 1.2b | |
| 18 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.2.2 | |
| 19 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.2.3 | |
| 20 | ME → SIM | FETCH | |
| 21 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.2.3 | [Update Binary] |
| 22 | ME → SIM2 | C-APDU: UPDATE BINARY 1.2 | [Update Binary] |
| 23 | SIM2 → ME | R-APDU: UPDATE BINARY 1.2 | |
| 24 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.2.3 | |
| 25 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.2.4 | |
| 26 | ME → SIM | FETCH | |
| 27 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.2.4 | [Read Binary] |
| 28 | ME → SIM2 | C-APDU: READ BINARY 1.2 | [Read Binary] |
| 29 | SIM2 → ME | R-APDU: READ BINARY 1.2 | |
| 30 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.2.4 | |
| 31 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.2.5 | |
| 32 | ME → SIM | FETCH | |
| 33 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.2.5 | [Update Binary] |
| 34 | ME → SIM2 | C-APDU: UPDATE BINARY 1.2a | [Update Binary] |
| 35 | SIM2 → ME | R-APDU: UPDATE BINARY 1.2 | |
| 36 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.2.3 | |

PROACTIVE COMMAND PERFORM CARD APDU 1.2.1

Logically:

Command details

Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Card Reader 1

C-APDU

Class: 'A0'
 Instruction: SELECT
 P1 parameter: '00'
 P2 parameter: '00'
 Lc: '02'
 Data: DF GSM

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 07 | A0 | A4 | 00 | 00 | 02 | 7F | 20 | | | | |

PROACTIVE COMMAND: PERFORM CARD APDU 1.2.2

Logically:

Command details

Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Card Reader 1

C-APDU

Class: 'A0'
 Instruction: SELECT
 P1 parameter: '00'
 P2 parameter: '00'
 Lc: '02'
 Data: EF PLMN

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 07 | A0 | A4 | 00 | 00 | 02 | 6F | 30 | | | | |

PROACTIVE COMMAND: PERFORM CARD APDU 1.2.3

Logically:

Command details

Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Card Reader 1

C-APDU

Class: 'A0'
 Instruction: UPDATE BINARY
 P1 parameter: '00'
 P2 parameter: '00'
 Lc: '18'

Data: '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F 10 11 12 13 14 15 16 17'

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 28 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 1D | A0 | D6 | 00 | 00 | 18 | 00 | 01 | 02 | 03 | 04 | 05 |
| | 06 | 07 | 08 | 09 | 0A | 0B | 0C | 0D | 0E | 0F | 10 | 11 |
| | 12 | 13 | 14 | 15 | 16 | 17 | | | | | | |

PROACTIVE COMMAND: PERFORM CARD APDU 1.2.4

Logically:

Command details

Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Card Reader 1

C-APDU

Class: 'A0'
 Instruction: READ BINARY
 P1 parameter: '00'
 P2 parameter: '00'
 Le: '18'

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 10 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 05 | A0 | B0 | 00 | 00 | 18 | | | | | | |

PROACTIVE COMMAND: PERFORM CARD APDU 1.2.5

Logically:

Command details

Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Card Reader 1

C-APDU

Class: 'A0'
 Instruction: UPDATE BINARY
 P1 parameter: '00'
 P2 parameter: '00'
 Lc: '18'
 Data: 'FF FF'

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 28 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 1D | A0 | D6 | 00 | 00 | 18 | FF | FF | FF | FF | FF | FF |
| | FF | FF | FF | FF | FF | FF | FF | FF | FF | FF | FF | FF |
| | FF | FF | FF | FF | FF | FF | | | | | | |

C-APDU: SELECT 1.2a

Logically:

C-APDU

Class: 'A0'
 Instruction: SELECT
 P1 parameter: '00'
 P2 parameter: '00'
 Lc: '02'
 Data: DF GSM

Coding:

| | | | | | | | |
|---------|----|----|----|----|----|----|----|
| Coding: | A0 | A4 | 00 | 00 | 02 | 7F | 20 |
|---------|----|----|----|----|----|----|----|

C-APDU: SELECT 1.2b

Logically:

C-APDU

Class: 'A0'
 Instruction: SELECT
 P1 parameter: '00'
 P2 parameter: '00'
 Lc: '02'
 Data: EF PLMN

Coding:

| | | | | | | | |
|---------|----|----|----|----|----|----|----|
| Coding: | A0 | A4 | 00 | 00 | 02 | 6F | 30 |
|---------|----|----|----|----|----|----|----|

C-APDU: UPDATE BINARY 1.2

Logically:

C-APDU

Class: 'A0'
 Instruction: UPDATE BINARY
 P1 parameter: '00'
 P2 parameter: '00'
 Lc: '18'
 Data: '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17'

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | A0 | D6 | 00 | 00 | 18 | 00 | 01 | 02 | 03 | 04 | 05 | 06 |
| | 07 | 08 | 09 | 0A | 0B | 0C | 0D | 0E | 0F | 10 | 11 | 12 |
| | 13 | 14 | 15 | 16 | 17 | | | | | | | |

C-APDU: READ BINARY 1.2

Logically:

C-APDU

Class: 'A0'
 Instruction: READ BINARY
 P1 parameter: '00'
 P2 parameter: '00'
 Le: '18'

Coding:

| | | | | | |
|---------|----|----|----|----|----|
| Coding: | A0 | B0 | 00 | 00 | 18 |
|---------|----|----|----|----|----|

C-APDU: UPDATE BINARY 1.2a

Logically:

C-APDU

Class: 'A0'
 Instruction: UPDATE BINARY
 P1 parameter: '00'
 P2 parameter: '00'
 Lc: '18'
 Data: 'FF FF'

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | A0 | D6 | 00 | 00 | 18 | FF | FF | FF | FF | FF | FF | FF |
| | FF | FF | FF | FF | FF | FF | FF | FF | FF | FF | FF | FF |
| | FF | FF | FF | FF | FF | | | | | | | |

R-APDU: SELECT 1.2a

Logically:

Status Words

SW1 / SW2: Normal ending of command - length '1B' of response data

Coding:

| | | |
|---------|----|----|
| Coding: | 9F | 1B |
|---------|----|----|

R-APDU: SELECT 1.2b

Logically:

Status Words

SW1 / SW2: Normal ending of command - length '0F' of response data

Coding:

| | | |
|---------|----|----|
| Coding: | 9F | 0F |
|---------|----|----|

R-APDU: UPDATE BINARY 1.2

Logically:

Status Words

SW1 / SW2: Normal ending of command

Coding:

| | | |
|---------|----|----|
| Coding: | 90 | 00 |
|---------|----|----|

R-APDU: READ BINARY 1.2

Logically:

R-APDU data

Data: '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17'

Status Words

SW1 / SW2: Normal ending of command

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 0A | 0B |
| | 0C | 0D | 0E | 0F | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| | 90 | 00 | | | | | | | | | | |

TERMINAL RESPONSE: PERFORM CARD APDU 1.2.1

Logically:

Command details

Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

R-APDU

Status Words

SW1 / SW2: Command performed successfully - length 1B of response data

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A3 | 02 | 9F | 1B | | | | | | | | |

TERMINAL RESPONSE: PERFORM CARD APDU 1.2.2

Logically:

Command details

Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

R-APDU

Status Words

SW1 / SW2: Command performed successfully - length 0F of response data

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A3 | 02 | 9F | 0F | | | | | | | | |

TERMINAL RESPONSE: PERFORM CARD APDU 1.2.3

Logically:

Command details

Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

R-APDU

Status Words

SW1 / SW2: Normal ending of command

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A3 | 02 | 90 | 00 | | | | | | | | |

TERMINAL RESPONSE: PERFORM CARD APDU 1.2.4

Logically:

Command details

Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

R-APDU

R-APDU data

Data: '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17'

Status Words

SW1 / SW2: Normal ending of command

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A3 | 1A | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
| | 0A | 0B | 0C | 0D | 0E | 0F | 10 | 11 | 12 | 13 | 14 | 15 |
| | 16 | 17 | 90 | 00 | | | | | | | | |

Expected Sequence 1.3 (PERFORM CARD APDU, card reader 1, card inserted, card powered off)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER OFF CARD 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POWER OFF CARD 1.3.1 | [Power off card reader 1] |
| 4 | ME → SIM2 | POWER OFF CARD | [Power off card reader 1] |
| 5 | ME → SIM | TERMINAL RESPONSE: POWER OFF CARD 1.3.1 | [Successful] |
| 6 | ME | SIM2 is powered off from ME card reader | |
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: PEFORM CARD APDU 1.1.1 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.1.1 | [Select Master File] |
| 10 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.3.1 | [Card powered off] |

PROACTIVE COMMAND: POWER OFF CARD 1.3.1

Logically:

Command details

Command number: 1
 Command type: POWER OFF CARD
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Card reader 1

Coding:

BER-TLV: D0 09 81 03 01 32 00 82 02 81 11

TERMINAL RESPONSE: POWER OFF CARD 1.3.1

Logically:

Command details

Command number: 1
 Command type: POWER OFF CARD
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 32 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | | | | | | | | | | |

TERMINAL RESPONSE: PERFORM CARD APDU 1.3.1

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU
 Command qualifier: "00"
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: MultipleCard commands error
 Additional Information: Card powered off

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 82 | 81 | 83 | 02 |
| | 38 | 04 | | | | | | | | | |

Expected Sequence 1.4 (PERFORM CARD APDU, card reader 1, no card inserted)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------|
| 1 | ME | SIM2 is removed from ME card reader | |
| 2 | SIM → ME | PROACTIVE COMMAND PENDING: PEFORM CARD APDU 1.1.1 | |
| 3 | ME → SIM | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.1.1 | [Select Master File] |
| 5 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.4.1 | [No card inserted] |

TERMINAL RESPONSE: PERFORM CARD APDU 1.4.1

Logically:

Command details
 Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: MultipleCard commands error
 Additional Information: Card removed or not present

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 82 | 81 | 83 | 02 |
| | 38 | 02 | | | | | | | | | |

Expected Sequence 1.5 (PERFORM CARD APDU, card reader 7 (which is not the valid card reader identifier of the additional ME card reader))

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: PEFORM CARD APDU 1.5.1 | [invalid card reader ID] |
| 3 | ME → SIM | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.5.1 | [Select Master File] |
| 5 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.5.1 | [Specified reader not valid] |

PROACTIVE COMMAND: PERFORM CARD APDU 1.5.1

Logically:

Command details

Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Card Reader 7

C-APDU

Class: 'A0'
 Instruction: SELECT
 P1 parameter: '00'
 P2 parameter: '00'
 Lc: '02'
 Data: Master File

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 17 | A2 |
| | 07 | A0 | A4 | 00 | 00 | 02 | 3F | 00 | | | | |

C-APDU: SELECT 1.1

Logically:

C-APDU

Class: 'A0'
 Instruction: SELECT
 P1 parameter: '00'
 P2 parameter: '00'
 Lc: '02'
 Data: Master File

Coding:

| | | | | | | | |
|---------|----|----|----|----|----|----|----|
| Coding: | A0 | A4 | 00 | 00 | 02 | 3F | 00 |
|---------|----|----|----|----|----|----|----|

TERMINAL RESPONSE: PERFORM CARD APDU 1.5.1

Logically:

Command details

Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: MultipleCard commands error
 Additional Information: Specified reader not valid

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 82 | 81 | 83 | 02 |
| | 38 | 09 | | | | | | | | | |

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 SIM command, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

27.22.4.17.2.4 Method of test

27.22.4.17.2.4.1 Initial conditions

The ME is connected to the SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 2.1.1 | [Select Master File] |
| 4 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 2.1.1 | [Card reader detached] |

PROACTIVE COMMAND: PERFORM CARD APDU 2.1.1

Logically:

Command details

Command number: 1
Command type: PERFORM CARD APDU
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Card Reader 1

C-APDU

Class: 'A0'
Instruction: SELECT
P1 parameter: '00'
P2 parameter: '00'
Lc: '02'
Data: Master File

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 07 | A0 | A4 | 00 | 00 | 02 | 3F | 00 | | | | |

TERMINAL RESPONSE: PERFORM CARD APDU 2.1.1

Logically:

Command details

Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: MultipleCard commands error
 Additional Information: Card reader removed or not present

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 82 | 81 | 83 | 02 |
| | 38 | 01 | | | | | | | | | |

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 SIM: Power Off Card facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.18, clause 6.6.18, clause 12.6, clause 12.7, clause 12.12, clause 12.12.9, 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 SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

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 SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2). Instead of the second SIM Simulator a card with different parameters may be used as SIM2 to execute these tests. In this case the SIM 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 second SIM Simulator (SIM2).

27.22.4.18.1.4.2 Procedure

Expected Sequence 1.1 (POWER OFF CARD, card reader 1)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER OFF CARD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POWER OFF CARD 1.1.1 | [Power off card reader 1] |
| 4 | ME → SIM2 | POWER OFF CARD | [Power off card reader 1] |
| 5 | ME → SIM | TERMINAL RESPONSE: POWER OFF CARD 1.1.1 | [Successful] |

PROACTIVE COMMAND: POWER OFF CARD 1.1.1

Logically:

Command details

Command number: 1
 Command type: POWER OFF CARD
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Card reader 1

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 32 | 00 | 82 | 02 | 81 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: POWER OFF CARD 1.1.1

Logically:

Command details

Command number: 1
 Command type: POWER OFF CARD
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 32 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | | | | | | | | | | |

Expected Sequence 1.2 (POWER OFF CARD, card reader 1, no card inserted)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---------------------------|
| 1 | SIM2 | SIM2 is removed from ME card reader | |
| 2 | SIM → ME | PROACTIVE COMMAND PENDING: POWER OFF CARD 1.1.1 | |
| 3 | ME → SIM | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND: POWER OFF CARD 1.1.1 | [Power off card reader 1] |
| 5 | ME → SIM | TERMINAL RESPONSE: POWER OFF CARD 1.2.1 | [No card inserted] |

TERMINAL RESPONSE: POWER OFF CARD 1.2.1

Logically:

Command details

Command number: 1
 Command type: POWER OFF CARD
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: MultipleCard commands error
 Additional Information: Card removed or not present

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 32 | 00 | 82 | 02 | 82 | 81 | 83 | 02 |
| | 38 | 02 | | | | | | | | | |

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 SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.18.2.4 Method of test

27.22.4.18.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second 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 second 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER OFF CARD 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POWER OFF CARD 2.1.1 | [Power off card reader 1] |
| 4 | ME → SIM | TERMINAL RESPONSE: POWER OFF CARD 2.1.1 | [Card reader removed or not present] |

PROACTIVE COMMAND: POWER OFF CARD 2.1.1

Logically:

Command details

Command number: 1
 Command type: POWER OFF CARD
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Card reader 1

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 32 | 00 | 82 | 02 | 81 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: POWER OFF CARD 2.1.1

Logically:

Command details

Command number: 1
 Command type: POWER OFF CARD
 Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: MultipleCard commands error
 Additional Information: Card reader removed or not present

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 32 | 00 | 82 | 02 | 82 | 81 | 83 | 02 |
| | 38 | 01 | | | | | | | | | |

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 SIM: Power On Card facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.19, clause 6.6.19, clause 12.6, clause 12.7, clause 12.12, clause 12.12.9, clause 12.34, 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 SIM command, and successfully returns the Answer To Reset within the TERMINAL RESPONSE command send to the SIM.

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 SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2). Instead of the second SIM Simulator a card with different parameters may be used as SIM2 to execute these tests. In this case the SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|-------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POWER ON CARD 1.1.1 | [Power on card reader 1] |
| 4 | ME → SIM2 | RESET CARD | [Perform electrical initialization] |
| 5 | SIM2 → ME | ANSWER TO RESET 1.1.1 | [ATR] |
| 6 | ME → SIM | TERMINAL RESPONSE: POWER ON CARD 1.1.1 | [ATR] |

PROACTIVE COMMAND: POWER ON CARD 1.1.1

Logically:

Command details

Command number: 1
 Command type: POWER ON CARD
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Card reader 1

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 81 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

ANSWER TO RESET 1.1.1

Logically:

| | |
|-----------------------------|------|
| TS (Initial character): | '3B' |
| T0 (Format character): | 0F |
| T1 (Historical character): | 'P' |
| T2 (Historical character): | 'o' |
| T3 (Historical character): | 'w' |
| T4 (Historical character): | 'e' |
| T5 (Historical character): | 'r' |
| T6 (Historical character): | 'O' |
| T7 (Historical character): | 'n' |
| T8 (Historical character): | 'C' |
| T9 (Historical character): | 'a' |
| T10 (Historical character): | 'r' |
| T11 (Historical character): | 'd' |
| T12 (Historical character): | 'T' |
| T13 (Historical character): | 'e' |
| T14 (Historical character): | 's' |
| T15 (Historical character): | 't' |

Coding:

| | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding | 3B | 0F | 50 | 6F | 77 | 65 | 72 | 4F | 6E | 43 | 61 | 72 |
| | 64 | 54 | 65 | 74 | 75 | | | | | | | |

TERMINAL RESPONSE: POWER ON CARD 1.1.1

Logically:

Command details

| | |
|--------------------|---------------|
| Command number: | 1 |
| Command type: | POWER ON CARD |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Card ATR

| | |
|-----------------------------|------|
| TS (Initial character): | '3B' |
| T0 (Format character): | 0F |
| T1 (Historical character): | 'P' |
| T2 (Historical character): | 'o' |
| T3 (Historical character): | 'w' |
| T4 (Historical character): | 'e' |
| T5 (Historical character): | 'r' |
| T6 (Historical character): | 'O' |
| T7 (Historical character): | 'n' |
| T8 (Historical character): | 'C' |
| T9 (Historical character): | 'a' |
| T10 (Historical character): | 'r' |
| T11 (Historical character): | 'd' |
| T12 (Historical character): | 'T' |
| T13 (Historical character): | 'e' |

T14 (Historical character): 's'

T15 (Historical character): 't'

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A1 | 11 | 3B | 0F | 50 | 6F | 77 | 65 | 72 | 4F | 6E | 43 |
| | 61 | 72 | 64 | 54 | 65 | 74 | 75 | | | | | |

Expected Sequence 1.2 (POWER ON CARD, card reader 1, no ATR)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|-------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POWER ON CARD 1.1.1 | [Power on card reader 1] |
| 4 | ME → SIM2 | RESET CARD | [Perform electrical initialization] |
| 5 | SIM2 → ME | NO ATR | [No ATR] |
| 6 | ME → SIM | TERMINAL RESPONSE: POWER ON CARD 1.2.1 | [No ATR] |

TERMINAL RESPONSE: POWER ON CARD 1.2.1

Logically:

Command details

Command number: 1
Command type: POWER ON CARD
Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: MultipleCard commands error
Additional Information: Card mute

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 38 |
| | 06 | | | | | | | | | | | |

Expected Sequence 1.3 (POWER ON CARD, card reader 1, no card inserted)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|-------------------------------|
| 1 | SIM2 | SIM2 is removed from ME card reader | |
| 2 | SIM → ME | PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1 | |
| 3 | ME → SIM | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND: POWER ON CARD 1.1.1 | [Power on card reader 1] |
| 5 | ME → SIM | TERMINAL RESPONSE: POWER ON CARD 1.3.1 | [Card removed or not present] |

TERMINAL RESPONSE: POWER ON CARD 1.3.1

Logically:

Command details

Command number: 1

Command type: POWER ON CARD
 Command qualifier: "00"
 Device identities
 Source device: Card reader 0
 Destination device: SIM
 Result
 General Result: MultipleCard commands error
 Additional Information: Card removed or not present

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 38 |
| | 02 | | | | | | | | | | | |

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 SIM command, and successfully returns the Answer To Reset within the TERMINAL RESPONSE command send to the SIM.

27.22.4.19.2.4 Method of test

27.22.4.19.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER ON CARD 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POWER ON CARD 2.1.1 | [Power on card reader 1] |
| 4 | ME → SIM | TERMINAL RESPONSE: POWER ON CARD 2.1.1 | [Card reader removed or not present] |

PROACTIVE COMMAND: POWER ON CARD 2.1.1

Logically:

Command details

Command number: 1
 Command type: POWER ON CARD
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Card reader 1

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 81 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: POWER ON CARD 2.1.1

Logically:

Command details

Command number: 1
 Command type: POWER ON CARD
 Command qualifier: "00"

Device identities

Source device: Card reader 0
 Destination device: SIM

Result

General Result: MultipleCard commands error
 Additional Information: Card reader removed or not present

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 38 |
| | 01 | | | | | | | | | | | |

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 SIM: Get Card Reader Status facility as defined in:

- TS 11.14 [15] clause 6.1, clause 5.2, clause 6.4.20, clause 6.6.20, clause 6.8, clause 12.6, clause 12.7, clause 12.33, clause 12.57 and annex H.

Additionally the ME shall support multiple card operation as defined in:

- TS 11.14 [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 SIM command, and successfully returns information about all interfaces to additional card reader(s) in the TERMINAL RESPONSE command send to the SIM.

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 second 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 SIM: Get Card Reader Status (Card Reader Status) facility. The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2). Instead of the second SIM Simulator a card with different parameters may be used as SIM2 to execute these tests. In this case the SIM Simulator shall take into account the corresponding response data.

The elementary files are coded as SIM 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 second 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POWER ON CARD 1.1.1 | [Power on card reader 1] |
| 4 | ME → SIM2 | RESET CARD | [Perform electrical initialization] |
| 5 | SIM2 → ME | ANSWER TO RESET 1.1.1 | [ATR] |
| 6 | ME → SIM | TERMINAL RESPONSE: POWER ON CARD 1.1.1 | [ATR] |
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: GET CARD READER STATUS 1.1.1 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND: GET CARD READER STATUS 1.1.1 | [Get Card Reader Status] |
| 10 | ME → SIM | TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1a Or TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1b or TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1c or TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1d | [Successful] [Successful] [Successful] [Successful] |

PROACTIVE COMMAND: POWER ON CARD 1.1.1

Logically:

Command details

Command number: 1
Command type: POWER ON CARD

Command qualifier: "00"
 Device identities
 Source device: SIM
 Destination device: Card reader 1

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 81 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

ANSWER TO RESET 1.1.1

Logically:

TS (Initial character): '3B'
 T0 (Format character): '00'

Coding:

| | | | | |
|---------|----|----|--|--|
| Coding: | 3B | 00 | | |
|---------|----|----|--|--|

TERMINAL RESPONSE: POWER ON CARD 1.1.1

Logically:

Command details
 Command number: 1
 Command type: POWER ON CARD
 Command qualifier: "00"
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully
 Card ATR
 TS (Initial character): '3B'
 T0 (Format character): '00'

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A1 | 02 | 3B | 00 | | | | | | | | |

PROACTIVE COMMAND: GET CARD READER STATUS 1.1.1

Logically:

Command details
 Command number: 1
 Command type: GET CARD READER STATUS
 Command qualifier: Card reader status
 Device identities
 Source device: SIM
 Destination device: ME

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1a

Logically:

Command details

Command number: 1
 Command type: GET CARD READER STATUS
 Command qualifier: Card reader status

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
 Card reader removable: 'No'
 Card reader present: Yes
 Card reader ID-1 size: 'Yes'
 Card present in reader: Yes
 Card powered: Yes

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | F1 | | | | | | | |

TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1b

Logically:

Command details

Command number: 1
 Command type: GET CARD READER STATUS
 Command qualifier: Card reader status

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
 Card reader removable: 'No'
 Card reader present: Yes
 Card reader ID-1 size: 'No'
 Card present in reader: Yes
 Card powered: Yes

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | D1 | | | | | | | |

TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1c

Logically:

Command details

Command number: 1
 Command type: GET CARD READER STATUS
 Command qualifier: Card reader status

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
 Card reader removable: 'Yes'
 Card reader present: Yes
 Card reader ID-1 size: 'Yes'
 Card present in reader: Yes
 Card powered: Yes

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | F9 | | | | | | | |

TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1d

Logically:

Command details

Command number: 1
 Command type: GET CARD READER STATUS
 Command qualifier: Card reader status

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
 Card reader removable: 'Yes'
 Card reader present: Yes
 Card reader ID-1 size: 'No'
 Card present in reader: Yes
 Card powered: Yes

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | D9 | | | | | | | |

Expected Sequence 1.2 (GET CARD READER STATUS, card reader 1, card inserted, card not powered)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER OFF CARD 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POWER OFF CARD 1.2.1 | [Power off card reader 1] |
| 4 | ME → SIM2 | POWER OFF CARD | [Power off card reader 1] |
| 5 | ME → SIM | TERMINAL RESPONSE: POWER OFF CARD 1.2.1 | [Successful] |
| 6 | SIM → ME | PROACTIVE COMMAND PENDING: GET CARD READER STATUS 1.1.1 | |
| 7 | ME → SIM | FETCH | |
| 8 | SIM → ME | PROACTIVE COMMAND: GET CARD READER STATUS 1.1.1 | [Get Card Reader Status] |
| 9 | ME → SIM | TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1a | [Successful] |
| | | Or | |
| | | TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1b | [Successful] |
| | | or | |
| | | TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1c | [Successful] |
| | | Or | |
| | | TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1d | [Successful] |

PROACTIVE COMMAND: POWER OFF CARD 1.2.1

Logically:

Command details

Command number: 1
 Command type: POWER OFF CARD
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Card reader 1

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 32 | 00 | 82 | 02 | 81 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: POWER OFF CARD 1.2.1

Logically:

Command details

Command number: 1
 Command type: POWER OFF CARD
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 32 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | | | | | | | | | | |

TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1a

Logically:

Command details

Command number: 1
 Command type: GET CARD READER STATUS
 Command qualifier: Card reader status

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
 Card reader removable: 'No'
 Card reader present: Yes
 Card reader ID-1 size: 'Yes'
 Card present in reader: Yes
 Card powered: No

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 71 | | | | | | | |

TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1b

Logically:

Command details

Command number: 1
 Command type: GET CARD READER STATUS
 Command qualifier: Card reader status

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
 Card reader removable: 'No'
 Card reader present: Yes
 Card reader ID-1 size: 'No'
 Card present in reader: Yes
 Card powered: No

