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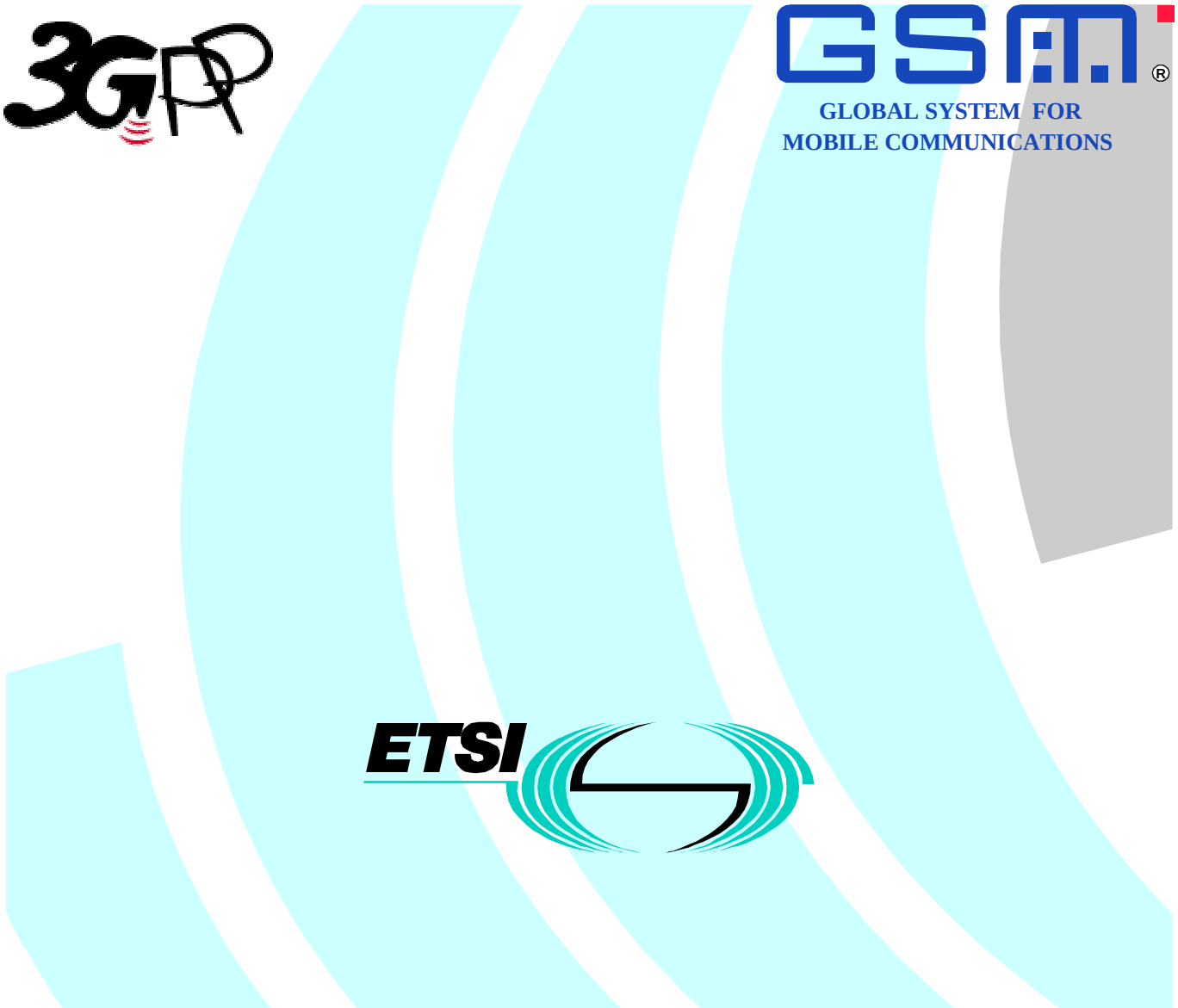
Technical Specification

Digital cellular telecommunications system (Phase 2+);
Mobile Station (MS) conformance specification;
Part 4: SIM Application Toolkit conformance specification
(3GPP TS 11.10-4 version 5.2.0 Release 1996)



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Foreword

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

The present document may refer to technical specifications or reports using their 3GPP identities, UMTS identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under www.etsi.org/key .

Contents

Foreword

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

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

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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 900 MHz and 1 800 MHz band (GSM 900 and DCS 1 800), standardized by 3GPP TSGs.

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 900 and DCS 1 800 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 test specification, and any other GSM technical specification or GSM related ETS or EN, then the other GSM technical specification or GSM related ETS or EN 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.
- For this Release 1996 document, references to GSM documents are for Release 1996 versions (version 5.x.y).

[1] GSM 01.04 version 5.0.1: "Digital cellular telecommunications system (Phase 2+); Abbreviations and acronyms".

[2] GSM 02.01 version 5.5.0: "Digital cellular telecommunications system (Phase 2+); Principles of telecommunication sevices supported by a GSM Public Land Mobile Network (PLMN)".

[3] GSM 02.03 version 5.3.2: "Digital cellular telecommunications system (Phase 2+); Teleservices supported by a GSM Public Land Mobile Network (PLMN)".

[4] GSM 02.04 version 5.7.1: "Digital cellular telecommunications system (Phase 2+); General on supplementary services".

[5] GSM 02.06 version 5.1.1: "Digital cellular telecommunications system (Phase 2+); Types of Mobile Stations (MS)".

[6] GSM 02.07 version 5.4.1: "Digital cellular telecommunications system (Phase 2+); Mobile Station (MS) features".

[7] GSM 03.38 version 5.6.1: "Digital cellular telecommunications system (Phase 2+); Alphabets and language-specific information".

[8] GSM 03.40 version 5.7.0: "Digital cellular telecommunications system (Phase 2+); Technical realization of the Short Message Service (SMS); Point-to-Point (PP)".

[9] GSM 03.41 version 5.8.1: "Digital cellular telecommunications system (Phase 2+); Technical realization of Short Message Service Cell Broadcast (SMSCB)".

[10] GSM 04.08 version 5.6.3: "Digital cellular telecommunications system (Phase 2+); Mobile radio interface layer 3 specification".

[11] GSM 04.11 version 5.2.1: "Digital cellular telecommunications system (Phase 2+); Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface".

[12] GSM 11.10-1 Version 5.9.0: "Digital cellular telecommunication system (Phase 2+); Mobile Station (MS) conformance specification; Part 1: Conformance specification".

[13] GSM 11.11 Version 5.10.1: "Digital cellular telecommunication system (Phase 2+); Specification of the Subscriber Identity Module - Mobile Equipment (SIM - ME) interface".

[14] GSM 11.12 Version 4.3.1: "Digital cellular telecommunications system (Phase 2); Specification of the 3 Volt Subscriber Identity Module - Mobile Equipment (SIM - ME) interface".

[15] GSM 11.14 version 5.9.0: "Digital cellular telecommunications system (Phase 2+); Specification of the SIM application toolkit for the Subscriber Identity Module – Mobile Equipment (SIM – ME) interface".

[16] GSM 11.10-2 Version 4.15.0: "Digital cellular telecommunication system (Phase 2); Mobile Station (MS) conformance specification; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".

3.1 Mobile station definition and configurations

The mobile station definition and configurations specified in GSM 11.10-1 [12] clause 3.1 shall apply, unless otherwise specified in the present clause.

3.2 Applicability

3.2.1 Applicability of this specification

The applicability specified in GSM 11.10-1 [12] clause 3.2.1 shall apply, unless otherwise specified in the present clause.

3.2.2 Applicability of the individual tests

The applicability of each individual test is identified in the following table.

Table 3.1: Applicability of tests

Clause	Title	Applicability
27.22.1	Initialisation of SIM Application Toolkit Enabled SIM by SIM Application Toolkit Enabled ME (Profile Download)	ME supporting SIM Application Toolkit.
27.22.2	Contents of the TERMINAL PROFILE command	ME supporting SIM Application Toolkit.
27.22.3	Servicing of Proactive SIM Commands	ME supporting the Proactive SIM facility.
27.22.4.1	Proactive SIM Command: DISPLAY TEXT	ME supporting the DISPLAY TEXT proactive SIM facility.
27.22.4.2	Proactive SIM Command: GET INKEY	ME supporting the GET INKEY proactive SIM facility.
27.22.4.3	Proactive SIM Command: GET INPUT	ME supporting the GET INPUT proactive SIM facility.
27.22.4.4	Proactive SIM Command: MORE TIME	ME supporting the MORE TIME proactive SIM facility.
27.22.4.5	Proactive SIM Command: PLAY TONE	ME supporting the PLAY TONE proactive SIM facility.
27.22.4.6	Proactive SIM Command: POLL INTERVAL	ME supporting the POLL INTERVAL proactive SIM facility.
27.22.4.7	Proactive SIM Command: REFRESH	ME supporting the REFRESH proactive SIM facility.
27.22.4.8	Proactive SIM Command: SET UP MENU	ME supporting the SET UP MENU proactive SIM facility.
27.22.4.9	Proactive SIM Command: SELECT ITEM	ME supporting the SELECT ITEM proactive SIM facility.
27.22.4.10	Proactive SIM Command: SEND SHORT MESSAGE	ME supporting the SEND SHORT MESSAGE proactive SIM facility.
27.22.4.11	Proactive SIM Command: SEND SS	ME supporting the SEND SS proactive SIM facility.
27.22.4.12	Proactive SIM Command: SEND USSD	ME supporting the SEND USSD proactive SIM facility.
27.22.4.13	Proactive SIM Command: SET UP CALL	ME supporting the SET UP CALL proactive SIM facility.
27.22.4.14	Proactive SIM Command: POLLING OFF	ME supporting the POLLING OFF proactive SIM facility.
27.22.4.15	Proactive SIM Command: PROVIDE LOCAL INFORMATION	ME supporting the PROVIDE LOCAL INFORMATION proactive SIM facility.
27.22.5.1	SMS-PP Data Download	ME supporting the SMS-PP data download facility.
27.22.5.2	SMS-CB Data Download	ME supporting the SMS-CB data download facility.
27.22.5.3	Menu Selection	ME supporting the Menu Selection facility.
27.22.6.1	Call control: Procedure for mobile originated calls	ME supporting the call control by SIM facility.
27.22.6.2	Call control: Procedure for Supplementary Services	ME supporting the call control by SIM facility.
27.22.6.3	Call control: Interaction with Fixed Dialling Number	ME supporting both the call control by SIM facility and Fixed Dialling Numbers (FDN)
27.22.6.4	Call control: Support of Barred Dialling number (BDN) service	ME supporting both the call control by SIM facility and Barred Dialling Numbers (BDN).

3.2.3 Applicability to terminal equipment

The applicability to terminal equipment specified in GSM 11.10-1 [12] clause 3.2.3 shall apply, unless otherwise specified in the present clause.

3.3 Definitions

The definitions specified in GSM 11.10-1 [12] clause 3.3 shall apply, unless otherwise specified in the present clause.

3.4 Conventions for mathematical notations

The conventions for mathematical notations specified in GSM 11.10-1 [12] clause 3.4 shall apply, unless otherwise specified in the present clause.

3.5 Conventions on electrical terms

The conventions on electrical terms specified in GSM 11.10-1 [12] clause 3.5 shall apply, unless otherwise specified in the present clause.

3.6 Terms on test conditions

The terms on test conditions specified in GSM 11.10-1 [12] clause 3.6 shall apply, unless otherwise specified in the present clause.

4 Test Equipment

The test equipment is specified in GSM 11.10-1 [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.

A declaration by the apparatus supplier (Requirement Table as given in annex A) is used to determine whether an optional function/procedure has been implemented.

5.2 Test interfaces and facilities

The test interfaces and facilities specified in GSM 11.10-1 [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 GSM 11.10-1 [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 GSM 11.10-1 [12] clause 5.4 shall apply, unless otherwise specified in the present clause.

In addition, the apparatus supplier shall provide the following information:

- information with respect to SIM Application Toolkit: Requirement Table (RT).

5.5 Definitions of transmit and receive times

The definitions of transmit and receive times specified in GSM 11.10-1 [12] clause 5.5 shall apply, unless otherwise specified in the present clause.

6 Reference test methods

The reference test methods specified in GSM 11.10-1 [12] clause 6 shall apply, unless otherwise specified.

7 Implicit testing

For some GSM features conformance is not verified explicitly in this 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:

...* Title

...*.1 Definition and applicability

This sections provides, if necessary, a definition of the feature/function being tested and the applicability of the test to different MS (e.g. speech only, data only etc.).

...*.2 Conformance requirement

This section details the core specification requirements being tested and includes any necessary core specification references.

...*.3 Test purpose

This section details the purpose of the test.

...*.4 Method of test

...*.4.1 Initial conditions

If present this section defines the initial conditions to be established before running the test.

...*.4.2 Procedure

This section details the test procedure.

...*.5 Test requirements

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

10 Generic call set up procedures

The generic call set up procedure specified in GSM 11.10-1 [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 GSM 11.10-1 [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 GSM 11.10-1 [12] clause 27 shall apply, unless otherwise specified in the present clause.

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.

27.1 - 27.21 Not used

27.22 SIM Application Toolkit

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 this specification, 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.

Testing of optional functions and procedures

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

A declaration by the apparatus supplier (requirement table) is used to determine whether an optional function/procedure has been implemented.

Definition of default values for SIM Application Toolkit testing

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

For each item, the logical default values and the coding within the elementary files (EF) of the SIM follow.

NOTE1: Bx represents byte x of the coding

NOTE2: Unless otherwise defined, the coding values are hexadecimal.

The FDN, BDN and SMS-MO Control features are disabled.

EFSST (SIM Service Table)

Logically: Abbreviated Dialling Numbers allocated and activated
Extension 1 allocated and activated
Fixed Dialling Numbers allocated and activated
Extension 2 allocated and activated
Cell Broadcast Message Identifier allocated and activated
Data download via SMS-CB allocated and activated
Data download via SMS-PP allocated and activated
Menu selection allocated and activated
Call control allocated and activated
Proactive SIM allocated and activated
Cell Broadcast Message Identifier Ranges allocated and activated
Barred Dialling Numbers allocated and activated
Extension4 allocated and activated

Coding:	B1	B2	B3	B4
	xx1111xx	xxxxxxxx	xx1111xx	xxxx11xx (binary)
	B5	B6	B7	B8
	xxxxxxxx	xxxxxxxx	11111111	11111111 (binary)
	B9			
	xxxxxxxx (binary)			

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: '0C 0C'

Coding: 0C 0C 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
Dialled 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
Dialled 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
Dialled number: 321
CCI: None
Ext4: None
Comparison Method Info: None

Coding:	B1	B2	B3	B4	...	B32	B33	B34	B35	B36	B37	...	B46
Record 1:	43	42	41	FF	...	FF	03	81	23	F1		...	FF

EF_{ECC} (Emergency Call Codes)

Logically:
Emergency Call Code 1: ’1020’

Coding:	01	02	FF

EF_{SMSP} (Short message service parameters)

Logically:

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

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

B24	B25	B26	B27	B28
FF	FF	FF	FF	FF

Definition of default values for Proactive SIM Commands

A SIM containing the following default values for the proactive SIM commands is used for all tests in this section unless otherwise stated.

Proactive SIM Command 1.1: REFRESH

Logically:
Command details
Command number: 1
Command type: REFRESH
Command qualifier: SIM Initialisation 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

Proactive SIM Command 1.2: REFRESH

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				

Proactive SIM Command 1.3: REFRESH

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: SIM Initialisation 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				

Proactive SIM Command 1.4: REFRESH

Logically:

Command details
- Command number: 1
- Command type: REFRESH
- Command qualifier: SIM Initialisation

Device identities
- Source device: SIM
- Destination device: ME

Coding:

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

Proactive SIM Command 1.5: REFRESH

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

Proactive SIM Command 2.1: MORE TIME

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

Proactive SIM Command 3.1: POLL INTERVAL

Logically:

Command details
- Command number: 1
- Command type: POLL INTERVAL
- Command qualifier: "00"

Device identities
- Source device: SIM
- Destination device: ME

Duration
- Time unit: Tenths of seconds
- Time interval: 1

Coding:

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

Proactive SIM Command 3.2: POLL INTERVAL

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									

Proactive SIM Command 4.1: POLLING OFF

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

Proactive SIM Command 10.1: SET UP CALL

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				

Proactive SIM Command 10.2: SET UP CALL

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: "Not busy with redial"

Address
- TON: International
- NPI: ISDN / telephone numbering plan
- Dialling number string "012340123456p1p2"

Coding:

BER-TLV:	D0	2A	81	03	01	10	01	82	02	81	83	85
	14	4E	6F	74	20	62	75	73	79	20	77	69
	74	68	20	72	65	64	69	61	6C	86	09	91
	10	32	04	21	43	65	1C	2C				

Proactive SIM Command 10.3: SET UP CALL

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					

Proactive SIM Command 10.5: SET UP CALL

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		

Proactive SIM Command 10.7: SET UP CALL

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	20			

Proactive SIM Command 10.8: SET UP CALL

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			

Proactive SIM Command 10.9: SET UP CALL

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

Proactive SIM Command 10.10: SET UP CALL

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: "0123456789012345678901234567 89*#*#*#*#*#
  0123456789012345678901234567 89*#*#*#*#*#
  0123456789012345678901234567 89*#*#*#*#*#
  0123456789012345678901234567 89*#*#*#*#*#p*
  0123456789012345678901234567 89*#*#*#*#*#pp
  0123456789012345678901234567 89*#*#*#*#*#ppp#
  0123456789012345678901234567 89*#*#*#*#*#pppp
  0123456789012345678901234567 89*#*#*#*#*#ppppp*
  0123456789012345678901234567 89*#*#*#*#*#pppppp
  0123456789012345678901234567 89*#*#*#*#*#ppppppp#
  0123456789012345678901234567 89*#*#*#*#*#pppppp01"

Coding:

BER-TLV:	D0	81	FD	81	03	01	10	01	82	02	81	83
	86	81	F1	91	10	32	54	76	98	10	32	54
	76	98	10	32	54	76	98	BA	BA	BA	BA	BA
	10	32	54	76	98	10	32	54	76	98	10	32
	54	76	98	BA	BA	BA	BA	BA	10	32	54	76
	98	10	32	54	76	98	10	32	54	76	98	BA
	BA	BA	BA	BA	10	32	54	76	98	10	32	54
	76	98	10	32	54	76	98	BA	BA	BA	BA	BA
	AC	10	32	54	76	98	10	32	54	76	98	10
	32	54	76	98	BA	BA	BA	BA	BA	CC	10	32
	54	76	98	10	32	54	76	98	10	32	54	76
	98	BA	BA	BA	BA	BA	CC	BC	10	32	54	76
	98	10	32	54	76	98	10	32	54	76	98	BA
	BA	BA	BA	BA	CC	CC	10	32	54	76	98	10
	32	54	76	98	10	32	54	76	98	BA	BA	BA
	BA	BA	CC	CC	AC	10	32	54	76	98	10	32
	54	76	98	10	32	54	76	98	BA	BA	BA	BA
	BA	CC	CC	CC	10	32	54	76	98	10	32	54
	76	98	10	32	54	76	98	BA	BA	BA	BA	BA
	CC	CC	CC	BC	10	32	54	76	98	10	32	54
	76	98	10	32	54	76	98	BA	BA	BA	BA	BA
	CC	CC	CC	10								

Proactive SIM Command 10.11: SET UP CALL

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								

Proactive SIM Command 11.1: SEND SS

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#"

Coding:

BER-TLV:	D0	27	81	03	01	11	00	82	02	81	83	85
	0C	43	61	6C	6C	20	46	6F	72	77	61	72
	64	89	0E	91	AA	12	0A	21	43	65	87	09
	21	43	65	87	B9							

Proactive SIM Command 11.2: SEND SS

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*012345678901234567890123456789012345678901234567*11#"

Coding:

BER-TLV:	D0	32	81	03	01	11	00	82	02	81	83	85
	0C	43	61	6C	6C	20	46	6F	72	77	61	72
	64	89	1A	91	AA	12	0A	21	43	65	87	09
	21	43	65	87	09	21	43	65	87	09	21	43
	65	A7		11	FB							

Proactive SIM Command 11.3: SEND SS

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: Unknown
- NPI: ISDN / telephone numbering plan
- 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
81	BA	13	FB								

Proactive SIM Command 13.1: SEND SHORT MESSAGE

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-RDInstruct 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			

Proactive SIM Command 13.2: SEND SHORT MESSAGE

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-RDInstruct 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								

Proactive SIM Command 13.3: SEND SHORT MESSAGE

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-RDInstruct 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									

Proactive SIM Command 13.4: SEND SHORT MESSAGE

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-RDInstruct 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	5F	44	65	73	74	69	6E	61	74	69
	6F	6E	5F	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								

Proactive SIM Command 13.5: SEND SHORT MESSAGE

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-RDInstruct 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				

Proactive SIM Command 13.6: SEND SHORT MESSAGE

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-RDInstruct 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								

Proactive SIM Command 20.1: PLAY TONE

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 SIM Command 20.2: PLAY TONE

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 SIM Command 20.3: PLAY TONE

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 SIM Command 20.4: PLAY TONE

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 SIM Command 20.5: PLAY TONE

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 SIM Command 20.6: PLAY TONE

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: 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 SIM Command 20.7: PLAY TONE

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
	09	43	61	6C	6C
	07	84	02	01	05

Proactive SIM Command 20.8: PLAY TONE

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 SIM Command 20.9: PLAY TONE

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 SIM Command 20.10: PLAY TONE

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 SIM Command 20.11: PLAY TONE

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 SIM Command 20.12: PLAY TONE

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 SIM Command 20.13: PLAY TONE

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 SIM Command 21.1: DISPLAY TEXT

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								

Proactive SIM Command 21.2: DISPLAY TEXT

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								

Proactive SIM Command 21.3: DISPLAY TEXT

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									

Proactive SIM Command 21.4: DISPLAY TEXT

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								

Proactive SIM Command 21.5: DISPLAY TEXT

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 pri"

Coding:

BER-TLV:	D0	81	AC	81	03	01	21	80	82	02	81	02
	8D	81	A0	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					

Proactive SIM Command 21.6: DISPLAY TEXT

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								

Proactive SIM Command 21.7: DISPLAY TEXT

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			

Proactive SIM Command 21.8: DISPLAY TEXT

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	17	81	03	01	21	80	82	02	81	02	8D
	0B	04	3C	54	49	4D	45	2D	4F	55	54	3E

Proactive SIM Command 22.1: GET INKEY

Logically:

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

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	

Proactive SIM Command 22.2: GET INKEY

Logically:

Command details
- Command number: 1
- Command type: GET INKEY
- Command qualifier: SMS default alphabet

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	

Proactive SIM Command 22.3: GET INKEY

Logically:

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

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		

Proactive SIM Command 22.4: GET INKEY

Logically:

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

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								

Proactive SIM Command 22.5: GET INKEY

Logically:

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

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			

Proactive SIM Command 22.6: GET INKEY

Logically:

Command details
- Command number: 1
- Command type: GET INKEY
- Command qualifier: SMS default alphabet

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	AC	81	03	01	22	01	82	02	81	82
	8D	81	A0	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				

Proactive SIM Command 23.1: GET INPUT

Logically:

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

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							

Proactive SIM Command 23.2: GET INPUT

Logically:

Command details
- Command number: 1
- Command type: GET INPUT
- Command qualifier: digits (0-9, *, # and +) only, input in packed SMS format, ME to echo text

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								

Proactive SIM Command 23.3: GET INPUT

Logically:

Command details
- Command number: 1
- Command type: GET INPUT
- Command qualifier: SMS default alphabet, input in unpacked format, ME to echotext

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							

Proactive SIM Command 23.4: GET INPUT

Logically:

Command details
- Command number: 1
- Command type: GET INPUT
- Command qualifier: digits (0-9, *, # and +) only, input in unpacked format, ME to hide text

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							

Proactive SIM Command 23.5: GET INPUT

Logically:

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

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										

Proactive SIM Command 23.6: GET INPUT

Logically:

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

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				

Proactive SIM Command 23.7: GET INPUT

Logically:

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

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											

Proactive SIM Command 23.8: GET INPUT

Logically:

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

Device identities
- Source device: SIM
- Destination device: ME

Text string
- Data coding scheme: unpacked, 8 bit data
- Text: "***1111111111###***2222222222###***3333333333###***4444444444###***5555555555###***6666666666###***7777777777###***8888888888###***9999999999###***0000000000###"

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

Proactive SIM Command 23.9: GET INPUT

Logically:

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

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

Proactive SIM Command 23.10: GET INPUT

Logically:

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

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								

Proactive SIM Command 24.1: SELECT ITEM

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									

Proactive SIM Command 24.2: SELECT ITEM

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

Proactive SIM Command 24.3: SELECT ITEM

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									

Proactive SIM Command 24.4: SELECT ITEM

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										

Proactive SIM Command 24.5: SELECT ITEM

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						

Proactive SIM Command 24.6: SELECT ITEM

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							

Proactive SIM Command 25.1: SET UP MENU

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 SIM Command 25.2: SET UP MENU

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
	758F	04	11	4F	6E	65	8F	04	12	54	77	
	6F											

Proactive SIM Command 25.3: SET UP MENU

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									

Proactive SIM Command 25.4: SET UP MENU

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
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 SIM Command 25.5: SET UP MENU

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 SIM Command 25.6: SET UP MENU

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									

Proactive SIM Command 26.1: PROVIDE LOCAL INFORMATION

Logically:

Command details
- Command number: 1
- Command type: PROVIDE LOCAL INFORMATION
- Command qualifier: location information

Device identities
- Source device: SIM
- Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	00	82	02	81	82

Proactive SIM Command 26.2: PROVIDE LOCAL INFORMATION

Logically:

Command details
- Command number: 1
- Command type: PROVIDE LOCAL INFORMATION
- Command qualifier: 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

ENVELOPE 1.1: SMS-PP DOWNLOAD

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: Default Alphabet
- TP-SCTS: 01/01/98 00:00:00 +0
- TP-UDL: 13
- TP-UD: "Short Message"

Coding:

BER-TLV:	D1	2C	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1B	04	04	91	21	43
	7F	12	89	10	10	00	00	00	00	0D	53	F4
	5B	4E	07	35	CB	F3	79	F8	5C	06		

ENVELOPE 1.2: SMS-PP DOWNLOAD

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
  - 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	

ENVELOPE 1.3: SMS-PP DOWNLOAD

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: Default Alphabet
  - 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	2C	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1B	04	04	91	21	43
	7F	F2	89	10	10	00	00	00	00	0D	53	F4
	5B	4E	07	35	CB	F3	79	F8	5C	06		

ENVELOPE 1.4: SMS-PP DOWNLOAD

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
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	

ENVELOPE 2.1: SMS-CB DOWNLOAD

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: 8 bit data
      - Message class: No message class
    - 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
	F4	11	43	65	6C	6C	20	42	72	6F	61	64
	63	61	73	74	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20

ENVELOPE 3.1: 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 3.2: 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

ENVELOPE 3.3: 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 3.4: 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 4.1: CALL CONTROL

Logically:

Call control
Device identities
Source device: ME
Destination device: SIM
Address
TON International number
NPI ISDN / telephone numbering plan
Dialling number string "01234567890123456789"

Coding:

BER-TLV:	D4	11	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98					

ENVELOPE 4.2: CALL CONTROL

Logically:

Call control
Device identities
Source device: ME
Destination device: SIM
Address
TON Unknown
NPI ISDN / telephone numbering plan
Dialling number string "123"

Coding:

BER-TLV:	D4	09	82	02	82	81	86	03	81	21	F3

ENVELOPE 4.3: CALL CONTROL

Logically:

Call control
Device identities
Source device: ME
Destination device: SIM
Address
TON Unknown
NPI ISDN / telephone numbering plan
Dialling number string "9876"

Coding:

BER-TLV:	D4	09	82	02	82	81	86	03	81	89	67

ENVELOPE 4.4: CALL CONTROL

Logically:

Call control
Device identities
Source device: ME
Destination device: SIM
Address
TON Unknown
NPI ISDN / telephone numbering plan
Dialling number string "321"

Coding:

BER-TLV:	D4	09	82	02	82	81	86	03	81	23	F1

ENVELOPE 4.5: CALL CONTROL

Logically:

Call control
Device identities
Source device: ME
Destination device: SIM
Address
TON Unknown
NPI ISDN / telephone numbering plan
Dialling number string "1234"

Coding:

BER-TLV:	D4	09	82	02	82	81	86	03	81	21	43

ENVELOPE 4.6: CALL CONTROL

Logically:

Call control
Device identities
Source device: ME
Destination device: SIM
Address
TON Unknown
NPI ISDN / telephone numbering plan
Dialling number string "1111"

Coding:

BER-TLV:	D4	09	82	02	82	81	86	03	81	11	11

SS Register 1

Logically:

Register SS Operation
Sequence
Sequence Tag
Sequence Length
SS Code
SS Code Tag
SS Code Length
SS Code Value Call Forwarded Unconditional
Forwarded To Number
BCD Encoded Number
Parameter Tag Octet String, Forwarded To Number
Length
TON and NPI International
NPI ISDN / telephone numbering plan
Digits 01234567890123456789
Version Indicator

Coding:	30	10	04	01	21	84	0B	91	10	32	54	76
	98	10	32	54	76	98						

SMS-PP (SEND SHORT MESSAGE) Message 1

Logically:

SMS TPDU

TP-MTI	SMS-SUBMIT
TP-RDInstruct 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" (not verified)
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:	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 2

Logically:

SMS TPDU

TP-MTI	SMS-SUBMIT
TP-RDInstruct 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" (not verified)
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:	01	00	09	91	10	32	54	76	F8	40	F0	07
	D3	B2	9B	0C	9A	36	01					

SMS-PP (SEND SHORT MESSAGE) Message 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	"00" (not verified)
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:	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 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	"00" (not verified)
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:

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 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	"00" (not verified)
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:

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 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	"00" (not verified)
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:	01	00	02	91	10	40	F0	01	20

SMS-PP (Data Download) Message 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	Default Alphabet
TP-SCTS:	01/01/98 00:00:00 +0
TP-UDL	13
TP-UD	"Short Message"

Coding:	04	04	91	21	43	7F	12	89	10	10	00	00
	00	00	0D	53	F4	5B	4E	07	35	CB	F3	79
	F8	5C	06									

SMS-PP (Data Download) Message 2

Logically:

SMS TPDU

TP-MTI	SMS-DELIVER
TP-MMS	No more messages waiting for the MS in this SC
TP-RP	TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI	TP-UD field contains only the short message
TP-SRI	A status report will not be returned to the SME
TP-OA	
TON	International number
NPI	ISDN / telephone numbering plan
Address value	"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
TP-SCTS:	01/01/98 00:00:00 +0
TP-UDL	13
TP-UD	"Short Message"

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								

SMS-PP (Data Download) Message 3

Logically:

SMS TPDU

TP-MTI	SMS-DELIVER
TP-MMS	No more messages waiting for the MS in this SC
TP-RP	TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI	TP-UD field contains only the short message
TP-SRI	A status report will not be returned to the SME
TP-OA	
TON	International number
NPI	ISDN / telephone numbering plan
Address value	"1234"
TP-PID	SIM Data download
TP-DCS	
Coding Group	Data Coding / Message Class
Message Coding	Default Alphabet
Message Class	Class 2 SIM Specific Message
TP-SCTS:	01/01/98 00:00:00 +0
TP-UDL	13
TP-UD	"Short Message"

Coding:	04	04	91	21	43	7F	F2	89	10	10	00	00
	00	00	0D	53	F4	5B	4E	07	35	CB	F3	79
	F8	5C	06									

SMS-PP (Data Download) Message 4

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
Message Class	Class 2 SIM Specific Message
TP-SCTS:	01/01/98 00:00:00 +0
TP-UDL	13
TP-UD	"Short Message"

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								

SMS-PP Data Download SIM Acknowledgement

Coding:	50	68	69	6C	20	48	6F	6F	6B	65	72

SMS-CB (Data Download) Message 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:	8 bit data
Message class:	No message class
Page Parameter	
Total number of pages:	1
Page number:	1
Content of message:	"Cell Broadcast "..

Coding:	C0	11	10	01	F4	11	43	65	6C	6C	20	42
	72	6F	61	64	63	61	73	74	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20								

SMS-CB (Data Download) Message 2

Logically:

Message Content
- Serial Number
  - Geographical scope: Cell wide, normal display mode
  - Message code: 1
  - Update number: 1
- Message Identifier: "0C0C"
- Data Coding Scheme
  - Message coding: 8 bit data
  - Message class: No message class
- Page Parameter
  - Total number of pages: 1
  - Page number: 1
- Content of message: "Cell Broadcast "..

Coding:	C0	11	0C	0C	F4	11	43	65	6C	6C	20	42
	72	6F	61	64	63	61	73	74	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20

Call Control Response 1.1

Logically:

Call control result: Allowed, no modification

Coding:	00	00

Call Control Response 1.2

Logically:

Call control result: Not allowed

Coding:	01	00

Call Control Response 1.3

Logically:

Call control result: Allowed, with modification

Address
- TON: International number
- NPI: ISDN / telephone numbering plan
- Address value: "010203"

Coding:	02	06	86	04	91	10	20	30

Call Control Response 1.4

Logically:

Call control result	Allowed, with modification
Address	
TON	Unknown
NPI	ISDN / telephone numbering plan
Address value	"112"

Coding: 02 05 86 03 81 11 F2

Call Control Response 1.5

Logically:

Call control result	Allowed, with modification
Address	
TON	Unknown
NPI	ISDN / telephone numbering plan
Address value	"1020"

Coding: 02 05 86 03 81 01 02

Call Control Response 2.1

Logically:

Call control result	Allowed, no modification

Coding: 00 00

Call Control Response 2.2

Logically

Call control result	Not allowed

Coding: 01 00

Call Control Response 2.3

Logically:

Call control result	Allowed with modifications
SS String	
TON	Unknown
NPI	ISDN / telephone numbering plan
SS String	"*#21#"

Coding: 02 06 89 04 81 BA 12 FB

Call Control Response 3.1

Logically:

Call control result	Allowed, no modifications

Coding: 00 00

Call Control Response 3.2

Logically:
Call control result Not allowed

Coding: 01 00

Call Control Response 3.3

Logically:
Call control result Allowed with modifications
Address
TON Unknown
NPI ISDN / telephone numbering plan
Address value "3333"

Coding: 02 05 86 03 81 33 33

Call Control Response 4.1

Logically:
Call control result Not allowed

Coding: 01 00

Call Control Response 4.2

Logically:
Call control result Allowed, no modifications

Coding: 00 00

Call Control Response 4.3

Logically:
Call control result Allowed with modifications
Address
TON Unknown
NPI ISDN / telephone numbering plan
Address value "2222"

Coding: 02 05 86 03 81 22 22

Call Control Response 4.4

Logically:
Call control result Allowed with modifications
Address
TON Unknown
NPI ISDN / telephone numbering plan
Address value "987654321"

Coding: 02 08 86 06 81 89 67 45 23 F1

27.22.1 Initialisation of SIM Application Toolkit Enabled SIM by SIM Application Toolkit Enabled ME (Profile Download)

27.22.1.1 Definition and applicability

The SIM - ME interface initialisation sequence allows the SIM to indicate to the ME that it is Toolkit enabled. A ME supporting Toolkit would then perform the Toolkit initialisation sequence.

This test applies to all MEs supporting SIM Application Toolkit.

27.22.1.2 Conformance requirement

The profile download instruction is sent by the ME to the SIM as part of the initialisation procedure. In this procedure the ME reads EF_{Phase}. If the EF indicates that the SIM requires the ME to perform the profile download procedure, then the ME shall, after having performed the CHV1 verification procedure and before selecting EF_{IMSI} or EF_{LOCI}, send the TERMINAL PROFILE command to the SIM.

See GSM 11.11 [13] clause 11.2.1 and GSM 11.14 [15] clause 5.1.

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 personalisation, with the CHV1 enabled.