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 51 | | | | | | | |

TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1c

Logically:

Command details

Command number: 1
 Command type: GET CARD READER STATUS
 Command qualifier: Card reader status

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
 Card reader removable: 'Yes'
 Card reader present: Yes
 Card reader ID-1 size: 'Yes'
 Card present in reader: Yes
 Card powered: No

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 79 | | | | | | | |

TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1d

Logically:

Command details

Command number: 1
 Command type: GET CARD READER STATUS
 Command qualifier: Card reader status

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
 Card reader removable: 'Yes'
 Card reader present: Yes
 Card reader ID-1 size: 'No'
 Card present in reader: Yes
 Card powered: No

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 59 | | | | | | | |

Expected Sequence 1.3 (GET CARD READER STATUS, card reader 1, card not present)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------|
| 1 | SIM2 | SIM2 is removed from ME card reader | |
| 2 | SIM → ME | PROACTIVE COMMAND PENDING: GET CARD READER STATUS 1.1.1 | |
| 3 | ME → SIM | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND: GET CARD READER STATUS 1.1.1 | [Get Card Reader Status] |
| 5 | ME → SIM | TERMINAL RESPONSE: GET CARD READER STATUS 1.3.1a | [Successful] |
| | | or | |
| | | TERMINAL RESPONSE: GET CARD READER STATUS 1.3.1b | [Successful] |
| | | or | |
| | | TERMINAL RESPONSE: GET CARD READER STATUS 1.3.1c | [Successful] |
| | | or | |
| | | TERMINAL RESPONSE: GET CARD READER STATUS 1.3.1d | [Successful] |

TERMINAL RESPONSE: GET CARD READER STATUS 1.3.1a

Logically:

Command details

Command number: 1
 Command type: GET CARD READER STATUS
 Command qualifier: Card reader status

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '1'
 Card reader removable: 'No'
 Card reader present: Yes
 Card reader ID-1 size: 'Yes'
 Card present in reader: No
 Card powered: No

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 31 | | | | | | | |

TERMINAL RESPONSE: GET CARD READER STATUS 1.3.1b

Logically:

Command details

Command number: 1
 Command type: GET CARD READER STATUS
 Command qualifier: card reader status

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '1'
 Card reader removable: 'No'
 Card reader present: Yes
 Card reader ID-1 size: 'No'
 Card present in reader: No
 Card powered: No

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 11 | | | | | | | |

TERMINAL RESPONSE: GET CARD READER STATUS 1.3.1c

Logically:

Command details

Command number: 1
 Command type: GET CARD READER STATUS
 Command qualifier: card reader status

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '1'
 Card reader removable: 'Yes'
 Card reader present: Yes
 Card reader ID-1 size: 'Yes'
 Card present in reader: No
 Card powered: No

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 39 | | | | | | | |

TERMINAL RESPONSE: GET CARD READER STATUS 1.3.1d

Logically:

Command details

Command number: 1
 Command type: GET CARD READER STATUS
 Command qualifier: Card reader status

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '1'
 Card reader removable: 'Yes'
 Card reader present: Yes
 Card reader ID-1 size: 'No'
 Card present in reader: No
 Card powered: No

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 19 | | | | | | | |

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 SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.20.2.4 Method of test

27.22.4.20.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM 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 second 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET CARD READER STATUS 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET CARD READER STATUS 2.1.1 | [Get Card Reader Status] |
| 4 | ME → SIM | TERMINAL RESPONSE: GET CARD READER STATUS 2.1.1a or TERMINAL RESPONSE: GET CARD READER STATUS 2.1.1b | [Successful] [Successful] |

PROACTIVE COMMAND: GET CARD READER STATUS 2.1.1

Logically:

Command details

Command number: 1
Command type: GET CARD READER STATUS
Command qualifier: Card Reader Status

Device identities

Source device: SIM
Destination device: ME

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: GET CARD READER STATUS 2.1.1a

Logically:

Command details

Command number: 1
Command type: GET CARD READER STATUS
Command qualifier: Card reader status

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: No
Card reader ID-1 size: Yes

Card present in reader: No

Card powered: No

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 29 | | | | | | | |

TERMINAL RESPONSE: GET CARD READER STATUS 2.1.1b

Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: 01

Card reader removable: Yes

Card reader present: No

Card reader ID-1 size: No

Card present in reader: No

Card powered: No

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 09 | | | | | | | |

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 11.14 [15] clause 5.2, clause 6.4.21, clause 6.8, clause 12.6, clause 12.7, clause 12.37 and clause 12.38.

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 SIM 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 SIM 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.

27.22.4.21.1.4.2 Procedure

Expected Sequence 1.1 (TIMER MANAGEMENT, start timer 1 several times, get the current value of the timer and deactivate the timer successfully)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.1 | [start timer 1] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.1 | [command performed successfully] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.1.2 | After 1 minute following reception of Terminal Response |
| 6 | ME → SIM | FETCH | |
| 7 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.2 | [ask value of timer 1] |
| 8 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.2 | [command performed successfully] |
| 9 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.1.3 | Before timer expires! |
| 10 | ME → SIM | FETCH | |
| 11 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.3 | [reinitialize timer 1] |
| 12 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.3 | [command performed successfully] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.1.4 | After 30 s following reception of the Terminal Response |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.4 | [deactivate timer 1] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.4 | [command performed successfully] |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.1

Logically:

Command details

Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: 5 min

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | A5 | 03 | 00 | 50 | 00 | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.2

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.3

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: 1min 30s

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | A5 | 03 | 00 | 10 | 03 | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.4

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.1 and 1.1.3

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 1

Coding::

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 01 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.2

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: value < to the timer value of command 1.1.1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 01 | A5 | 03 | xx | xx | xx | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.4

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: value < to the timer value of command 1.1.3

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 01 | A5 | 03 | xx | xx | xx | | | | |

Expected Sequence 1.2 (TIMER MANAGEMENT, start timer 2 several times, get the current value of the timer and deactivate the timer successfully)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.1 | [start timer 2] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.1 | [command performed successfully] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.2.2 | After 1 minute following reception of Terminal Response |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.2 | [ask value of timer 2] |
| 8 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.2 | [command performed successfully] |
| 9 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.2.3 | Before timer expires! |
| 10 | ME → SIM | FETCH | |
| 11 | SIM → ME | PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.3 | [reinitialize timer 2] |
| 12 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.3 | [command performed successfully] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.2.4 | After 10 seconds following reception of Terminal Response |
| 14 | ME → SIM | FETCH | |
| 15 | SIM → ME | PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.4 | [deactivate timer 2] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.4 | [command performed successfully] |

PROACTIVE COMMAND:TIMER MANAGEMENT 1.2.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM

Destination device: ME

Timer identifier

Identifier of timer: 2

Timer value

Value of timer: 23 h 59 min 59 s

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 02 | A5 | 03 | 32 | 95 | 95 | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.2

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 2

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 02 | | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.3

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 2

Timer value

Value of timer: 1 min 10 s

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 02 | A5 | 03 | 00 | 10 | 01 | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.4

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 2

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 02 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.1 and 1.2.3

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 2

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 02 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.2

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 2

Timer value

Value of timer: value < to the timer value of command 1.2.1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 02 | A5 | 03 | xx | xx | xx | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.4

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 2

Timer value

Value of timer: value < to the timer value of command 1.2.3

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 02 | A5 | 03 | xx | xx | xx | | | | |

Expected Sequence 1.3 (TIMER MANAGEMENT, start timer 8 several times, get the current value of the timer and deactivate the timer successfully)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.1 | [start timer 8] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.1 | [command performed successfully] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.3.2 | After 1 minute following reception of Terminal Response |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.2 | [ask value of timer 8] |
| 8 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.2 | [command performed successfully] |
| 9 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.3.3 | Before timer expires! |
| 10 | ME → SIM | FETCH | |
| 11 | SIM → ME | PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.3 | [reinitialize timer 8] |
| 12 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.3 | [command performed successfully] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.3.4 | After 30 seconds following reception of Terminal Response |
| 14 | ME → SIM | FETCH | |
| 15 | SIM → ME | PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.4 | [deactivate timer 8] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.4 | [command performed successfully] |

PROACTIVE COMMAND:TIMER MANAGEMENT 1.3.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM

Destination device: ME

Timer identifier

Identifier of timer: 8

Timer value

Value of timer: 20min

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 08 | A5 | 03 | 00 | 02 | 00 | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.2

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 8

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 08 | | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.3

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 8

Timer value

Value of timer: 01 h 00 min 00 s

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 08 | A5 | 03 | 10 | 00 | 00 | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.4

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 8

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 08 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.1 and 1.3.3

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 8

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 08 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.2

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 8

Timer value

Value of timer: value < to the timer value of command 1.3.1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 08 | A5 | 03 | xx | xx | xx | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.4

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 8

Timer value

Value of timer: value < to the timer value of command 1.3.3

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 08 | A5 | 03 | xx | xx | xx | | | | |

**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)**

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.1 | [get current value from timer 1] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.1A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.1B | [action in contradiction with the current timer state] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.2 | |
| 6 | ME → SIM | FETCH | |
| 7 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.2 | [get current value from timer 2] |
| 8 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.2A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.2B | [action in contradiction with the current timer state] |
| 9 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.3 | |
| 10 | ME → SIM | FETCH | |
| 11 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.3 | [get current value from timer 3] |
| 12 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.3A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.3B | [action in contradiction with the current timer state] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.4 | |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.4 | [get current value from timer 4] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.4A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.4B | [action in contradiction with the current timer state] |
| 17 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.5 | |
| 18 | ME → SIM | FETCH | |
| 19 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.5 | [get current value from timer 5] |
| 20 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.5A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.5B | [action in contradiction with the current timer state] |
| 21 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.6 | |
| 22 | ME → SIM | FETCH | |
| 23 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.6 | [get current value from timer 6] |
| 24 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.6A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.6B | [action in contradiction with the current timer state] |

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 25 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.7 | |
| 26 | ME → SIM | FETCH | |
| 27 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.7 | [get current value from timer 7] |
| 28 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.7A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.7B | [action in contradiction with the current timer state] |
| 29 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.8 | |
| 30 | ME → SIM | FETCH | |
| 31 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.8 | [get current value from timer 8] |
| 32 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.8A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.8B | [action in contradiction with the current timer state] |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.1

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.1A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 01 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.1B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.2

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 2

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 02 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.2A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 2

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 02 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.2B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.3

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 3

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 03 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.3A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 3

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 03 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.3B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.4

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 4

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 04 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.4A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 4

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 04 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.4B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.5

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 05 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.5A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 05 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.5B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.6

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 6

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 06 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.6A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 6

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 06 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.6B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.7

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 7

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 07 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.7A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 7

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 07 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.7B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.8

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 8

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 08 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.8A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 8

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 08 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.8B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence1.5 (TIMER MANAGEMENT, try to deactivate a timer which is not started: action in contradiction with the current timer state)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.1 | [deactivate timer 1] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.1A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.1B | [action in contradiction with the current timer state] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.2 | |
| 6 | ME → SIM | FETCH | |
| 7 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.2 | [deactivate timer 2] |
| 8 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.2A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.2B | [action in contradiction with the current timer state] |
| 9 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.3 | |
| 10 | ME → SIM | FETCH | |
| 11 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.3 | [deactivate timer 3] |
| 12 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.3A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.3B | [action in contradiction with the current timer state] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.4 | |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.4 | [deactivate timer 4] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.4A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.4B | [action in contradiction with the current timer state] |
| 17 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.5 | |
| 18 | ME → SIM | FETCH | |
| 19 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.5 | [deactivate timer 5] |
| 20 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.5A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.5B | [action in contradiction with the current timer state] |
| 21 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.6 | |
| 22 | ME → SIM | FETCH | |
| 23 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.6 | [deactivate timer 6] |
| 24 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.6A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.6B | [action in contradiction with the current timer state] |

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 25 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.7 | |
| 26 | ME → SIM | FETCH | |
| 27 | | PROACTIVE COMMAND: | [deactivate timer 7] |
| 28 | ME → SIM | TIMER MANAGEMENT 1.5.7 TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.7A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.7B | [action in contradiction with the current timer state] |
| 29 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.8 | |
| 30 | ME → SIM | FETCH | |
| 31 | | PROACTIVE COMMAND: | [deactivate timer 8] |
| 32 | ME → SIM | TIMER MANAGEMENT 1.5.8 TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.8A or TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.8B | [action in contradiction with the current timer state] |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.1

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.1A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 01 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.1B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.2

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 2

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 02 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.2A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 2

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 02 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.2B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND3: TIMER MANAGEMENT 1.5.3

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 3

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 03 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.3A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 3

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 03 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.3B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.4

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 4

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 04 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.4A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 4

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 04 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.4B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.5

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 05 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.5A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 05 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.5B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.6

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 6

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 06 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.6A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 6

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 06 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.6B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.7

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 7

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 07 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.7A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 7

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 07 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.7B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.8

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 8

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 08 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.8A

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 8

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 08 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.8B

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.6 (TIMER MANAGEMENT, start 8 timers successfully)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.1 | [timer 1] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.1 | [command performed successfully] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.2 | |
| 6 | ME → SIM | FETCH | |
| 7 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.2 | [timer 2] |
| 8 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.2 | [command performed successfully] |
| 9 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.3 | |
| 10 | ME → SIM | FETCH | |
| 11 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3 | [timer 3] |
| 12 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.3 | [command performed successfully] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.4 | |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4 | [timer 4] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4 | [command performed successfully] |
| 17 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.5 | |
| 18 | ME → SIM | FETCH | |
| 19 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5 | [timer 5] |
| 20 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5 | [command performed successfully] |
| 21 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6 | |
| 22 | ME → SIM | FETCH | |
| 23 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6 | [timer 6] |
| 24 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6 | [command performed successfully] |
| 25 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7 | |
| 26 | ME → SIM | FETCH | |
| 27 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7 | [timer 7] |
| 28 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7 | [command performed successfully] |
| 29 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8 | |
| 30 | ME → SIM | FETCH | |
| 31 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8 | [timer 8] |
| 32 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8 | [command performed successfully] |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.1

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities
 Source device: SIM
 Destination device: ME

Timer identifier
 Identifier of timer: 1

Timer value
 Value of timer: 5 s

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.1

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities
 Source device: ME
 Destination device: SIM

Result
 General Result: Command performed successfully

Timer identifier
 Identifier of timer: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 01 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.2

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities
 Source device: SIM
 Destination device: ME

Timer identifier
 Identifier of timer: 2

Timer value
 Value of timer: 5 s

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 02 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.2

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 2

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 02 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 3

Timer value

Value of timer: 5 s

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 03 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.3

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 3

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 03 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 4

Timer value

Value of timer: 5 s

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 04 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 4

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 04 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 5

Timer value

Value of timer: 5 s

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 05 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 05 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 6

Timer value

Value of timer: 5 s

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 06 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 6

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 06 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 7

Timer value

Value of timer: 5 s

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 07 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 7

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 07 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 8

Timer value

Value of timer: 5 s

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 08 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 8

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 08 | | | | | | | | | |

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 11.14 [15] clause 4.10, clause 10.1 and clause 10.2.

The ME shall support the TIMER MANAGEMENT as defined in the following technical specifications:

- TS 11.14 [15] clause 5.2, clause 6.4.21, clause 6.8, clause 12.6, clause 12.7, clause 12.37 and clause 12.38.

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 SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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 SIM 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 SIM command)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|-----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | ME → SIM | PROACTIVE COMMAND: TIMER MANAGEMENT 2.1.1 | [timer 1] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 2.1.1 | [command performed successfully] |
| 5 | ME → SIM | ENVELOPE: TIMER EXPIRATION 2.1.1 | |
| 6 | SIM → ME | PROACTIVE COMMAND PENDING: MORE TIME X.1(or an other SAT command tested before to ensure it is properly supported by the mobile). | [response to envelope is "91 xx"] |
| 7 | ME → SIM | FETCH | |

PROACTIVE COMMAND: TIMER MANAGEMENT 2.1.1

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: 0 h 0 min 10 s

Coding:

| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| | 01 | 01 | A5 | 03 | 00 | 00 | 01 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 2.1.1

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 01 | | | | | | | | | |

ENVELOPE: TIMER EXPIRATION 2.1.1

Logically:

Device identities

Source device: ME

Destination device: SIM

Timer identifier

Timer 1

Timer value

Hour: '00'

Minute: '00'

Second: '10' ± 1 s

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D7 | 0C | 82 | 02 | 82 | 81 | A4 | 01 | 01 | A5 | 03 | 00 |
| | 00 | xx | | | | | | | | | | |

Expected Sequence 2.2 (TIMER EXPIRATION, SIM application toolkit busy)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | | PROACTIVE COMMAND: TIMER MANAGEMENT 2.2.1 | [timer 1] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 2.2.1 | [command performed successfully] |
| 5 | ME → SIM | ENVELOPE: TIMER EXPIRATION 2.2.1A | |
| 6 | SIM → ME | PROACTIVE SIM SESSION BUSY | [SIM is busy; response to the envelope = "93 00"] |
| ... | | | [SIM is busy during 10 seconds. If the ME periodically retries to send the envelope until it is accepted, then step 7a-10a apply. If the ME does not periodically retry to send the envelope, e.g. it waits for a TERMINAL RESPONSE processed by the SIM with status '90 00', then step 7b – 14b apply] |
| 7a | ME → SIM | ENVELOPE: TIMER EXPIRATION 2.2.1B | [Branch applies for MEs periodically retrying to send the envelope] |
| 8a | SIM → ME | PROACTIVE SIM SESSION BUSY | [SIM is busy, response to the envelope = "93 00"] |
| 9a | ME → SIM | ENVELOPE: TIMER EXPIRATION 2.2.1C | |
| 10a | SIM → ME | SW1/SW2=90 00 | |
| 7b | ME → SIM | STATUS or other command | [Branch applies for MEs not periodically retrying to send the envelope (in compliance with TS 11.14 [15], cl. 10.1)] Steps 7b – 12b are repeated maximal 100 times (to prevent infinite testing) or until the terminal sends ENVELOPE: TIMER EXPIRATION 2.2.1B in step 13b or at any time during steps 7b – 12b (in latter case step 13b is obsolete). |
| 8b | SIM → ME | Response to the command issued in step 7b PROACTIVE COMMAND PENDING | [SW1/SW2=91 xx] |
| 9b | ME → SIM | FETCH | |
| 10b | SIM → ME | PROACTIVE COMMAND: e.g. MORE TIME 2.2.2 | |
| 11b | ME → SIM | TERMINAL RESPONSE: e.g. MORE TIME 2.2.2 | [command performed successfully] |
| 12b | SIM → ME | Response to the command issued in step 11b | [SW1/SW2 = 90 00] |
| 13b | ME → SIM | ENVELOPE: TIMER EXPIRATION 2.2.1B | |
| 14b | SIM → ME | SW1/SW2=90 00 | |

PROACTIVE COMMAND: TIMER MANAGEMENT 2.2.1

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: 0 h 0 min 30 s

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | A5 | 03 | 00 | 00 | 03 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 2.2.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 01 | | | | | | | | | |

ENVELOPE: TIMER EXPIRATION 2.2.1A

Logically:

Device identities

Source device: ME

Destination device: SIM

Timer identifier

Timer 1

Timer value

Hour: '00'

Minute: '00'

Second: '30' ± 1 s

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D7 | 0C | 82 | 02 | 82 | 81 | A4 | 01 | 01 | A5 | 03 | 00 |
| | 00 | xx | | | | | | | | | | |

ENVELOPE: TIMER EXPIRATION 2.2.1B

Logically:

Device identities

Source device: ME

Destination device: SIM

Timer identifier

Timer 1

Timer value

Hour: '00'

Minute: '00'

Second: ≥ timer in clause 2.2.1A

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D7 | 0C | 82 | 02 | 82 | 81 | A4 | 01 | 01 | A5 | 03 | 00 |
| | 00 | xx | | | | | | | | | | |

ENVELOPE: TIMER EXPIRATION 2.2.1C

Logically:

Device identities

Source device: ME
 Destination device: SIM

Timer identifier

Timer 1

Timer value

Hour: '00'
 Minute: '00'
 Second: \geq timer in 2.2.1B

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D7 | 0C | 82 | 02 | 82 | 81 | A4 | 01 | 01 | A5 | 03 | 00 |
| | 00 | xx | | | | | | | | | | |

PROACTIVE COMMAND: MORE TIME 2.2.2

Logically:

Command details

Command number: 1
 Command type: MORE TIME
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 02 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: MORE TIME 2.2.2

Logically:

Command details

Command number: 1
 Command type: MORE TIME
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 02 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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 11.14 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 11.6, clause 6.8, clause 11, clause 11.1, clause 12.25, clause 6.4.7 and clause 6.6.13.

Additionally the ME shall support the REFRESH proactive SIM facility as defined in:

- TS 11.14 [15] clause 5.2, clause 6.1, clause 6.4.7, clause 6.6.13, clause 6.11, clause 12.6, clause 12.12, clause 13.4 and clause 14.

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 SIM Simulator and the System Simulator.

The elementary files are coded as SIM 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.

27.22.4.22.1.4.2 Procedure

Expected Sequence 1.1 (SET UP IDLE MODE TEXT, display idle mode text)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.1 | [Idle Mode Text] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.1.1 | [Command performed successfully] |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 6 | USER → ME | Select idle screen | Only if idle screen not already available |
| 7 | ME → USER | Display "Idle Mode Text" | |

PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
Text: "Idle Mode Text"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0F | 04 | 49 | 64 | 6C | 65 | 20 | 4D | 6F | 64 | 65 | 20 |
| | 54 | 65 | 78 | 74 | | | | | | | | |

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.1.1

Logically:

Command details

Command number: 1
Command type: SET UP IDLE MODE TEXT
Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.2 (SET UP IDLE MODE TEXT, replace idle mode text)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.1.1 | [Idle Mode Text] |
| 4 | ME → SIM | 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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.2.1 | [Idle Mode Text] |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.2.1 | [Idle Mode Text] |
| 10 | ME → SIM | TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.2.1 | |
| 11 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 12 | USER → ME | Select idle screen | Only if idle screen not already available |
| 13 | ME → USER | Display "Toolkit Test" | |

PROACTIVE COMMAND: SETUP IDLE MODE TEXT 1.2.1

Logically:

Command details

Command number: 1
Command type: SETUP IDLE MODE TEXT
Command qualifier: RFU

Device identities

Source device: SIM

Destination device: ME
 Text String
 Data coding scheme: unpacked, 8 bit data
 Text: "Toolkit Test"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 18 | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0D | 04 | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 54 | 65 |
| | 73 | 74 | | | | | | | | | | |

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.2.1

Logically:

Command details
 Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.3 (SET UP IDLE MODE TEXT, remove idle mode text)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.1.1 | ["Idle Mode Text"] |
| 4 | ME → SIM | 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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.3.1 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.3.1 | [Remove idle mode text] |
| 10 | ME → SIM | TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.3.1 | |
| 11 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 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 | |

PROACTIVE COMMAND: SETUP IDLE MODE TEXT 1.3.1

Logically:

Command details
 Command number: 1
 Command type: SETUP IDLE MODE TEXT
 Command qualifier: RFU
 Device identities
 Source device: SIM

Destination device: ME
 Text String: zero length TLV

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0B | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 00 | | | | | | | | | | | |

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.3.1

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.4 (SET UP IDLE MODE TEXT, competing information on ME display)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.1.1 | ["Idle Mode Text"] |
| 4 | ME → SIM | 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 | SS → 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 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.4.1 | |
| 12 | ME → SIM | FETCH | |
| 13 | SIM → 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 → SIM | TERMINAL RESPONSE: DISPLAY TEXT 1.4.1 | [Command performed successfully] |
| 17 | ME → USER | Display "Idle Mode Text" | |
| 18 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.4.1 | |
| 19 | ME → SIM | FETCH | |
| 20 | SIM → 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 → SIM | TERMINAL RESPONSE: PLAY TONE 1.4.1 | [Command performed successfully] |
| 23 | SIM → ME | PROACTIVE SIM 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: SIM
 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: SIM

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: SIM
 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.1.1 | ["Idle Mode Text"] |
| 4 | ME → SIM | 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 ↔ SIM | GSM TERMINATION PROCEDURE | |
| 9 | USER → ME | Power on ME | |
| 10 | ME ↔ SIM | GSM ACTIVATION PROCEDURE | |
| 11 | ME ↔ SIM | SIM 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 SIM Initialization)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.1 | [Idle Mode Text] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.1.1 | |
| 4 | ME → SIM | 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 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 1.6.1 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND: REFRESH 1.6.1 | [SIM Initialization] |
| 10 | ME ↔ SIM | SIM 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 → SIM | TERMINAL RESPONSE: REFRESH 1.6.1A or TERMINAL RESPONSE: REFRESH 1.6.1B | [Command performed successfully] [Command performed successfully with additional files read] |
| 14 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: REFRESH 1.6.1

Logically:

Command details

Command number: 1
 Command type: REFRESH
 Command qualifier: SIM Initialization

Device identities

Source device: SIM
 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: SIM Initialization

Device identities

Source device: ME
 Destination device: SIM

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: SIM Initialization

Device identities

Source device: ME
 Destination device: SIM

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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.7.1 | [large text string] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.7.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.7.1 | [command performed successfully] |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 6 | USER → ME | Select idle screen | Only if idle screen not already available |
| 7 | ME → USER | Display "The SIM shall supply a text string, which shall be displayed by the ME as an idle mode text if the ME is able to do it. The presentation style is left as an implementation decision to the ME manufacturer. The idle mode text shall be displayed in a manner that ensures that ne" | [274 characters] |

PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.7.1

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: SIM
 Destination device: ME

Text String

Data coding scheme: packed, SMS default alphabet
 Text: "The SIM shall supply a text string, which shall be displayed by the ME as an idle mode text if the ME is able to do it. The presentation style is left as an implementation decision to the ME manufacturer. The idle mode text shall be displayed in a manner that ensures that ne"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FD | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 |
| | 8D | 81 | F1 | 00 | 54 | 74 | 19 | 34 | 4D | 36 | 41 | 73 |
| | 74 | 98 | CD | 06 | CD | EB | 70 | 38 | 3B | 0F | 0A | 83 |
| | E8 | 65 | 3C | 1D | 34 | A7 | CB | D3 | EE | 33 | 0B | 74 |
| | 47 | A7 | C7 | 68 | D0 | 1C | 1D | 66 | B3 | 41 | E2 | 32 |
| | 88 | 9C | 9E | C3 | D9 | E1 | 7C | 99 | 0C | 12 | E7 | 41 |
| | 74 | 74 | 19 | D4 | 2C | 82 | C2 | 73 | 50 | D8 | 0D | 4A |
| | 93 | D9 | 65 | 50 | FB | 4D | 2E | 83 | E8 | 65 | 3C | 1D |
| | 94 | 36 | 83 | E8 | E8 | 32 | A8 | 59 | 04 | A5 | E7 | A0 |
| | B0 | 98 | 5D | 06 | D1 | DF | 20 | F2 | 1B | 94 | A6 | BB |
| | A8 | E8 | 32 | 08 | 2E | 2F | CF | CB | 6E | 7A | 98 | 9E |
| | 7E | BB | 41 | 73 | 7A | 9E | 5D | 06 | A5 | E7 | 20 | 76 |
| | D9 | 4C | 07 | 85 | E7 | A0 | B0 | 1B | 94 | 6E | C3 | D9 |
| | E5 | 76 | D9 | 4D | 0F | D3 | D3 | 6F | 37 | 88 | 5C | 1E |
| | A7 | E7 | E9 | B7 | 1B | 44 | 7F | 83 | E8 | E8 | 32 | A8 |
| | 59 | 04 | B5 | C3 | EE | BA | 39 | 3C | A6 | D7 | E5 | 65 |
| | B9 | 0B | 44 | 45 | 97 | 41 | 69 | 32 | BB | 0C | 6A | BF |
| | C9 | 65 | 10 | BD | 8C | A7 | 83 | E6 | E8 | 30 | 9B | 0D |
| | 12 | 97 | 41 | E4 | F4 | 1C | CE | 0E | E7 | CB | 64 | 50 |
| | DA | 0D | 0A | 83 | DA | 61 | B7 | BB | 2C | 07 | D1 | D1 |
| | 61 | 3A | A8 | EC | 9E | D7 | E5 | E5 | 39 | 88 | 8E | 0E |
| | D3 | 41 | EE | 32 | | | | | | | | |

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.7.1

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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 SIM provides an icon identifier with a proactive command, then the ME shall inform the SIM 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 SIM, then 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 SIM Simulator and the System Simulator.

The elementary files are coded as SIM 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 System Simulator.

27.22.4.22.2.4.2 Procedure

Expected Sequence 2.1A (SET UP IDLE MODE TEXT, Icon is self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.1.1 | [Icon is self-explanatory] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.1.1A | [command performed successfully] |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 6 | USER → ME | Select idle screen | Only if idle screen not already available |
| 7 | ME → USER | Display the icon | |

PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: SIM
 Destination device: ME

Text String: "Idle text"

Icon identifier

Icon qualifier: icon is self-explanatory
 Icon identifier: <record 1 in EF IMG>

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 19 | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 49 | 64 | 6C | 65 | 20 | 74 | 65 | 78 | 74 | 9E |
| | 02 | 00 | 01 | | | | | | | | | |

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.1.1A

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 2.1B (SET UP IDLE MODE TEXT, Icon is self-explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.1.1 | [Icon is self-explanatory] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.1.1B | [Command performed successfully, but requested icon could not be displayed] |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 6 | USER → ME | Select idle screen | Only if idle screen not already available |
| 7 | ME → USER | Display "Idle text" without the icon | |

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.1.1B

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 2.2A (SET UP IDLE MODE TEXT, Icon is not self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.2.1 | [Icon is not self-explanatory] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.2.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.2.1A | [command performed successfully] |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 6 | USER → ME | Select idle screen | Only if idle screen not already available |
| 7 | ME → USER | Display icon #1 and "Idle text" | |

PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.2.1

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: SIM
 Destination device: ME
 Text String: "Idle text"

Icon identifier

Icon qualifier: icon is not self-explanatory
 Icon identifier: <record 1 in EF IMG>

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 19 | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 49 | 64 | 6C | 65 | 20 | 74 | 65 | 78 | 74 | 9E |
| | 02 | 01 | 01 | | | | | | | | | |

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.2.1A

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 2.2B (SET UP IDLE MODE TEXT, Icon is not self-explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.2.1 | [Icon is not self-explanatory] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.2.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.2.1B | [Command performed successfully, but requested icon could not be displayed] |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 6 | USER → ME | Select idle screen | Only if idle screen not already available |
| 7 | ME → USER | Display "Idle text" without the icon | |

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.2.1B

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 2.3A (SET UP IDLE MODE TEXT, Icon is self-explanatory, colour icon, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.3.1 | [Icon is self-explanatory] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.3.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.3.1A | [command performed successfully] |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 6 | USER → ME | Select idle screen | Only if idle screen not already available |
| 7 | ME → USER | Display the icon | |

PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.3.1

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: SIM
 Destination device: ME
 Text String: "Idle text"

Icon identifier

Icon qualifier: icon is self-explanatory
 Icon identifier: <record 2 in EF IMG>

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 19 | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 49 | 64 | 6C | 65 | 20 | 74 | 65 | 78 | 74 | 9E |
| | 02 | 00 | 02 | | | | | | | | | |

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.3.1A

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 2.3B (SET UP IDLE MODE TEXT, Icon is self-explanatory, colour icon, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.3.1 | [Icon is self-explanatory] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.3.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.3.1B | [requested icon could not be displayed] |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 6 | USER → ME | Select idle screen | Only if idle screen not already available |
| 7 | ME → USER | Display 'Idle text' without the icon | |

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.3.1B

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 2.4 (SET UP IDLE MODE TEXT, Icon is not self-explanatory, empty text string)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.4.1 | [Icon is not self-explanatory, empty text string] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.4.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.4.1 | |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.4.1

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: SIM
 Destination device: ME

Text string

Contents: null data object

Icon identifier

Icon qualifier: icon is not self-explanatory
 Icon identifier: <record 1 in EF IMG>

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0F | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 00 | 9E | 02 | 01 | 01 | | | | | | | |

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.4.1

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command data not understood by ME

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 32 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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 SIM Simulator and the System Simulator.

The elementary files are coded as SIM 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 System Simulator.

27.22.4.22.3.4.2 Procedure

Expected Sequence 3.1 (SET UP IDLE MODE TEXT, UCS2 alphabet text)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 3.1.1 | ["Hello" in Russian] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP IDLE MODE TEXT 3.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP IDLE MODE TEXT 3.1.1 | |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 6 | USER → ME | Select idle screen | Only if idle screen not already available |
| 7 | ME → USER | Display "ЗДРАВСТВУЙТЕ" | ["Hello" in Russian] |

PROACTIVE COMMAND: SET UP IDLE MODE TEXT 3.1.1

Logically:

Command details

Command number: 1
Command type: SET UP IDLE MODE TEXT
Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: UCS2 (16bit)
Text: "ЗДРАВСТВУЙТЕ"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 24 | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 19 | 08 | 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: SET UP IDLE MODE TEXT 3.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.22.3.5 Test requirement

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

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 SIM: RUN AT COMMAND facility as defined in:

- TS 11.14 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 12.6, clause 12.7, clause 12.2, clause 12.40, clause 12.31 and clause 12.41.
- 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 SIM.

27.22.4.23.1.4 Method of test

27.22.4.23.1.4.1 Initial conditions

The ME is connected to the SIM 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 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SIM | TERMINAL RESPONSE: RUN AT COMMAND 1.1.1 | [Command performed successfully, AT Response containing IMSI] |

PROACTIVE SIM 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: SIM
Destination device: ME

AT Command

AT Command string: "AT+CIMI"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | A8 |
| | 07 | 41 | 54 | 2B | 43 | 49 | 4D | 49 | | | | |

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: SIM

Result

General Result: Command performed successfully

AT Response

AT Response string: IMSI

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A9 | 08 | 09 | 10 | 10 | 10 | 32 | 54 | 76 | 98 | | |

Expected Sequence 1.2 (RUN AT COMMAND, null data alpha identifier presented, request IMSI)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SIM | TERMINAL RESPONSE: RUN AT COMMAND 1.1.1 | [Command performed successfully, AT Response containing IMSI] |

PROACTIVE SIM 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: SIM
 Destination device: ME

Alpha Identifier null data object

AT Command

AT Command string: "AT+CIMI"

Coding:

| BER-TLV: | D0 | 14 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| | 00 | A8 | 07 | 41 | 54 | 2B | 43 | 49 | 4D | 49 | | |

Expected Sequence 1.3 (RUN AT COMMAND, alpha identifier presented, request IMSI)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: RUN AT COMMAND 1.3.1 | [alpha identifier, request IMSI] |
| 4 | ME → USER | Display "Run AT Command" | |
| 5 | ME → SIM | TERMINAL RESPONSE: RUN AT COMMAND 1.1.1 | [Command performed successfully, AT Response containing IMSI] |

PROACTIVE SIM 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: SIM
 Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command"

AT Command

AT Command string: "AT+CIMI"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
| | 61 | 6E | 64 | A8 | 07 | 41 | 54 | 2B | 43 | 49 | 4D | 49 |

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 SIM: RUN AT COMMAND facility as defined in:

- TS 11.14 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 12.6, clause 12.7, clause 12.2, clause 12.40, clause 12.31 and clause 12.41.
- 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 SIM.

In addition to verify that if an icon is provided by the SIM, 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 SIM 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 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SIM | 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: SIM
 Destination device: ME

Alpha Identifier

Alpha identifier: "Basic Icon"

AT Command

AT Command string: "AT+CIMI"

Icon identifier:

Icon qualifier: icon is self-explanatory
 Icon identifier: record 1 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0A | 42 | 61 | 73 | 69 | 63 | 20 | 49 | 63 | 6F | 6E | A8 |
| | 07 | 41 | 54 | 2B | 43 | 49 | 4D | 49 | 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: SIM

Result

General Result: Command performed successfully

AT Response

AT Response string: IMSI

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A9 | 08 | 09 | 10 | 10 | 10 | 32 | 54 | 76 | 98 | | |

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 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SIM | 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: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

AT Response

AT Response string: IMSI

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | A9 | 08 | 09 | 10 | 10 | 10 | 32 | 54 | 76 | 98 | | |

Expected Sequence 2.2A (RUN AT COMMAND, colour icon self explanatory, request IMSI, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SIM | 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: SIM
 Destination device: ME
 Alpha Identifier
 Alpha identifier: "Colour Icon"
 AT Command
 AT Command string: "AT+CIMI"
 Icon identifier:
 Icon qualifier: icon is self-explanatory
 Icon identifier: record 2 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 23 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | A8 |
| | 0B | 43 | 6F | 6C | 6F | 75 | 72 | 20 | 49 | 63 | 6F | 6E |
| | A8 | 07 | 41 | 54 | 2B | 43 | 49 | 4D | 49 | 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 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SIM | 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 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SIM | 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: SIM

Destination device: ME
 Alpha Identifier
 Alpha identifier: "Basic Icon"
 AT Command
 AT Command string: "AT+CIMI"
 Icon identifier
 Icon qualifier: icon is non self-explanatory
 Icon identifier: record 1 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0A | 42 | 61 | 73 | 69 | 63 | 20 | 49 | 63 | 6F | 6E | A8 |
| | 07 | 41 | 54 | 2B | 43 | 49 | 4D | 49 | 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 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SIM | 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 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SIM | 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: SIM
 Destination device: ME
 Alpha Identifier
 Alpha identifier: "Colour Icon"
 AT Command
 AT Command string: "AT+CIMI"
 Icon identifier:

Icon qualifier: icon is self-explanatory
 Icon identifier: record 2 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 23 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0B | 43 | 6F | 6C | 6F | 75 | 72 | 20 | 49 | 63 | 6F | 6E |
| | A8 | 07 | 41 | 54 | 2B | 43 | 49 | 4D | 49 | 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 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SIM | 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 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: RUN AT COMMAND 2.5.1 | [BASIC-ICON, non self-explanatory] |
| 4 | ME → SIM | 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: SIM
 Destination device: ME

AT Command

AT Command string: "AT+CIMI"

Icon identifier

Icon qualifier: icon is non self-explanatory
 Icon identifier: record 1 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 16 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | A8 |
| | 07 | 41 | 54 | 2B | 43 | 49 | 4D | 49 | 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: SIM
 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.

27.22.4.24 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 SIM: Send DTMF facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 12.12.2, clause 5.2, clause 12.6, clause 12.7, clause 12.2 and clause 12.44.

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 SIM command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

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 SIM 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 SIM command.

To verify that if an alpha identifier is provided by the SIM 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 SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table.

The elementary files are coded as SIM 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 System Simulator.

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 → SS | The ME attempts to set up a call to "+0123456789" | |
| 3 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 4 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 1.1.1 | |
| 5 | ME → SIM | FETCH | |
| 6 | SIM → 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 → SS | Start DTMF 1.1 | ["1"] |
| 9 | ME | | No DTMF sending for 3 seconds ±20% |
| 10 | ME → SS | Start DTMF 1.2 | ["2"] |
| 11 | ME → SIM | TERMINAL RESPONSE: SEND DTMF 1.1.1 | [Command performed successfully] |
| 12 | SIM → ME | PROACTIVE SIM 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: SIM
 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: SIM

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 → SS | The ME attempts to set up a call to "+0123456789" | |
| 3 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 4 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 1.2.1 | |
| 5 | ME → SIM | FETCH | |
| 6 | SIM → ME | PROACTIVE COMMAND: SEND DTMF 1.2.1 | |
| 7 | ME → USER | Display "Send DTMF" | Alpha identifier |
| | | Do not locally generate audible DTMF tones and play them to the user. | |
| 8 | ME → SS | Start DTMF 1.1 | ["1"] |
| 9 | ME → SS | Start DTMF 1.2 | ["2"] |
| 10 | ME → SS | Start DTMF 1.3 | ["3"] |
| 11 | ME → SS | Start DTMF 1.4 | ["4"] |
| 12 | ME → SS | Start DTMF 1.5 | ["5"] |
| 13 | ME → SS | Start DTMF 1.6 | ["6"] |
| 14 | ME → SS | Start DTMF 1.7 | ["7"] |
| 15 | ME → SS | Start DTMF 1.8 | ["8"] |
| 16 | ME → SS | Start DTMF 1.9 | ["9"] |
| 17 | ME → SS | Start DTMF 1.10 | ["0"] |
| 18 | ME → SIM | TERMINAL RESPONSE: SEND DTMF 1.1.1 | [Command performed successfully] |
| 19 | SIM → ME | PROACTIVE SIM 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: SIM
 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 → SS | The ME attempts to set up a call to "+0123456789" | |
| 3 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 4 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 1.3.1 | |
| 5 | ME → SIM | FETCH | |
| 6 | SIM → 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 → SS | Start DTMF 1.1 | ["1"] |
| 9 | ME | | No DTMF sending for 30 seconds ±20% |
| 10 | ME → SS | Start DTMF 1.2 | ["2"] |
| 11 | ME → SIM | TERMINAL RESPONSE: SEND DTMF 1.1.1 | [Command performed successfully] |
| 12 | SIM → ME | PROACTIVE SIM 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: SIM
 Destination device: Network
 Alpha identifier: "" (null data object)
 DTMF String: "1" 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 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 1.1.1 | [Mobile is not in a speech call] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND DTMF 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SEND DTMF 1.4.1 | [ME currently unable to process command, not in speech call] |
| 5 | SIM → ME | PROACTIVE SIM 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: SIM

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.

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 SIM: Send DTMF facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 12.12.2, clause 5.2, clause 12.6, clause 12.7, clause 12.2, clause 12.44, clause 12.31 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 SIM command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

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 SIM command.

To verify that the ME displays the icons which are referred to in the contents of the SEND DTMF proactive SIM 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 System Simulator.

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 → SS | The ME attempts to set up a call to "+0123456789" | |
| 3 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 4 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.1.1 | |
| 5 | ME → SIM | FETCH | |
| 6 | SIM → 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 → SS | Start DTMF 1.1 | ["1"] |
| 9 | ME | | No DTMF sending for 3 seconds ±20% |
| 10 | ME → SS | Start DTMF 1.2 | ["2"] |
| 11 | ME → SIM | TERMINAL RESPONSE: SEND DTMF 2.1.1A | [Command performed successfully] |
| 12 | SIM → ME | PROACTIVE SIM 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: SIM
 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: SIM

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 → SS | The ME attempts to set up a call to "+0123456789" | |
| 3 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 4 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.1.1 | |
| 5 | ME → SIM | FETCH | |
| 6 | SIM → 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 → SS | Start DTMF 1.1 | ["1"] |
| 9 | ME | | No DTMF sending for 3 seconds ±20 % |
| 10 | ME → SS | Start DTMF 1.2 | ["2"] |
| 11 | ME → SIM | TERMINAL RESPONSE: SEND DTMF 2.1.1B | [Command performed successfully, but requested icon could not be displayed] |
| 12 | SIM → ME | PROACTIVE SIM 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: SIM

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 → SS | The ME attempts to set up a call to "+0123456789" | |
| 3 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 4 | SIM → ME | PROACTIVE COMMAND | |
| 5 | ME → SIM | PENDING: SEND DTMF 2.2.1 | |
| 6 | SIM → ME | FETCH | [COLOUR-ICON] |
| 7 | ME → USER | PROACTIVE COMMAND: SEND DTMF 2.2.1 Display the COLOUR-ICON Do not locally generate audible DTMF tones and play them to the user. | |
| 8 | ME → SS | Start DTMF 1.1 | ["1"] |
| 9 | ME | | No DTMF sending for 3 seconds ±20% |
| 10 | ME → SS | Start DTMF 1.2 | ["2"] |
| 11 | ME → SIM | TERMINAL RESPONSE: SEND DTMF 2.1.1A | [Command performed successfully] |
| 12 | SIM → ME | PROACTIVE SIM 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: SIM
 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 → SS | The ME attempts to set up a call to "+0123456789" | |
| 3 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 4 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.2.1 | |
| 5 | ME → SIM | FETCH | |
| 6 | SIM → 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 → SS | Start DTMF 1.1 | ["1"] |
| 9 | ME | | No DTMF sending for 3 seconds ±20% |
| 10 | ME → SS | Start DTMF 1.2 | ["2"] |
| 11 | ME → SIM | TERMINAL RESPONSE: SEND DTMF 2.1.1B | [Command performed successfully, but requested icon could not be displayed] |
| 12 | SIM → ME | PROACTIVE SIM 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 → SS | The ME attempts to set up a call to "+0123456789" | |
| 3 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 4 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.3.1 | |
| 5 | ME → SIM | FETCH | |
| 6 | SIM → 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 → SS | Start DTMF 1.1 | ["1"] |
| 9 | ME | | No DTMF sending for 3 seconds ±20 % |
| 10 | ME → SS | Start DTMF 1.2 | ["2"] |
| 11 | ME → SIM | TERMINAL RESPONSE: SEND DTMF 2.1.1A | [Command performed successfully] |
| 12 | SIM → ME | PROACTIVE SIM 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: SIM
 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 → SS | The ME attempts to set up a call to "+0123456789" | |
| 3 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 4 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.3.1 | |
| 5 | ME → SIM | FETCH | |
| 6 | SIM → 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 → SS | Start DTMF 1.1 | ["1"] |
| 9 | ME | | No DTMF sending for 3 seconds ±20% |
| 10 | ME → SS | Start DTMF 1.2 | ["2"] |
| 11 | ME → SIM | TERMINAL RESPONSE: SEND DTMF 2.1.1B | [Command performed successfully, but requested icon could not be displayed] |
| 12 | SIM → ME | PROACTIVE SIM 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.

27.22.4.24.3 SEND DTMF (UCS2 support)

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 SIM: Send DTMF facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 12.12.2, clause 5.2, clause 12.6, clause 12.7, clause 12.2 and clause 12.44.

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 SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.24.3.4 Method of test

27.22.4.24.3.4.1 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.

The elementary files are coded as SIM 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)

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 → SS | The ME attempts to set up a call to "+0123456789" | |
| 3 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 4 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 3.1.1 | |
| 5 | ME → SIM | FETCH | |
| 6 | SIM → ME | PROACTIVE COMMAND: SEND DTMF 3.1.1 | |
| 7 | ME → USER | Display "ЗДРАВСТВУЙТЕ" | ["Hello" in Russian] |
| 8 | ME → SS | Start DTMF 1.1 | ["1"] |
| 9 | ME | | No DTMF sending for 3 seconds ±20% |
| 10 | ME → SS | Start DTMF 1.2 | ["2"] |
| 11 | ME → SIM | TERMINAL RESPONSE: SEND DTMF 3.1.1 | [Command performed successfully] |
| 12 | SIM → ME | PROACTIVE SIM 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: SIM
 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: SIM

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 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 SIM, as soon as possible after receiving the LANGUAGE NOTIFICATION proactive SIM command.

- TS 11.14 [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 SIM after the ME receives the LANGUAGE NOTIFICATION proactive SIM command.

27.22.4.25.4 Method of Test

27.22.4.25.4.1 Initial conditions

The ME is connected to the SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LANGUAGE NOTIFICATION 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: LANGUAGE NOTIFICATION 1.1.1 | Language specified in the command is different from the one set on the mobile. [Command performed successfully] |
| 4 | ME → SIM | TERMINAL RESPONSE: LANGUAGE NOTIFICATION 1.1.1 | |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | Language of ME may have been replaced by the one specified in LANGUAGE NOTIFICATION 1.1.1 |

PROACTIVE COMMAND: LANGUAGE NOTIFICATION 1.1.1

Logically:

Command details

Command number: 1
 Command type: LANGUAGE NOTIFICATION
 Command qualifier: "01" (specific language notification)

Device identities

Source device: SIM
 Destination device: ME

Language

Language 'se'(Spanish) → 73 65
 or 'de'→64 65 (German) for instance: choose a language different
 from the one initially set on the ME to check the proper execution
 of the command

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0D | 81 | 03 | 01 | 35 | 01 | 82 | 02 | 81 | 82 | AD |
| | 02 | 73 | 65 | | | | | | | | | |

TERMINAL RESPONSE: LANGUAGE NOTIFICATION 1.1.1

Logically:

Command details

Command number: 1
 Command type: LANGUAGE NOTIFICATION
 Command qualifier: "01"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 35 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.2 (LANGUAGE NOTIFICATION)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LANGUAGE NOTIFICATION 1.1.1 | Language specified in the command is different from the one set on the mobile. [Command performed successfully] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: LANGUAGE NOTIFICATION 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: LANGUAGE NOTIFICATION 1.1.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: LANGUAGE NOTIFICATION 1.2.1 | [Command performed successfully] |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND: LANGUAGE NOTIFICATION 1.2.1 | |
| 8 | ME → SIM | TERMINAL RESPONSE: LANGUAGE NOTIFICATION 1.2.1 | |
| 9 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: LANGUAGE NOTIFICATION 1.2.1

Logically:

Command details

Command number: 1
 Command type: LANGUAGE NOTIFICATION
 Command qualifier: "00" (non specific language notification)

Device identities

Source device: SIM
 Destination device: ME

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 35 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: LANGUAGE NOTIFICATION 1.2.1

Logically:

Command details

Command number: 1
 Command type: LANGUAGE NOTIFICATION
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 35 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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 SIM Command as defined in:

- TS 11.14 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 12.6, clause 12.7, clause 12.48, clause 13.2, clause 12.2, clause 12.47, clause 12.49, clause 12.50, clause 12.15 and clause 12.31.

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 SIM Simulator and the System Simulator.

The elementary files are coded as SIM 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.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

Bearer Parameters

| | |
|------------------------|---------|
| Precedence Class: | 02 |
| Delay Class: | 04 |
| Reliability Class: | 05 |
| Peak throughput class: | 05 |
| Mean throughput class: | 16 |
| Packet data protocol: | 02 (IP) |

GPRS Parameters

| | |
|----------------------|-----------|
| Network access name: | TestGp.rs |
| User login: | UserLog |
| User password: | UserPwd |

SIM/ME interface transport level

| | |
|-------------------|-------|
| Transport format: | UDP |
| Port number: | 44444 |

Data destination address 01.01.01.01

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] |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SIM | TERMINAL RESPONSE: LAUNCH BROWSER 1.1.1 | [Command performed successfully] |
| 7 | ME→SS | The ME attempts to launch the session with the default browser parameters and the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the default browser session is properly established. Then he/she ends the navigation. The ME returns in idle mode. | |

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: SIM
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: SIM

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] |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SIM | TERMINAL RESPONSE: LAUNCH BROWSER 1.2.1 | [Command performed successfully] |
| 7 | ME→SS | The ME attempts to connect the URL specified in the LAUNCH BROWSER command. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the URL is properly connected. Then he/she ends the navigation. The ME returns in idle mode. | |

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: SIM
 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: SIM

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] |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: LAUNCH BROWSER 1.3.1 | [connect to the default 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 → SIM | TERMINAL RESPONSE: LAUNCH BROWSER 1.3.1 | [Command performed successfully] |
| 7 | ME→SS | The ME attempts to connect the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the default browser session is properly established. Then he/she ends the navigation. The ME returns in idle mode. | |

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: SIM
 Destination device: ME
 Browser Identity: default
 URL: empty

Coding::

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0E | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 30 |
| | 01 | 00 | 31 | 00 | | | | | | | | |

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: SIM

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 SS)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 0 | ME | | [the ME is in idle mode], GPRS supported by SS, GPRS supported by the ME and activated] |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: LAUNCH BROWSER 1.4.1 | [connect to the default 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 → SIM | TERMINAL RESPONSE: LAUNCH BROWSER 1.4.1 | [Command performed successfully] |
| 7 | ME→SS | The ME attempts to connect the default URL using the requested bearer and proxy identity | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the browser session is properly established with the required bearer. Then he/she ends the navigation. The ME returns in idle mode. | |

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: SIM
 Destination device: ME
 URL: empty
 Bearer: GPRS

Gateway/Proxy id

DCSunpacked, 8 bits data
 Text string: abc.def.ghi (different from the default IP address)

Coding::

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
| | 00 | 32 | 01 | 03 | 0D | 0C | 04 | 61 | 62 | 63 | 2E | 64 |
| | 65 | 66 | 2E | 67 | 68 | 69 | | | | | | |

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: SIM

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

27.22.4.26.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.4

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 SIM Command as defined in:

- TS 11.14 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 12.6, clause 12.7, clause 12.48, clause 13.2, clause 12.2, clause 12.47, optional clause 12.49, optional clause 12.50, clause 12.15 and clause 12.31.