27.22.1.4.2 Procedure

a) The ME is powered on.

b) "1111" shall be entered on the ME after the PIN entry request is displayed.

c) The SIM Simulator indicates to the ME that the CHV verification has been unsuccessful, with at least one attempt left with SW1 / SW2 of '98 04'.

d) "1234" shall be entered on the ME after the PIN entry request is displayed.

e) The SIM Simulator indicates to the ME that the CHV verification has been successful with SW1 / SW2 of '90 00'.

f) After the ME sends the TERMINAL PROFILE command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '90 00'.

The test is terminated upon the ME sending the TERMINAL PROFILE command or reading EF_{IMSI} and EF_{LOCI}.

27.22.1.5 Test Requirement

1) After step e) the ME shall send the TERMINAL PROFILE command to the SIM Simulator before selecting EF_{IMSI} or EF_{LOCI}.

27.22.2 Contents of the TERMINAL PROFILE command

27.22.2.1 Definition and applicability

The TERMINAL PROFILE command send by the ME gives the SIM knowledge about the ME´s SIM Application Toolkit capability so that the SIM can then limit its instruction range accordingly.

This test applies to all MEs supporting SIM Application Toolkit.

27.22.2.2 Conformance requirement

The TERMINAL PROFILE shall state the facilities relevant to SIM Application Toolkit that are supported by the ME.

TS GSM 11.14 [15] clause 5.

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 personalisation.

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'.

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).

27.22.3 Servicing of Proactive SIM Commands

27.22.3.1 Definition and applicability

A ME supporting SIM Application Toolkit facilities shall support the FETCH and TERMINAL RESPONSE commands.

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 GSM 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 Definition and applicability

This test is only applicable to ME's that support the DISPLAY TEXT proactive SIM facility.

The DISPLAY TEXT proactive SIM facility allows the SIM to display normal or high priority, unpacked or SMS point-to-point packed text on the ME screen and then clear message after a delay or wait for user to clear message.

27.22.4.1.2 Conformance requirement

The ME shall accept the text to be displayed in both unpacked or SMS point-to-point packed format.

The ME shall always accept and immediately display high priority text, except if there is a conflict of priority level of alerting such as incoming calls or low battery warnings.

The ME shall accept and display a text string of 160 characters.

The ME shall reject normal priority text commands if the screen is currently being used for anything other than it's normal standby display.

The ME shall accept and display normal priority text commands when the screen is only being used for it's normal standby display.

The ME shall send the Terminal Response command after a short delay or until cleared by the user.

The ME shall send a TERMINAL RESPONSE with "Proactive SIM application session terminated by the user" result value, if the user has indicated the need to end the proactive SIM application session.

The ME shall send a TERMINAL RESPONSE with "Backward move in the proactive SIM session requested by the user" result value, if the user has indicated the need to go backwards in the proactive SIM application session.

The ME shall return the command number, type of command and command qualifier corresponding to the respective proactive SIM command in the TERMINAL RESPONSE command.

TS GSM 11.14 [15] clause 6.4.1.

27.22.4.1.3 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.

27.22.4.1.4 Method of test

27.22.4.1.4.1 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.

27.22.4.1.4.2 Procedure

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

b) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1C'.

c) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 21.1: DISPLAY TEXT.

d) A MMI action shall be initiated to indicate user acceptance on the ME after "Toolkit Test 1" is displayed.

e) The SIM Simulator indicates that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

f) The ME screen shall be set to a display mode other than the normal stand-by display.

g) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1C'.

h) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 21.1: DISPLAY TEXT.

i) The SIM Simulator indicates to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

j) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1C'.

k) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 21.2: DISPLAY TEXT.

l) A MMI action shall be initiated to indicate user acceptance on the ME after "Toolkit Test 2" is displayed.

m) The SIM Simulator indicates to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

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

o) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1B'.

p) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 21.3: DISPLAY TEXT.

q) A MMI action shall be initiated to indicate user acceptance on the ME after "Toolkit Test 3" is displayed.

r) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1C' following receipt of the TERMINAL RESPONSE command.

s) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 21.4: DISPLAY TEXT.

t) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

u) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 AF'.

v) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 21.5: DISPLAY TEXT.

w) A MMI action shall be initiated to indicate user acceptance on the ME after " 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 pri" is displayed.

x) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1C' following receipt the TERMINAL RESPONSE command.

y) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 21.6: DISPLAY TEXT.

z) A MMI action shall be initiated to action a backward move on the ME after "<GO-BACKWARDS>" is displayed.

aa) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 15' following receipt of the TERMINAL RESPONSE command.

bb) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 21.7: DISPLAY TEXT.

cc) A MMI action shall be initiated to terminate the proactive SIM session on the ME after "<ABORT>" is displayed.

dd) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following the TERMINAL RESPONSE command.

The test is terminated upon the SIM Simulator receiving the TERMINAL RESPONSE command.

27.22.4.1.5 Test Requirement

1) After step c) the ME shall display "Toolkit Test 1".

2) After step d) the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE command returned to the SIM Simulator.

3) After step e) the ME screen shall return to it's normal stand-by display.

4) After step h) the ME shall not change it's currently being used display, shall not display "Toolkit Test 1" and shall return a result of "ME currently unable to process command" with the additional information "Screen is busy" in the TERMINAL RESPONSE command returned to the SIM Simulator.

5) After step k) the ME shall display "Toolkit Test 2".

6) After step l) the ME shall return a successful result of "command performed successfully" in the TERMINAL RESPONSE command returned to the SIM Simulator.

7) After step p) the ME shall display "Toolkit Test 3".

8) After step q) the ME shall return a successful result of "command performed successfully" in the TERMINAL RESPONSE command returned to the SIM Simulator.

9) After step s) the ME shall display "Toolkit Test 4" and shall return a successful result of "command performed successfully" in the TERMINAL RESPONSE command returned to the SIM Simulator.

10) After step v) the ME shall 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 pri".

11) After step w) the ME shall return a successful result of "command performed successfully" in the TERMINAL RESPONSE command returned to the SIM Simulator.

12) After step y) the ME shall display "<GO-BACKWARDS>".

13) After step z) the ME shall return a result of "backward move in the proactive SIM session requested by the user" in the TERMINAL RESPONSE command returned to the SIM Simulator.

14) After step bb) the ME shall display "<ABORT>".

15) After step cc) the ME shall return a result of "proactive SIM session terminated by the user" in the TERMINAL RESPONSE command returned to the SIM Simulator.

The ME shall return the command number, type of command and command qualifier corresponding to the respective proactive SIM command in the TERMINAL RESPONSE command.

27.22.4.2 GET INKEY

27.22.4.2.1 Definition and applicability

This test is only applicable to ME's that support the GET INKEY proactive SIM facility.

The GET INKEY proactive SIM facility allows the SIM to display unpacked or SMS point-to-point packed text on the ME screen and to expect the user to enter a single character. Any response entered by the user shall be passed transparently by the ME to the SIM.

27.22.4.2.2 Conformance Requirement

Upon receiving the command, the ME shall display the text. The ME shall allow the user to enter a single character in response.

The text to be displayed can be in one of two formats: SMS point-to-point packed or unpacked format.

The SIM can specify one of two character sets to be used in the response. The character sets being: digits only (0-9, *, # and +) or characters from the SMS default alphabet.

The ME shall only allow the user to enter a character from the characters within the specified character set.

When the user has entered a character, the ME shall pass the entered character transparently to the SIM in the TERMINAL RESPONSE.

The response from the ME shall be coded in the SMS default alphabet in unpacked format.

The ME shall send a TERMINAL RESPONSE with "Backwards move in proactive SIM session requested by the user" result value, if the user has indicated the need to go backwards in the proactive SIM application session.

The ME shall send a TERMINAL RESPONSE with "Proactive SIM application terminated by the user" result value, if the user has indicated the need to end the proactive SIM session.

The ME shall send the TERMINAL RESPONSE with "No response from user" end result, if the ME decides that no user response has been received.

The ME shall return the command number, type of command and command qualifier corresponding to the respective proactive SIM command in the TERMINAL RESPONSE command.

TS GSM 11.14 [15] clause 6.4.2.

27.22.4.2.3 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.

To verify that the ME only allows a character from the specified character set to be entered.

To verify that the ME sends "Backward move in the proactive SIM session requested by the user", when the user has indicated the need to go backwards in the proactive SIM session.

To verify that the ME sends "Proactive SIM session terminated by the user", when the user has indicated the need to end the proactive SIM session.

The ability of the ME to send the TERMINAL RESPONSE with "No response from user" result value cannot be tested as the length of time to wait is undefined in GSM 11.14 [15].

27.22.4.2.4 Method of Test

27.22.4.2.4.1 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.

27.22.4.2.4.2 Procedure

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

b) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 17'.

c) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 22.1: GET INKEY.

d) The "+" key shall be entered on the ME after "Enter "+"" is displayed.

e) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 16' following receipt of the TERMINAL RESPONSE command.

f) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 22.3: GET INKEY.

g) A "0" character shall be entered on the ME after "Enter "0"" is displayed.

h) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1C' following receipt of the TERMINAL RESPONSE command.

i) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 22.4: GET INKEY.

j) A MMI action shall be initiated to action a backward move on the ME after "<GO-BACKWARDS>" is displayed.

k) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 15' following receipt of the TERMINAL RESPONSE command.

l) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 22.5: GET INKEY.

m) A MMI action shall be initiated to terminate the proactive SIM session on the ME after "<ABORT>" is displayed.

n) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 17' following receipt of the TERMINAL RESPONSE command.

o) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 22.2: GET INKEY.

p) The "q" character shall be entered on the ME after "Enter "q"" is displayed.

q) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 AF' following receipt of the TERMINAL RESPONSE command.

r) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 22.6: GET INKEY.

s) The "x" key shall be entered on the ME after "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" is displayed.

t) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

The test is terminated upon the ME sending the TERMINAL RESPONSE.

27.22.4.2.5 Test Requirement

1) After step c) the ME shall display "Enter "+"".

2) After step d) the ME shall return a result of "command performed successfully" with the returned text string of "+" in the TERMINAL RESPONSE command.

3) After step f) the ME shall display "Enter "0"".

4) After step g) the ME shall return a result of "command performed successfully" with the returned text string of "0" in the TERMINAL RESPONSE.

5) After step i) the ME shall display "<GO-BACKWARDS>".

6) After step j) the ME shall return a result of "backwards move in proactive SIM session" in the TERMINAL RESPONSE command.

7) After step l) the ME shall display "<ABORT>".

8) After step m) the ME shall return a result of "proactive SIM session terminated by the user" in the TERMINAL RESPONSE command.

9) After step o) the ME shall display "Enter "q"".

10) After step p) the ME shall return a result of "command performed successfully" with the returned text string of "q" in the TERMINAL RESPONSE command.

11) After step r) the ME shall 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".

12) After step s) the ME shall return a result of "command performed successfully" with the returned text string of "x" in the TERMINAL RESPONSE.

The ME shall return the command number, type of command and command qualifier corresponding to the respective proactive SIM command in the TERMINAL RESPONSE command.

27.22.4.3 GET INPUT

27.22.4.3.1 Definition and applicability

This test is only applicable to ME's that support the GET INPUT proactive SIM facility.

The GET INPUT proactive SIM facility allows the SIM to display unpacked or SMS point-to-point packed text on the ME screen and to expect the user to enter a text string. The SIM indicates the minimum and maximum length of text string expected in the response. Any response entered by the user shall be passed transparently by the ME to the SIM.

27.22.4.3.2 Conformance Requirement

Upon receiving the command, the ME shall display the text. The ME shall allow the user to enter a string of characters in response.

If the SIM requests that the user input (text string) is to be hidden, it is permissible for the ME to indicate the entry of characters, so long as the characters themselves are not revealed.

The SIM can send the text to be displayed either in unpacked or SMS point-to-point packed format.

The SIM can specify one of two character sets to be used in the response. The character sets being: digits only (0-9, *, # and +) or characters from the SMS default alphabet.

When the user indicates completion, the ME shall pass the entered characters transparently to the SIM within the TERMINAL RESPONSE.

If the SIM requests the user input to be in packed format, then the ME shall pack the text according to SMS point-to-point before submitting it to the SIM.

The ME shall send a TERMINAL RESPONSE with "Backwards move in proactive SIM session requested by the user" result value, if the user has indicated the need to go backwards in the proactive SIM application session.

The ME shall send a TERMINAL RESPONSE with "Proactive SIM application terminated by the user" result value, if the user has indicated the need to end the proactive SIM session.

The ME shall send the TERMINAL RESPONSE with "No response from user" end result, if the ME decides that no user response has been received.

TS GSM 11.14 [15] clause 6.4.3.

27.22.4.3.3 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.

To verify that the ME sends "Backward move in the proactive SIM session requested by the user", when the user has indicated the need to go backwards in the proactive SIM session.

To verify that the ME sends "Proactive SIM session terminated by the user", when the user has indicated the need to end the proactive SIM session.

The ability of the ME to send the TERMINAL RESPONSE with "No response from user" result value cannot be tested as the length of time to wait is undefined in GSM 11.14 [15].

27.22.4.3.4 Method of Test

27.22.4.3.4.1 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.

27.22.4.3.4.2 Procedure

a) The ME screen shall be set to a display mode other than the normal stand by display.

b) The SIM Simulator shall indicate to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1D'.

c) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 23.1: GET INPUT.

d) "12345" and <SEND> or otherwise indicates completion shall be entered on the ME after "Enter 12345" is displayed.

e) The SIM Simulator shall indicate to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1C' following receipt of the TERMINAL RESPONSE command.

f) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 23.2: GET INPUT.

g) "67*#+" and <SEND> or otherwise indicates completion shall be entered on the ME after "Enter 67*#+" is displayed.

h) The SIM Simulator shall indicate to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 29' following receipt of the TERMINAL RESPONSE command.

i) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 23.4: GET INPUT.

j) "1" and <SEND> or otherwise indicates completion shall be entered on the ME after "Password 1<SEND>2345678" is displayed.

k) "2345678" and <SEND> or otherwise indicates completion shall be entered on the ME after "Password 1<SEND>2345678" is displayed.

l) The SIM Simulator shall indicate to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 26' following receipt of the TERMINAL RESPONSE command.

m) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 23.5: GET INPUT.

n) <SEND> or otherwise indicates completion shall be entered on the ME after "Enter 1..9,0..9,0(1)" is displayed.

o) The text on the ME screen shall be modified using the ME MMI to display entered text of "12345678901234567890". "1" shall then be entered on the ME.

p) With "12345678901234567890" displayed on the ME screen <SEND> or otherwise indicates completion shall be entered on the ME.

q) The SIM Simulator shall indicate to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 20' following receipt of the TERMINAL RESPONSE command.

r) After the ME sends the FETCH instruction to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 23.6: GET INPUT.

s) A MMI action shall be initiated to action a backward move on the ME after "<GO-BACKWARDS>" is displayed.

t) The SIM Simulator shall indicate to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 19' following receipt of the TERMINAL RESPONSE command.

u) After the ME sends the FETCH instruction to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 23.7: GET INPUT.

v) A MMI action shall be initiated to terminate the proactive SIM session on the ME after "<ABORT>" is displayed.

w) The SIM Simulator shall indicate to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 B4' following receipt of the TERMINAL RESPONSE command.

x) After the ME sends the FETCH instruction to the SIM Simulator, the SIM Simulator returns the Proactive SIM Command 23.8: GET INPUT.

y) "***1111111111###***2222222222###***3333333333###***4444444444###***5555555555###***6666666666###***7777777777###***8888888888###***9999999999###***0000000000###" and <SEND> or otherwise indicates completion shall be entered on the ME after "***1111111111###***2222222222###***3333333333###***4444444444###***5555555555###***6666666666###***7777777777###***8888888888###***9999999999###***0000000000###" is displayed.

z) The SIM Simulator shall indicate to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 18' following receipt of the TERMINAL RESPONSE command.

aa) After the ME sends the FETCH instruction to the SIM Simulator, the SIM Simulator returns the Proactive SIM Command 23.9: GET INPUT.

bb) <SEND> or otherwise indicates completion shall be entered on the ME after "<SEND>" is displayed.

cc) The SIM Simulator shall indicate to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1D' following receipt of the TERMINAL RESPONSE command.

dd) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 23.3: GET INPUT.

ee) "AbCdE" and <SEND> or otherwise indicates completion shall be entered on the ME after "Enter AbCdE" is displayed.

ff) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

The test is terminated upon the ME sending the TERMINAL RESPONSE.

27.22.4.3.5 Test Requirement

1) After step c) the ME shall display "Enter 12345".

2) After step d) the ME shall return a result of "command performed successfully" with the returned text string of "12345" in the TERMINAL RESPONSE command in unpacked format.

3) After step f) the ME shall display "Enter 67*#+".

4) After step g) the ME shall return a result of "command performed successfully" with the returned text string of "67*#+" in the TERMINAL RESPONSE command in SMS point-to-point packed format.

5) After step i) the ME shall display "Password 1<SEND>2345678".

6) After step j) the ME shall not reveal the entered character and shall not return the TERMINAL RESPONSE command.

7) After step k) the ME shall not reveal the entered characters and shall return a result of "command performed successfully" with the returned text string of "12345678" in the TERMINAL RESPONSE command in unpacked format.

8) After step m) the ME shall display "Enter 1..9,0..9,0(1)".

9) After step p) the ME shall return a result of "command performed successfully" with the returned text string of "12345678901234567890" in the TERMINAL RESPONSE command in unpacked format.

10) After step r) the ME shall display "<GO-BACKWARDS>".

11) After step s) the ME shall return a result of "backward move in proactive SIM session" in the TERMINAL RESPONSE command.

12) After step u) the ME shall display "<ABORT>".

13) After step v) the ME shall return a result of "proactive SIM session terminated by the user" in the TERMINAL RESPONSE command.

14) After step x) the ME shall display "***1111111111###***2222222222###***3333333333###***4444444444###***5555555555###***6666666666###***7777777777###***8888888888###***9999999999###***0000000000###".