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 SIM Simulator and the System Simulator.

The elementary files are coded as SIM 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 by default in browser parameters.

27.22.4.26.2.4.2 Procedure

Expected Sequence 2.1 (LAUNCH BROWSER, use the existing browser, connect to the default URL)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 0 | ME | The user is navigating in a browser session (not default URL). | [Browser is in use, the current session is not secured] |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: LAUNCH BROWSER 2.1.1 | [connect to the default 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 → SIM | TERMINAL RESPONSE: LAUNCH BROWSER 2.1.1 | [Command performed successfully] |
| 7 | ME→SS | The ME does not close the existing session and attempts to connect the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL. | |

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: SIM
 Destination device: ME
 URL: empty

Alpha Identifier "Default URL"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 18 | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 81 | 82 | 31 |
| | 00 | 05 | 0B | 44 | 65 | 66 | 61 | 75 | 6C | 74 | 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: SIM

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 default URL)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 0 | ME | The user is navigating in a browser session (not default URL).. | [Browser is in use, the current session is not secured] |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: LAUNCH BROWSER 2.2.1 | [connect to the default 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 → SIM | TERMINAL RESPONSE: LAUNCH BROWSER 2.2.1 | [Command performed successfully] |
| 7 | ME→SS | The ME closes the existing session and attempts to launch the session with the default browser parameters and the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the default URL is connected; and the previous URL cannot be retrieved (to verify the previous session has been closed). Then he/she does not end the navigation. | |

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: Device identities
 Source device: SIM
 Destination device: ME
 URL: empty
 Alpha Identifier: "Default URL"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 18 | 81 | 03 | 01 | 15 | 03 | 82 | 02 | 81 | 82 | 31 |
| | 00 | 05 | 0B | 44 | 65 | 66 | 61 | 75 | 6C | 74 | 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: Device identities

Source device: ME
 Destination device: SIM
 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 default URL).. | [Browser is in use, the current session is not secured] |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: LAUNCH BROWSER 2.3.1 | [connect to the default URL, "launch browser, if not already launched] |
| 4 | ME → SIM | TERMINAL RESPONSE: LAUNCH BROWSER 2.3.1 | [ME unable to process command - browser unavailable] |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 6 | USER → ME | The user verifies that the default URL has not been connected. Then he/she ends the navigation. The ME returns in idle mode. | |

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: SIM
 Destination device: ME
 URL: empty

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0B | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
| | 00 | | | | | | | | | | | |

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: SIM

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 | | | | | | | | | | | |

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 support)

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 SIM Command as defined in:

- TS 11.14 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 12.6, clause 12.7, clause 12.48, clause 13.2, clause 12.2, clause 12.47, optional clause 12.49, optional clause 12.50, clause 12.15 and clause 12.31.

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in:

- ISO/IEC 10646 [17].

27.22.4.26.2.3 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 SIM.

27.22.4.26.3.4 Method of test

27.22.4.26.3.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The elementary files are coded as SIM 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.

27.22.4.26.3.4.2 Procedure

Expected Sequence 3.1 (LAUNCH BROWSER, use the existing browser, connect to the default URL)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 0 | ME | The user is navigating in a browser session (not default URL).. | [Browser is in use, the current session is not secured]] |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: LAUNCH BROWSER 3.1.1 | [connect to the default 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 → SIM | TERMINAL RESPONSE: LAUNCH BROWSER 3.1.1 | [Command performed successfully] |
| 7 | ME→SS | The ME does not close the existing session and attempts to connect the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL. | |

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: SIM
 Destination device: ME
 URL: empty

Alpha Identifier

Data coding scheme: UCS2 (16 bits)
 Text: "ЗДРАВСТВУЙТЕ"

Coding:

| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 81 | 82 | 31 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| | 00 | 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: SIM

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 SIM Command as defined in:

- TS 11.14 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 12.6, clause 12.7, clause 12.48, clause 13.2, clause 12.2, clause 12.47, optional clause 12.49, optional clause 12.50, clause 12.15 and clause 12.31.

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 SIM.

27.22.4.26.4.4 Method of test

27.22.4.26.4.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The elementary files are coded as SIM 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.

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 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.1.1 | [Browser is in use, the current session is not secured]] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: LAUNCH BROWSER 4.1.1 | [connect to the default 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 → SIM | TERMINAL RESPONSE: LAUNCH BROWSER 4.1.1 A | [Command performed successfully] |
| 7 | ME→SS | The ME does not close the existing session and attempts to connect the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL. | |

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: SIM
 Destination device: ME
 URL: empty

Alpha Identifier: "Not self explan."

Icon identifier:

Icon qualifier: not self-explanatory
 Icon identifier: record 1 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 21 | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 81 | 82 | 31 |
| | 00 | 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.1.1 | [Browser is in use, the current session is not secured]] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: LAUNCH BROWSER 4.1.1 | [connect to the default 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 → SIM | TERMINAL RESPONSE: LAUNCH BROWSER 4.1.1 B | [Command performed successfully but requested icon could not be displayed] |
| 7 | ME→SS | The ME does not close the existing session and attempts to connect the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL. | |

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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.2.1 | [Browser is in use, the current session is not secured]] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: LAUNCH BROWSER 4.2.1 | [connect to the default 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 → SIM | TERMINAL RESPONSE: LAUNCH BROWSER 4.2.1 A | [Command performed successfully] |
| 7 | ME→SS | The ME does not close the existing session and attempts to connect the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL. | |

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: SIM
 Destination device: ME
 URL: empty

Alpha Identifier

"Self explan."

Icon identifier:

Icon qualifier: self-explanatory

Icon identifier: record 1 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 81 | 82 | 31 |
| | 00 | 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.2.1 | [Browser is in use, the current session is not secured]] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: LAUNCH BROWSER 4.2.1 | [connect to the default 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 → SIM | TERMINAL RESPONSE: LAUNCH BROWSER 4.2.1 B | [Command performed successfully] |
| 7 | ME→SS | The ME does not close the existing session and attempts to connect the default URL. | [Command performed successfully but requested icon could not be displayed] |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL. | |

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: SIM

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.

27.22.4.27 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 11.14 [15].

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 SIM after the ME receives the OPEN CHANNEL proactive command. The TERMINAL RESPONSE sent back to the SIM is the result of the ME and the network capabilities against requested parameters by the SIM.

27.22.4.27.2.4 Method of test

27.22.4.27.2.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System 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 following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

Bearer Parameters

| | |
|------------------------|---------|
| Precedence Class: | 02 |
| Delay Class: | 04 |
| Reliability Class: | 05 |
| Peak throughput class: | 05 |
| Mean throughput class: | 31 |
| Packet data protocol: | 02 (IP) |

GPRS Parameters

| | |
|----------------------|-----------|
| Network access name: | TestGp.rs |
| User login: | UserLog |
| User password: | UserPwd |

SIM/ME interface transport level

| | |
|-------------------|-------|
| Transport format: | UDP |
| Port number: | 44444 |

Data destination address 01.01.01.01

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.2/5.

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.1/30), 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 (OPEN CHANNEL, immediate link establishment, GPRS, no local address, no alpha identifier, no network access name)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | USER → ME | Set and activate APN "TestGp.rs" in the terminal configuration if required | [see initial conditions] |
| 2 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.1.1 | |
| 3 | ME → SIM | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL 2.1.1 | |
| 5 | ME → user | The ME may display channel opening information | |
| 6 | ME → SS | PDP context activation request | |
| 7 | SS → ME | PDP context activation accept | |
| 8 | ME → SIM | TERMINAL RESPONSE : OPEN CHANNEL 2.1.1 A or TERMINAL RESPONSE : OPEN CHANNEL 2.1.1B | [Command performed successfully] |

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: SIM
 Destination device: ME

Bearer

Bearer type: GPRS
 Bearer parameter:
 Precedence Class: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 Mean throughput class: 31
 Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400
 Text String: UserLog (User login)
 Text String: UserPwd (User password)
 SIM/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 | 02 | 04 | 05 | 05 | 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: SIM

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: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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 | 02 | 04 | 05 | 05 | 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: SIM

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: 05
 Peak throughput class: 05
 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 | 05 | 05 | 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 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL 2.2.1 | |
| 4 | ME → user | The ME may display channel opening information | |
| 5 | ME → SS | PDP context activation request | |
| 6 | SS → ME | PDP context activation accept | |
| 7 | ME → SIM | 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: SIM
 Destination device: ME

Bearer

Bearer type: GPRS
 Bearer parameter:
 Precedence Class: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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)

SIM/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 | 02 | 04 | 05 | 05 | 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: SIM

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: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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 | 02 | 04 | 05 | 05 | 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: SIM

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: 05

Peak throughput class: 05
 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 | 05 | 05 | 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 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | PDP context activation request | |
| 7 | SS → ME | PDP context activation accept | |
| 8 | ME → SIM | 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: SIM
 Destination device: ME

Alpha Identifier Open ID

Bearer

Bearer type: GPRS
 Bearer parameter:
 Precedence Class: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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)
 SIM/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 | 02 |
| | 04 | 05 | 05 | 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 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | PDP context activation request | |
| 7 | SS → ME | PDP context activation accept | |
| 8 | ME → SIM | 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: SIM

Alpha Identifier Null

Bearer

Bearer type: GPRS
 Bearer parameter:
 Precedence Class: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 Mean throughput class: 31
 Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400
 Network access name: TestGp.rs

Other Address

Length: 00

Text String: UserLog (User login)

Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
 Port number: 44444

Data destination address 01.01.01.01

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 46 | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 05 |
| | 00 | 35 | 07 | 02 | 02 | 04 | 05 | 05 | 1F | 02 | 39 | 02 |
| | 05 | 78 | 47 | 0A | 06 | 54 | 65 | 73 | 74 | 47 | 70 | 02 |
| | 72 | 73 | 3E | 00 | 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 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL 2.5.1 | |
| 4 | ME → user | The ME may display channel opening information | |
| 5 | ME → SS | PDP context activation request | |
| 6 | SS → ME | PDP context activation accept | |
| 7 | ME → SIM | 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: SIM

Bearer

Bearer type: GPRS
 Bearer parameter:
 Precedence Class: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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)

SIM/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 | 02 | 04 | 05 | 05 | 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: SIM

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: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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.2/5 "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 | 02 | 04 | 05 | 05 | 1F |
| | 02 | Note 1 | | | | | | | | | | |

Note1: The buffer size TLV shall be attached and contain the value stated in table A.2/5 "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: SIM

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: 05
 Peak throughput class: 05
 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.2/5 "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 | 05 | 05 | 1F |
| | 02 | Note 1 | | | | | | | | | | |

Note1: The buffer size TLV shall be attached and contain the value stated in table A.2/5 "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 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.7.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → 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 → SS | No PDP context activation request is sent to the SS | |
| 7 | ME → SIM | 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 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.7.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL 2.7.1 | |
| 4 | ME → SS | PDP context activation request | |
| 5 | SS → 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 → SIM | 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: SIM

Destination device: ME

Alpha Identifier "Open ID"

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02

Delay Class: 04

Reliability Class: 05

Peak throughput class: 05

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)

SIM/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 | 02 |
| | 04 | 05 | 05 | 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: SIM

Result

General Result: User did not accept the proactive command

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02

Delay Class: 04

Reliability Class: 05

Peak throughput class: 05

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 |
| | 35 | 07 | 02 | 02 | 04 | 05 | 05 | 1F | 02 | Note 1 | | |

Note1: 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: SIM

Result

General Result: User did not accept the proactive command

Bearer description

Bearer type: GPRS
 Bearer parameter:
 Precedence Class: 00
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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 |
| | 35 | 07 | 02 | 00 | 04 | 05 | 05 | 1F | 02 | Note 1 | | |

Note1: 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 (OPEN CHANNEL, immediate link establishment, GPRS, ME busy on call)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|-------------------|
| 1 | User → ME | Set up a call | |
| 2 | ME → SS | SETUP CALL | |
| 3 | SS → ME | CONNECTED | |
| 4 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 2.8.1 | |
| 5 | ME → SIM | FETCH | |
| 6 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL 2.8.1 | |
| 7a | ME → SS | No PDP context activation request sent to the SS | |
| 7b | ME → SIM | TERMINAL RESPONSE : OPEN CHANNEL 2.8.1A or TERMINAL RESPONSE : OPEN CHANNEL 2.8.1B | [ME busy on call] |

PROACTIVE COMMAND: OPEN CHANNEL 2.8.1

Logically:

Command details

Command number: 1
 Command type: OPEN CHANNEL
 Command qualifier: immediate link establishment

Device identities

Source device: SIM
 Destination device: ME

Bearer

Bearer type: GPRS
 Bearer parameter:
 Precedence Class: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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)
 SIM/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 | 02 | 04 | 05 | 05 | 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 2.8.1A

Logically:

Command details

Command number: 1
 Command type: OPEN CHANNEL
 Command qualifier: immediate link establishment

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: ME currently unable to process command
 Additional info: ME busy on call

Bearer

Bearer type: GPRS
 Bearer parameter:
 Precedence Class: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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 | 02 | 20 |
| | 02 | 35 | 07 | 02 | 02 | 04 | 05 | 05 | 1F | 02 | Note 1 | |

Note1: 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 2.8.1B

Logically:

Command details

Command number: 1
 Command type: OPEN CHANNEL
 Command qualifier: immediate link establishment

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: ME currently unable to process command
 Additional info: ME busy on call

Bearer

Bearer type: GPRS
 Bearer parameter:
 Precedence Class: 00
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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 | 02 | 20 |
| | 02 | 35 | 07 | 02 | 00 | 04 | 05 | 05 | 1F | 02 | Note 1 | |

Note1: 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.

27.22.4.27.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.8.

27.22.4.28 CLOSE CHANNEL

27.22.4.28.1 Definition and applicability

See clause 3.2.2.

27.22.4.28.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 11.14 [15].

27.22.4.28.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (Command Performed Successfully); or
- TERMINAL RESPONSE (Bearer Independent Protocol Error);

to the SIM after the ME receives the CLOSE CHANNEL proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

27.22.4.28.4 Method of Test

27.22.4.28.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System 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.

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 following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

Bearer Parameters

Precedence Class: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 Mean throughput class: 31
 Packet data protocol: 02 (IP)

GPRS Parameters

Network access name: TestGp.rs
 User login: UserLog
 User password: UserPwd

SIM/ME interface transport level

Transport format: UDP
 Port number: 44444
 Data destination address 01.01.01.01

27.22.4.28.4.2 Procedure

Expected sequence 1.1 (CLOSE CHANNEL, successful)

| Step | Direction | MESSAGE / Action | Comments | |
|------|-----------|--|----------------------------------|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND | See initial conditions | |
| | | PENDING: OPEN CHANNEL 1.1.1 | | |
| 2 | ME → SIM | FETCH | | |
| 3 | SIM → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 | | |
| 4 | ME → USER | The ME may display channel opening information | | |
| 5 | ME → SS | PDP context activation request | | |
| 6 | SS → ME | PDP context activation accept | | |
| 7 | ME → SIM | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | | [Command performed successfully] |
| 8 | SIM → ME | PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.1.1 | | |
| 9 | ME → SIM | FETCH | | |
| 10 | SIM → ME | PROACTIVE COMMAND: CLOSE CHANNEL 1.1.1 | | |
| 11 | ME → SS | PDP context deactivation request | | |
| 12 | SS → ME | PDP context deactivation accept | | |
| 13 | ME → SIM | 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: SIM
 Destination device: ME

Bearer

Bearer type: GPRS
 Bearer parameter:
 Precedence Class: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05

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)
 SIM/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 | 02 | 04 | 05 | 05 | 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: SIM

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: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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 | 02 | 04 | 05 | 05 | 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: SIM

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: 05
 Peak throughput class: 05
 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 | 05 | 05 | 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: SIM
 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 | |
| 4 | ME → USER | The ME may display channel opening information | |
| 5 | ME → SS | PDP context activation request | |
| 6 | SS → ME | PDP context activation accept | |
| 7 | ME → SIM | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | |
| 8 | SIM → ME | PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.2.1 | |
| 9 | ME → SIM | FETCH | |
| 10 | SIM → ME | PROACTIVE COMMAND: CLOSE CHANNEL 1.2.1 | |
| 11 | ME → SIM | TERMINAL RESPONSE CLOSE CHANNEL 1.2.1 | |

PROACTIVE COMMAND: CLOSE CHANNEL 1.2.1

Logically:

Command details

Command number: 1
 Command type: CLOSE CHANNEL
 Command qualifier: RFU

Device identities

Source device: SIM
 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 | |
| 4 | ME → USER | The ME may display channel opening information | |
| 5 | ME → SS | PDP context activation request | |
| 6 | SS → ME | PDP context activation accept | |
| 7 | ME → SIM | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | SIM → ME | PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.1.1 | |
| 9 | ME → SIM | FETCH | |
| 10 | SIM → ME | PROACTIVE COMMAND: CLOSE CHANNEL 1.1.1 | |
| 11 | ME → SS | PDP context deactivation request | |
| 12 | SS → ME | PDP context deactivation accept | |
| 13 | ME → SIM | TERMINAL RESPONSE CLOSE CHANNEL 1.1.1 | [Command performed successfully] |
| 14 | SIM → ME | PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.3.1 | |
| 15 | ME → SIM | FETCH | |
| 16 | SIM → ME | PROACTIVE COMMAND: CLOSE CHANNEL 1.3.1 | |
| 17 | ME → SIM | 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: SIM
 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: SIM

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: SIM

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 | | | | | | | | | | | |

27.22.4.28.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

27.22.4.29 RECEIVE DATA

27.22.4.29.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 11.14 [15].

27.22.4.29.3 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 SIM after the ME receives the RECEIVE DATA proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

27.22.4.29.4 Method of test

27.22.4.29.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System 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.

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 following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

Bearer Parameters

| | |
|------------------------|---------|
| Precedence Class: | 02 |
| Delay Class: | 04 |
| Reliability Class: | 05 |
| Peak throughput class: | 05 |
| Mean throughput class: | 31 |
| Packet data protocol: | 02 (IP) |

GPRS Parameters

| | |
|----------------------|-----------|
| Network access name: | TestGp.rs |
| User login: | UserLog |
| User password: | UserPwd |

SIM/ME interface transport level

| | |
|--------------------------|-------------|
| Transport format: | UDP |
| Port number: | 44444 |
| Data destination address | 01.01.01.01 |

27.22.4.29.4.2 Procedure

Expected sequence 1.1 (RECEIVE DATA, already opened channel)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 | |
| 8 | ME → USER | The ME may display channel opening information | |
| 9 | ME → SS | PDP context activation request | |
| 10 | SS → ME | PDP context activation accept | |
| 11 | ME → SIM | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1 A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 12 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 | |
| 13 | ME → SIM | FETCH | |
| 14 | SIM → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1 | |
| 15 | ME → SS | Transfer of 8 Bytes of data to the SS through channel 1 | [To retrieve ME's port number] |
| 16 | ME → SIM | TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1 | [Command performed successfully] |
| 17 | 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 | |
| 18 | ME → SIM | ENVELOPE: EVENT DOWNLOAD - Data available 1.1.1 | (1000 Bytes of data in the ME buffer) |
| 19 | SIM → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.1 | |
| 20 | ME → SIM | FETCH | |
| 21 | SIM → ME | PROACTIVE COMMAND: RECEIVE DATA 1.1.1 | [200 Bytes] |
| 22 | ME → SIM | TERMINAL RESPONSE: RECEIVE DATA 1.1.1 | |
| 23 | SIM → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.2 | |
| 24 | ME → SIM | FETCH | |
| 25 | SIM → ME | PROACTIVE COMMAND: RECEIVE DATA 1.1.2 | [200 Bytes] |
| 26 | ME → SIM | TERMINAL RESPONSE: RECEIVE DATA 1.1.2 | |
| 27 | SIM → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.3 | |
| 28 | ME → SIM | FETCH | |
| 29 | SIM → ME | PROACTIVE COMMAND: RECEIVE DATA 1.1.3 | [200 Bytes] |
| 30 | ME → SIM | TERMINAL RESPONSE: RECEIVE DATA 1.1.3 | |
| 31 | SIM → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.4 | |
| 32 | ME → SIM | FETCH | |
| 33 | SIM → ME | PROACTIVE COMMAND: RECEIVE DATA 1.1.4 | [200 Bytes] |
| 34 | ME → SIM | TERMINAL RESPONSE: RECEIVE DATA 1.1.4 | |
| 35 | SIM → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.5 | |
| 36 | ME → SIM | FETCH | |
| 37 | SIM → ME | PROACTIVE COMMAND: RECEIVE DATA 1.1.5 | [200 Bytes] |
| 38 | ME → SIM | 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: SIM
 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: SIM

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: SIM
 Destination device: ME

Bearer

Bearer type: GPRS
 Bearer parameter:
 Precedence Class: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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)
 SIM/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 | 02 | 04 | 05 | 05 | 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: SIM

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: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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 | 02 | 04 | 05 | 05 | 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: SIM

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: 05

Peak throughput class: 05
 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 | 05 | 05 | 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: SIM
 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: SIM

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: SIM

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: SIM
 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: 2
 Command type: RECEIVE DATA
 Command qualifier: RFU

Device identities

Source device: SIM
 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 1.1.3

Logically:

Command details

Command number: 3
 Command type: RECEIVE DATA
 Command qualifier: RFU

Device identities

Source device: SIM
 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 1.1.4

Logically:

Command details

Command number: 4
 Command type: RECEIVE DATA
 Command qualifier: RFU

Device identities

Source device: SIM
 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 | | | | | | | | | | |

PROACTIVE COMMAND: RECEIVE DATA 1.1.5

Logically:

Command details

Command number: 5
 Command type: RECEIVE DATA
 Command qualifier: RFU

Device identities

Source device: SIM
 Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 05 | 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: SIM

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: 2
 Command type: RECEIVE DATA
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

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 1.1.3

Logically:

Command details

Command number: 3
 Command type: RECEIVE DATA
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

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 1.1.4

Logically:

Command details

Command number: 4
 Command type: RECEIVE DATA
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

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 | | | | | | | | |

TERMINAL RESPONSE: RECEIVE DATA 1.1.5

Logically:

Command details

Command number: 5
 Command type: RECEIVE DATA
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully
 Channel Data: 20 21 .. E7 (200 Bytes of data)
 Channel data length: 00

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 05 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | B6 | 81 | C8 | 20 | 21 | 22 | .. | E7 | B7 | 01 | 00 | |
| | | | | | | | | | | | | |

27.22.4.29.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.4.30 SEND DATA

27.22.4.30.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 11.14 [15].

27.22.4.30.3 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 SIM session terminated by the user);

to the SIM after the ME receives the SEND DATA proactive command. The TERMINAL RESPONSE sent back to the SIM is the result of the ME and the network capabilities against requested parameters by the SIM.

27.22.4.30.4 Method of test

27.22.4.30.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System 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.

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 following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

Bearer Parameters

| | |
|------------------------|---------|
| Precedence Class: | 02 |
| Delay Class: | 04 |
| Reliability Class: | 05 |
| Peak throughput class: | 05 |
| Mean throughput class: | 31 |
| Packet data protocol: | 02 (IP) |

GPRS Parameters

| | |
|----------------------|-----------|
| Network access name: | TestGp.rs |
| User login: | UserLog |
| User password: | UserPwd |

SIM/ME interface transport level

| | |
|--------------------------|-------------|
| Transport format: | UDP |
| Port number: | 44444 |
| Data destination address | 01.01.01.01 |

27.22.4.30.4.2 Procedure

Expected sequence 1.1 (SEND DATA, immediate mode)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 | [Command performed successfully] |
| 4 | ME → USER | The ME may display channel opening information | |
| 5 | ME → SS | PDP context activation request | |
| 6 | SS → ME | PDP context activation accept | |
| 7 | ME → SIM | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | |
| 8 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 | |
| 9 | ME → SIM | FETCH | |
| 10 | SIM → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1 | |
| 11 | ME → SS | Transfer of 8 Bytes of data to the SS through channel 1 | |
| 12 | ME → SIM | TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1 | |

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: SIM
 Destination device: ME

Bearer

Bearer type: GPRS
 Bearer parameter:
 Precedence Class: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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)
 SIM/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 | 02 | 04 | 05 | 05 | 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: SIM

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: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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 | 02 | 04 | 05 | 05 | 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: SIM

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: 05

Peak throughput class: 05
 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 | 05 | 05 | 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: SIM
 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 | |
| 4 | ME → USER | The ME may display channel opening information | |
| 5 | ME → SS | PDP context activation request | |
| 6 | SS → ME | PDP context activation accept | |
| 7 | ME → SIM | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.2.1 | |
| 9 | ME → SIM | FETCH | |
| 10 | SIM → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.2.1 | Send 500 Bytes of data (200 + 200 + 100) |
| 11 | ME → SIM | TERMINAL RESPONSE: SEND DATA (store mode) 1.2.1 | [Command performed successfully] |
| 12 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.2.2 | |
| 13 | ME → SIM | FETCH | |
| 14 | SIM → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.2.2 | [200 Bytes] |
| 15 | ME → SIM | TERMINAL RESPONSE: SEND DATA (store mode) 1.2.2 | [Command performed successfully] |
| 16 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.2.3 | |
| 17 | ME → SIM | FETCH | |
| 18 | SIM → ME | PROACTIVE COMMAND: SEND DATA (Immediate mode) 1.2.3 | [100 Bytes] |
| 19 | ME → SS | Transfer of 500 Bytes of data to the SS through channel 1 | |
| 20 | ME → SIM | 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: SIM
 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: SIM
 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: SIM
 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: SIM
 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: SIM
 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 | |
| 4 | ME → USER | The ME may display channel opening information | |
| 5 | ME → SS | PDP context activation request | |
| 6 | SS → ME | PDP context activation accept | |
| 7 | ME → SIM | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.1 | |
| 9 | ME → SIM | FETCH | |
| 10 | SIM → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.1 | Send 1000 Bytes of data by packet of 200 Bytes |
| 11 | ME → SIM | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.1 | [Command performed successfully] |
| 12 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.2 | |
| 13 | ME → SIM | FETCH | |
| 14 | SIM → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.2 | [200 Bytes] |
| 15 | ME → SIM | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2 | [Command performed successfully] |
| 16 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.3 | |
| 17 | ME → SIM | FETCH | |
| 18 | SIM → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.3 | [200 Bytes] |
| 19 | ME → SIM | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3 | [Command performed successfully] |
| 20 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.4 | |
| 21 | ME → SIM | FETCH | |
| 22 | SIM → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.4 | [200 Bytes] |
| 23 | ME → SIM | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4 | [Command performed successfully] |
| 24 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.5 | |
| 25 | ME → SIM | FETCH | |
| 26 | SIM → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.3.5 | [200 Bytes] |
| 27 | ME → SS | Transfer of 1000 Bytes of data to the SS through channel 1 | |
| 28 | ME → SIM | 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: SIM
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: SIM

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: SIM
 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: SIM

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: SIM
 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: SIM

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: SIM
 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: SIM

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: SIM
 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: SIM

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 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 | |
| 4 | ME → USER | The ME may display channel opening information | |
| 5 | ME → SS | PDP context activation request | |
| 6 | SS → ME | PDP context activation accept | |
| 7 | ME → SIM | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.1 | |
| 9 | ME → SIM | FETCH | |
| 10 | SIM → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.1 | Send 1000 Bytes of data by packets of 200 Bytes |
| 11 | ME → SIM | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.1 | [Command performed successfully] |
| 12 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.2 | |
| 13 | ME → SIM | FETCH | |
| 14 | SIM → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.2 | [200 Bytes] |
| 15 | ME → SIM | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2 | [Command performed successfully] |
| 16 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.3 | |
| 17 | ME → SIM | FETCH | |
| 18 | SIM → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.3 | [200 Bytes] |
| 19 | ME → SIM | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3 | [Command performed successfully] |
| 20 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.4 | |
| 21 | ME → SIM | FETCH | |
| 22 | SIM → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.4 | [200 Bytes] |
| 23 | ME → SIM | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4 | [Command performed successfully] |
| 24 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.5 | ... |
| 25 | ME → SIM | FETCH | |
| 26 | SIM → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.3.5 | |
| 27 | ME → SS | Transfer of 1000 Bytes of data to the SS through channel 1 | |
| 28 | ME → SIM | TERMINAL RESPONSE: SEND DATA (immediate) 1.3.5 | [Command performed successfully] |
| 29 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.1 | |
| 30 | ME → SIM | FETCH | |
| 31 | SIM → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.1 | Send 1000 Bytes of data by packets of 200 Bytes |
| 32 | ME → SIM | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.1 | [Command performed successfully] |
| 33 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.2 | |
| 34 | ME → SIM | FETCH | |
| 35 | SIM → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.2 | [200 Bytes] |

| | | | |
|----|----------|--|----------------------------------|
| 36 | ME → SIM | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2 | [Command performed successfully] |
| 37 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.3 | |
| 38 | ME → SIM | FETCH | |
| 39 | SIM → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.3 | [200 Bytes] |
| 40 | ME → SIM | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3 | [Command performed successfully] |
| 41 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.4 | |
| 42 | ME → SIM | FETCH | |
| 43 | SIM → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.4 | [200 Bytes] |
| 44 | ME → SIM | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4 | [Command performed successfully] |
| 45 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.5 | ... |
| 46 | ME → SIM | FETCH | |
| 47 | SIM → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.3.5 | |
| 48 | ME → SS | Transfer of 1000 Bytes of data to the SS through channel 1 | |
| 49 | ME → SIM | 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 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 | |
| 4 | ME → USER | The ME may display channel opening information | |
| 5 | ME → SS | PDP context activation request | |
| 6 | SS → ME | PDP context activation accept | |
| 7 | ME → SIM | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.5.1 | |
| 9 | ME → SIM | FETCH | |
| 10 | SIM → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.5.1 | |
| 11 | ME → SIM | 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: SIM
 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: SIM

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

27.22.4.30.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.5.

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 as defined in:

- TS 11.14 [15].

27.22.4.31.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (Command Performed Successfully) to the SIM after the ME receives the GET STATUS proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

27.22.4.31.4 Method of test

27.22.4.31.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System 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.

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 following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

Bearer Parameters

Precedence Class: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 Mean throughput class: 31
 Packet data protocol: 02 (IP)

GPRS Parameters

Network access name: TestGp.rs
 User login: UserLog
 User password: UserPwd

SIM/ME interface transport level

Transport format: UDP
 Port number: 44444
 Data destination address 01.01.01.01

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 | SIM → ME | PROACTIVE COMMAND PENDING: GET CHANNEL STATUS 1.1.1 | [Command performed successfully] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: GET STATUS 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE GET STATUS 1.1.1 A Or TERMINAL RESPONSE: GET STATUS 1.1.1B Or TERMINAL RESPONSE: GET STATUS 1.1.1C | |

PROACTIVE COMMAND: GET STATUS 1.1.1

Logically:

Command details

Command number: 1
 Command type: GET STATUS
 Command qualifier: RFU

Device identities

Source device: SIM
 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: SIM

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: SIM

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: SIM

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

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 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 | |
| 4 | ME → SS | PDP context activation request | |
| 5 | SS → ME | PDP context activation accept | |
| 6 | ME → SIM | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: GET CHANNEL STATUS 1.2.1 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND: GET STATUS 1.2.1 | |
| 10 | ME → SIM | 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: SIM
Destination device: ME

Bearer

Bearer type: GPRS
Bearer parameter:
Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
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)
 SIM/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 | 02 | 04 | 05 | 05 | 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: SIM

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: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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 | 02 | 04 | 05 | 05 | 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: SIM

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: 05

Peak throughput class: 05

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 | 05 | 05 | 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: SIM

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: SIM

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: SIM

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 1 | | | | | | | | | | | |

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | [Command performed successfully] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 | |
| 8 | ME → SS | PDP context activation request | |
| 9 | SS → ME | PDP context activation request | |
| 10 | ME → SIM | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 11 | SS → ME | DROP LINK | |
| 12 | ME → SIM | ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.3.1 | [Link dropped] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: GET STATUS 1.3.1 | |
| 14 | ME → SIM | FETCH | |
| 15 | SIM → ME | PROACTIVE COMMAND: GET STATUS 1.3.1 | |
| 16 | ME → SIM | 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: SIM

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: SIM
 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 | 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: SIM
 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: SIM

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: SIM

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: SIM
 Destination device: ME

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.31.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

27.22.5 Data Download to SIM

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 SIM: SMS-PP Data Download facility as defined in the following technical specifications:

- TS 11.14 [15] clause 4.3, clause 5, clause 7.1, clause 12.1, clause 12.7 and clause 12.13.

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 SIM.

To verify that the ME returns the RP-ACK message back to the system Simulator, if the SIM responds with '90 00' or '91 XX'.

To verify that the ME returns the response data from the SIM back to the system Simulator in the TP-User-Data element of the RP-ACK message, if the SIM responds with '9F XX'.

27.22.5.1.4 Method of Test

27.22.5.1.4.1 Initial conditions

The ME is connected to the system Simulator and the SIM 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.

27.22.5.1.4.2 Procedure

Expected Sequence 1.1 Void**Expected Sequence 1.2 (SMS-PP Data Download, General Data Coding, GET RESPONSE, Acknowledgement)**

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|------------------------|
| 1 | SS → ME | SMS-PP Data Download Message 1.2.1 | |
| 2 | ME → USER | The ME shall not display the message or alert the user of a short message waiting. | |
| 3 | ME → SIM | ENVELOPE: SMS-PP DOWNLOAD 1.2.2 | |
| 4 | SIM → ME | RESPONSE DATA AVAILABLE | [SW1 / SW2 of '9F 0B'] |
| 5 | ME → SIM | GET RESPONSE | |
| 6 | SIM → ME | SMS-PP Data Download SIM Acknowledgement 1.2.4 | |
| 7 | ME → SS | SMS-PP Data Download SIM Acknowledgement 1.2.4 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. | |

Expected Sequence 1.3 (SMS-PP Data Download, General Data Coding, FETCH, MORE TIME)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|------------------------|
| 1 | SS → ME | SMS-PP Data Download Message 1.3.1 | |
| 2 | ME → USER | The ME shall not display the message or alert the user of a short message waiting | |
| 3 | ME → SIM | ENVELOPE: SMS-PP DOWNLOAD 1.3.2 | [SW1 / SW2 of '91 0B'] |
| 4 | SIM → ME | PROACTIVE COMMAND PENDING: MORE TIME 1.3.4 | |
| 5 | ME → SS | RP-ACK | |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND: MORE TIME 1.3.4 | |
| 8 | ME → SIM | TERMINAL RESPONSE: MORE TIME 1.3.5 | |
| 9 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: MORE TIME 1.3.4

Logically:

Command details

Command number: 1
 Command type: MORE TIME
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 02 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: MORE TIME 1.3.5

Logically:

Command details

Command number: 1
 Command type: MORE TIME
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 02 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.4 (SMS-PP Data Download, General Data Coding)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------|
| 1 | SS → ME | SMS-PP Data Download Message 1.4.1 | |
| 2 | ME | The ME shall not display the message or alert the user of a short message waiting | |
| 3 | ME → SIM | ENVELOPE: SMS-PP DOWNLOAD 1.4.2 | |
| 4 | SIM → ME | SW1 / SW2 of '90 00' | |
| 5 | ME → SS | RP-ACK | |

SMS-PP (Data Download) Message 1.2.1 / 1.3.1 / 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 SME |
| TP-OA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "1234" |
| TP-PID | SIM Data download |
| TP-DCS | |
| Coding Group | General Data Coding |
| Compression | Text is uncompressed |
| Message Class | Class 2 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 1.2.2 / 1.3.2 / 1.4.2,

Logically:

SMS-PP Download

| | |
|-------------------|---------|
| Device identities | |
| Source device: | Network |

Destination device: SIM

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 SIM Data download

TP-DCS

Coding Group General Data Coding

Compression Text is uncompressed

Message Class Class 2 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 1.5 Void

Expected Sequence 1.6 (SMS-PP Data Download, with Data Coding / Message Class)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------|
| 1 | SS → ME | SMS-PP Data Download Message 1.6.1 | |
| 2 | ME | The ME shall not display the message or alert the user of a short message waiting | |
| 3 | ME → SIM | ENVELOPE: SMS-PP DOWNLOAD 1.6.2 | |
| 4 | SIM → ME | SW1 / SW2 of '90 00' | |
| 5 | ME → SS | RP-ACK | |

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 SIM Data download

TP-DCS

Coding Group Data Coding / Message Class
 Message Coding 8 bit data
 Message Class Class 2 SIM Specific Message
 TP-SCTS: 01/01/98 00:00:00 +0
 TP-UDL 13
 TP-UD "Short Message"

Coding:

| | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding | 04 | 04 | 91 | 21 | 43 | 7F | F6 | 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 1.6.2

Logically:

SMS-PP Download

Device identities

Source device: Network
 Destination device: SIM

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

SIM Data download

TP-DCS

Coding Group Data Coding / Message Class
 Message Coding 8 bit data
 Message Class Class 2 SIM Specific Message
 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 | F6 | 89 | 10 | 10 | 00 | 00 | 00 | 00 | 0D | 53 | 68 |
| | 6F | 72 | 74 | 20 | 4D | 65 | 73 | 73 | 61 | 67 | 65 | |

SMS-PP Data Download SIM Acknowledgement 1.2.4

Coding:

| | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|----|
| Coding | 50 | 68 | 69 | 6C | 20 | 48 | 6F | 6F | 6B | 65 | 72 |
|--------|----|----|----|----|----|----|----|----|----|----|----|

27.22.5.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.2 to 1.6.

27.22.5.2 SMS-CB 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 SIM: SMS-CB Data Download facility as defined in:

- TS 11.14 [15] clause 4.3, clause 5, clause 7.2, clause 12.5 and clause 12.7.

27.22.5.2.3 Test purpose

To verify that the ME transparently passes the "data download via SMS Cell Broadcast" messages to the SIM, 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 system Simulator and the SIM Simulator.

The elementary files are coded as Toolkit default with the following exception:

EF LP shall contain an entry indicating "English".

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 (SMS-CB (Data Download), ENVELOPE(SMS-CB DOWNLOAD), ME does not display message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|-----------------------------------|----------------------------|
| 1 | SS → ME | SMS-CB (DATA DOWNLOAD) 1.1 | Message identifier '10 01' |
| 2 | ME → SIM | ENVELOPE (SMS-CB DOWNLOAD) 1.1 | |
| 3 | SIM → ME | SW1, SW2 '90 00' | |

SMS-CB (Data Download) 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: SMS-CB DOWNLOAD 1.1

Logically:

Cell Broadcast Download

Device identities

Source device: Network

Destination device: SIM

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 (SMS-CB(DATA DOWNLOAD), ENVELOPE(SMS-CB DATA DOWNLOAD), FETCH, MORE TIME, ME does not display message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------|
| 1 | SS → ME | SMS-CB (DATA DOWNLOAD) 1.1 | Message identifier '10 01' |
| 2 | ME → SIM | ENVELOPE (SMS-CB DOWNLOAD) 1.1 | |
| 3 | SIM → ME | PROACTIVE COMMAND PENDING: MORE TIME 1.1 | SW1/SW2 '91 0B' |
| 4 | ME → SIM | FETCH 1.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND:MORE TIME 1.1 | |
| 6 | ME → SIM | TERMINAL RESPONSE: MORE TIME 1.1 | |
| 7 | SIM → ME | SW1/SW2 '90 00' | SIM session ended |

PROACTIVE COMMAND: MORE TIME 1.1

Logically:

Command details

Command number: 1
 Command type: MORE TIME
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 02 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: MORE TIME 1.1

Logically:

Command details

Command number: 1
 Command type: MORE TIME
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 02 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.3 (SMS-CB (DATA DOWNLOAD), ME displays message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SS → ME | SMS-CB (DATA DOWNLOAD) 1.2 | Message identifier '03 E7' |
| 2a | ME → USER | ME may display the message | |
| 2b | ME → SIM | ME shall not download the CB message to the SIM using ENVELOPE (SMS-CB 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] |

SMS-CB (Data Download) 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 | | | | | | | | |

27.22.5.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

27.22.6 CALL CONTROL BY SIM

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 11.14 [15] clause 9.1.1.

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 SIM command, the ME shall first pass the call set-up details (dialled digits and associated parameters) to the SIM, using the ENVELOPE (CALL CONTROL).

To verify that if the SIM responds with '90 00', the ME shall set up the call with the dialled digits and other parameters as sent to the SIM.

To verify that if the SIM responds with '9F XX', the ME shall use the GET RESPONSE command to get the response data. The response data from the SIM shall indicate to the ME whether to set up the call as proposed, not set up the call, set up a call using the data supplied by the SIM.

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 SIM using TERMINAL RESPONSE "interaction with call control by SIM or MO short message control by SIM, action not allowed".

To verify that it is possible for the SIM 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 SIM Simulator and System Simulator and has performed the location update procedure.

The GSM 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 SIM Application Toolkit default with the following exception:

The call control service is allocated and activated in the SIM Service Table.

27.22.6.1.4.2 Procedure

Expected Sequence 1.1 (CALL CONTROL BY SIM , set up call attempt by user, the SIM responds with '90 00')

| Step | Direction | Message / Action | Comments |
|------|-----------|--|--|
| 1 | User → ME | Set up a call to "+01234567890123456789" | |
| 2 | ME → SIM | ENVELOPE CALL CONTROL 1.1.1A Or ENVELOPE CALL CONTROL 1.1.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 90 00 | |
| 4 | ME → SS | 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: SIM

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)

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 |
| | F1 | 10 | 00 | 01 | 00 | 01 | Note 4 | | | | | |

ENVELOPE CALL CONTROL 1.1.1B

Logically:

Device identities

Source device: ME
Destination device: SIM

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.

Expected Sequence 1.2 (CALL CONTROL BY SIM , 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 → SIM | ENVELOPE CALL CONTROL 1.2.1 A or ENVELOPE CALL CONTROL 1.2.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 02 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 1.2.1 | [Call control result: "Allowed, no modification"] |
| 6 | ME → SS | 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: SIM

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)

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 |
| | F1 | 10 | 00 | 01 | 00 | 01 | Note 4 | | | | | |

ENVELOPE CALL CONTROL 1.2.1B

Logically:

Device identities

Source device: ME
Destination device: SIM

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.

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 SIM , set up call attempt resulting from a set up call proactive command, allowed without modification)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → 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→SIM | FETCH | |
| 3 | SIM → 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 → SIM | ENVELOPE CALL CONTROL 1.3.1A or ENVELOPE CALL CONTROL 1.3.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 7 | SIM → ME | 9F 02 | |
| 8 | ME → SIM | GET RESPONSE | |
| 9 | SIM → ME | CALL CONTROL RESULT 1.3.1 | [Call control result: "Allowed, no modification"] |
| 10 | ME → SS | The ME sets up the call without modification | [Set up call to "+012340123456"] |
| 11 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 1.3.1 | [command performed successfully] |

Expected Sequence 1.3 B (CALL CONTROL BY SIM , set up call attempt resulting from a set up call proactive command, allowed without modification)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → 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→SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP CALL 1.3.1 | [Set up call to "+012340123456"] |
| 4 | ME → SIM | ENVELOPE CALL CONTROL 1.3.1A or ENVELOPE CALL CONTROL 1.3.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 5 | SIM → ME | 9F 02 | |
| 6 | ME → SIM | GET RESPONSE | |
| 7 | SIM → ME | CALL CONTROL RESULT 1.3.1 | [Call control result: "Allowed, no modification"] |
| 8 | ME → USER | ME displays "+012340123456" during user confirmation phase. | |
| 9 | USER → ME | The user confirms the call set up | [user confirmation] |
| 10 | ME → SS | The ME sets up the call without modification | [Set up call to "+012340123456"] |
| 11 | ME → SIM | 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: SIM
 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: SIM
 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)
 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 | F1 | 10 |
| | 00 | 01 | 00 | 01 | Note 4 | | | | | | |

ENVELOPE CALL CONTROL 1.3.1B

Logically:

Device identities
 Source device: ME
 Destination device: SIM
 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.

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: SIM

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 SIM , set up call attempt by user, not allowed)

| Step | Direction | Message / Action | Comments |
|------|-----------|---|--|
| 1 | User → ME | Set up a call to "+01234567890123456789" | |
| 2 | ME → SIM | ENVELOPE CALL CONTROL 1.4.1 A or ENVELOPE CALL CONTROL 1.4.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 02 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 1.4.1 | [Call control result: "not Allowed"] |
| 6 | ME → SS | The ME does not set up the call | |

ENVELOPE CALL CONTROL 1.4.1A

Logically:

Device identities

Source device: ME
Destination device: SIM

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)

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 |
| | F1 | 10 | 00 | 01 | 00 | 01 | Note 4 | | | | | |

ENVELOPE CALL CONTROL 1.4.1B

Logically:

Device identities

Source device: ME
Destination device: SIM

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.

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 SIM , set up call attempt resulting from a set up call proactive command, not allowed)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → 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→SIM | FETCH | |
| 3 | SIM → 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 → SIM | ENVELOPE CALL CONTROL 1.5.1A or ENVELOPE CALL CONTROL 1.5.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 7 | SIM → ME | 9F 02 | |
| 8 | ME → SIM | GET RESPONSE | |
| 9 | SIM → ME | CALL CONTROL RESULT 1.5.1 | [Call control result: "Not Allowed"] |
| 10 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 1.5.1 | [Permanent Problem - Interaction with Call Control by SIM] |
| 11 | ME → SS | The ME does not set up the call | |

Expected Sequence 1.5 B (CALL CONTROL BY SIM , set up call attempt resulting from a set up call proactive command, not allowed)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → 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→SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP CALL 1.5.1 | [Set up call to "+012340123456"] |
| 4 | ME → SIM | ENVELOPE CALL CONTROL 1.5.1A or ENVELOPE CALL CONTROL 1.5.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 5 | SIM → ME | 9F 02 | |
| 6 | ME → SIM | GET RESPONSE | |
| 7 | SIM → ME | CALL CONTROL RESULT 1.5.1 | [Call control result: "Not Allowed"] [No user confirmation phase because Call Control has disallowed the request] |
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 1.5.1 | [Permanent Problem - Interaction with Call Control by SIM] |
| 9 | ME → SS | 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: SIM
 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: SIM

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)

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 | F1 | 10 |
| | 00 | 01 | 00 | 01 | Note 4 | | | | | | |

ENVELOPE CALL CONTROL 1.5.1B

Logically:

Device identities

Source device: ME
 Destination device: SIM

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

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: SIM

Result

General Result: Interaction with call control by SIM or MO short message control by SIM, 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 SIM , 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 → SIM | ENVELOPE CALL CONTROL 1.6.1 A or ENVELOPE CALL CONTROL 1.6.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 08 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 1.6.1 | [Call control result: "Allowed with modifications",] |
| 6 | ME → SS | The ME sets up the call to "+010203" | |

ENVELOPE CALL CONTROL 1.6.1A

Logically:

Device identities

Source device: ME
 Destination device: SIM

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)

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 |
| | F1 | 10 | 00 | 01 | 00 | 01 | Note 4 | | | | | |

ENVELOPE CALL CONTROL 1.6.1B

Logically:

Device identities

Source device: ME
 Destination device: SIM

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.

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 SIM, set up call attempt resulting from a set up call proactive command, allowed with modifications)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → 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→SIM | FETCH | |
| 3 | SIM → 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 → SIM | ENVELOPE CALL CONTROL 1.7.1A or ENVELOPE CALL CONTROL 1.7.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 7 | SIM → ME | 9F 0B | |
| 8 | ME → SIM | GET RESPONSE | |
| 9 | SIM → ME | CALL CONTROL RESULT 1.7.1 | [Call control result: "Allowed with modifications"] |
| 10 | ME → SS | The ME sets up the call to "+011111111111" | |
| 11 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 1.7.1 | [command performed successfully] |

Expected Sequence 1.7 B (CALL CONTROL BY SIM, set up call attempt resulting from a set up call proactive command, allowed with modifications)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → 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→SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP CALL 1.7.1 | [Set up call to "+012340123456"] |
| 4 | ME → SIM | ENVELOPE CALL CONTROL 1.7.1A or ENVELOPE CALL CONTROL 1.7.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 5 | SIM → ME | 9F 0B | |
| 6 | ME → SIM | GET RESPONSE | |
| 7 | SIM → ME | CALL CONTROL RESULT 1.7.1 | [Call control result: "Allowed with modifications"] |
| 8 | ME → USER | ME displays "+012340123456" during user confirmation phase. | |
| 9 | USER → ME | The user confirms the call set up | [user confirmation] |
| 10 | ME → SS | The ME sets up the call to "+011111111111" | [call is set up to modified address] |
| 11 | ME → SIM | 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: SIM
 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: SIM

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)

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 | F1 | 10 |
| | 00 | 01 | 00 | 01 | Note 4 | | | | | | |

ENVELOPE CALL CONTROL 1.7.1B

Logically:

Device identities

Source device: ME
 Destination device: SIM

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.

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: SIM

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 SIM , 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 → SIM | ENVELOPE CALL CONTROL 1.8.1A or ENVELOPE CALL CONTROL 1.8.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 07 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 1.8.1 | [Call control result: "Allowed with modifications"] |
| 6 | ME → SS | The ME sets up an emergency call; | |

ENVELOPE CALL CONTROL 1.8.1A

Logically:

Device identities

Source device: ME

Destination device: SIM

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)

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 |
| | F1 | 10 | 00 | 01 | 00 | 01 | Note 4 | | | | | |

ENVELOPE CALL CONTROL 1.8.1B

Logically:

Device identities

Source device: ME

Destination device: SIM

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.

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 SIM , 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 → SIM | ENVELOPE CALL CONTROL 1.9.1A or ENVELOPE CALL CONTROL 1.9.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 07 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 1.9.1 | [Call control result: "Allowed with modifications"] |
| 6 | ME → SS | 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: SIM

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)

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 |
| | F1 | 10 | 00 | 01 | 00 | 01 | Note 4 | | | | | |

ENVELOPE CALL CONTROL 1.9.1B

Logically:

Device identities

Source device: ME
 Destination device: SIM

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.