15) After step y) the ME shall return a result of "command performed successfully" with the returned text string of "***1111111111###***2222222222###***3333333333###***4444444444###***5555555555##***6666666666###***7777777777###***8888888888###***9999999999###***0000000000###" in the TERMINAL RESPONSE command in unpacked format.

16) After step aa) the ME shall display "<SEND>".

17) After step bb) the ME shall return a result of "command performed successfully" with the returned text string TLV containing no text string in the TERMINAL RESPONSE command.

18) After step dd) the ME shall display "Enter AbCdE".

19) After step ee) the ME shall return a result of "command performed successfully" with the returned text string of "AbCdE" in the TERMINAL RESPONSE command in unpacked format.

27.22.4.4 MORE TIME

27.22.4.4.1 Definition and applicability

This test is only applicable to ME's that support the MORE TIME proactive SIM facility.

The MORE TIME proactive SIM facility allows the SIM to request more time for processing, where the processing is so long that it is in danger of affecting normal GSM operation, and clock stop prevents processing to take place in the background.

27.22.4.4.2 Conformance Requirement

The ME shall conclude the command by sending TERMINAL RESPONSE (OK) to the SIM, as soon as possible after receiving the MORE TIME proactive SIM command.

TS GSM 11.14 [15] clause 6.4.4.

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

a) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 0B'.

b) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 2.1: MORE TIME.

c) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

The test is terminated upon the ME sending the TERMINAL RESPONSE.

27.22.4.4.5 Test Requirement

1) After step b) the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE.

27.22.4.5 PLAY TONE

27.22.4.5.1 Definition and applicability

This test is only applicable to ME's that support the PLAY TONE proactive SIM facility.

The PLAY TONE proactive SIM facility allows the SIM to instruct the ME to play an audio tone.

27.22.4.5.2 Conformance Requirement

If the ME is in, or is setting up a speech call, it shall superimpose the tone on top of the downlink audio (if any), for the duration given in the command. The progress or current state of the call shall not be affected in any way.

If the ME is not in or setting up a speech call, it shall route the audio to the external ringer, or other appropriate audio device, and play the tone for the duration given in the command.

For single tones, the value of the duration data object shall be ignored by the ME.

If the ME support for the specific tone requested is optional, and the ME does not support this particular tone, the ME shall inform the SIM using TERMINAL RESPONSE (Command beyond ME's capabilities).

The ME shall not generate any verbal indication or display any text or graphical indication about the normal meaning of this tone. If the SIM wishes to convey a meaning in text to the user, it shall do this through the alpha identifier data object.

TS GSM 11.14 [15] clause 6.4.5, 6.6.5.

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.

27.22.4.5.4 Method of Test

27.22.4.5.4.1 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.

27.22.4.5.4.2 Procedure

a) The ME shall be in its normal standby display.

b) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1D'.

c) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 20.1: PLAY TONE.

d) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

e) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1D' following receipt of the TERMINAL RESPONSE command.

f) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 20.2: PLAY TONE.

g) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

h) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1E' following receipt of the TERMINAL RESPONSE command.

i) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 20.3: PLAY TONE.

j) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

k) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1A' following receipt of the TERMINAL RESPONSE command.

l) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 20.4: PLAY TONE.

m) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

n) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 19' following receipt of the TERMINAL RESPONSE command.

o) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 20.5: PLAY TONE.

p) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

q) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1D' following receipt of the TERMINAL RESPONSE command.

r) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 20.6: PLAY TONE.

s) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

t) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1D' following receipt of the TERMINAL RESPONSE command.

u) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 20.7: PLAY TONE.

v) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

w) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1D' following receipt of the TERMINAL RESPONSE command.

x) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 20.8: PLAY TONE.

y) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

z) A voice call shall be set up on the ME.

aa) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1D'.

bb) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 20.1: PLAY TONE.

cc) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

dd) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 00'.

ee) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 20.13: PLAY TONE.

ff) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

gg) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 18' following receipt of the TERMINAL RESPONSE command.

hh) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 20.9: PLAY TONE.

ii) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

jj) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1C' following receipt of the TERMINAL RESPONSE command.

kk) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 20.10: PLAY TONE.

ll) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

mm) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1C' following receipt of the TERMINAL RESPONSE command.

nn) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 20.11: PLAY TONE.

oo) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

pp) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 19' following receipt of the TERMINAL RESPONSE command.

qq) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 20.12: PLAY TONE.

rr) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

The test is terminated upon the ME sending the TERMINAL RESPONSE.

27.22.4.5.5 Test Requirement

1) After step c) the ME shall display "Dial Tone", play a standard supervisory dial tone through the external ringer for a duration of 5 seconds and shall then return a result of "command performed successfully" in the TERMINAL RESPONSE command.

2) After step f) the ME shall display "Sub. Busy", play a standard supervisory called subscriber busy tone for a duration of 5 seconds and shall then return a result of "command performed successfully" in the TERMINAL RESPONSE command.

3) After step i) the ME shall display "Congestion", play a standard supervisory congestion tone for a duration of 5 seconds and shall then return a result of "command performed successfully" in the TERMINAL RESPONSE command.

4) After step l) the ME shall display "RP Ack", play a standard supervisory radio path acknowledgement tone and shall then return a result of "command performed successfully" in the TERMINAL RESPONSE command.

5) After step o) the ME shall display "No RP", play a standard supervisory radio path not available / call dropped tone for a duration of 5 seconds and shall then return a result of "command performed successfully" in the TERMINAL REPSONSE command.

6) After step r) the ME shall display "Spec Info", play a standard supervisory error / special information tone for a duration of 5 seconds and shall then return a result of "command performed successfully" in the TERMINAL RESPONSE command.

7) After step u) the ME shall display "Call Wait", play a standard supervisory call waiting tone for a duration of 5 seconds and shall then return a result of "command performed successfully" in the TERMINAL RESPONSE command.

8) After step x) the ME shall display "Ring Tone", play a standard supervisory ringing tone for duration of 5 seconds and shall then return a result of "command performed successfully" in the TERMINAL RESPONSE command.

9) After step bb) the ME shall display "Dial Tone", superimpose the standard supervisory dial tone on the audio downlink for the duration of 5 seconds and shall then return a result of "command performed successfully" in the TERMINAL RESPONSE command.

10) After step ee) the ME shall display "This command instructs the ME to play an audio tone. Upon receiving this command, the ME shall check if it is currently in, or in the process of setting up (SET-UP message sent to the network, see GSM"04.08"(8)), a speech call. - If the ME I", play a general beep and shall then return a result of "command performed successfully" in the TERMINAL RESPONSE command.

11) After step hh) the ME shall display "Beep", play a ME proprietary general beep and shall then return a result of "command performed successfully" in the TERMINAL RESPONSE command.

12) After step kk) the ME shall display "Positive", play a ME proprietary positive acknowledgement tone and shall then return a result of "command performed successfully" in the TERMINAL RESPONSE command.

13) After step nn) the ME shall display "Negative", play a ME proprietary negative acknowledgement tone and shall then return a result of "command performed successfully" in the TERMINAL RESPONSE command.

14) After step qq) the ME shall display "Quick", play a ME proprietary general beep and shall then return a result of "command performed successfully" in the TERMINAL RESPONSE command.

27.22.4.6 POLL INTERVAL

27.22.4.6.1 Definition and applicability

This test is only applicable to ME's that support the POLL INTERVAL proactive SIM facility.

The POLL INTERVAL proactive SIM facility negotiates the maximum interval time between STATUS commands issued by the ME when in idle mode.

27.22.4.6.2 Conformance Requirement

The SIM indicates the poll interval it requests from then onwards, and the ME responds through TERMINAL RESPONSE with the maximum interval it will use. If the ME does not support the poll interval requested by the SIM, then the ME shall respond with the closest interval to the one requested by the SIM, or, if the intervals the ME can offer are equidistant (higher or lower) from the SIMs request, the ME shall respond with the lower interval of the two.

The ME shall send STATUS commands to the SIM at intervals no longer than the interval negotiated with the SIM.

TS GSM 11.14 [15] clause 6.4.6.

27.22.4.6.3 Test Purpose

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.

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.

27.22.4.6.4.2 Procedure

a) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 0F'.

b) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 3.1: POLL INTERVAL.

c) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

d) The ME shall be in its normal idle mode.

e) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 0F'.

f) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 3.2: POLL INTERVAL.

g) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

h) The ME shall be in its normal idle mode.

27.22.4.6.5 Test Requirement

1) After step b) the ME shall return a result of "command performed successfully" and shall indicate the negotiated time interval between STATUS commands in the TERMINAL RESPONSE command.

2) After step d) the ME shall change the time interval between STATUS commands to no longer than that indicated in the TERMINAL RESPONSE command.

3) After step f) the ME shall return a result of "command performed successfully" and indicate the negotiated time interval between STATUS commands in the TERMINAL RESPONSE command.

4) After step h) the ME shall change the time interval between STATUS commands to no longer than that indicated in the TERMINAL RESPONSE command.

27.22.4.7 REFRESH

27.22.4.7.1 Definition and applicability

This test is only applicable to ME's that support the REFRESH proactive SIM facility.

The REFRESH proactive SIM facility enables the ME to be notified of the changes to the SIM configuration that have occurred as the result of a SIM application activity.

The elementary files that are normally mirrored by the ME are mostly optional files on the SIM. This test requires the ME to recognise EF_{FDN} and EF_{PLMN}.

27.22.4.7.2 Conformance Requirement

The SIM requests the ME to perform the REFRESH procedure. The ME shall then either read the indicated files, initialise the SIM or reset the SIM depending on the mode of REFRESH requested.

The command supports five different modes:

SIM Initialisation mode tells the ME to carry out SIM initialisation as defined in GSM 11.11 [13] subclause 11.2.1 only, starting after the CHV1 verification procedure. The ME shall not reset the SIM electrically.

File Change Notification mode advises the ME of the identity of the EFs that have been changed (in structure or contents) in the SIM. This information can be used by the ME if there is an image of SIM EFs in the ME's memory, to determine whether it needs to update this image.

SIM Initialisation and File Change Notification mode is a combination of the two modes above.

SIM Initialisation and Full File Change Notification modes causes the ME to perform the SIM initialisation procedure of the first mode above and advises the ME that several EFs have been changed (in structure or contents) in the SIM. If there is an image of SIM EFs in the ME's memory, the ME shall completely update this image.

SIM Reset mode causes the ME to run the GSM session termination procedure and to deactivate the SIM in accordance with GSM 11.11 [13]. Subsequently, the ME activates the SIM again and starts a new card session. In case of a 3 Volt technology ME, the ME shall restart the SIM with the same supply voltage as in the previous session, if the ME can ensure that the SIM has not been changed in between. Otherwise, the ME shall perform the supply voltage switching in accordance with GSM 11.12 [14]. The ME shall not send the TERMINAL RESPONSE after completion of this command.

If the ME performs the REFRESH command successfully for only those EFs indicated in the mode, the MEs shall inform the SIM using TERMINAL RESPONSE (command performed successfully), after it has completed its refreshing.

For REFRESH commands with mode other than "SIM Reset", it is permissible for the ME, as part of it's execution of the REFRESH command, to read EFs in addition to those notified by the SIM, or to perform a SIM Initialisation, provided that the procedure executed wholly encompasses the mode requested by the SIM. The ME shall not electrically reset the SIM. If the ME does the refreshing successfully, it shall inform the SIM using TERMINAL RESPONSE (Refresh performed with additional EFs read), after the ME has completed it's refreshing.

Note: The test requirements detailed below do not make any reference to the operation of the IMSI attach and IMSI detach procedures.

TS GSM 11.14 [15] clause 6.4.7.

27.22.4.7.3 Test Purpose

To verify that the ME performs the refresh procedure of a mode contained in the REFRESH proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME updates the elementary files given in the parameters of the REFRESH proactive SIM command which are mirrored in the ME.

27.22.4.7.4 Method of Test

27.22.4.7.4.1 Initial Conditions

The ME is connected to the system Simulator and the SIM Simulator.

The elementary files are coded as Toolkit default.

The Call Control service is disabled on the SIM Simulator.

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

27.22.4.7.4.2 Procedure

a) The ME shall be in its normal idle mode.

b) The System Simulator shall perform an identity request with requested identity of IMSI on the ME.

c) The SIM Simulator sets EF_{IMSI} to "001 01 0011223344".

d) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 0B'.

e) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 1.4: REFRESH.

f) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

g) The System Simulator shall perform an identity request with requested identity of IMSI on the ME.

h) The SIM Simulator invalidates EF_{IMSI}, EF_{LOCI} and EF_{ADN}.

i) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 0B'.

j) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 1.1: REFRESH

k) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

l) A call shall be attempted to be set up to "321".

m) A call shall be attempted to be set up to "123".

n) After connection the call shall be ended.

o) The SIM Simulator shall set record 1 of EF_{FDN} to "0123456789".

p) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 14' following receipt of the TERMINAL RESPONSE command.

q) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 1.2: REFRESH.

r) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command

s) A call shall be attempted to be set up to "123".

t) A call shall be attempted to be set up to "0123456789".

u) After connection the call shall be ended.

v) The SIM Simulator shall set the 1st PLMN of EF_{PLMN} to "98798".

w) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 14'.

x) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 1.3: REFRESH.

y) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

z) The SIM Simulator shall set EF_{IMSI} to "001 01 9876543210".

aa) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 0B'.

bb) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 1.5: REFRESH.

cc) The System Simulator shall perform an identity request with requested identity of IMSI on the ME.

27.22.4.7.5 Test Requirement

1) After step b) the ME shall return the identity response containing the IMSI "001010123456789".

2) After step e) the ME shall initialise the SIM and shall return a result of "command performed successfully" or "REFRESH performed with additional EFs read" in the TERMINAL RESPONSE command.

3) After step g) the ME shall return the identity response containing the IMSI "001010011223344".

4) After step j) the ME shall initialise the SIM and read all the elementary files that it has mirrored and shall return a result of "command performed successfully" in the TERMINAL RESPONSE command.

5) After step l) the ME shall reject the call, indicating that the call has been rejected in the normal fixed dialling manner.

6) After step m) the ME shall allow the set up of the call.

7) After step q) the ME shall read at least EF_{FDN} and shall return a result of "command performed successfully" or "REFRESH performed with additional EFs read" in the TERMINAL RESPONSE command

8) After step s) the ME shall reject the call, indicating that the call has been rejected in the normal fixed dialling manner.

9) After step t) the ME shall allow the set up of the call.

10) After step x) the ME shall initialise the SIM, read EF_{PLMN} during or after initialisation and return a result of "command performed successfully" or "REFRESH performed with additional EFs read" in the TERMINAL RESPONSE command.

11) After step bb) the ME shall restart the SIM with the same supply voltage as in the previous session.

12) After step cc) the ME shall return the identity response containing the IMSI"001019876543210".

27.22.4.8 SET UP MENU

27.22.4.8.1 Definition and applicability

This test is only applicable to ME's that support the SET UP MENU proactive SIM facility.

The SET UP MENU proactive SIM command 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. Each item comprises a short identifier (used to indicate the selection) and a text string. The included alpha identifier acts as a title for the list of menu items.

27.22.4.8.2 Conformance Requirement

The list of menu items shall be part of the menu system of the ME and the user is allowed to select an item from this list. The presentation style is left as an implementation decision to the ME manufacturer.

When the ME has successfully integrated the list of menu items, it shall send the TERMINAL RESPONSE (OK) to the SIM.

When the ME is not able to successfully integrate the list of menu items, it shall send the TERMINAL RESPONSE (Command beyond ME's capabilities). [This is not tested]

Any subsequent SET UP MENU command replaces the current list of menu items supplied in the previous SET UP MENU command.

The SET UP MENU command can also be used to remove a menu from the menu system in the ME.

When the user has selected one of the menu items of this item list, then the ME shall use the Menu Selection mechanism to transfer the identifier of the selected menu item to the SIM.

TS GSM 11.14 [15] clause 6.4.8.

27.22.4.8.3 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.

27.22.4.8.4 Method of Test

27.22.4.8.4.1 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.

27.22.4.8.4.2 Procedure

a) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 3D'.

b) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 25.1: SET UP MENU.

c) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

d) The ME MMI shall be navigated and the menu item "Item 2" under menu header "Toolkit Menu" shall be selected.

e) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 25'.

f) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 25.2: SET UP MENU.

g) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

h) After the ME has successfully integrated the list of menu items, the ME MMI shall be negotiated and the menu item "Two" under menu header "Toolkit Menu" shall be selected.

i) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 0F'.

j) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 25.3: SET UP MENU.

k) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

l) After the ME has successfully integrated the list of menu items, the ME MMI shall be negotiated to search for the presence of the SIM Application Toolkit menu.

m) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 FF'.

n) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 25.4: SET UP MENU.

o) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

p) After the ME has successfully integrated the list of menu items, the ME MMI shall be negotiated and the menu item "Orange" under menu header "LargeMenu1" shall be selected.

q) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 F6'.

r) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 25.5: SET UP MENU.

s) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

t) After the ME has successfully integrated the list of menu items, the ME MMI shall be negotiated and the menu item "5 Barring Of All Outgoing Calls" under menu header "LargeMenu2" shall be selected.

u) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 FF'.

v) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 25.6: SET UP MENU.

w) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

x) After the ME has successfully integrated the list of menu items, the ME MMI shall be negotiated and the menu item "Y" under menu header "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" shall be selected.

27.22.4.8.5 Test Requirement

1) After step b) the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE command and shall integrate the new menu header of "Toolkit Menu" into its menu system. The ME shall have the menu items of "Item 1", "Item 2", "Item 3" and "Item 4" under this header.

2) After step f) the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE command and shall integrate the new menu header of "Toolkit Menu" into its menu system. The ME shall have the menu items of "One" and "Two" under this header.

3) After step j) the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE command and shall remove the menu from it's menu system.

4) After step n) the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE command and shall integrate the new menu header of "LargeMenu1" into its menu system. The ME shall 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) After step r) the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE command and shall integrate the new menu header of "LargeMenu2" into its menu system. The ME shall 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.

6) After step v) the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE command and shall 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. The ME shall have a menu item of "Y" under this header.

27.22.4.9 SELECT ITEM

27.22.4.9.1 Definition and applicability

This test is only applicable to ME's that support the SELECT ITEM proactive SIM facility.