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 SIM , 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 → SIM | The ME does not send any ENVELOPE CALL CONTROL | |
| 3 | ME → SS | The ME sets up an emergency call | |

Expected Sequence 1.11 (CALL CONTROL BY SIM , set up call through call register, the SIM 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 → SIM | ENVELOPE CALL CONTROL 1.1.1A or ENVELOPE CALL CONTROL 1.1.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 90 00 | |
| 4 | ME → SS | 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 → SIM | ENVELOPE CALL CONTROL 1.1.1A or ENVELOPE CALL CONTROL 1.1.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 8 | SIM → ME | 90 00 | |
| 9 | ME → SS | 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 SIM , 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 → SIM | ENVELOPE CALL CONTROL 1.2.1A or ENVELOPE CALL CONTROL 1.2.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 02 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 1.2.1 | [Call control result: "Allowed, no modification"] |
| 6 | ME → SS | The ME sets up the call without modification | [Set up call to "+01234567890123456789"] |
| 7 | User → ME | End the call then call the last dialled number | |
| 8 | ME → SIM | ENVELOPE CALL CONTROL 1.2.1A or ENVELOPE CALL CONTROL 1.2.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 9 | SIM → ME | 9F 02 | [Call control result: "Allowed, no modification"] |
| 10 | ME → SIM | GET RESPONSE | |
| 11 | SIM → ME | CALL CONTROL RESULT 1.2.1 | |
| 12 | ME → SS | The ME sets up the call without modification | [Set up call to "+01234567890123456789"] |

Expected Sequence 1.13 (CALL CONTROL BY SIM , 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 → SIM | ENVELOPE CALL CONTROL 1.4.1A or ENVELOPE CALL CONTROL 1.4.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 02 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 1.4.1 | [Call control result: "not Allowed"] |
| 6 | ME → SS | The ME does not set up the call | |
| 7 | User → ME | The user calls the last dialled number | |
| 8 | ME → SIM | ENVELOPE CALL CONTROL 1.4.1A or ENVELOPE CALL CONTROL 1.4.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 9 | SIM → ME | 9F 02 | |
| 10 | ME → SIM | GET RESPONSE | |
| 11 | SIM → ME | CALL CONTROL RESULT 1.4.1 | [Call control result: "not Allowed"] |
| 12 | ME → SS | The ME does not set up the call | |

Expected Sequence 1.14 (CALL CONTROL BY SIM , 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 → SIM | ENVELOPE CALL CONTROL 1.6.1A or ENVELOPE CALL CONTROL 1.6.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 08 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 1.6.1 | [Call control result: "Allowed with modifications"] |
| 6 | ME → SS | The ME sets up the call to "+010203" | |
| 7 | User → ME | End the call and then set up a call to "+01234567890123456789" | |
| 8 | ME → SIM | ENVELOPE CALL CONTROL 1.6.1A or ENVELOPE CALL CONTROL 1.6.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 9 | SIM → ME | 9F 08 | |
| 10 | ME → SIM | GET RESPONSE | |
| 11 | SIM → ME | CALL CONTROL RESULT 1.6.1 | [Call control result: "Allowed with modifications"] |
| 12 | ME → SS | 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 11.14 [15] clause 9.1.2.

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 SIM, using the ENVELOPE (CALL CONTROL) command.

To verify that, if the SIM responds with '90 00', the ME shall send the supplementary service operation with the information as sent to the SIM.

To verify that, if the SIM responds with '9F XX', the ME shall use the GET RESPONSE command to get the response data. The response data from the SIM shall indicate to the ME whether to send the supplementary service operation as proposed, not send the SS operation, or instead send the SS operation using the data supplied by the SIM.

27.22.6.2.4 Method of tests

27.22.6.2.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

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 exception:

The call control service is allocated and activated in the SIM Service Table.

The GSM 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 SIM , send SS, the SIM 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 → SIM | ENVELOPE CALL CONTROL 2.1.1A or ENVELOPE CALL CONTROL 2.1.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 90 00 | |
| 4 | ME → SS | REGISTER 2.1A or REGISTER 2.1B | [The ME sends the supplementary service operation with the information as sent to the SIM] |
| 5 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 2.1 | |

ENVELOPE CALL CONTROL 2.1.1A

Logically:

Device identities

Source device: ME
 Destination device: SIM
 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)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 14 | 82 | 02 | 82 | 81 | 89 | 05 | FF | 2A | A1 | 1A |
| | B0 | 13 | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | |

ENVELOPE CALL CONTROL 2.1.1B

Logically:

Device identities
 Source device: ME
 Destination device: SIM
 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 SIM , 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 → SIM | ENVELOPE CALL CONTROL 2.2.1A or ENVELOPE CALL CONTROL 2.2.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 02 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 2.2.1 | [Call control result: "Allowed without modifications"] |
| 6 | ME → SS | REGISTER 2.1A or REGISTER 2.1B | The ME sends the supplementary service operation with the information as sent to the SIM |
| 7 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 2.1 | |

ENVELOPE CALL CONTROL 2.2.1A

Logically:

- Device identities
 - Source device: ME
 - Destination device: SIM
- 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)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 14 | 82 | 02 | 82 | 81 | 89 | 05 | FF | 2A | A1 | 1A |
| | B0 | 13 | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | |

ENVELOPE CALL CONTROL 2.2.1B

Logically:

Device identities

Source device: ME
 Destination device: SIM

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 SIM , 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 → SIM | ENVELOPE CALL CONTROL 2.3.1A or ENVELOPE CALL CONTROL 2.3.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 02 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 2.3.1 | [Call control result: "Not Allowed"] |
| 6 | ME → SS | The ME does not send the supplementary service operation | |

ENVELOPE CALL CONTROL 2.3.1A

Logically:

Device identities

Source device: ME
Destination device: SIM

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)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 12 | 82 | 02 | 82 | 81 | 89 | 03 | FF | 2A | B1 | 13 |
| | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | | | |

ENVELOPE CALL CONTROL 2.3.1B

Logically:

Device identities

Source device: ME
Destination device: SIM

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 SIM , 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 → SIM | ENVELOPE CALL CONTROL 2.4.1A or ENVELOPE CALL CONTROL 2.4.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 07 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 2.4.1 | [Call control result: "Allowed with modifications"] |
| 6 | ME → SS | REGISTER 2.4A or REGISTER 2.4B | [The ME sends the supplementary service operation with the information as sent by the SIM] |
| 7 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 2.4 | |

ENVELOPE CALL CONTROL 2.4.1A

Logically:

Device identities

Source device: ME
Destination device: SIM

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)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 12 | 82 | 02 | 82 | 81 | 89 | 03 | FF | 2A | B1 | 13 |
| | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | | | |

ENVELOPE CALL CONTROL 2.4.1B

Logically:

Device identities

Source device: ME
Destination device: SIM

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:

| | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|
| Coding | 02 | 06 | 89 | 04 | FF | BA | 12 | FB |
|--------|----|----|----|----|----|----|----|----|

REGISTER 2.4A

Logically (only SS argument):

| |
|---------------------------------|
| INTERROGATE SS ARGUMENT |
| SS-Code |
| - Call Forwarding Unconditional |

Coding:

| | | | | | |
|--------|----|----|----|----|----|
| Coding | 30 | 03 | 04 | 01 | 21 |
|--------|----|----|----|----|----|

REGISTER 2.4B

Logically (only SS argument):

| |
|---------------------------------|
| INTERROGATE SS ARGUMENT |
| SS-Code |
| - Call Forwarding Unconditional |
| - longFTN Supported |

Coding:

| | | | | | | | |
|--------|----|----|----|----|----|----|----|
| Coding | 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:

| | | | | | | | | |
|--------|----|----|----|--|--|--|--|--|
| Coding | 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 11.14 [15] clause 9.1.4.

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 SIM, using the ENVELOPE (CALL CONTROL) command.

To verify that, if the SIM responds with "allowed, no modification", the ME shall set up the call as proposed.

To verify that, if the SIM responds with "not allowed", the ME shall not set up the call.

To verify that, if the SIM responds with "allowed with modifications", the ME shall set up the call in accordance with the response from the SIM. 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 SIM Simulator and the System Simulator.

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 allocated and activated in the SIM Service Table.

Fixed Dialling Number service is enabled.

The GSM 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 SIM , 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 → SIM | The ME does not send the ENVELOPE (CALL CONTROL) command to the SIM. | |
| 3 | ME → SS | The ME does not set up the call. | |

Expected Sequence 3.2 (CALL CONTROL BY SIM , set up a call in EF_{FDN} , the SIM responds with '90 00')

| Step | Direction | Message / Action | Comments |
|------|-----------|--|--|
| 1 | User → ME | The user sets up a call to "123" | |
| 2 | ME → SIM | ENVELOPE CALL CONTROL 3.2.1A or ENVELOPE CALL CONTROL 3.2.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 90 00 | |
| 4 | ME → SS | 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: SIM

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)

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 | F1 | 10 | 00 | 01 | 00 | 01 | Note 4 | |

ENVELOPE CALL CONTROL 3.2.1B

Logically:

Device identities

Source device: ME

Destination device: SIM
 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.

Expected Sequence 3.3 (CALL CONTROL BY SIM , 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 → SIM | ENVELOPE CALL CONTROL 3.3.1A or ENVELOPE CALL CONTROL 3.3.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 02 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 3.3.1 | [Call control result: "Allowed without modifications"] |
| 6 | ME → SS | 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: SIM
 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)

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 | F1 | 10 | 00 | 01 | 00 | 01 | Note 4 | |

ENVELOPE CALL CONTROL 3.3.1B

Logically:

Device identities

Source device: ME
 Destination device: SIM

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

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 SIM , 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 → SIM | ENVELOPE CALL CONTROL 3.4.1A or ENVELOPE CALL CONTROL 3.4.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 02 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 3.4.1 | [Call control result: "Not Allowed"] |
| 6 | ME → SS | The ME does not set up the call | |

ENVELOPE CALL CONTROL 3.4.1A

Logically:

Device identities

Source device: ME
Destination device: SIM

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)

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 | F1 | 10 | 00 | 01 | 00 | 01 | Note 4 | |

ENVELOPE CALL CONTROL 3.4.1B

Logically:

Device identities

Source device: ME
Destination device: SIM

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.

CALL CONTROL RESULT 3.4.1

Logically:

Call control result Not Allowed

Coding:

| | | |
|----------|----|----|
| BER-TLV: | 01 | 00 |
|----------|----|----|

Expected Sequence 3.5 (CALL CONTROL BY SIM , 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 → SIM | ENVELOPE CALL CONTROL 3.5.1A or ENVELOPE CALL CONTROL 3.5.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 07 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 3.5.1 | [Call control result: "Allowed with modifications"] |
| 6 | ME → SS | The ME sets up the call with data sent by the SIM | [Set up call to "3333"] |

ENVELOPE CALL CONTROL 3.5.1A

Logically:

Device identities

Source device: ME

Destination device: SIM

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)

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 | F1 | 10 | 00 | 01 | 00 | 01 | Note 4 | |

ENVELOPE CALL CONTROL 3.5.1B

Logically:

Device identities

Source device: ME
Destination device: SIM

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.

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

See clause 3.2.2.

27.22.6.4.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in:

- TS 11.14 [15] clause 9.1.5.

27.22.6.4.3 Test purpose

To verify that, if Barred Dialling Number service is enabled, the ME checks the number entered through the MMI against EF_{BDN} .

To verify that, if the SIM responds with "not allowed", the ME does not set up the call.

To verify that, if the SIM responds with "allowed, no modification", the ME shall set up the call (or the supplementary service operation) as proposed.

To verify that, if the SIM responds with "allowed with modifications", the ME sets up the call in accordance with the response from the SIM. 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.

27.22.6.4.4 Method of tests

27.22.6.4.4.1 Initial conditions

The ME is connected to the SIM Simulator and the Systems Simulator.

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 allocated and activated in the SIM Service Table.

Barred Dialling Number service is enabled.

Prior to the execution of expected sequence 4.4 the FDN service shall be enabled.

The GSM 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 SIM , set up a call in EF_{BDN})

| Step | Direction | Message / Action | Comments |
|------|-----------|--|--|
| 1 | User → ME | The user sets up a call to "321" | |
| 2 | ME → SIM | ENVELOPE CALL CONTROL 4.1.1A or ENVELOPE CALL CONTROL 4.1.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 02 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 4.1.1 | [Call control result: "Not Allowed"] |
| 6 | ME → SS | The ME does not set up the call | |

ENVELOPE CALL CONTROL 4.1.1A

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "321"

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)

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 | 23 | F1 | Note 2 |
| | Note 3 | 13 | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | Note 4 | |

ENVELOPE CALL CONTROL 4.1.1B

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "321"

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 | 23 | F1 | 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.

CALL CONTROL RESULT 4.1.1

Logically:

Call control result Not Allowed

Coding:

| | | |
|----------|----|----|
| BER-TLV: | 01 | 00 |
|----------|----|----|

Expected Sequence 4.2 (CALL CONTROL BY SIM , set up a call not in EF_{BDN} , Allowed without modifications)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|--|
| 1 | User → ME | The user sets up a call to "1234" | |
| 2 | ME → SIM | ENVELOPE CALL CONTROL 4.2.1A or ENVELOPE CALL CONTROL 4.2.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 02 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 4.2.1 | [Call control result: "Allowed without modifications"] |
| 6 | ME → SS | The ME sets up the call without modification | [Set up call to "1234"] |

ENVELOPE CALL CONTROL 4.2.1A

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "1234"

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)

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 | 43 | Note 2 |
| | Note 3 | 13 | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | Note 4 | |

ENVELOPE CALL CONTROL 4.2.1B

Logically:

Device identities

Source device: ME
 Destination device: SIM

Address

TON Unknown
 NPI "ISDN / telephone numbering plan"
 Dialling number string "1234"

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 | 43 | 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.

CALL CONTROL RESULT 4.2.1

Logically:

Call control result Allowed, no modifications

Coding:

| | | |
|----------|----|----|
| BER-TLV: | 00 | 00 |
|----------|----|----|

Expected Sequence 4.3 (CALL CONTROL BY SIM , set up a call not in EF_{BDN} , Allowed with modifications)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|--|
| 1 | User → ME | The user sets up a call to "1111" | |
| 2 | ME → SIM | ENVELOPE CALL CONTROL 4.3.1A or ENVELOPE CALL CONTROL 4.3.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 07 | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 4.3.1 | [Call control result: "Allowed with modifications"] |
| 6 | ME → SS | The ME sets up the call with data sent by the SIM | [Set up call to "2222"] |

ENVELOPE CALL CONTROL 4.3.1A

Logically:

Device identities

Source device: ME
Destination device: SIM

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.

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)

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 |
| | Note 3 | 13 | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | Note 4 | |

ENVELOPE CALL CONTROL 4.3.1B

Logically:

Device identities

Source device: ME
Destination device: SIM

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.

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 | 11 | 11 | 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.

CALL CONTROL RESULT 4.3.1

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 4.4 (CALL CONTROL BY SIM , 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 → SIM | ENVELOPE CALL CONTROL 4.4.1A Or ENVELOPE CALL CONTROL 4.4.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 9F 0A | |
| 4 | ME → SIM | GET RESPONSE | |
| 5 | SIM → ME | CALL CONTROL RESULT 4.4.1 | [Call control result: "Allowed with modifications"] |
| 6 | ME → SS | The ME sets up the call with data sent by the SIM | [Set up call to "987654321"the ME does not re-check this modified number against the FDN list] |

ENVELOPE CALL CONTROL 4.4.1A

Logically:

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

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)

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 | F1 | 10 | 00 | 01 | 00 | 01 | Note 4 | |

ENVELOPE CALL CONTROL 4.4.1B

Logically:

Device identities

Source device: ME
 Destination device: SIM

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.

CALL CONTROL RESULT 4.4.1

Logically:

Call control result Allowed with modifications

Address

TON Unknown
 NPI "ISDN / telephone numbering plan"
 Address value "987654321"

Coding:

| | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 02 | 08 | 86 | 06 | 81 | 89 | 67 | 45 | 23 | F1 |
|----------|----|----|----|----|----|----|----|----|----|----|

27.22.6.4.5 Test requirement

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

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 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.1 and clause 12.25.

27.22.7.1.1.3 Test purpose

To verify that the ME informs the SIM 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 SIM Simulator and the System Simulator.

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | |
| 5 | SS → ME | CALL SET UP without CLI | [MT Call Set Up Without CLI] |
| 6 | ME → SIM | ENVELOPE: EVENT DOWNLOAD - MT Call 1.1.1 | |
| 7 | SS → ME | CALL DISCONNECT | |
| 8 | SS → ME | CALL SET UP with CLI | [MT Call Set Up With CLI] |
| 9 | ME → SIM | ENVELOPE: EVENT DOWNLOAD - MT Call 1.1.2 | |
| 10 | SS → 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: SIM
 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: SIM

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: SIM

Transaction identifier:

Ti value: 0 (bit 5-7)
 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: SIM

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"

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 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.2 and clause 12.25.

27.22.7.2.1.3 Test purpose

To verify that the ME informs the SIM that an Event: Call Connected has occurred using the ENVELOPE (EVENT DOWNLOAD -Call Connected) command.

27.22.7.2.1.4 Method of test

27.22.7.2.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | [EVENT: Call Connected active] |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | |
| 5 | SS → ME | SETUP | [MT Call] Ti = 0 |
| 6 | USER → ME | Accept Call Set Up | |
| 7 | ME→SS | CONNECT | |
| 8 | ME → SIM | ENVELOPE: EVENT DOWNLOAD - Call Connected 1.1.1 | |
| 9 | SS → ME | DISCONNECT | |
| 10 | USER → ME | Initiate Call to "123" | |
| 11 | ME → SS | SETUP | [MO Call] Ti = 0 |
| 12 | SS → ME | CONNECT | |
| 13 | ME → SIM | ENVELOPE: EVENT DOWNLOAD - Call Connected 1.1.2 | |
| 14 | USER → ME | End Call | |
| 15 | ME → SS | 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: SIM
 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: SIM

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: SIM
 Transaction identifier:
 Ti value: 0 (bit 5-7)
 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: SIM
 Transaction identifier:
 Ti value: 0 (bit 5-7)
 Ti flag: 1 (bit 8)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 19 | 01 | 01 | 82 | 02 | 83 | 81 | 1C | 01 | 80 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.7.2.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

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 SIM Command as defined in:

- TS 11.14 [15] clause 11.2.2, clause 6.4.13 and clause 6.6.12.

27.22.7.2.2.3 Test purpose

To verify that the ME informs the SIM 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 SIM Simulator and the System Simulator.

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 2.1.1 | [EVENT: Call Connected active] |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 2.1.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING | |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → 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 → SS | SETUP | Ti=0 |
| 11 | SS → ME | CONNECT | |
| 12 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 2.1.1 | |
| 13 | ME → SIM | 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: SIM
 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: SIM
 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: SIM
 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: SIM
 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: SIM
 Transaction identifier:
 Ti value: 0 (bit 5-7)

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 1.1'.

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 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.3 and clause 12.25.

27.22.7.3.1.3 Test purpose

To verify that the ME informs the SIM 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 SIM Simulator and the System Simulator.

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | [EVENT: Call Disconnected active] |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | |
| 5 | SS → ME | SETUP | [incoming call] Ti=0 |
| 6 | USER → ME | Accept Call Set Up | |
| 7 | SS → ME | RELEASE | [MT RELEASE] |
| 8 | ME → SIM | ENVELOPE: CALL DISCONNECTED 1.1.1 | |
| 9 | SS → ME | SETUP | [incoming call] Ti=0 |
| 10 | USER → ME | Accept Call Set Up | |
| 11 | SS → ME | RELEASE COMPLETE | [MT RELEASE COMPLETE] |
| 12 | ME → SIM | ENVELOPE: CALL DISCONNECTED 1.1.1 | |
| 13 | SS → ME | SETUP | [incoming call] Ti=0 |
| 14 | USER → ME | Accept Call Set Up | |
| 15 | USER → ME | End Call | |
| 16 | ME → SS | DISCONNECT | [MO DISCONNECT] |
| 17 | ME → SIM | ENVELOPE: CALL DISCONNECTED 1.1.2A or ENVELOPE: CALL DISCONNECTED 1.1.2B or ENVELOPE: CALL DISCONNECTED 1.1.2C | |
| 18 | SS → ME | SETUP | [incoming call] Ti=0 |
| 19 | USER → ME | Accept Call Set Up | |
| 20 | SS → ME | DISCONNECT | [MT DISCONNECT + CAUSE: normal call clearing] |
| 21 | ME → SIM | ENVELOPE: CALL DISCONNECTED 1.1.3A or ENVELOPE: CALL DISCONNECTED 1.1.3B | |
| 22 | SS → ME | SETUP | Ti=0 |
| 23 | USER → ME | Accept Call Set Up | |
| 24 | SS | TX POWER to XX | [RADIO LINK FAILURE] |
| 25 | ME → SIM | 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: SIM

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: SIM
 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: SIM
 Transaction identifier:
 Ti value: 0 (bit 5-7)
 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: SIM
 Transaction identifier:
 Ti value: 0 (bit 5-7)
 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: SIM
 Transaction identifier:
 Ti value: 0 (bit 5-7)
 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: SIM
 Transaction identifier:
 Ti value: 0 (bit 5-7)
 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: SIM
 Transaction identifier:
 Ti value: 0 (bit 5-7)
 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: SIM
 Transaction identifier:
 Ti value: 0 (bit 5-7)
 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: SIM
 Transaction identifier:
 Ti value: 0 (bit 5-7)
 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: SIM
 Transaction identifier:
 Ti value: 0 (bit 5-7)
 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 11.14 [15] clause 11.4 and clause 6.4.16.

27.22.7.4.1.3 Test purpose

To verify that the ME informs the SIM that an Event: MM_IDLE state has occurred using 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

The ME is connected to the SIM Simulator and the System Simulator.

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;
- 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.

27.22.7.4.1.4.2 Procedure

Expected Sequence 1.1(EVENT DOWNLOAD -LOCATION STATUS)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | |
| 5 | SS | Cell 1 is switched off | |
| 6 | ME → SIM | ENVELOPE: EVENT DOWNLOAD - Location Status 1.1.1 | |
| 7 | SS | 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 → SS | Location Updating Request | |
| 10 | SS → ME | Location updating accept | |
| 11 | ME → SIM | ENVELOPE: EVENT DOWNLOAD - Location Status 1.1.2A or ENVELOPE: EVENT DOWNLOAD - Location Status 1.1.2B | [Option A shall apply for GSM 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: SIM
 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: SIM

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: SIM
 Location status: No service

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 19 | 01 | 03 | 82 | 02 | 82 | 81 | 1B | 01 | 02 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD - LOCATION STATUS 1.1.2A

Logically:

Event list: Location status
 Device identities
 Source device: ME
 Destination device: SIM
 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)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 13 | 19 | 01 | 03 | 82 | 02 | 82 | 81 | 1B | 01 | 00 |
| | 13 | 07 | 00 | F1 | 10 | 00 | 02 | 00 | 02 | | | |

EVENT DOWNLOAD - LOCATION STATUS 1.1.2B

Logically:

Event list: Location status
 Device identities
 Source device: ME
 Destination device: SIM
 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 | | | |

27.22.7.4.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

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 11.14 [15] clause 5.2, clause 6.4.16, clause 6.8, clause 6.6.16, clause 6.11, clause 11, clause 11.5, clause 12.6 and clause 12.25.

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 SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | [set up event list: event User Activity] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | [set up event list: event User Activity] |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | [command performed successfully] |
| 5 | USER → ME | press any key | |
| 6 | ME → SIM | ENVELOPE EVENT DOWNLOAD -USER ACTIVITY 1.1.1 | |
| 7 | USER → ME | press any key | check if no envelope Event Download-User activity sending to the SIM (this event is reported once) |

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: SIM
 Destination device: ME
 Event list: User Activity

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | 04 | | | | | | | | | | |

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: SIM
 Result
 General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD -USER ACTIVITY 1.1.1

Logically:

Event list: User Activity
 Device identities
 Source device: ME
 Destination device: SIM

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 07 | 19 | 01 | 04 | 82 | 02 | 82 | 81 |
|----------|----|----|----|----|----|----|----|----|----|

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 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.1 and clause 12.25.

27.22.7.6.1.3 Test purpose

To verify that the ME informs the SIM 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 SIM Simulator and the System Simulator.

The elementary files are coded as SIM 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 System Simulator.

27.22.7.6.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD - IDLE SCREEN AVAILABLE)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | USER → ME | Select screen other than the ME idle screen | |
| 2 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | [set up event list: idle screen available] |
| 3 | ME → SIM | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | [set up event list: idle screen available] |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | [command performed successfully] |
| 6 | USER → ME | Select ME idle screen | |
| 7 | ME → SIM | ENVELOPE: IDLE SCREEN AVAILABLE 1.1.1 | |
| 8 | USER → ME | Select screen other than the ME idle screen | |
| 9 | USER → ME | Select ME idle screen | |
| 10 | ME → SIM | ENVELOPE: IDLE SCREEN AVAILABLE shall not be sent to the SIM | |

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: SIM
 Destination device: ME

Event list

Event 1: idle screen available

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | 05 | | | | | | | | | | |

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: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD - IDLE SCREEN AVAILABLE 1.1.1

Logically:

Event list: Idle screen available
 Device identities
 Source device: Display
 Destination device: SIM

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 07 | 19 | 01 | 05 | 82 | 02 | 02 | 81 |
|----------|----|----|----|----|----|----|----|----|----|

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 11.14 [15] clause 4.7, clause 4.9, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.7, clause 12.25, clause 12.33, annex G, annex H, clause 12.25 and clause 12.7.

27.22.7.7.1.3 Test purpose

To verify that the ME informs the SIM 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 SIM 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)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|-----------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | [EVENT: Card Reader Status] |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | [Successfully] |
| 5 | User → ME | Insert a card in Reader | |
| 6 | ME → SIM | ENVELOPE: CARD READER STATUS 1.1.1a or ENVELOPE: CARD READER STATUS 1.1.1b Or ENVELOPE: CARD READER STATUS 1.1.1c Or ENVELOPE: CARD READER STATUS 1.1.1d | |
| 7 | User → ME | Remove the card from Reader | |
| 8 | ME → SIM | ENVELOPE: CARD READER STATUS 1.1.2a Or ENVELOPE: CARD READER STATUS 1.1.2b Or ENVELOPE: CARD READER STATUS 1.1.2c Or ENVELOPE: CARD READER STATUS 1.1.2d | |

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: SIM
Destination device: ME

Event list

Event 1: Card Reader Status

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 |
| | 99 | 01 | 06 | | | | | | | | |

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: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1a

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME
 Destination device: SIM

Card reader status

Identity of card reader: 01
 Card reader removable: Yes
 Card reader present: Yes
 Card reader ID-1 size: Yes
 Card present in reader: Yes
 Card powered: No

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 79 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1b

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME
 Destination device: SIM

Card reader status

Identity of card reader: 01
 Card reader removable: Yes
 Card reader present: Yes
 Card reader ID-1 size: No
 Card present in reader: Yes
 Card powered: No

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 59 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1c

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME

Destination device: SIM

Card reader status

Identity of card reader: 01

Card reader removable: No

Card reader present: Yes

Card reader ID-1 size: Yes

Card present in reader: Yes

Card powered: No

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 71 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1d

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME

Destination device: SIM

Card reader status

Identity of card reader: 01

Card reader removable: No

Card reader present: Yes

Card reader ID-1 size: No

Card present in reader: Yes

Card powered: No

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 51 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2a

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME

Destination device: SIM

Card reader status

Identity of card reader: 01

Card reader removable: Yes

Card reader present: Yes

Card reader ID-1 size: Yes

Card present in reader: No

Card powered: No

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 39 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2b

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME

Destination device: SIM

Card reader status

Identity of card reader: 01

Card reader removable: Yes

Card reader present: Yes

Card reader ID-1 size: No

Card present in reader: No

Card powered: No

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 19 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2c

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME

Destination device: SIM

Card reader status

Identity of card reader: 01

Card reader removable: No

Card reader present: Yes

Card reader ID-1 size: Yes

Card present in reader: No

Card powered: No

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 31 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2d

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME

Destination device: SIM

Card reader status

Identity of card reader: 01

Card reader removable: No

Card reader present: Yes

Card reader ID-1 size: No

Card present in reader: No

Card powered: No

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

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 11.14 [15] clause 4.7, clause 4.9, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.7, clause 12.25, clause 12.33, annex G, annex H, clause 12.25 and clause 12.7.

27.22.7.7.2.3 Test purpose

To verify that the ME informs the SIM 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 SIM 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)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | [SET UP EVENT: Card Reader Status] |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | [Successfully] |
| 5 | User → ME | Attach the Card Reader to ME | |
| 6 | ME → SIM | ENVELOPE: CARD READER STATUS 2.1.1a Or ENVELOPE: CARD READER STATUS 2.1.1b | |
| 7 | User → ME | Detach the Card Reader from ME | |
| 8 | ME → SIM | ENVELOPE: CARD READER STATUS 2.1.2a Or ENVELOPE: CARD READER STATUS 2.1.2b | |

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.1a

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME

Destination device: SIM

Card reader status

Identity of card reader: 01

Card reader removable: Yes

Card reader present: Yes

Card reader ID-1 size: Yes

Card present in reader: No

Card powered: No

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 39 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.1b

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME

Destination device: SIM

Card reader status

Identity of card reader: 01

Card reader removable: Yes

Card reader present: Yes

Card reader ID-1 size: No

Card present in reader: No

Card powered: No

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 19 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.2a

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME

Destination device: SIM

Card reader status

Identity of card reader: 01

Card reader removable: Yes

Card reader present: No

Card reader ID-1 size: Yes

Card present in reader: No

Card powered: No

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 29 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.2b

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME

Destination device: SIM

Card reader status

Identity of card reader: 01

Card reader removable: Yes

Card reader present: No

Card reader ID-1 size: No

Card present in reader: No

Card powered: No

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 09 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.7.7.1.5 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 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.8 and clause 12.25.

27.22.7.8.1.3 Test purpose

To verify that the ME informs the SIM 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 SIM Simulator and the System Simulator.

The elementary files are coded as SIM 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)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | [set up event list: language selection] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | [set up event list: language selection] |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | [command performed successfully] |
| 5 | USER → ME | Change the language to German. | |
| 6 | ME → SIM | ENVELOPE: LANGUAGE SELECTION 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: SIM
 Destination device: ME

Event list

Event 1: language selection

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | 07 | | | | | | | | | | |

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: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD - LANGUAGE SELECTION 1.1.1

Logically:

Event list Language selection
 Device identities
 Source device: ME
 Destination device: SIM
 Language
 Language 'de' → 64 65 (German)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0B | 19 | 01 | 07 | 82 | 02 | 82 | 81 | 2D | 02 | 64 |
| | 65 | | | | | | | | | | | |

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 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.9, clause 12.25, clause 12.51, annex G and clause 12.7.

27.22.7.9.1.3 Test purpose

To verify that the ME informs the SIM 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 SIM Simulator and the System Simulator.

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.

27.22.7.9.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD - Browser termination)

| Step | Direction | Message / Action | Comments |
|------|-----------|---|-------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | [EVENT: Browser termination Status] |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | [Successfully] |
| 5 | User→ME | Launch the browser with URL selected by the user. | |
| 6 | ME→SS | 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→SIM | 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: SIM
 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: SIM

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: SIM
 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 11.14 [15].

Additionally the ME shall support ENVELOPE (EVENT DOWNLOAD - Data available).

27.22.7.10.3 Test purpose

To verify that the ME shall send an ENVELOPE (EVENT DOWNLOAD - Data available) to the SIM after the ME receives a packet of data from the server by the BIP channel previously opened.

27.22.7.10.4 Method of test

27.22.7.10.4.1 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 and performed the PROFILE DOWNLOAD procedure. The SIM 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 following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

Bearer Parameters

Precedence Class: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 Mean throughput class: 31
 Packet data protocol: 02 (IP)

GPRS Parameters

Network access name: TestGp.rs
 User login: UserLog
 User password: UserPwd

SIM/ME interface transport level

Transport format: UDP
 Port number: 44444
 Data destination address 01.01.01.01

27.22.7.10.4.2 Procedure

Expected sequence 1.1 (EVENT DOWNLOAD - Data available)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 | [Command performed successfully] |
| 4 | ME → USER | The ME may display channel opening information | |
| 5 | ME → SS | PDP context activation request | |
| 6 | SS → ME | PDP context activation accept | |
| 7 | ME → SIM | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | |
| 8 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 | |
| 9 | ME → SIM | FETCH | |
| 10 | SIM → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1 | |
| 11 | ME → SS | Transfer of 8 Bytes of data to the SS through channel 1 | [To retrieve ME's port number] |
| 12 | ME → SIM | TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1 | [Command performed successfully] |
| 13 | SS → ME | Data sent through the BIP channel using the ME's port number, which was retrieved in step 11 | |
| 14 | ME → SIM | 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: SIM
 Destination device: ME

Bearer

Bearer type: GPRS
 Bearer parameter:
 Precedence Class: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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)
 SIM/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 | 02 | 04 | 05 | 05 | 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: SIM

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: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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 | 02 | 04 | 05 | 05 | 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: SIM

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: 05
 Peak throughput class: 05
 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 | 05 | 05 | 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: SIM
 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: SIM

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: SIM

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 | | | | | | | | |

27.22.7.10.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

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 11.14 [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 SIM 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 SIM Simulator and the System 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.

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 following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

Bearer Parameters

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

GPRS Parameters

Network access name: TestGp.rs
User login: UserLog
User password: UserPwd

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

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 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | [EVENT: channel status] |
| 4 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | [command performed successfully] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 | |
| 8 | ME → USER | The ME may display channel opening information | |
| 9 | ME → SS | PDP context activation request | |
| 10 | SS → ME | PDP context activation accept | |
| 11 | ME → SIM | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 12 | SS → ME | Link dropped | |
| 13 | ME → SIM | 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: SIM
 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: SIM

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: SIM
 Destination device: ME

Bearer

Bearer type: GPRS
 Bearer parameter:
 Precedence Class: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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)
 SIM/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 | 02 | 04 | 05 | 05 | 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: SIM

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: 02
 Delay Class: 04
 Reliability Class: 05
 Peak throughput class: 05
 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 | 02 | 04 | 05 | 05 | 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: SIM

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: 05
 Peak throughput class: 05
 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 | 05 | 05 | 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: SIM

Channel status

Channel status: Channel 1, link dropped

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0B | 99 | 01 | 0A | 82 | 02 | 82 | 81 | B8 | 02 | 01 |
| | 05 | | | | | | | | | | | |

27.22.7.11.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.8 MO SHORT MESSAGE CONTROL BY SIM

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 11.14 [15] clause 9.2.

The ME shall also support the SEND SMS facility as specified in

- TS 11.14 [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 SIM command, the ME shall first pass the RP_destination_address of the service center and the TP_Destination_Address to the SIM, using the ENVELOPE (MO Short Message CONTROL).

To verify that if the SIM responds with '90 00', the ME shall send the SMS with the address unchanged.

To verify that if the SIM responds with '93 00', the ME shall not send the SMS and may retry the command.

To verify that if the SIM responds with '9F XX', the ME shall use the GET RESPONSE command to get the response data. The response data from the SIM shall indicate to the ME whether to send the SM as proposed, not send the SM, send the SM using the data supplied by the SIM.

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 SIM using TERMINAL RESPONSE "interaction with call control by SIM or MO short message control by SIM, 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 SIM Simulator.

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

The MO SMS control service is enabled.

The SMS service center address in the ME shall be set to '+112233445566778' prior to the execution of the tests.

The GSM 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.

27.22.8.4.2 Procedure

Expected Sequence 1.1 (MO SM CONTROL BY SIM , with Proactive command, Allowed, no modification')

| Step | Direction | Message / Action | Comments |
|------|------------|--|--|
| 1 | SIM -> ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1 | |
| 2 | ME -> SIM | FETCH | |
| 3 | SIM -> ME | PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1 | |
| 4 | ME -> USER | Display "Send SM" | [Alpha Identifier] |
| 5 | ME -> SIM | ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A Or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 6 | SIM -> ME | 9F 02 | |
| 7 | ME -> SIM | GET RESPONSE | |
| 8 | SIM -> ME | MO SMS CONTROL RESULT 1.1.1 | ['Allowed, no modification'] |
| 9 | ME -> SS | Send SMS-PP Message 1.1 | [The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.1 without modification] |
| 10 | SS -> ME | SMS RP-ACK | |
| 11 | ME -> SIM | 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: SIM
 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: SIM

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)

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 | F1 | 10 | 00 | 01 | 00 |
| | 01 | | | | | | | | | | |

ENVELOPE MO SHORT MESSAGE CONTROL 1.1.1B

Logically:

Device identities

Source device: ME
Destination device: SIM

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: SIM

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 SIM , 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 -> SIM | ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM -> ME | 9F 02 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | MO SHORT MESSAGE CONTROL RESULT 1.1.1 | ['Allowed, no modification'] |
| 6 | ME -> SS | Send SMS-PP Message 1.2 | [The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.2 without modification] |
| 7 | SS -> 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 SIM , with Proactive command, Not allowed')

| Step | Direction | Message / Action | Comments |
|------|------------|--|--|
| 1 | SIM -> ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1 | |
| 2 | ME -> SIM | FETCH | |
| 3 | SIM -> ME | PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1 | |
| 4 | ME -> USER | Display "Send SM" | [Alpha Identifier] |
| 5 | ME -> SIM | ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 6 | SIM -> ME | 9F 02 | |
| 7 | ME -> SIM | GET RESPONSE | |
| 8 | SIM -> ME | MO SHORT MESSAGE CONTROL RESULT 1.3.1 | ['not Allowed'] |
| 9 | ME -> SIM | TERMINAL RESPONSE: SEND SHORT MESSAGE 1.3.1 | [Permanent Problem - Interaction with Call Control or MO short message control by SIM] |
| 10 | ME-> SS | 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: SIM

Result

General Result: Interaction with call control or MO-SM by SIM 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 SIM , 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 -> SIM | ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM -> ME | 9F 02 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | MO SM CONTROL RESULT 1.3.1 | ['Not allowed'] |
| 6 | ME -> SS | The ME does not send the Short Message | |

Expected Sequence 1.5 (MO SM CONTROL BY SIM , with Proactive command, Allowed with modifications')

| Step | Direction | Message / Action | Comments |
|------|------------|--|--|
| 1 | SIM -> ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1 | |
| 2 | ME -> SIM | FETCH | |
| 3 | SIM -> ME | PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1 | Send SMS to '+012345678' |
| 4 | ME -> USER | Display "Send SM" | [Alpha Identifier] |
| 5 | ME -> SIM | ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 6 | SIM -> ME | 9F 15 | |
| 7 | ME -> SIM | GET RESPONSE | |
| 8 | SIM -> ME | MO SM CONTROL RESULT 1.5.1 | [Allowed with modifications'] |
| 9 | ME -> SS | 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 SIM to the changed Service Center Address '+112233445566779'] |
| 10 | SS -> ME | SMS RP-ACK | |
| 11 | ME -> SIM | 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:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 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: SIM

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 SIM , 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 -> SIM | ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM -> ME | 9F XX | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | MO SM CONTROL RESULT 1.5.1 | ['Allowed with modifications'] |
| 6 | ME-> SS | 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 SIM] to the changed Service Center Address '+112233445566779' |
| 7 | SS -> 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 SIM , with Proactive command, the SIM responds with '90 00', Allowed, no modification)

| Step | Direction | Message / Action | Comments |
|------|------------|--|---|
| 1 | SIM -> ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1 | |
| 2 | ME -> SIM | FETCH | |
| 3 | SIM -> ME | PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1 | Send SMS to '+012345678' |
| 4 | ME -> USER | Display "Send SM" | [Alpha Identifier] |
| 5 | ME -> SIM | ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 6 | SIM -> ME | 90 00 | |
| 7 | ME -> SS | Send SMS-PP | [The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.1 without modification] |
| 8 | SS -> ME | SMS RP-ACK | |
| 9 | ME -> SIM | TERMINAL RESPONSE: SEND SHORT MESSAGE 1.1.1 | |

Expected Sequence 1.8 (MO SM CONTROL BY SIM , Send Short Message attempt by user, the SIM 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 → SIM | ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1 A or ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1B | [Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters] |
| 3 | SIM → ME | 90 00 | |
| 4 | ME → SS | Send SMS-PP | [The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.2 without modification] |
| 5 | SS -> ME | SMS RP-ACK | |

Expected Sequence 1.9 Void

27.22.8.5 Test requirement

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

Annex A:
Void

Annex B:
Void

Annex C:
Void

Annex D (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:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 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 E (normative): Details of terminal profile support

Table E.1: TERMINAL PROFILE support

| Item | Terminal Profile | Ref. | Release | Status | Support | Mnemonic |
|------|---|-------------|---------|--------|---------|----------------------|
| 1 | Profile Download | TS 11.14, 5 | R96 | M | | PD_Pro_Dvnl |
| 2 | SMS-PP data download | TS 11.14, 5 | R96 | M | | PD_SMS_PP |
| 3 | Cell Broadcast data download | TS 11.14, 5 | R96 | M | | PD_CB |
| 4 | Menu selection | TS 11.14, 5 | R96 | M | | PD_Menu_sel |
| 5 | '9EXX' response code for SIM data download error | TS 11.14, 5 | R97 | C224 | | PD_9EXX |
| 6 | Timer expiration | TS 11.14, 5 | R98 | M | | PD_TExpir |
| 7 | USSD string data object supported in Call Control | TS 11.14, 5 | R98 | M | | PD_CC_USSD_Str |
| 8 | Envelope Call Control always sent to the SIM during automatic redial mode | TS 11.14, 5 | R99 | C225 | | PD_CC_Auto_Redial |
| 9 | Command result | TS 11.14, 5 | R96 | M | | PD_Cmd_Res |
| 10 | Call Control by SIM | TS 11.14, 5 | R96 | M | | PD_CC |
| 11 | Cell identity included in Call Control by SIM | TS 11.14, 5 | R97 | M | | PD_CC_Cell_Id |
| 12 | MO short message control by SIM | TS 11.14, 5 | R98 | M | | PD_MO_SMS_CC |
| 13 | Handling of the alpha identifier | TS 11.14, 5 | R97 | M | | PD_Alpha_Id |
| 14 | UCS2 Entry supported | TS 11.14, 5 | R97 | C203 | | PD_UCS2_entry |
| 15 | UCS2 Display supported | TS 11.14, 5 | R97 | C204 | | PD_UCS2_Display |
| 16 | Display of the extension text | TS 11.14, 5 | R98 | C205 | | PD_Disp_Ext_Text |
| 17 | DISPLAY TEXT | TS 11.14, 5 | R96 | M | | PD_Display_Text |
| 18 | GET INKEY | TS 11.14, 5 | R96 | M | | PD_Get_Inkey |
| 19 | GET INPUT | TS 11.14, 5 | R96 | M | | PD_Get_Input |
| 20 | MORE TIME | TS 11.14, 5 | R96 | M | | PD_More_Time |
| 21 | PLAY TONE | TS 11.14, 5 | R96 | M | | PD_Play_Tone |
| 22 | POLL INTERVAL | TS 11.14, 5 | R96 | M | | PD_Poll_interval |
| 23 | POLLING OFF | TS 11.14, 5 | R96 | M | | PD_Polling_Off |
| 24 | REFRESH | TS 11.14, 5 | R96 | M | | PD_Refresh |
| 25 | SELECT ITEM | TS 11.14, 5 | R96 | M | | PD_Select_Item |
| 26 | SEND SHORT MESSAGE | TS 11.14, 5 | R96 | M | | PD_Send_SMS |
| 27 | SEND SS | TS 11.14, 5 | R96 | M | | PD_Send_SS |
| 28 | SEND USSD | TS 11.14, 5 | R98 | M | | PD_Send_USSD |
| 29 | SET UP CALL | TS 11.14, 5 | R96 | M | | PD_SetUp_Call |
| 30 | SET UP MENU | TS 11.14, 5 | R96 | M | | PD_SetUp_Menu |
| 31 | PROVIDE LOCAL INFORMATION (LOCI & IMEI) | TS 11.14, 5 | R96 | M | | PD_Provide_Local |
| 32 | PROVIDE LOCAL INFORMATION (NMR) | TS 11.14, 5 | R97 | M | | PD_Provide_Local_NMR |
| 33 | SET UP EVENT LIST | TS 11.14, 5 | R98 | M | | PD_Setup_Evt_List |
| 34 | Event: MT call | TS 11.14, 5 | R98 | M | | PD_MT_Call |
| 35 | Event: Call connected | TS 11.14, 5 | R98 | M | | PD_Call_Conn |
| 36 | Event: Call disconnected | TS 11.14, 5 | R98 | M | | PD_Call_Disc |
| 37 | Event: Location status | TS 11.14, 5 | R98 | M | | PD_Loc_Status |
| 38 | Event: User activity | TS 11.14, 5 | R98 | M | | PD_User_Act |
| 39 | Event: Idle screen available | TS 11.14, 5 | R98 | M | | PD_Idle_Scr_Avail |
| 40 | Event: Card reader status | TS 11.14, 5 | R98 | C206 | | PD_Evt_Rdr_Status |
| 41 | Event: Language selection | TS 11.14, 5 | R99 | M | | PD_Lang_Select |
| 42 | Event: Browser Termination | TS 11.14, 5 | R99 | C212 | | PD_Browser_Term |
| 43 | Event: Data available | TS 11.14, 5 | R99 | C223 | | PD_Data_Avail |

| Item | Terminal Profile | Ref. | Release | Status | Support | Mnemonic |
|------|--|-------------|---------|--------|---------|----------------------------|
| 44 | Event: Channel status | TS 11.14, 5 | R99 | C223 | | PD_Evt_Ch_Status |
| 45 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_45 |
| 46 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_46 |
| 47 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_47 |
| 48 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_48 |
| 49 | POWER ON CARD | TS 11.14, 5 | R98 | C206 | | PD_C_On |
| 50 | POWER OFF CARD | TS 11.14, 5 | R98 | C206 | | PD_C_Off |
| 51 | PERFORM CARD APDU | TS 11.14, 5 | R98 | C206 | | PD_C_APDU |
| 52 | GET READER STATUS (Card reader status) | TS 11.14, 5 | R98 | C206 | | PD_Get_Rdr_Status |
| 53 | GET READER STATUS (Card reader identifier) | TS 11.14, 5 | R99 | C208 | | PD_Get_Rdr_Id |
| 54 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_54 |
| 55 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_55 |
| 56 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_56 |
| 57 | TIMER MANAGEMENT (start, stop) | TS 11.14, 5 | R98 | M | | PD_Timer_Mgt_Start_Stop |
| 58 | TIMER MANAGEMENT (get current value) | TS 11.14, 5 | R98 | M | | PD_Timer_Val |
| 59 | PROVIDE LOCAL INFORMATION (date, time and time zone) | TS 11.14, 5 | R98 | M | | PD_Provide_Local_D_Time |
| 60 | Binary choice in GET INKEY | TS 11.14, 5 | R98 | M | | PD_Bin_Get_Inkey |
| 61 | SET UP IDLE MODE TEXT | TS 11.14, 5 | R98 | M | | PD_Stup_Id_Mod_Txt |
| 62 | RUN AT COMMAND (i.e. class "b" is supported) | TS 11.14, 5 | R98 | C209 | | PD_Run_AT |
| 63 | 2nd alpha identifier in SET UP CALL | TS 11.14, 5 | R98 | C226 | | PD_SetUp_Call_Sec_Alpha_Id |
| 64 | 2nd capability configuration parameter | TS 11.14, 5 | R98 | C210 | | PD_Cap_Conf_Param |
| 65 | Sustained DISPLAY TEXT | TS 11.14, 5 | R98 | C211 | | PD_Sustained_Displ_Txt |
| 66 | SEND DTMF command | TS 11.14, 5 | R98 | M | | PD_Send_DTMF |
| 67 | PROVIDE LOCAL INFORMATION - BCCH | TS 11.14, 5 | R98 | M | | PD_Provide_Local_BCCH_List |
| 68 | PROVIDE LOCAL INFORMATION (language) | TS 11.14, 5 | R99 | M | | PD_Provide_Local_LS |
| 69 | PROVIDE LOCAL INFORMATION (Timing Advance) | TS 11.14, 5 | R99 | M | | PD_Provide_Local_TA |
| 70 | LANGUAGE NOTIFICATION | TS 11.14, 5 | R99 | M | | PD_Lang_Notif |
| 71 | LAUNCH BROWSER | TS 11.14, 5 | R99 | C212 | | PD_Launch_Brws |
| 72 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_72 |
| 73 | Soft keys support for SELECT ITEM | TS 11.14, 5 | R99 | C213 | | PD_Softkey_Select_Item |
| 74 | Soft Keys support for SET UP MENU | TS 11.14, 5 | R99 | C213 | | PD_Softkey_SetUp_Menu |
| 75 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_75 |
| 76 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_76 |
| 77 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_77 |
| 78 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_78 |
| 79 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_79 |
| 80 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_80 |
| 81 | Maximum number of soft keys available ('FF' = RFU) | TS 11.14, 5 | R99 | C214 | | PD_Max_SoftKey |
| 82 | Maximum number of soft keys available ('FF' = RFU) | TS 11.14, 5 | R99 | C214 | | PD_Max_SoftKey |
| 83 | Maximum number of soft keys available ('FF' = RFU) | TS 11.14, 5 | R99 | C214 | | PD_Max_SoftKey |
| 84 | Maximum number of soft keys available ('FF' = RFU) | TS 11.14, 5 | R99 | C214 | | PD_Max_SoftKey |

| Item | Terminal Profile | Ref. | Release | Status | Support | Mnemonic |
|------|--|-------------|---------|--------|---------|------------------|
| 85 | Maximum number of soft keys available ('FF' = RFU) | TS 11.14, 5 | R99 | C214 | | PD_Max_SoftKey |
| 86 | Maximum number of soft keys available ('FF' = RFU) | TS 11.14, 5 | R99 | C214 | | PD_Max_SoftKey |
| 87 | Maximum number of soft keys available ('FF' = RFU) | TS 11.14, 5 | R99 | C214 | | PD_Max_SoftKey |
| 88 | Maximum number of soft keys available ('FF' = RFU) | TS 11.14, 5 | R99 | C214 | | PD_Max_SoftKey |
| 89 | OPEN CHANNEL | TS 11.14, 5 | R99 | C223 | | PD_Open_Ch |
| 90 | CLOSE CHANNEL | TS 11.14, 5 | R99 | C223 | | PD_Close_Ch |
| 91 | RECEIVE DATA | TS 11.14, 5 | R99 | C223 | | PD_Rx_Data |
| 92 | SEND DATA | TS 11.14, 5 | R99 | C223 | | PD_Send_Data |
| 93 | GET CHANNEL STATUS | TS 11.14, 5 | R99 | C223 | | PD_Get_Ch_Status |
| 94 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_94 |
| 95 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_95 |
| 96 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_96 |
| 97 | CSD supported by ME | TS 11.14, 5 | R99 | C207 | | PD_CSD |
| 98 | GPRS supported by ME | TS 11.14, 5 | R99 | C222 | | PD_GPRS |
| 99 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_99 |
| 100 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_100 |
| 101 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_101 |
| 102 | Number of channels supported by ME | TS 11.14, 5 | R99 | C227 | | PD_Nb_Channel |
| 103 | Number of channels supported by ME | TS 11.14, 5 | R99 | C227 | | PD_Nb_Channel |
| 104 | Number of channels supported by ME | TS 11.14, 5 | R99 | C227 | | PD_Nb_Channel |
| 105 | Number of characters supported down the ME | TS 11.14, 5 | R99 | C217 | | PD_Nb_Char |
| 106 | Number of characters supported down the ME | TS 11.14, 5 | R99 | C217 | | PD_Nb_Char |
| 107 | Number of characters supported down the ME | TS 11.14, 5 | R99 | C217 | | PD_Nb_Char |
| 108 | Number of characters supported down the ME | TS 11.14, 5 | R99 | C217 | | PD_Nb_Char |
| 109 | Number of characters supported down the ME | TS 11.14, 5 | R99 | C217 | | PD_Nb_Char |
| 110 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_110 |
| 111 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_111 |
| 112 | Screen Sizing Parameters | TS 11.14, 5 | R99 | C216 | | PD_Screen_Siz |
| 113 | Number of characters supported across the ME display | TS 11.14, 5 | R99 | C217 | | PD_Nb_Char_Dis |
| 114 | Number of characters supported across the ME display | TS 11.14, 5 | R99 | C217 | | PD_Nb_Char_Dis |
| 115 | Number of characters supported across the ME display | TS 11.14, 5 | R99 | C217 | | PD_Nb_Char_Dis |
| 116 | Number of characters supported across the ME display | TS 11.14, 5 | R99 | C217 | | PD_Nb_Char_Dis |
| 117 | Number of characters supported across the ME display | TS 11.14, 5 | R99 | C217 | | PD_Nb_Char_Dis |
| 118 | Number of characters supported across the ME display | TS 11.14, 5 | R99 | C217 | | PD_Nb_Char_Dis |
| 119 | Number of characters supported across the ME display | TS 11.14, 5 | R99 | C217 | | PD_Nb_Char_Dis |
| 120 | Variable size fonts Supported | TS 11.14, 5 | R99 | C217 | | PD_Var_Font |
| 121 | Display can be resized | TS 11.14, 5 | R99 | C218 | | PD_Dis_Resize |
| 122 | Text Wrapping supported | TS 11.14, 5 | R99 | C218 | | PD_Txt_Wrap |