The SELECT ITEM proactive SIM command 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 is intended to act as a title for the list of items.

27.22.4.9.2 Conformance Requirement

The ME shall present the list of text strings to the user, and allow the user to select an item from this list. The presentation style is left as an implementation decision to the ME manufacturer.

When the user has selected an item, the ME shall send the TERMINAL RESPONSE (OK) to the SIM with the identifier of the chosen item.

If the user indicated the need to end the proactive SIM application session, the ME shall send a TERMINAL RESPONSE with "Proactive SIM application session terminated by the user" result value.

If the user has indicated the need to go backwards in the proactive SIM application session, the ME shall send a TERMINAL RESPONSE with "Backward move in the proactive SIM application session requested by the user" result value.

If the ME decides that no user response has been received, the ME shall send a TERMINAL RESPONSE with "No response from user" result value.

TS GSM 11.14 [15] clause 6.4.9.

27.22.4.9.3 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.

The ability of the ME to send the TERMINAL RESPONSE with "No response from user" result value cannot be tested as the length of time to wait is undefined in GSM 11.14 [15].

27.22.4.9.4 Method of Test

27.22.4.9.4.1 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.

27.22.4.9.4.2 Procedure

a) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 3F'.

b) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 24.1: SELECT ITEM.

c) The ME MMI shall be navigated and item "Item 2" shall be selected.

d) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 FF' following receipt of the TERMINAL RESPONSE command.

e) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 24.3: SELECT ITEM.

f) The ME MMI shall be navigated and item "Orange" shall be selected.

g) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 FE' following receipt of the TERMINAL RESPONSE command.

h) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 24.4: SELECT ITEM.

i) The ME MMI shall be navigated and item "Barring Of All Outgoing Calls" shall be selected.

j) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

k) The SIM Simulator shall indicate to the ME that us has a proactive SIM command pending with SW1 / SW2 of '91 24'.

l) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 24.2: SELECT ITEM.

m) The ME MMI shall be navigated to go backwards in the proactive SIM application session.

n) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 24' following receipt of the TERMINAL RESPONSE command.

o) After the ME sends the FETCH instruction to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 24.2: SELECT ITEM.

p) The ME MMI shall be navigated to end the proactive SIM application and return the ME to normal operation.

q) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

r) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 00' following receipt of the TERMINAL RESPONSE command.

s) After the ME sends the FETCH instruction to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 24.6: SELECT ITEM.

t) The ME MMI shall be navigated and item "Y" shall be selected.

u) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

v) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 F6' following receipt of the TERMINAL RESPONSE command.

w) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 24.5: SELECT ITEM.

x) The ME MMI shall be navigated and item "5 Barring Of All Outgoing Calls" shall be selected.

The test is terminated upon the ME sending the TERMINAL RESPONSE.

27.22.4.9.5 Test Requirement

1) After step b) the ME shall present the items of "Item 1", "Item 2", "Item 3" and "Item 4" under the header of "Toolkit Select" to the user, and allow the user to select an item from this list.

2) After step c) the ME shall return a result of "command performed successfully" and the item identifier '02' in the TERMINAL RESPONSE command.

3) After step e) the ME shall 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", and allow the user to select an item from this list.

4) After step f) the ME shall return a result of "command performed successfully" and the item identifier '3D' in the TERMINAL RESPONSE command.

5) After step h) the ME shall present the items of " Call Forwarding Unconditional", "Call Forward On User Busy", "Call Forward On No Reply", "Call Forward On User Not Reachable", "Barring Of All Outgoing Calls", "Barring Of All Outgoing International Calls" and "CLI Presentation" under the header of " LargeMenu2", and allow the user to select an item from this list.

6) After step i) the ME shall return a result of "command performed successfully" and the item identifier 'FB' in the TERMINAL RESPONSE command.

7) After step l) the ME shall present the items of "One" and "Two" under the header of "Select Item" to the user, and allow the user to select an item from the list.

8) After step m) the ME shall return a result of "Backward move in the proactive SIM application session requested by user" in the TERMINAL RESPONSE command.

9) After step o) the ME shall present the items of "One" and "Two" under the header of "Select Item" to the user, and allow the user to select an item from the list.

10) After step p) the ME shall return a result of "Proactive SIM application terminated by the user" in the TERMINAL RESPONSE command.

11) After step s) the ME shall 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", and allow the user to select an item from this list.

12) After step t) the ME shall return a result of "command performed successfully" and the item identifier '01' in the TERMINAL RESPONSE command.

13) After step w) the ME shall 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", and allow the user to select an item from this list.

14) After step x) the ME shall return a result of "command performed successfully" and the item identifier 'FB' in the TERMINAL RESPONSE command.

27.22.4.10 SEND SHORT MESSAGE

27.22.4.10.1 Definition and applicability

This test is only applicable to ME's that support the SEND SHORT MESSAGE proactive SIM facility.

The SEND SHORT MESSAGE proactive SIM command shall send a short message to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transparently, or in an SMS-SUBMIT message where the text needs to be packed by the ME.

27.22.4.10.2 Conformance Requirement

The ME's ability to send mobile originated SMS is tested in subclause 34.2.2 of document GSM 11.10-1 [12], so is not re-tested again in this document.

8-bit data Short Messages may be sent by the SIM. The command shall indicate packing not required. The string shall not be longer than 140 bytes, and the length (in SMS TPDU) shall indicate the number of bytes in the string.

SMS commands may be sent by the SIM. These shall count as packed text message. The SMS TPDU from the SIM shall indicate SMS-COMMAND. The command details shall indicate "packing not required".

Where packing by the ME is required, the text string provided by the SIM shall not be longer than 160 characters. It shall use the SMS default 7-bit coded alphabet as defined in GSM 03.38 [7] with bit 8 set to 0. The text length given by the SIM shall state the number of characters in the text string. The ME shall pack the text string in accordance with GSM 03.38 [7] before submitting the message to the network (System Simulator).

If the ME is capable of SMS-MO, then it shall send the data as a Short Message TPDU to the destination address. The ME shall give a result to the SIM using TERMINAL RESPONSE (indicating successful or unsuccessful transmission of the Short Message) after receiving an SMS RP-ACK or RP-Error from the network (System Simulator).

TS GSM 11.14 [15] clause 6.4.10.

27.22.4.10.3 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.

27.22.4.10.4 Method of Test

27.22.4.10.4.1 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.

27.22.4.10.4.2 Procedure

a) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 39'.

b) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 13.1: SEND SHORT MESSAGE.

c) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

d) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 34'.

e) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 13.2: SEND SHORT MESSAGE.

f) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

g) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 3F'.

h) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 13.3: SEND SHORT MESSAGE.

i) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 00'.

j) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 13.4: SEND SHORT MESSAGE.

k) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 EC'.

l) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 13.5: SEND SHORT MESSAGE.

m) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 00'.

n) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 13.6: SEND SHORT MESSAGE.

o) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

The test is terminated upon the ME sending the TERMINAL RESPONSE.

27.22.4.10.5 Test Requirement

1) After step b) the ME shall send an SMS to the System Simulator in the manner defined in GSM 03.40 [8] and GSM 04.11 [11] containing SMS-PP (SEND SHORT MESSAGE) Message 1 and return a result of "command performed successfully" in the TERMINAL RESPONSE command.

2) After step e) the ME shall send an SMS to the System Simulator in the manner defined in GSM 03.40 [8] and GSM 04.11 [11] containing SMS-PP (SEND SHORT MESSAGE) Message 2 and return a result of "command performed successfully" in the TERMINAL RESPONSE command.

3) After step h) the ME shall send an SMS to the System Simulator in the manner defined in GSM 03.40 [8] and GSM 04.11 [11] containing SMS-PP (SEND SHORT MESSAGE) Message 3 and return a result of "command performed successfully" in the TERMINAL RESPONSE command.

4) After step j) the ME shall send an SMS to the System Simulator in the manner defined in GSM 03.40 [8] and GSM 04.11 [11] containing SMS-PP (SEND SHORT MESSAGE) Message 4 and return a result of "command performed successfully" in the TERMINAL RESPONSE command.

5) After step j) the ME shall send an SMS to the System Simulator in the manner defined in GSM 03.40 [8] and GSM 04.11 [11] containing SMS-PP (SEND SHORT MESSAGE) Message 5 and return a result of "command performed successfully" in the TERMINAL RESPONSE command.

6) After step n) the ME shall send an SMS to the System Simulator in the manner defined in GSM 03.40 [8] and GSM 04.11 [11] containing SMS-PP (SEND SHORT MESSAGE) Message 6 and return a result of "command performed successfully" in the TERMINAL RESPONSE command.

27.22.4.11 SEND SS

27.22.4.11.1 Definition and applicability

This test is only applicable to ME's that support the SEND SS proactive SIM facility.

The SEND SS proactive SIM command shall send a SS request to the network (System Simulator), without need to alert the user.

27.22.4.11.2 Conformance Requirement

Upon receiving this command, the ME shall decide if it is able to execute the command.

If the command is rejected because the ME is busy on a SS transaction, the ME informs the SIM using TERMINAL RESPONSE (ME unable t o process command - currently busy on SS transaction). [This is not tested].

If the command is rejected because the ME does not support that Supplementary Service, the ME informs the SIM using TERMINAL RESPONSE (Command beyond ME's capabilities). [This is not tested].

If the ME is able to send the SS request, the ME shall:

- Send the SS request immediately, without need to alert the user first.
- Once a SS Return Result message not containing an error has been received from the System Simulator, the ME shall inform the SIM that the command has been successfully executed, using TERMINAL RESPONSE. This command shall include the contents of the SS Return Result as additional data.
- If the command is rejected because the System Simulator cannot support or is not allowing the Supplementary Service request, the ME informs the SIM using TERMINAL RESPONSE (SS Return Result error code).
- If the SS request is unsuccessfully received by the System Simulator, the ME shall inform the SIM using TERMINAL RESPONSE (network currently unable to process command), and not to retry to send the request.

If the ME supports the Last Number Dialled service, the ME shall not store in EF_{LND} the supplementary service string sent by the SIM in this command.

TS GSM 11.14 [15] clause 6.4.11.

27.22.4.11.3 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.

27.22.4.11.4 Method of Test

27.22.4.11.4.1 Initial Conditions

The ME is connected to the system Simulator and SIM Simulator.

The elementary files are coded as Toolkit default.

The Call Control service is disabled on the SIM Simulator.

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

27.22.4.11.4.2 Procedure

a) The ME shall be in its normal idle mode.

b) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 29'.

c) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 11.1: SEND SS.

d) The System Simulator indicates acceptance of the SS request to the ME with SS Return Result additional data.

e) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

f) The ME shall be in its normal idle mode.

g) The SIM Simulator indicates to the ME that is has a proactive SIM command pending with SW1 / SW2 of '91 29'.

h) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 11.1: SEND SS.

i) The System Simulator indicates rejection of the SS request to the ME, indicating that it cannot support or is not allowing the service.

j) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

k) The ME shall be in its normal idle mode.

l) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 29'.

m) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 11.1: SEND SS.

n) The network (System Simulator) sends a SS request rejection to the ME, indicating that it was unsuccessfully received by the network.

o) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

p) The ME shall be in its normal idle mode.

q) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 34'.

r) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 11.2: SEND SS.

s) The System Simulator indicates acceptance of the SS request to the ME with SS Return Result additional data.

t) The ME shall be in its normal idle mode.

u) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 00'.

v) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 11.3: SEND SS.

w) The System Simulator indicates acceptance of the SS request to the ME with SS Return Result additional data.

x) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

27.22.4.11.5 Test Requirement

1) After step c) the ME shall send the Supplementary Service request to the System Simulator containing the SS string "**21*+0123456789012345678 9#" as SS Register 1.

2) After step d) the ME shall return a result indicating successful transmission of the SS string with the SS Return Result as additional data in the TERMINAL RESPONSE command.

3) After step h) the ME shall send the SS request to the System Simulator containing the SS string "**21*+0123456789012345678 9#" as SS Register 1.

4) After step i) the ME shall return a result indicating SS Return Result error code in the TERMINAL RESPONSE command.

5) After step m) the ME shall send the SS request to the System Simulator containing the SS string "**21*+0123456789012345678 9#" as SS Register 1.

6) After step n) the ME shall return a result to the SIM indicating network currently unable to process the command in the TERMINAL RESPONSE command. The ME should then not retry to send the request.

7) After step r) the ME shall send the Supplementary Service request to the System Simulator containing the SS string "**21*+0123456789012345678901234567890123456 7*11#" within a SS Register message.

8) After step s) the ME shall return a result indicating successful transmission of the SS string with the SS Return Result as additional data in the TERMINAL RESPONSE command.

9) After step v) the ME shall send the Supplementary Service request to the System Simulator containing the SS string "*#31#" within a SS Register message.

10) After step w) the ME shall return a result indicating successful transmission of the SS string with the SS Return Result as additional data in the TERMINAL RESPONSE command.

27.22.4.12 SEND USSD

For further study.

27.22.4.13 SET UP CALL

27.22.4.13.1 Definition and applicability

This test is only applicable to ME's that support the SET UP CALL proactive SIM facility.

The SET UP CALL proactive SIM command allows the SIM to initiate the set up of a call.

27.22.4.13.2 Conformance Requirement

The call can be set up in one of three ways: call set up, but only if not currently busy on another call; call set up, putting all other call (if any) on hold; call set up, disconnecting all other calls (if any) first.

The ME shall use the capability configuration parameters (giving the bearer capability to request for the call) and the called party sub-address in its call set-up request to the network. The command may also include DTMF digits, which the ME shall send to the network after the call has connected.

If the command is rejected because the ME is busy on another call, the ME informs the SIM using TERMINAL RESPONSE (ME unable to process command - currently busy on call);

If the command is rejected because the ME is busy on a SS transaction, the ME informs the SIM using TERMINAL RESPONSE (ME unable to process commands - currently busy on SS transaction); [This is not tested].

If the command is rejected because the ME cannot support Call Hold, or because the ME does not support the capability configuration parameters requested by the SIM, the ME informs the SIM using TERMINAL RESPONSE (Command beyond ME's capabilities);

If the command is rejected because the System Simulator cannot support or is not allowing Call Hold of a single call, the ME informs the SIM using TERMINAL RESPONSE (Network currently unable to process command).

If the ME is able to set up the call on the serving network, the ME shall:

- Alert the user (as for an incoming call);
- If the user accepts the call, the ME shall then set up a call to the destination address given in the response data, with the relevant capability configuration parameters and the called party sub-address (if provided by the SIM);
- If the user does not accept the call, or rejects the call, then the ME informs the SIM using TERMINAL RESPONSE (user did not accept call set-up request). The operation is aborted;
- Once a CONNECT message has been received from the network (System Simulator) (defined in GSM 04.08 [10]), the ME shall inform the SIM that the command has been successfully executed, using TERMINAL RESPONSE. Operation of the call then proceeds as normal.

If the first call set-up attempt was unsuccessful:

- If the SIM did not request redial than the ME shall inform the SIM using TERMINAL RESPONSE (network currently unable to process command), and not redial to set-up the call;
- If the SIM requested redial, then the ME may automatically redial the call (depending on it's capability / configuration). In this case, the ME shall not send a command result to the SIM concerning the first or any subsequent failed set-up attempts. If the call set-up has not been successful, and the ME is not going to perform any more redials, or the time elapsed since the first call set-up attempt has exceeded the duration requested by the SIM, then the ME shall inform the SIM using TERMINAL RESPONSE (network currently unable to process command), and the redial mechanism shall be terminated;
- If the user stops the call set-up attempt or the redial mechanism before a result is received from the network, the ME informs the SIM using TERMINAL RESPONSE (user cleared down call before connection or network release).

If the ME supports the Last Number Dialled service, the ME shall not store in the EF_{LND} the call set-up details (called party number and associated parameters) sent by the SIM in this command.

TS GSM 11.14 [15] clause 6.4.13.

27.22.4.13.3 Test Purpose

To verify that the ME correctly performs the call set up procedure with the parameters contained within the SET UP CALL proactive SIM command

To verify that the ME returns a TERMINAL RESPONSE command to the SIM indicating the status of the call set-up attempt.

27.22.4.13.4 Method of Test

27.22.4.13.4.1 Initial Conditions

The ME is connected to the system Simulator and the SIM Simulator.

The elementary files are coded as Toolkit default.

The Call Control service is disabled on the SIM Simulator.

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

27.22.4.13.4.2 Procedure

a) The ME shall be in its normal idle mode.

b) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 20'.

c) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 10.1: SET UP CALL.

d) After the ME displays "Not busy" or otherwise prompts the user to set up a call to "+012340123456p1p2", the call set up shall be confirmed.

e) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

f) The call shall be ended, after the ME has been in call for 5 seconds.

g) The ME shall be in its normal idle mode.

h) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 20'.

i) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 10.1: SET UP CALL.

j) After the ME displays "Not busy" or otherwise prompts the user to set up a call to "+012340123456p1p2", the operator shall reject the call set up.

k) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

l) The System Simulator shall be configured such that all call set up requests will return currently busy on call.

m) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 2C'.

n) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 10.2: SET UP CALL.

o) After the ME displays "Not busy with redial" or otherwise prompts the user to set up a call to "+012340123456p1p2", the call set up shall be confirmed.

p) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

q) The System Simulator shall be configured such that all call set up request will not return currently busy on call.

r) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1F'.

s) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 10.3: SET UP CALL.

t) After the ME displays "On hold" or otherwise prompts the user to set up a call to "+012340123456p1p2", the call set up shall be confirmed.

u) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

v) After 5 seconds the call shall be ended.

w) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 22'.

x) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 10.5: SET UP CALL.

y) After the ME displays "Disconnect" or otherwise prompts the user to set up a call to "+012340123456p1p2", the call set up shall be confirmed.

z) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

aa) After 5 seconds the call shall be ended.

bb) A call shall be set up on the ME.

cc) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 20'.

dd) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 10.1: SET UP CALL.

ee) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

ff) The call shall be ended.

gg) The System Simulator shall be configured to not allow Call Hold.

hh) The ME shall set up a call.

ii) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 1F'.

jj) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 10.3: SET UP CALL.

kk) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

ll) The call shall be ended.

mm) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 2D'.

nn) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 10.7: SET UP CALL.

oo) After the ME displays "Capability config" or otherwise prompts the user to set up a call to "+012340123456p1p2", the call set up shall be confirmed.

pp) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

qq) The call shall be ended.

rr) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 00'.

ss) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 10.10: SET UP CALL.

tt) After the ME prompts the user to set up a call to "+0123456789012345678901234567890*#*#*#*#*#*#0123456789012345678901234567890*#*#*#*#*#*0123456789012345678901234567890*#*#*#*#*#*#0123456789012345678901234567890*#*#*#*#*#*#p*01234567890123456789012345678 9*#*#*#*#*#*#pp0123456789012345678901234567890*#*#*#*#*#*#ppp#01234567890123456789012345678 90123456789*#*#*#*#*#*#pppp0123456789012345678901234567890*#*#*#*#*#*#ppppp*01234567890123456789012345678 90123456789*#*#*#*#*#*#pppppp0123456789012345678901234567890*#*#*#*#*#*#ppppppp#01234567890123456 7890123456789*#*#*#*#*#*#pppppp01", the call set up shall be confirmed.

uu) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

vv) The call shall be ended.

ww) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 00'.

xx) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 10.11: SET UP CALL.

yy) After the 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, " or otherwise prompts the user to set up a call to "+01", the call set up shall be confirmed.

zz) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

aaa) The call shall be ended.

bbb) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 2D'.

ccc) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 10.8: SET UP CALL.

ddd) After the ME displays "Called party" or otherwise prompts the user to set up a call to "+012340123456p1p2", the call set up shall be confirmed.

eee) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

fff) The call shall be ended.

ggg) The ME shall set up a call.

hhh) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 24'.

iii) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 10.9: SET UP CALL.

jjj) After the ME displays "Duration" or otherwise prompts the user to set up a call to "+012340123456p1p2", the call set up shall be confirmed.

kkk) The call shall be ended after 5 seconds.

lll) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

mmm) The call shall be ended.

27.22.4.13.5 Test Requirement

1) After step c) the ME shall display "Not busy" or otherwise prompts the user to set up the call to "+012340123456p1p2".

2) After step d) the ME shall attempt to set up a call to the address "+012340123456p1p2". After the ME receives the CONNECT message from the System Simulator the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE command. The ME shall not update EF_{LND} with the called party address.

3) After step i) the ME shall display "Not busy" or otherwise prompts the user to set up the call to "+012340123456p1p2".

4) After step j) the ME shall return a result of user did not accept call set up request in the TERMINAL RESPONSE command.

5) After step n) the ME shall display "Not busy with redial" or otherwise prompt the user to set up the call.

6) After step o) the ME shall attempt to set up a call to the address "+01234123456p1p2" at least twice. The ME shall return a result of "network currently unable to process command" in the TERMINAL RESPONSE command.

7) After step s) the ME shall display "On hold" or otherwise prompt the user to set up the call to "+012340123456p1p2".

8) After step t) the ME shall attempt to set up a call to the address "+012340123456". After the ME receives the CONNECT message from the System Simulator the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE command. The ME shall put the previous call on hold.

9) After step x) the ME shall display "Disconnect" or otherwise prompt the user to set up the call to "+012340123456p1p2".

10) After step y) the ME shall disconnect the previous call and shall attempt to set up a call to address "+012340123456". After the ME receives the CONNECT message from the System Simulator the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE command. The ME shall disconnect the previous call.

11) After step dd) the ME shall return a result of "ME unable to process command - currently busy on call" in the TERMINAL RESPONSE command.

12) After step jj) the ME shall display "On hold" or otherwise prompt the user to set up the call to "+012340123456p1p2".

13) After step jj) the ME shall return a result of "Network currently unable to process command" in the TERMINAL RESPONSE command.

14) After step nn) the ME shall display "Capability config" or otherwise prompt the user to set up the call to "+012340123456p1p2".

15) After step oo) the ME shall attempt to set up a call to address "+012340123456" with the capability configuration information. After the ME receives the CONNECT message from the System Simulator the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE command.

16) After step ss) the ME shall prompt the user to set up the call to "+0123456789012345678901234567890123456789*#*#*#*#*#0123456789012345678901234567890123456789*#*#*#*#*012345678901234567890123456789*#*#*#*#*#0123456789012345678901234567890123456789*#*#*#*#*#p*01234567890123456789012345678901234567890123456789*#*#*#*#*#pp0123456789012345678901234567890123456789*#*#*#*#*#ppp#012345678901234567890123456789*#*#*#*#*#pppp0123456789012345678901234567890123456789*#*#*#*#*#ppppp*012345678901234567890123456789*#*#*#*#*#pppppp0123456789012345678901234567890123456789*#*#*#*#*#ppppppp#01234567890123456789012345678901234567890123456789*#*#*#*#*#pppppp01".

17) After step tt) the ME shall attempt to set up a call to address "+0123456789012345678901234567890123456789*#*#*#*#*#0123456789012345678901234567890123456789*#*#*#*#*012345678901234567890123456789*#*#*#*#*#0123456789012345678901234567890123456789*#*#*#*#*#p*01234567890123456789012345678901234567890123456789*#*#*#*#*#pp0123456789012345678901234567890123456789*#*#*#*#*#ppp#012345678901234567890123456789*#*#*#*#*#pppp0123456789012345678901234567890123456789*#*#*#*#*#ppppp*012345678901234567890123456789*#*#*#*#*#pppppp0123456789012345678901234567890123456789*#*#*#*#*#ppppppp#01234567890123456789012345678901234567890123456789*#*#*#*#*#pppppp01". After the ME receives the CONNECT message from the System Simulator the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE command.

18) After step xx) the ME shall display "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, " or otherwise prompt the user to set up the call to "+01".

19) After step yy) the ME shall attempt to set up a call to address "+01". After the ME receives the CONNECT message from the System Simulator the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE command.

20) After step ccc) the ME shall display "Called party" or otherwise prompt the user to set up the call to "+012340123456p1p2".

21) After step ddd) the ME shall attempt to set up a call to address "+012340123456" with the called party subaddress information. After the ME receives the CONNECT message from the System Simulator the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE command.

22) After step iii) the ME shall display "Duration" or otherwise prompt the user to set up the call to "+012340123456p1p2".

23) After step jjj) the ME shall attempt to set up a call to address "+012340123456" with the capability configuration information. After the ME receives the CONNECT message from the System Simulator the ME shall return a result of "command performed successfully" in the TERMINAL RESPONSE command.

27.22.4.14 POLLING OFF

27.22.4.14.1 Definition and applicability

This test is only applicable to ME's that support the POLLING OFF proactive SIM facility.

The POLLING OFF proactive SIM command cancels the effect of any previous POLL INTERVAL commands.

27.22.4.14.2 Conformance Requirement

The ME shall cancel the effect of any previous POLL INTERVAL commands. SIM presence shall not be effected by this command.

TS GSM 11.14 [15] clause 6.4.14.

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.

The ME is connected to the System Simulator and has performed the location update procedure.

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.

27.22.4.14.4.2 Procedure

a) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 0B'.

b) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 4.1: POLLING OFF.

c) A call shall be set up on the ME.

27.22.4.14.5 Test Requirement

1) After step b) the ME shall return a result of "command performed successfully" to the SIM in the TERMINAL RESPONSE command.

2) After step c) the ME shall perform the SIM presence procedure on the SIM.

27.22.4.15 PROVIDE LOCAL INFORMATION

27.22.4.15.1 Definition and applicability

This test is only applicable to ME's that support the PROVIDE LOCAL INFORMATION proactive SIM facility.

The PROVIDE LOCAL INFORMATION proactive SIM command requests the ME to send the SIM the current local information including ME IMEI, MCC, MNC, LAC and Cell Identity.

27.22.4.15.2 Conformance Requirement

The ME shall return the requested local information with in a TERMINAL RESPONSE. The local information requested is either: the MCC, MNC, LAC and Cell Identity or the ME IMEI.

If the ME does not store the requested local information, then the ME shall return TERMINAL RESPONSE (Command beyond ME's capabilities).

TS GSM 11.14 [15] clause 6.4.15.

27.22.4.15.3 Test Purpose

To verify that the ME sends the correct local information to the SIM in the TERMINAL RESPONSE, 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 Test

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 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

a) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 0B'.

b) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 26.1: PROVIDE LOCAL INFORMATION.

c) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 0B' following receipt of TERMINAL RESPONSE command.

d) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 26.2: PROVIDE LOCAL INFORMATION.

e) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

27.22.4.15.5 Test Requirement

1) After step b) the ME shall send the MCC, MNC, LAC and Cell Identity of the System Simulator to the SIM in the TERMINAL RESPONSE command.

2) After step d) the ME shall send the IMEI of the ME to the SIM in the TERMINAL RESPONSE command. The IMEI shall be identical to that sent to the System Simulator.

27.22.5 Data Download to SIM

27.22.5.1 SMS-PP Data Download

27.22.5.1.1 Definition and applicability

This test is only applicable to ME's that support the SMS-PP data download facility.

The SMS-PP data download facility allows the network to pass a message to the SIM transparently through the ME.

27.22.5.1.2 Conformance requirement

When the ME receives a short message with a protocol identifier indicating SIM data download and a data coding scheme of a class 2 message, the ME shall pass the message transparently to the SIM using the ENVELOPE (SMS-PP DOWNLOAD) command.

The ME shall not display the message, or alert the user of a short message waiting.

The ME shall wait for an acknowledgement from the SIM. The SIM shall respond with SW1 / SW2 of '90 00', '91 XX' or '9F XX'.

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 will be supplied by the ME in the TP-User-Data element of the RP-ACK message it will send back to the network. The values of protocol identifier and data coding scheme in RP-ACK shall be as in the original message. The response data will be limited by the SIM to a maximum of 128 bytes.

If the service "data download via SMS-PP" is not allocated and activated in the SIM Service Table, and the ME receives a Short Message with a protocol identifier of SIM data download and data coding scheme of class 2 message, then the ME shall store the message in EF_{SMS} in accordance with GSM 11.11 [13].

TS GSM 11.14 [15] clause 7.1.1.

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

a) The ME shall be in its normal idle mode.

b) The System Simulator shall send to the ME the Short Message: SMS-PP Data Download 1.

c) After the ME sends the ENVELOPE 1.1: SMS-PP DOWNLOAD command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '90 00'.

d) The ME shall be in its normal idle mode.

e) The System Simulator shall send to the ME the Short Message: SMS-PP Download 1

f) After the ME sends the ENVELOPE 1.1: SMS-PP DOWNLOAD command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 0B'.

g) After the ME sends the GET RESPONSE command to the SIM Simulator, the SIM Simulator shall return the SMS-PP Data Download SIM Acknowledgement.

h) The ME shall be in its normal idle mode.

i) The System Simulator shall send to the ME the Short Message: SMS-PP Download 1

j) After the ME sends the ENVELOPE 1.1: SMS-PP DOWNLOAD command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '91 0B'.

k) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 2.1: MORE TIME.

l) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

m) The ME shall be in its normal idle mode.

n) The System Simulator shall send to the ME the Short Message: SMS-PP Data Download 2.

o) After the ME sends the ENVELOPE 1.2: SMS-PP DOWNLOAD command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '90 00'.

p) The ME shall be in its normal idle mode.

q) The System Simulator shall send to the ME the Short Message: SMS-PP Data Download 3.

r) After the ME sends the ENVELOPE 1.3: SMS-PP DOWNLOAD command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '90 00'.

s) The ME shall be in its normal idle mode.

t) The System Simulator shall send to the ME the Short Message: SMS-PP Data Download 4.

u) After the ME sends the ENVELOPE 1.4: SMS-PP DOWNLOAD command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '90 00'.

27.22.5.1.5 Test Requirement

1) After step b) the ME shall not display the message or alert the user of a short message waiting and shall send the Short Message to the SIM in the ENVELOPE 1.1: SMS-PP DOWNLOAD command.

2) After step c) the ME shall send the RP-ACK to the System Simulator.

3) After step e) the ME shall not display the message or alert the user of a short message waiting and shall send the Short Message to the SIM in the ENVELOPE 1.1: SMS-PP DOWNLOAD command.

4) After step g) the ME shall send the SMS-PP Data Download SIM Acknowledgement back to the System Simulator 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.

5) After step i) the ME shall not display the message or alert the user of a short message waiting and shall send the Short Message to the SIM in the ENVELOPE 1.1: SMS-PP DOWNLOAD command.

6) After step j) the ME shall send the RP-ACK to the System Simulator.

7) After step n) the ME shall not display the message or alert the user of a short message waiting and shall send the Short Message to the SIM in the ENVELOPE 1.2: SMS-PP DOWNLOAD command.

8) After step o) the ME shall send the RP-ACK to the System Simulator.

9) After step q) the ME shall not display the message or alert the user of a short message waiting and shall send the Short Message to the SIM in the ENVELOPE 1.3: SMS-PP DOWNLOAD command.

10) After step r) the ME shall send the RP-ACK to the System Simulator.

11) After step t) the ME shall not display the message or alert the user of a short message waiting and shall send the Short Message to the SIM in the ENVELOPE 1.4: SMS-PP DOWNLOAD command.

12) After step u) the ME shall send the RP-ACK to the System Simulator.

27.22.5.2 SMS-CB Data Download

27.22.5.2.1 Definition and applicability

This test is only applicable to ME's that support the SMS-CB data download facility.

The SMS-CB data download facility allows the network to pass a message to the SIM transparently through the ME.

27.22.5.2.2 Conformance requirement

When the ME receives a new Cell Broadcast message, the ME shall compare the message identifier of the Cell Broadcast message with the message identifiers contained in EF_{CBMID}.

If the message identifier is found in EF_{CBMID}, the cell broadcast page is passed to the SIM using the ENVELOPE (CELL BROADCAST DOWNLOAD) command. The ME shall not display the message.

If the message identifier of the incoming cell broadcast message is not found in EF_{CBMID}, then the ME shall determine if the message should be displayed, by following the procedure in GSM 03.41 [9] and GSM 11.11 [13].

The ME shall identify new cell broadcast pages by their message identifier, serial number and page values.

TS GSM 11.14 [15] clause 7.2.1.

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.

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

27.22.5.2.4.2 Procedure

a) The ME shall be in its normal idle mode.

b) The System Simulator shall send SMS-CB (Data Download) Message 1 to the ME with a message identifier of '10 01'.

c) After the ME sends the ENVELOPE (SMS-CB DOWNLOAD) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '90 00'.

d) The ME shall be in its normal idle mode.

e) The System Simulator shall send SMS-CB (Data Download) Message 1 to the ME with a message identifier of '10 01'.

f) After the ME sends the ENVELOPE (SMS-CB DOWNLOAD) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '91 0B'.

g) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 2.1: MORE TIME.

h) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

i) The ME shall be in its normal idle mode.

j) The System Simulator shall send SMS-CB (Data Download) Message 2 to the ME with a message identifier of '0C 0C'.

27.22.5.2.5 Test Requirement

1) After step b) the ME shall not display the cell broadcast message and shall send the Cell Broadcast Message to the SIM in the ENVELOPE 2.1: SMS-CB DOWNLOAD command.

2) After step e) the ME shall not display the Cell Broadcast Message and shall send the Cell Broadcast Message to the SIM in the ENVELOPE 2.1: SMS-CB DOWNLOAD command.

3) After step i) the ME shall display the Cell Broadcast Message.

27.22.5.3 Menu Selection

27.22.5.3.1 Definition and applicability

This test is only applicable to ME's that support the Menu Selection facility.

A set of possible menu options can be supplied by the SIM using the proactive SIM command SET UP MENU. If the SIM has sent this command, and the user subsequently chooses an option, the ME informs the SIM using this procedure.

27.22.5.3.2 Conformance requirement

If the service "menu selection" is allocated and activated in the SIM Service Table), then the ME shall follow the procedure below:

When the ME receives a menu selection from one of the menu items defined by the "SET UP MENU" command issued previously by the SIM it shall pass the identifier of the selected menu item to the SIM using the ENVELOPE (MENU SELECTION) command.

TS GSM 11.14 [15] clause 8.1.

27.22.5.3.3 Test Purpose

To verify that the ME correctly passes the identifier of the selected menu item to the SIM using the ENVELOPE (MENU SELECTION) command.

27.22.5.3.4 Method of Test

27.22.5.3.4.1 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.

27.22.5.3.4.2 Procedure

a) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 3D'.

b) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 25.1: SET UP MENU.

c) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

d) The ME MMI shall be navigated and the menu item "Item 2" under menu header "Toolkit Menu" shall be selected.

e) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 25'.

f) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 25.2: SET UP MENU.

g) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

h) After the ME has successfully integrated the list of menu items, the ME MMI shall be negotiated and the menu item "Two" under menu header "Select Item" shall be selected.

i) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 0F'.

j) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 25.3: SET UP MENU.

k) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

l) After the ME has successfully integrated the list of menu items, the ME MMI shall be negotiated to search for the presence of the SIM Application Toolkit menu.

m) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 FF'.

n) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 25.4: SET UP MENU.

o) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

p) After the ME has successfully integrated the list of menu items, the ME MMI shall be negotiated and the menu item "Orange" under menu header "LargeMenu1" shall be selected.

q) The SIM Simulator indicates to the ME that it has a proactive SIM command pending with SW1 / SW2 of '91 F6'.

r) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 25.5: SET UP MENU.

s) The SIM Simulator shall indicate to the ME that the proactive SIM session has ended with SW1 / SW2 of '90 00' following receipt of the TERMINAL RESPONSE command.

t) After the ME has successfully integrated the list of menu items, the ME MMI shall be negotiated and the menu item "5 Barring Of All Outgoing Calls" under menu header "LargeMenu2" shall be selected.

27.22.5.3.5 Test Requirement

1) After step d) the ME shall send ENVELOPE 3.1: MENU SELECTION command to the SIM Simulator indicating that menu item '02' has been selected.

2) After step h) the ME shall send ENVELOPE 3.2: MENU SELECTION command to the SIM Simulator indicating that menu item '12' has been selected.