| Item | Terminal Profile | Ref. | Release | Status | Support | Mnemonic |
|------|---|-------------|---------|--------|---------------------------------|----------------|
| 123 | Text Scrolling supported | TS 11.14, 5 | R99 | C218 | | PD_Txt_Scroll |
| 124 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_124 |
| 125 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_125 |
| 126 | Width reduction when in a menu | TS 11.14, 5 | R99 | C217 | | PD_Width_Reduc |
| 127 | Width reduction when in a menu | TS 11.14, 5 | R99 | C217 | | PD_Width_Reduc |
| 128 | Width reduction when in a menu | TS 11.14, 5 | R99 | C217 | | PD_Width_Reduc |
| 129 | TCP | TS 11.14, 5 | R99 | C220 | | PD_TCP |
| 130 | UDP | TS 11.14, 5 | R99 | C221 | | PD_UDP |
| 131 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_131 |
| 132 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_132 |
| 133 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_133 |
| 134 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_134 |
| 135 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_135 |
| 136 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_136 |
| 137 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_137 |
| 138 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_138 |
| 139 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_139 |
| 140 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_140 |
| 141 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_141 |
| 142 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_142 |
| 143 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_143 |
| 144 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_144 |
| 145 | Protocol Version | TS 11.14, 5 | R99 | TBD | | |
| 146 | Protocol Version | TS 11.14, 5 | R99 | TBD | | |
| 147 | Protocol Version | TS 11.14, 5 | R99 | TBD | | |
| 148 | Protocol Version | TS 11.14, 5 | R99 | TBD | | |
| 149 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_149 |
| 150 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_150 |
| 151 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_151 |
| 152 | RFU | TS 11.14, 5 | R96 | X | | PD_RFU_152 |
| C201 | Void | | | | -- Void | |
| C202 | Void | | | | -- Void | |
| C203 | IF A.1/3 THEN M | | | | -- O_Ucs2_Entry | |
| C204 | IF A.1/15 THEN M | | | | -- O_Ucs2_Dispatch | |
| C205 | IF A.1/4 THEN M | | | | -- O_Ext_Str | |
| C206 | IF A.1/7 THEN M | | | | -- O_Dual_Slot | |
| C207 | IF A.1/12 THEN M | | | | -- O_BIP_CSD | |
| C208 | IF (A.1/7 AND A.1/8) THEN M | | | | -- O_Dual_Slot AND O_Detach_Rdr | |
| C209 | IF A.1/9 THEN M | | | | -- O_Run_At | |
| C210 | IF A.1/1 THEN M | | | | -- O_Cap_Conf | |
| C211 | IF A.1/2 THEN M | | | | -- O_sust_text | |
| C212 | IF A.1/10 THEN M | | | | -- O_LB | |
| C213 | IF A.1/11 THEN M for at least one of the bits 1 - 2 of byte 10 | | | | -- O_Softkey | |
| C214 | IF C213 THEN M for at least one, but not for all of the bits 1 - 8 of byte 11 | | | | -- O_Softkey (parameters) | |
| C215 | Void | | | | -- Void | |
| C216 | IF A.1/13 THEN M | | | | -- O_Scr_Siz | |
| C217 | IF C216 THEN bit values "0" / "1" allowed | | | | -- O_Scr_Siz (parameters) | |
| C218 | IF A.1/14 THEN M | | | | -- O_Scr_Resiz | |
| C219 | IF C218 THEN bit values "0" / "1" allowed | | | | -- O_Scr_Resiz (parameters) | |
| C220 | IF A.1/18 THEN M | | | | -- O_TCP | |
| C221 | IF A.1/17 THEN M | | | | -- O_UDP | |
| C222 | IF A.1/21 THEN M | | | | -- O_BIP_GPRS | |
| C223 | IF (C207 OR C222) THEN M | | | | -- O_BIP_CSD OR O_BIP_GPRS | |
| C224 | IF A.1/27 THEN M | | | | -- O_9EXX | |
| C225 | IF A.1/28 THEN M | | | | -- O_CC_Auto_Redial | |
| C226 | IF A.1/29 THEN M | | | | -- O_SetUp_Call_Sec_Alpha_Id | |
| C227 | IF (C207 OR C222) THEN M for at least one of the bits 6 - 8 of byte 13 | | | | -- O_BIP_CSD OR O_BIP_GPRS | |

| Item | Terminal Profile | Ref. | Release | Status | Support | Mnemonic |
|--|------------------|------|---------|--------|---------|----------|
| Comments: This static requirement for the TERMINAL PROFILE is specifying the bit coding of this command. In the support column a "Yes" (or "Y" or "y") means bit coding "1" and a "No" (or "N" or "n") and "X" means bit coding "0" in the command. | | | | | | |

Annex F (informative): Change History

| TSG# | WG TD# | CR | Rev | Subject | New Ver |
|------------|--------|------------|-----|---|---------|
| SMG# 30 | - | - | - | Approved as release 1996 at SMG#30 | 5.0.0 |
| | | A001 | - | Corrections to SIM Application Toolkit Test Specification | 5.1.0 |
| | | | - | Version update to 5.1.1 for Publication | 5.1.1 |
| | | A002 | - | Editorial and coding corrections | 5.2.0 |
| | | A003 | - | Correction of wrong coding for SIM Application Toolkit test 27.22.4.2 | 5.3.0 |
| | | A004 | - | Corrections for Test Case 27.22.5.1 (SMS-PP Data Download) | 5.3.0 |
| | | A005 | - | Correction of wrong coding for SIM Application Toolkit 27.22 | 5.4.0 |
| | | A006 | - | Corrections for Test Case 27.22.4.7 (REFRESH) | 5.5.0 |
| | | A007 | - | Corrections for Test Case 27.22.5.2 (SMS-CB Data Download) | 5.5.0 |
| | | A008 | - | Upgrade of the MS SAT test specification to Release 99 | 8.1.0 |
| | | A010r 1 | - | Addition of Terminal Profile information, suppression of PLAY TONE Test sequence 1.2 | 8.2.0 |
| | | A011 | - | References to 11.10-1 replaced. Reference to 11.10-2 removed. | 8.3.0 |
| | | A012 | - | Corrections to Send Short Message, Sequence 1.4 | 8.4.0 |
| | | A013 | - | Redial in Set Up Call | 8.4.0 |
| | | A014 | - | Correction to Terminal Response: Set Up Call 1.7.1 | 8.4.0 |
| | | A015 | - | Select Item: Support of "No response from user" | 8.4.0 |
| | | A016 | - | Correction of Emergency Call test cases | 8.4.0 |
| | | A017 | - | Essential corrections to default values for SIM Application Toolkit testing | |
| | | A018 | - | Clarification on comprehension required flag usage | 8.5.0 |
| | | A019 | - | Essential corrections to Display text test cases | |
| | | A020 | - | Essential corrections to Get Inkey test cases | |
| | | A021 | - | Essential corrections to Get Input test cases | 8.5.0 |
| | | A022 | - | Essential corrections to Set Up Menu test cases | |
| | | A023 | - | Essential corrections to Play Tone test cases | |
| | | A024 | - | Essential corrections to Poll Intervall test case | |
| | | A025 | - | Essential corrections to Polling off test case | 8.5.0 |
| | | A026 | - | Essential corrections to Provide Local Information test cases | 8.5.0 |
| | | A027 | - | Essential corrections to Send Short message test cases | 8.5.0 |
| | | A028 | - | Essential corrections to Language Notification test cases | 8.5.0 |
| | | A029 | - | Essential corrections to Send SS test cases | |
| | | A030 | - | Essential corrections to Set Up Call test cases | 8.5.0 |
| | | A031 | - | Essential corrections to Send USSD test cases | |
| | | A032 | - | Essential correction to Set Up Idle Mode Text test cases | 8.5.0 |
| | | A033 | - | Essential corrections to Power Off Card test case | |
| | | A034 | - | Essential corrections to Perform Card APDU test cases | |
| | | A035 | - | Essential correction to Get Reader Status test cases | |
| | | A036 | - | Essential corrections to Send DTMF test cases | |
| | | A037 | - | Essential corrections to CALL CONTROL BY SIM test cases | 8.5.0 |
| | | A038 | - | Essential corrections to CALL CONTROL BY SIM (Interaction with FDN/ BDN) test cases | 8.5.0 |
| | | A039 | - | Essential corrections to Select Item test cases | |
| | | A040 | - | Essential corrections to card reader status event download test cases | |
| | | A041 | - | Essential corrections to language selection and browser termination event download test cases | 8.5.0 |
| | | A042 | - | Essential corrections to Close Channel test cases | 8.5.0 |
| | | A043 | - | Essential corrections to Launch Browser test cases | 8.5.0 |
| | | A044 | - | Essential corrections to Open Channel test cases | |
| | | A045 | - | Essential corrections to Receive Data test cases | |
| | | A046 | - | Essential corrections to Send Data test cases | |
| | | A047 | - | Essential corrections to channel status event download test case | |
| | | A048 | - | Essential corrections to Get Channel Status test cases | |
| | | A049 | - | Essential corrections to CB data download test cases | |
| | | A050 | - | Essential corrections to location status, user activity and idle screen available event download test cases | 8.5.0 |
| | | A051 | - | Corrections in the REFRESH test sequences (with inclusion of T3-030535's contents) | 8.5.0 |
| | | A052 | - | Essential corrections to test requirement references | 8.5.0 |
| | | A053 | - | Essential corrections to CALL CONTROL BY SIM (supplementary services) test case | |
| | | A054 | - | Essential corrections to MT Call, Call connected and Call disconnected event download test cases | 8.5.0 |
| | | A055 | - | Introduction of 'MO Short Message Control by SIM' envelope testing | 8.6.0 |

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|-------|-----------|------|---|--|--------|
| | | A056 | - | Re-Introduction of changes already approved at the last T3. | 8.6.0 |
| | | A057 | - | Essential corrections | 8.6.0 |
| | | A058 | - | Essential corrections to 27.22.4.14 'POLLING OFF' | 8.6.0 |
| | | A059 | - | Essential corrections to Send DTMF test cases | 8.6.0 |
| | | A060 | - | Introduction of BIP testing in GPRS | 8.6.0 |
| | | A061 | - | Correction of image instance descriptor for colour icons | 8.7.0 |
| | | A062 | - | Essential correction on Terminal Profile for the BIP Inclusion of tests on Open Channel for GPRS, on the user confirmation | 8.7.0 |
| | | A063 | - | CR 11.10-4 Launch Browser test cases | 8.7.0 |
| | | A064 | - | CR 11.10-4 R99: Essential corrections | 8.7.0 |
| | | A065 | - | CR 11.10-4 R99: Essential correction of coding convention | 8.7.0 |
| | | A071 | - | Correction of Cell Broadcast message download test | 8.8.0 |
| | | A066 | - | Essential corrections | 8.8.0 |
| | | A067 | - | Support of GSM 700, GSM 850 and PCS 1900 | 8.8.0 |
| | | A068 | - | Corrections of applicability table | 8.8.0 |
| | | A070 | - | Correction on allowing optional parameters in ENVELOPE(CALL CONTROL) command for call set-ups when testing Call Control procedures | 8.8.0 |
| | | A069 | - | Essential corrections to Call Control test cases | 8.8.0 |
| | | A076 | - | Essential corrections of Event Download test cases | 8.9.0 |
| | | A073 | - | Essential corrections | 8.9.0 |
| | | A072 | - | Clarification of call hang up in 27.22.4.5 Play Tone | 8.9.0 |
| | | A074 | - | Removal of misleading comment from Refresh SIM Reset tests | 8.9.0 |
| | | A075 | - | Correction of poll interval related tests | 8.9.0 |
| | | A077 | - | Correction of Send Short Message test case | 8.10.0 |
| | | A078 | - | Correction of Select Item test case | 8.10.0 |
| | | A079 | - | Correction of Language Notification test case | 8.10.0 |
| | | A080 | - | Correction of Select Item (Next action identifier) test case | 8.10.0 |
| | | A081 | - | Correction of PROFILE DOWNLOAD test case – incorrect P2 | 8.10.0 |
| | | A082 | - | Correction of CALL CONTROL test cases | 8.10.0 |
| | | A083 | - | Incorrect specification of file codings | 8.10.0 |
| | | A084 | - | Correction of Refresh test case | 8.10.0 |
| | | A085 | - | Correction of MO SM CONTROL BY SIM test case | 8.10.0 |
| | | A086 | - | Correction of Errors | 8.10.0 |
| | | A087 | - | Clarification of PLAY TONE test case | 8.10.0 |
| | | A088 | - | Clarification of RECEIVE DATA test case | 8.10.0 |
| | | A089 | - | Corrections for Test Case 27.22.5.1 (SMS-PP Data Download) | 8.10.0 |
| | | A090 | - | Modification of 27.22.1 PROFILE DOWNLOAD | 8.10.0 |
| | | A091 | - | Correction of Set Up Idle Mode Text test case | 8.10.0 |
| | | A092 | - | Correction of Timer Management test cases | 8.10.0 |
| | | A093 | - | Essential Corrections on Launch Browser | 8.10.0 |
| TP-27 | T3-050096 | A094 | - | Correction of terminal profile test | 8.11.0 |
| TP-27 | T3-050097 | A095 | - | Correction of Set Up Call test | 8.11.0 |
| TP-27 | T3-050098 | A096 | - | Essential Corrections | 8.11.0 |
| TP-27 | T3-050099 | A097 | - | Correction of Call Connected Event test | 8.11.0 |
| TP-27 | T3-050100 | A098 | - | Correction of Call Control test cases | 8.11.0 |
| TP-27 | T3-050125 | A099 | - | Corrections of references | 8.11.0 |
| TP-27 | T3-050155 | A100 | - | Clarification on LAUNCH BROWSER test case | 8.11.0 |
| TP-27 | T3-050194 | A101 | - | Correction of network related tests | 8.11.0 |
| TP-27 | T3-050195 | A102 | - | Correction of Timer Management test | 8.11.0 |
| TP-27 | T3-050196 | A103 | - | Correction of coding of SS RETURN RESULT in 27.22.4.12 SEND USSD | 8.11.0 |
| TP-27 | T3-050197 | A104 | - | Correction of Expected sequence 2.4 in section 27.22.4.22.2.4 SET UP IDLE MODE TEXT (icon support) | 8.11.0 |
| TP-27 | T3-050198 | A105 | - | Correction on Timer Management test cases | 8.11.0 |
| CT-28 | C6-050354 | A106 | - | Correction of coding in MT Call Even | 8.12.0 |
| CT-28 | C6-050381 | A107 | - | Essential corrections | 8.12.0 |
| CT-28 | C6-050382 | A109 | - | Too many digits in PCS 1900 for the Called Party BCD number | 8.12.0 |
| CT-29 | C6-050629 | A110 | - | CR 11.10-4: Correction of applicability and terminal profile support tables | 8.13.0 |
| CT-29 | C6-050631 | A111 | - | CR 11.10-4: Correction of Refresh tests | 8.13.0 |
| CT-29 | C6-050632 | A112 | - | CR 11.10-4: Correction of EF_BDN coding | 8.13.0 |
| CT-29 | C6-050634 | A127 | - | CR 11.10-4 R99: Essential correction to Terminal Profile table E.1 | 8.13.0 |
| CT-29 | C6-050636 | A113 | - | CR 11.10-4: Incorrect Dialling Number string in clause 27.22.4.13.1 SEQ 1.9 for PCS 1900 | 8.13.0 |
| CT-29 | C6-050640 | A115 | - | CR 11.10-4: Incorrect Ti Flag value for SET UP 1.4.1 in clause 27.22.4.16.1 | 8.13.0 |
| CT-29 | C6-050642 | A116 | - | CR 11.10-4: Correction of TP-MR (TP Message Reference) of the SMS SUBMIT TPDU submitted to the SS (Network) | 8.13.0 |
| CT-29 | C6-050644 | A117 | - | CR 11.10-4: Corrections in the Logical description and BER encoding in clause 27.22.6.2 and 27.22.4.11 | 8.13.0 |
| CT-29 | C6-050646 | A118 | - | CR 11.10-4: Incorrect DCS in SMS-CB data download tests | 8.13.0 |

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|-------|-----------|------|---|---|----------------|
| CT-29 | C6-050662 | A119 | - | CR 11.10-4: Essential Corrections in clause 27.22.8 MO SHORT MESSAGE CONTROL BY SIM | 8.13.0 |
| CT-29 | C6-050664 | A120 | - | CR 11.10-4: Essential Corrections | 8.13.0 |
| CT-29 | C6-050671 | A121 | - | CR 11.10-4 R99: Essential corrections in clause 27.22.4.7.2 REFRESH (IMSI changing procedure) | 8.13.0 |
| CT-29 | C6-050672 | A122 | - | CR 11.10-4 R99: Incorrect SMS-PP 1.4.1 TPDU in clause 27.22.4.22.1 | 8.13.0 |
| CT-29 | C6-050674 | A123 | - | CR 11.10-4 R99: Missing interactions in Bearer Independent Protocol test cases | 8.13.0 |
| CT-29 | C6-050669 | A124 | - | CR 11.10-4 R99: Applicability of TC 27.22.4.7.1 and TCs related to FDN and BDN | 8.13.0 |
| CT-29 | C6-050703 | A126 | - | Correction of CB message identifier | 8.13.0 |
| CT-29 | C6-050714 | A125 | - | Essential corrections in display icons Setup Menu and Select Item | 8.13.0 |
| - | - | - | - | editorial corrections due to the CRs approved at CP-29 | 8.13.1 |
| CT-30 | CP-050483 | A114 | - | Corrections of Set Up Call (second alpha identifier) test | 8.14.0 |
| CT-30 | CP-050483 | A129 | - | Essential Corrections of Set Up Menu test | 8.14.0 |
| CT-30 | CP-050483 | A130 | - | Essential Corrections in clause 27.22.4.11 | 8.14.0 |
| CT-30 | CP-050483 | A131 | - | Corrections to Select Item (icons support) | 8.14.0 |
| CT-30 | CP-050483 | A132 | - | 27.22.7.4.1 Location Status Event (normal) | 8.14.0 |
| CT-30 | CP-050483 | A134 | - | Correction of applicability table | 8.14.0 |
| CT-30 | CP-050483 | A135 | - | Correction in SMS-PP 1.4.1 TPDU of clause 27.22.4.22.1 | 8.14.0 |
| CT-30 | CP-050483 | A136 | - | Essential Corrections of SMS-PP download message in Refresh test case | 8.14.0 |
| CT-30 | CP-050483 | A137 | - | Essential Correction in MO SHORT MESSAGE CONTROL BY SIM Deletion of sequence 1.9 | 8.14.0 |
| CT-30 | CP-050483 | A138 | - | Deletion of SEQ 1.3 in clause 27.22.4.13.1 | 8.14.0 |
| CT-31 | CP-060014 | A148 | - | Essential Corrections in clause 27.22.4.11 | 8.15.0 |
| CT-31 | CP-060014 | A151 | - | Essential Corrections in clause 27.22.8 MO SHORT MESSAGE CONTROL BY SIM | 8.15.0 |
| CT-31 | CP-060014 | A147 | - | Essential correction in SEQ 1.4 of clause 27.22.4.11.1 SEND SS (normal) | 8.15.0 |
| CT-31 | CP-060014 | A146 | - | Essential corrections of Run AT Command tests | 8.15.0 |
| CT-31 | CP-060014 | A152 | - | Essential corrections to SET UP CALL test sequences | 8.15.0 |
| CT-31 | CP-060012 | A158 | - | Essential correction of Refresh IMSI changing tests | 8.15.0 |
| CT-31 | CP-060012 | A141 | - | Essential correction of UCS2 related test case applicability | 8.15.0 |
| CT-31 | CP-060012 | A142 | - | Removal of SEQ 2.2 in clause 27.22.4.12.2 | 8.15.0 |
| CT-31 | CP-060012 | A150 | - | Essential correction of Channel Data length in SEQ 1.1 of clause 27.22.4.30 | 8.15.0 |
| CT-31 | CP-060012 | A145 | - | Essential correction of SMS-CB (data download) tests | 8.15.0 |
| CT-31 | CP-060013 | A139 | - | Deletion of Send Data test sequence | 8.15.0 |
| CT-31 | CP-060013 | A140 | - | Essential correction of Provide Local Information (IMEI) test | 8.15.0 |
| CT-31 | CP-060013 | A143 | - | Essential Correction in SEQ 1.8 of clause 27.22.8 | 8.15.0 |
| CT-31 | CP-060013 | A144 | - | Essential correction on 27.22.7.3.1 Call Disconnected Event | 8.15.0 |
| CT-31 | CP-060013 | A149 | - | Essential correction of Channel Data length in clause 27.22.4.30 | 8.15.0 |
| CT-31 | CP-060015 | A154 | - | Essential Correction in TERMINAL RESPONSE coding of clause 27.22.4.31 | 8.15.0 |
| CT-31 | CP-060015 | A156 | - | Essential corrections to Timer Expiration tests | 8.15.0 |
| CT-31 | CP-060015 | A153 | - | BER-TLV suppressions | 8.15.0 |
| CT-31 | CP-060016 | A155 | - | Creation of a new TS 51.10-4, Rel-4 specification coming from TS 11.10-4 R99 | 51.010-4v4.0.0 |
| CT-32 | CP-060236 | 0001 | - | Essential correction to prevent optional ME features being mandatorily tested | 4.1.0 |
| CT-32 | CP-060236 | 0004 | - | Essential correction of Language Selection Event test | 4.1.0 |
| CT-32 | CP-060242 | 0002 | - | Essential correction of BIP tests | 4.1.0 |
| CT-32 | CP-060242 | 0003 | - | Essential Correction in REGISTER 1.2B message coding of clause 27.22.4.11.1 SEND SS (normal) | 4.1.0 |
| CT-32 | CP-060242 | 0005 | - | Essential correction of 27.22.4.13.1 SET UP CALL, seq 1.4 | 4.1.0 |
| CT-32 | CP-060242 | 0006 | - | Essential correction of second card reader test applicability | 4.1.0 |
| CT-32 | CP-060242 | 0007 | - | Correction of TON/NPI coding for Call Control Test case | 4.1.0 |
| CT-32 | CP-060242 | 0008 | - | Essential corrections on 27.22.4.11.1 sequence. 1.2 | 4.1.0 |
| CT-33 | CP-060382 | 0016 | 1 | Essential correction of GET INPUT test | 4.2.0 |
| CT-33 | CP-060382 | 0018 | 1 | Essential correction of SEND DATA test | 4.2.0 |
| CT-33 | CP-060382 | 0019 | 1 | Correction of various typographical errors | 4.2.0 |
| CT-33 | CP-060382 | 0010 | 2 | Essential correction of BIP test cases | 4.2.0 |
| CT-33 | CP-060517 | 0012 | 1 | Essential corrections Set Up Call, seq. 1.9 | 4.2.0 |
| CT-33 | CP-060475 | 0014 | 1 | Essential corrections of MMI entries in table E.1 | 4.2.0 |
| CT-33 | CP-060475 | 0009 | 1 | Corrections to SET UP CALL test case 27.22.4.13.1 | 4.2.0 |
| CT-33 | CP-060475 | 0020 | 2 | Essential corrections to SEND SS concerning longForwardedToNumber | 4.2.0 |
| CT-33 | CP-060475 | 0017 | 2 | Corrections to MO SHORT MESSAGE CONTROL BY SIM tests | 4.2.0 |
| CT-34 | CP-060539 | 0023 | - | Essential corrections on TC 27.22.4.29, sequence 1.1 | 4.3.0 |
| CT-34 | CP-060540 | 0021 | - | Correction of APN Coding in Open Channel test case | 4.3.0 |
| CT-34 | CP-060540 | 0013 | 2 | Essential corrections of BIP entries in table E.1 | 4.3.0 |

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|-------|-----------|------|---|---|-------|
| CT-34 | CP-060540 | 0022 | 2 | Essential correction of Result TLV handling | 4.3.0 |
| CT-34 | CP-060540 | 0024 | 1 | Essential correction of expected sequence in OPEN CHANNEL test case | 4.3.0 |
| CT-35 | CP-070062 | 0032 | | Essential correction of Send USSD applicability | 4.4.0 |
| CT-35 | CP-070062 | 0030 | 1 | Essential correction of GPRS QoS parameter in BIP tests | 4.4.0 |
| CT-35 | CP-070062 | 0036 | 1 | Test execution recommendation for terminals supporting both, SAT and USAT | 4.4.0 |
| CT-35 | CP-070063 | 0029 | | Essential correction of 27.22.5.2 | 4.4.0 |
| CT-35 | CP-070063 | 0027 | 1 | Essential correction of Terminal Profile Support table | 4.4.0 |
| CT-35 | CP-070063 | 0026 | 1 | Essential correction of 27.22.4.13.1 Expected Sequence 1.7 | 4.4.0 |
| CT-36 | CP-070290 | 0037 | - | Correction of reference to ISO/IEC 7816-3 | 4.5.0 |
| CT-36 | CP-070290 | 0038 | 1 | Essential correction of test case applicability for 27.22.6.1 | 4.5.0 |
| CT-36 | CP-070290 | 0039 | 1 | Essential correction on 27.22.8 | 4.5.0 |
| - | - | - | - | MCC Table formatting throughout document (reduces page count) | 4.5.0 |
| CT-37 | CP-070609 | 0040 | - | Essential correction to 27.22.8 | 4.6.0 |
| CT-37 | CP-070610 | 0041 | 1 | Essential correction of 27.22.6.2 | 4.6.0 |
| CT-37 | CP-070610 | 0042 | - | Essential correction of 27.22.4.13.1, seq. 1.9 | 4.6.0 |
| CT-37 | CP-070609 | 0043 | - | Essential Correction to insert a missing Carriage Return | 4.6.0 |

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