3) After step l) the ME shall have removed the SIM Application Toolkit menu header and items from the ME MMI.

4) After step p) the ME shall send ENVELOPE 3.3: MENU SELECTION command to the SIM Simulator indicating that menu item '3D' has been selected.

5) After step t) the ME shall send ENVELOPE 3.4: MENU SELECTION command to the SIM Simulator indicating that menu item 'FB' has been selected.

27.22.6 Call control

27.22.6.1 Procedure for mobile originated calls

27.22.6.1.1 Definition and applicability

This test is only applicable to ME's that support the call control by SIM facility.

The call control by SIM function allows the SIM to determine which to which dialled digits calls are able to be set up.

27.22.6.1.2 Conformance Requirement

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) command. The only exception is for the ME managing automatic redial attempts, for which the ME is required to pass the call set-up details to the SIM for the first attempt only.

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.

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 to set up the call, or instead set up a call using the data supplied by the SIM. It is mandatory for the ME to perform the call set-up request in accordance with the data from the SIM. 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.

TS GSM 11.14 [15] clause 9.1.

27.22.6.1.3 Test Purpose

To verify that the ME correctly follows the call control by SIM procedure, if the call control service is allocated and activated in the SIM Service Table.

27.22.6.1.4 Method of Test

27.22.6.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME is connected to the System Simulator.

The elementary files are coded as Toolkit default, with the addition of the call control service set as allocated and activated in the SIM Service Table.

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

27.22.6.1.4.2 Procedure

a) The ME shall be in its normal idle mode.

b) "+01234567890123456789" and <SEND> or otherwise indicates completion shall be entered on the ME.

c) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '90 00'.

d) The ME shall be in its normal idle mode.

e) "+01234567890123456789" and <SEND> or otherwise indicates completion shall be entered on the ME.

f) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 02'.

g) After the ME sends the GET RESPONSE command to the SIM Simulator, the SIM Simulator returns Call Control Response 1.1.

h) The ME shall be in its normal idle mode.

i) "+01234567890123456789" and <SEND> or otherwise indicates completion shall be entered on the ME.

j) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 02'.

k) After the ME sends the GET RESPONSE command to the SIM Simulator, the SIM Simulator returns Call Control Response 1.2.

l) The ME shall be in its normal idle mode.

m) "+01234567890123456789" and <SEND> or otherwise indicates completion shall be entered on the ME.

n) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 08'.

o) After the ME sends the GET RESPONSE command to the SIM Simulator, the SIM Simulator returns Call Control Response 1.3.

p) The ME shall be in its normal idle mode.

q) "+01234567890123456789" and <SEND> or otherwise indicates completion shall be entered on the ME.

r) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 07'.

s) After the ME sends the GET RESPONSE command to the SIM Simulator, the SIM Simulator returns Call Control Response 1.4.

t) The ME shall be in its normal idle mode.

u) "112" and <SEND> or otherwise indicates completion shall be entered on the ME.

v) The call shall be ended.

w) "+01234567890123456789" and <SEND> or otherwise indicates completion shall be entered on the ME.

x) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 07'.

y) After the ME sends the GET RESPONSE command to the SIM Simulator, the SIM Simulator returns Call Control Response 1.5.

z) The call shall be ended.

27.22.6.1.5 Test Requirement

1) After step b) the ME shall send the dialled digits of "+01234567890123456789" in the ENVELOPE 4.1: CALL CONTROL command to the SIM.

2) After step c) the ME shall set up to the call with the dialled digits "+01234567890123456789".

3) After step e) the ME shall send the dialled digits of "+01234567890123456789" in the ENVELOPE 4.1: CALL CONTROL command to the SIM.

4) After step f) the ME shall use the GET RESPONSE command to get the response data.

5) After step g) the ME shall set up the call with the dialled digits "+01234567890123456789".

6) After step i) the ME shall send the dialled digits of "+01234567890123456789" in the ENVELOPE 4.1: CALL CONTROL command to the SIM.

7) After step j) the ME shall use the GET RESPONSE command to get the response data.

8) After step k) the ME shall not set up the call.

9) After step m) the ME shall send the dialled digits of "+01234567890123456789" in the ENVELOPE 4.1: CALL CONTROL command to the SIM.

10) After step n) the ME shall use the GET RESPONSE command to get the response data.

11) After step o) the ME shall set up the call with the dialled digits "+010203".

12) After step q) the ME shall send the dialled digits of "+01234567890123456789" in the ENVELOPE 4.1: CALL CONTROL command to the SIM.

13) After step r) the ME shall use the GET RESPONSE command to get the response data.

14) After step s) the ME shall set up an emergency call.

15) After step u) the ME shall not send the ENVELOPE 4.1: CALL CONTROL command to the SIM and shall set up an emergency call.

16) After step w) the ME shall send the dialled digits "+01234567890123456789" in the ENVELOPE 4.1: CALL CONTROL command to the SIM.

17) After step x) the ME shall use the GET RESPONSE command to get the response data.

18) After step y) the ME shall set up the call with the dialled digits "1020". The ME shall not set up an emergency call.

27.22.6.2 Procedure for Supplementary Services

27.22.6.2.1 Definition and applicability

This test is only applicable to ME's that support the call control by SIM facility.

The call control by SIM function allows the SIM to determine which supplementary service control strings are used.

27.22.6.2.2 Conformance Requirement

For supplementary service operations, the ME shall first pass the supplementary service control string (corresponding to the supplementary service operation, even if this SS operation has been performed via a specific menu of the ME) to the SIM, using the ENVELOPE (CALL CONTROL) command.

The SIM shall respond in the same way as dialled digits.

If the SIM responds with '90 00', the ME shall send the supplementary service operation with the information as sent to the SIM.

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. It is mandatory for the ME to send the supplementary service operation in accordance with the data from the SIM.

TS GSM 11.14 [15] clause 9.2.

27.22.6.2.3 Test Purpose

To verify that the ME correctly follows the call control by SIM procedure, if the call control service is allocated and activated in the SIM Service Table.

27.22.6.2.4 Method of Test

27.22.6.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME is connected to the System Simulator.

The elementary files are coded as Toolkit default, with the addition of the call control service allocated and activated in the SIM Service Table.

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

27.22.6.2.4.2 Procedure

a) The ME shall be in its normal idle mode.

b) A facility of the ME shall be selected which requires a supplementary service operation to be sent to the network (System Simulator).

c) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '90 00'.

d) The ME shall be in its normal idle mode.

e) A facility of the ME shall be selected which requires a supplementary service operation to be sent to the network (System Simulator).

f) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 02'.

g) After the ME sends the GET RESPONSE command to the SIM Simulator, the SIM Simulator returns Call Control Response 2.1.

h) The ME shall be in its normal idle mode.

i) A facility of the ME shall be selected which requires a supplementary service operation to be sent to the network (System Simulator).

j) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 02'.

k) After the ME sends the GET RESPONSE command to the SIM Simulator, the SIM Simulator returns Call Control Response 2.2.

l) The ME shall be in its normal idle mode.

m) A facility of the ME shall be selected which requires a supplementary service operation to be sent to the network (System Simulator).

n) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 08'.

o) After the ME sends the GET RESPONSE command to the SIM Simulator, the SIM Simulator returns Call Control Response 2.3.

p) The ME shall be in its normal idle mode.

27.22.6.2.5 Test Requirement

1) After step b) the ME shall send the supplementary service control string in the ENVELOPE (CALL CONTROL) command to the SIM Simulator.

2) After step c) the ME shall send the supplementary service operation with the information as sent to the SIM Simulator to the network (System Simulator).

3) After step e) the ME shall send the supplementary service control string in the ENVELOPE (CALL CONTROL) command to the SIM Simulator.

4) After step f) the ME shall use the GET RESPONSE command to get the response data.

5) After step g) the ME shall then send the supplementary service control string to the network (System Simulator).

6) After step i) the ME shall send the supplementary service control string in the ENVELOPE (CALL CONTROL) command to the SIM Simulator.

7) After step j) the ME shall use the GET RESPONSE command to get the response data.

8) After step k) the ME shall not send the supplementary service control string to the network (System Simulator).

9) After step m) the ME shall send the supplementary service control string in the ENVELOPE (CALL CONTROL) command to the SIM Simulator.

10) After step n) the ME shall use the GET RESPONSE command to get the response data.

11) After step o) the ME shall then send the interrogate SS - all teleservices supplementary service control string to the network (System Simulator).

27.22.6.3 Interaction with Fixed Dialling Number

27.22.6.3.1 Definition and applicability

This test is only applicable to ME's that support both the call control by SIM facility and Fixed Dialling Numbers (FDN).

The call control by SIM facility allows the SIM to use the FDN list of allowed destination MSISDNs.

27.22.6.3.2 Conformance Requirement

If FDN is enabled and Call Control is activated, the ME shall follow this procedure:

- The ME shall check that the number entered through the MMI is on the FDN list, in accordance with GSM 02.07 [6].
- If the MMI input does not pass the FDN check, the call shall not be set up.
- 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.
- If the SIM responds with "allowed, no modification", the ME shall set up the call as proposed.
- If the SIM responds with "not allowed", the ME shall not set up the call.
- 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.
- If the user wishes to enable or disable Fixed Dialling Number, the ME shall follow the procedure in GSM 11.11 [13]. The state of the Call Control service shall have no effect on this procedure.

TS GSM 11.14 [15] clause 9.4.

27.22.6.3.3 Test Purpose

To verify that the ME correctly uses the Fixed Dialling Numbers in the call control by SIM procedure, if FDN is enabled and the call control by SIM service is allocated and activated.

27.22.6.3.4 Method of Test

27.22.6.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME is connected to the System Simulator.

The elementary files are coded as Toolkit default, with the addition of the call control service allocated and activated in the SIM Service Table.

Fixed Dialling Number service is enabled.

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

27.22.6.3.4.2 Procedure

a) The ME shall be in its normal idle mode.

b) "4321" and <SEND> or otherwise indicates completion shall be entered on the ME.

c) The ME shall be in its normal idle mode.

d) "123" and <SEND> or otherwise indicates completion shall be entered on the ME.

e) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '90 00'.

f) The ME shall be in its normal idle mode.

g) "9876" and <SEND> or otherwise indicates completion shall be entered on the ME.

h) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 02'.

i) After the ME sends the GET RESPONSE command to the SIM Simulator, the SIM Simulator returns Call Control Response 3.1.

j) The ME shall be in its normal idle mode.

k) "9876" and <SEND> or otherwise indicates completion shall be entered on the ME.

l) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 02'.

m) After the ME sends the GET RESPONSE command to the SIM Simulator, the SIM Simulator returns Call Control Response 3.2.

n) The ME shall be in its normal idle mode.

o) "9876" and <SEND> or otherwise indicates completion shall be entered on the ME.

p) After the ME send the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 07'.

q) After the ME sends the GET RESPONSE command to the SIM Simulator, the SIM Simulator returns Call Control Response 3.3.

r) The call shall be ended.

27.22.6.3.5 Test Requirement

1) After step b) the ME shall not send the ENVELOPE (CALL CONTROL) command to the SIM and shall not set up the call.

2) After step d) the ME shall send the dialled digits of "123" in the ENVELOPE 4.2: CALL CONTROL command to the SIM.

3) After step e) the ME shall set up a call with the dialled digits "123".

4) After step g) the ME shall send the dialled digits of "9876" in the ENVELOPE 4.3: CALL CONTROL command to the SIM.

5) After step h) the ME shall use the GET RESPONSE command to get the response data.

6) After step i) the ME shall set up the call with the dialled digits "9876".

7) After step k) the ME shall send the dialled digits of "9876" in the ENVELOPE 4.3: CALL CONTROL command to the SIM.

8) After step l) the ME shall use the GET RESPONSE command to get the response data.

9) After step m) the ME shall not set up the call.

10) After step o) the ME shall send the dialled digits of "9876" in the ENVELOPE 4.3: CALL CONTROL command to the SIM.

11) After step p) the ME shall use the GET RESPONSE command to get the response data.

12) After step q) the ME shall perform a call set up request for a call to "3333".

27.22.6.4 Support of Barred Dialling number (BDN) service

27.22.6.4.1 Definition and applicability

This test is only applicable to ME's that support both the call control by SIM facility and Barred Dialling Numbers (BDN).

The call control by SIM facility allows the SIM to use the BDN list of not allowed destination MSISDNs.

27.22.6.4.2 Conformance Requirement

If Barred Dialling Number service is enabled, when received the dialled number (or supplementary service control string) and other parameters from the ME, the SIM may check this information against those stored in EF_{BDN}.

If the SIM responds with "not allowed", the ME shall not set up the call (or supplementary service operation).

If the SIM responds with "allowed, no modification", the ME shall set up the call (or the supplementary service operation) as proposed.

If the SIM responds with "allowed with modifications", the ME shall set up the call (or the supplementary service operation) in accordance with the response from the SIM. If the modifications involve changing the dialled number (or the supplementary service control string), the ME shall not re-check this modified number (or string) against the FDN list when FDN is enabled.

If the user wishes to enable or disable the Barred Dialling Number, the ME shall follow the procedure in GSM 11.11 [13].

TS GSM 11.14 [15] clause 9.5.

27.22.6.4.3 Test Purpose

To verify that the ME correctly uses the BDN list in the call control by SIM procedure, if BDN is enabled and the call control by SIM service is allocated and activated.

27.22.6.4.4 Method of Test

27.22.6.4.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME is connected to the System Simulator.

The elementary files are coded as Toolkit default, with the addition of the call control service allocated and activated in the SIM Service Table.

Barred dialling numbers is enabled.

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

27.22.6.4.4.2 Procedure

a) The ME shall be in it's normal idle mode.

b) "321" and <SEND> or otherwise indicates completion shall be entered on the ME.

c) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 02' and shall respond with "call set up not allowed" / Call Control Response 4.1.

d) The ME shall be in it's normal idle mode.

e) "1234" and <SEND> or otherwise indicates completion shall be entered on the ME.

f) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 02' and shall respond with "call set up allowed, no modifications" / Call Control Response 4.2.

g) The ME shall be in it's normal idle mode.

h) "1111" and <SEND> or otherwise indicates completion shall be entered on the ME.

i) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 07' and shall respond with "call set up allowed with modification" / Call Control Response 4.3.

j) The ME shall be in its' normal idle mode.

k) The ME shall be powered down.

l) Fixed dialling shall be enabled on the SIM Simulator.

m) The ME shall be powered up.

n) "123" and <SEND> or otherwise indicates completion shall be entered on the ME.

o) After the ME sends the ENVELOPE (CALL CONTROL) command to the SIM Simulator, the SIM Simulator returns SW1 / SW2 of '9F 0A' and shall respond with "call set up allowed with modification" / Call Control Response 4.4.

27.22.6.4.5 Test Requirement

1) After step b) the ME shall send the dialled digits of "321" in the ENVELOPE 4.4: CALL CONTROL command to the SIM.

2) After step c) the ME shall use the GET RESPONSE command to get the response data, and the ME shall not perform the call set up.

3) After step e) the ME shall send the dialled digits of "1234" in the ENVELOPE 4.5: CALL CONTROL command to the SIM.

4) After step f) the ME shall use the GET RESPONSE command to get the response data, and the ME shall perform a call set up with dialled digits of "1234".

5) After step h) the ME shall send the dialled digits of "1111" in the ENVELOPE 4.6: CALL CONTROL command to the SIM.

6) After step i) the ME shall use the GET RESPONSE command to get the response data, and the ME shall perform the call set up to "2222".

7) After step n) the ME shall send the dialled digits "123" in the ENVELOPE 4.2: CALL CONTROL command to the SIM.

8) After step o) the ME shall use the GET RESPONSE command to get the response data, and the ME shall perform the call set up to "987654321".

Annex A (normative): The Requirement Table

A.1 Introduction to the Requirement Table

This Requirement Table (RT) provides a summary of the static requirements of this test specification for the SIM Application Toolkit.

The dynamic requirements are not included for which reason this RT is not a complete RT.

Than main purpose with this proforma of static requirements is to provide a means to capture the choices which the manufacturer has made in implementing the equipment. When completed in respect of a particular equipment the tables provide a means to undertake the static assessment of conformity with the standard, and to select the appropriate test cases to be used in dynamically testing the equipment. The selection of test cases is left for the test specification.

The section with static requirements contains all requirements related to this particular specification. Only static requirements needed for the test specification are included. Some static requirements already defined in 11.10-2 [16] are used and new requirements are defined. Static requirements from 11.10-2 [16] are also marked with the original number.

References to items:

For each possible item answer (answer in the support column) within the static requirements tables 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 1: A.2/5 is the reference to the answer of item 5 in table A.2.

Prerequisite line

A prerequisite line takes the form: Prerequisite: <predicate>.

A prerequisite line after a clause or table title indicates that the whole clause or the whole table is not required to be completed if the predicate is FALSE.

A.2 Format of the tables

The entries of the static requirement tables are defined as follows:

- In the "Item" column a local entry number for the requirement in the RT is given.
- In the "Description" column a short non-exhaustive description of the requirement is found.
- The "Ref." column references the corresponding clause of base standard or EN 300 607-1 (GSM 11.10-1) [12].
- In the "Status" column the status of the entry, as further detailed in the following clause, is indicated.
- 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 "Values allowed" column contains the values or the ranges of values allowed.
- The "Values supported" column shall be filled in by the supplier of the implementation. In this column, the values or the ranges of values supported by the implementation shall be indicated.

The "Mnemonic" assigns a symbolic name to the static requirement.

A.3 References to EN

Not used.

A.4 Notations used in the RT

A.4.1 Status Notations

The "Status" column shows the status of the entries as follows:

M	Mandatory, shall be implemented under all circumstances.
O	Optional, may be provided, but if provided shall be implemented in accordance with the requirements.
O.<n>	This status is used for mutually exclusive or selectable options among a set, in cases where it is mandatory to implement one or more options among a set. The integer <n> refers to a unique group of options within the RT. A footnote under the table in which it is used states explicitly what the requirement is for each numbered group.
C<n>	Conditional number <n>. Reference is made to a Boolean expression under the table with predicates of support answers, which will resolve to either "M", "X", "N", or "O.<n>" for a specific implementation. In all cases "ELSE Not Applicable" is implied, if an ELSE expression is omitted.
N/A	Not applicable.
X	Excluded or Prohibited.

A.4.2 Support Answer Notations

The "support" column is reserved for completion in respect of a particular implementation. Entries may be:

Yes (or Y or y)	Indicating that the implementation claims to fully implement the EN-R in accordance with the specification. The entry of a "Yes" against an "X" status entry means the equipment does not conform to the standard.
No (or N or n)	Indicating that the implementation does not claim full support of the EN-R in accordance with the specification. The entry "No" against an "M" status entry means the equipment does not conform to the standard.

A.4.3 Value Allowed Notations

The "Value Allowed" column is reserved for the possible values if the particular implementation contain options for a number/value a set of values or appropriate indications.

Further the "Value Allowed" column may contain the following status:

N/A	Not applicable. Means that the "value" columns are not applicable for the particular options and the "Value Supported" column shall not be stated.

A.4.4 Value Supported Notations

The "Value Supported" column is reserved for completion if the particular implementation contain options for a number/value, a set of values or appropriate indications.

If the "Value Allowed" status is "N/A", no value shall be stated.

A.5 The Requirement Tables

A.5.1 Static Requirements, RT

A.5.1.1 General Mobile Station Features

The supplier of the implementation shall state the support of the implementation for each of the questions concerning the general features a mobile station given in the table below.

Table A.1: General Mobile Station Features

Item	General Mobile Station Feature	Ref.	Status	Support	Mnemonic
1 (A.2/16)	Subaddress.	GSM 02.07, B.1.18	O		Feat_Subaddress
2 (A.2/20)	Abbreviated Dialling	GSM 02.07 B.3.1	O		Feat_AD
3 (A.2/21)	Fixed Number Dialling	GSM 02.07 B.3.2	O		Feat_FND
4 (A.2/22)	Barring of Outgoing Calls	GSM 02.07 B.3.3	O		Feat_BO
5 (A.2/25)	Last Numbers Dialled	GSM 02.07 B.3.6	O		Feat_LND
6 (A.2/26)	At least one autocalling feature.	GSM 02.07, 2	O		Feat_Autocall
7 (A.3/1)	Telephony.	GSM 02.03, A.1.1	O		Serv_TS11
8 (A.3/2)	Emergency Call.	GSM 02.03, A.1.2	C301		Serv_TS12
9 (A.5/5)	Call Forwarding Unconditional.	GSM 02.04, 3.1; GSM 02.07, B.2.1	O		Serv_SS_CFU
10 (A.3/4)	Short Message MO/PP.	GSM 02.03, A.1.3.1	O		Serv_TS22
11 (A.5/9)	Call Waiting.	GSM 02.04, 3.1	O		Serv_SS_CW
12 (A.25/2)	full rate speech mode.	GSM 02.06, 3.2.2; GSM 02.01, A.1.1	C2501		TSPC_FullRateSpeech
13 (A.25/3)	half rate speech mode.	GSM 02.06, 3.2.2; GSM 02.01, A.1.1	O		TSPC_HalfRateSpeech
14	5V only SIM/ME interface.	GSM 11.11	O.2503		AddInfo_5V
15	3V only SIM/ME interface.	GSM 11.12	O.2503		AddInfo_3V
16	5V/3V SIM/ME interface.	GSM 11.12	O.2503		AddInfo_5V3V
17	SIM Application Toolkit	GSM 11.11, 11.6	O		Feat_SIM_ATK
C301	IF A.1/7 (A.3/1) THEN M ELSE O			-- Serv_TS11	
C2501	IF A.1/13 (A.25/3) THEN M ELSE O			-- TSPC_HalfRateSpeech	
O.2503	One and only one of these items shall be supported.			--	

Comments:

The static requirements already defined in 11.10-2 [16] are marked with a secondary item number in brackets. This secondary reference is the original table reference from 11.10-2 [16]. E.g. item 1, "Subaddress" is already defined in 11.10-2 [16] in table A.2 item 16. I.e. new static requirement introduced with this specification does not have the secondary item reference.

A.5.1.2 SIM Application Toolkit mechanism

The supplier of the implementation shall state the support of the implementation for each of the SIM Application Toolkit (SAT) mechanism given in the table below.

Table A.2: SAT Mechanism

Prerequisite: A1/17: Feat_SIM_ATK

Item	SAT Mechanism	Ref.	Status	Support	Mnemonic
1	Terminal Profile	GSM 11.11, 8.18, 11.6.3, 11.6.9,	M		SAT_FEA_Term_Profile
2	Envelope	GSM 11.11, 8.19, 11.6.3, 11.6.9,	M		SAT_FEA_Envelope
3	Fetch	GSM 11.11, 8.20, 11.6.3	M		SAT_FEA_Fetch
4	Terminal Response	GSM 11.11, 8.21, 11.6.3, 11.6.9	M		SAT_FEA_Term_Resp
5	Proactive Commands	GSM 11.14, 6	O		SAT_FEA_Proactive
6	Data download to SIM	GSM 11.14, 7	O		SAT_FEA_DDSIM
7	Menu selection	GSM 11.14, 8	O		SAT_FEA_Menu_Sel
8	Call Control by SIM	GSM 11.14, 9	O		SAT_FEA_CC

Comments:

A.5.1.2.1 Terminal Profile

The supplier of the implementation shall state the contents of the TERMINAL PROFILE used in the Profile Download instruction sent to the SIM as part of the SIM initialisation.

Table A.3: TERMINAL PROFILE

Prerequisite: A.2/1 SAT_FEA_Term_Profile.

Item	Terminal Profile	Ref.	Status	Support	Mnemonic
1	Profile Download	GSM 11.14, 5	M		PD_Pro_Dvnl
2	SMS-PP data download	GSM 11.14, 5	C.201		PD_SMS_PP
3	Cell Broadcast data download	GSM 11.14, 5	C.202		PD_CB
4	Menu selection	GSM 11.14, 5	C.203		PD_Menu_sel
5	RFU	GSM 11.14, 5	X		PD_RFU_5
6	RFU	GSM 11.14, 5	X		PD_RFU_6
7	RFU	GSM 11.14, 5	X		PD_RFU_7
8	RFU	GSM 11.14, 5	X		PD_RFU_8
9	Command result	GSM 11.14, 5	M		PD_Cmd_Res
10	Call Control by SIM	GSM 11.14, 5	C.204		PD_CC
11	RFU	GSM 11.14, 5	X		PD_RFU_11
12	RFU	GSM 11.14, 5	X		PD_RFU_12
13	RFU	GSM 11.14, 5	X		PD_RFU_13
14	RFU	GSM 11.14, 5	X		PD_RFU_14
15	RFU	GSM 11.14, 5	X		PD_RFU_15
16	RFU	GSM 11.14, 5	X		PD_RFU_16
17	DISPLAY TEXT	GSM 11.14, 5	C.205		PD_Display_Text
18	GET INKEY	GSM 11.14, 5	C.206		PD_Get_Inkey
19	GET INPUT	GSM 11.14, 5	C.207		PD_Get_Input
20	MORE TIME	GSM 11.14, 5	C.208		PD_More_Time
21	PLAY TONE	GSM 11.14, 5	C.209		PD_Play_Tone
22	POLL INTERVAL	GSM 11.14, 5	C.210		PD_Poll_interval
23	POLLING OFF	GSM 11.14, 5	C.211		PD_Polling_Off
24	REFRESH	GSM 11.14, 5	C.212		PD_Refresh
25	SELECT ITEM	GSM 11.14, 5	C.213		PD_Select_Item
26	SEND SHORT MESSAGE	GSM 11.14, 5	C.214		PD_Send_SMS
27	SEND SS	GSM 11.14, 5	C.215		PD_Send_SS
28	RFU	GSM 11.14, 5	X		PD_RFU_28
29	SET UP CALL	GSM 11.14, 5	C.216		PD_SetUp_Call
30	SET UP MENU	GSM 11.14, 5	C.217		PD_SetUp_Menu
31	PROVIDE LOCAL INFORMATION (LOCI & IMEI)	GSM 11.14, 5	C.218		PD_Provide_Local
32	RFU	GSM 11.14, 5	X		PD_RFU_32
33	RFU	GSM 11.14, 5	X		PD_RFU_33
34	RFU	GSM 11.14, 5	X		PD_RFU_34
35	RFU	GSM 11.14, 5	X		PD_RFU_35
36	RFU	GSM 11.14, 5	X		PD_RFU_36
37	RFU	GSM 11.14, 5	X		PD_RFU_37
38	RFU	GSM 11.14, 5	X		PD_RFU_38

C.201 IF A.2/6 THEN (IF A.3/3 THEN O ELSE M) ELSE X
C.202 IF A.2/6 THEN (IF A.3/2 THEN O ELSE M) ELSE X
C.203 IF A.2/7 THEN M ELSE X
C.204 IF A.2/8 THEN M ELSE X
C.205 IF A.4/1 THEN M ELSE X
C.206 IF A.4/2 THEN M ELSE X
C.207 IF A.4/3 THEN M ELSE X
C.208 IF A.4/4 THEN M ELSE X
C.209 IF A.4/5 THEN M ELSE X

Item	Terminal Profile	Ref.	Status	Support	Mnemonic
C.210	IF A.4/6 THEN M ELSE X				
C.211	IF A.4/13 THEN M ELSE X				
C.212	IF A.4/7 THEN M ELSE X				
C.213	IF A.4/9 THEN M ELSE X				
C.214	IF A.4/10 THEN M ELSE X				
C.215	IF A.4/11 THEN M ELSE X				
C.216	IF A.4/12 THEN M ELSE X				
C.217	IF A.4/8 THEN M ELSE X				
C.218	IF A.4/14 THEN M ELSE X				

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.

A.5.1.2.2 Proactive commands

The supplier of the implementation shall state which of the proactive commands are supported of the implementation in the table below.

Table A.4: Proactive commands

Item	Proactive commands	Ref.	Status	Support	Mnemonic
1	Display Text	GSM 11.14, 6.4.1	O.101		Pro_Display_Text
2	Get Inkey	GSM 11.14, 6.4.2	O.102		Pro_Get_Inkey
3	Get Input	GSM 11.14, 6.4.3	O.103		Pro_Get_Input
4	More Time	GSM 11.14, 6.4.4	O.104		Pro_More_Time
5	Play Tone	GSM 11.14, 6.4.5	O.105		Pro_Play_Tone
6	Poll Interval	GSM 11.14, 6.4.6	O.106		Pro_Poll_Interval
7	Refresh	GSM 11.14, 6.4.7	O.107		Pro_Refresh
8	Set up Menu	GSM 11.14, 6.4.8	O.108		Pro_Setup_Menu
9	Select Item	GSM 11.14, 6.4.9	O.109		Pro_Select_Item
10	Send Short Message	GSM 11.14, 6.4.10	O.110		Pro_Send_SMS
11	Send SS	GSM 11.14, 6.4.11	O.111		Pro_Send_SS
12	Set Up Call	GSM 11.14, 6.4.13	O.112		Pro_Setup_Call
13	Polling off	GSM 11.14, 6.4.14	O.113		Pro_Polling_Off
14	Provide Local Information	GSM 11.14, 6.4.15	O.114		Pro_Provide_Local

O.101 ..O.114	IF A.2/5 THEN
	at least one of these items shall be supported
	ELSE
	O.101 = "X"
	...
	O.114 = "X"				

Comments:

A.5.1.2.2.1 Display Text

The supplier of the implementation shall state the support of possible qualifiers for the Display Text in the table below.

Table A.5: Display Text

Prerequisite: A4/1: Pro_Display_Text

Item	Display Text	Reference	Status	Support	Mnemonic	Value	
						Allowed	Supported
1	Number of characters displayed.	GSM 11.14, 6.4.1 and 12.6	M		Display_ Text_Len	0..160	

Comments:

Item 1: This clause means that it is mandatory for the implementation to support the command Display Text. The "Value" column allows the implementation to truncate the text string when displayed. The Value supported shall indicate how many characters the implementation is able to display. Due to different styles/fonts used in the implementations, it is allowed to specify a mean number of characters. If no "truncation" is applied by the implementation, the value supported shall be 160.

A.5.1.2.2.2 Get Inkey

The supplier of the implementation shall state the support of possible qualifiers for the Get Inkey in the table below.

Table A.6: Get Inkey

Prerequisite: A4/2: Pro_Get_Inkey

Item	Get Inkey	Reference	Status	Support	Mnemonic	Value	
						Allowed	Supported
1	Number of characters displayed as the text string.	GSM 11.14, 6.4.2	M		Get_Inkey_Len	1..160	
2	Input of digits 0-9, +, *, #	GSM 02.07, 2	M		Get_Input_C_ digits	N/A	
3	Input of characters other than 0-9, +, *, #	GSM 11.14, 6.4.3, GSM 02.07, 2 GSM 03.38, 6.2.1	O		Get_Input_Char_Set	Default alphabet defined in GSM 03.38 6.2.1 with 0-9, +, *, # excluded.	

Comments:

Item 1: See comment table A.5/1

Item 3: If appropriate, the characters not supported can be stated.

A.5.1.2.2.3 Get Input

The supplier of the implementation shall state the support of possible qualifiers for the Get Input in the table below.

Table A.7: Get Input

Prerequisite: A4/3: Pro_Get_Input

Item	Get Input	Reference	Status	Support	Mnemonic	Value	
						Allowed	Supported
1	Number of characters displayed as the text string.	GSM 11.14, 6.4.3	M		Get_Input_Len	1..160	
2	Input of digits 0-9, +, *, #	GSM 02.07, 2	M		Get_Input_C_digits	N/A	N/A
3	Input of characters other than 0-9, +, *, #	GSM 11.14, 6.4.3, GSM 02.07, 2 GSM 03.38, 6.2.1	O		Get_Input_Char_Set	Default alphabet defined in GSM 03.38 6.2.1 with 0-9, +, *, # excluded.	

Comments:
Item 1: See comment table A.5/1

Item 3: If appropriate, the characters not supported can be stated.

A.5.1.2.2.4 More Time

Not necessary

A.5.1.2.2.5 Play Tone

The supplier of the implementation shall state the support of possible qualifiers for the Play Tone in the table below.

Table A.8: Play Tone

Prerequisite: A4/5: Pro_Play_Tone.

Item	Play Tone	Reference	Status	Support	Mnemonic	Value	
						Allowed	Supported
1	Alpha identifier supported	GSM 11.14, 6.4.5, 6.5.3	O		Play_Tone_Alpha_Len	1..241	

Comments:
Item 1: This clause means that it is mandatory for the implementation to support this command. The "Value" column allows the implementation to truncate the alpha string when displayed. The Value supported shall indicate how many characters the implementation is able to display. Due to different styles/fonts used in the implementations, it is allowed to specify a mean number of characters. If no truncation is applied by the implementation, the value supported shall be 241.
241 = 256-1-2-5-4-3

Editors Note: Supervisory tones not included.

A.5.1.2.2.6 Poll Interval

The supplier of the implementation shall state the polling interval supported by the implementation in the table below.

Table A.9: Poll Interval

Prerequisite: A4/6: Pro_Poll_Interval

Item	Poll Interval	Reference	Status	Support	Mnemonic	Value	
						Allowed	Supported
1	Maximum poll interval	GSM 11.14, 6.4.6	M		Poll_Max	0.1 s.. 255 min	
2	Minimum poll interval	GSM 11.14, 6.4.6	M		Poll_Min	0.1 s.. 255 min	
The supported value for Maximum poll interval shall be greater or equal to the Minimum poll interval.							

Comments:

A.5.1.2.2.7 Refresh

The supplier of the implementation shall state the support of possible qualifiers for the Refresh in the table below.

Table A.10: Refresh

Prerequisite: A4/7: Pro_Refresh

Item	Refresh	Ref.	Status	Support	Mnemonic
1	Additional EFs read to those specified in SIM Initialisation	GSM 11.14, 6.4.7	O		Refresh_Add_EF

Comments:

A.5.1.2.2.8 Set Up Menu

The supplier of the implementation shall state the support of possible qualifiers for the Set Up Menu in the table below.

Table A.11: Set Up Menu

Prerequisite: A4/8: Pro_Setup_Menu

Item	Set Up Menu	Reference	Status	Support	Mnemonic	Value	
						Allowed	Supported
1	Alpha identifier supported	GSM 11.14, 6.4.8, 6.5.3	M		Setup_Menu_ Alpha_Len	1..238	
2	Number of characters displayed as text string of item.	GSM 11.14, 11.9	M		Select_Item_ Text_Len	1..240.	

Comments:
Item 1: See comment for table A.8/1
238 = 256-1-2-5-4-3-3

Item 2: 240 = 256-1-2-5-4-4

A.5.1.2.2.9 Select Item

The supplier of the implementation shall state the support of possible qualifiers for the Select Item in the table below.

Table A.12: Select Item

Prerequisite: A4/9: Pro_Select_Item

Item	Select Item	Reference	Status	Support	Mnemonic	Value	
						Allowed	Supported
1	Alpha identifier supported	GSM 11.14, 6.4.9, 6.5.3, 11.2	O		Select_Item_ Alpha_len	1..238	
2	Number of characters displayed as text string of item.	GSM 11.14, 11.9	M		Select_Item_ Text_Len	1..240.	

Comments:
Item 1: See comment for table A.8/1
238 = 256-1-2-5-4-3-3

Item 2: 240 = 256-1-2-5-4-4

A.5.1.2.2.10 Send Short Message

The supplier of the implementation shall state the support of possible qualifiers for the Send Short Message in the table below.

Table A.13: Send Short Message

Prerequisite: A4/10: Pro_Send_Short_MSG

Item	Send Short Message	Reference	Status	Support	Mnemonic	Value	
						Allowed	Supported
1	Alpha identifier supported	GSM 11.14, 6.4.10, 6.5.3, 11.2	O		Send_SMS_ Alpha_Len	1..X	

Comments:
Item 1: See comment for table A.8/1
X = 256-1-2-5-4-3-length(SMS TPDU simple TLV)
(Minimum length of length(SMS TPDU simple TLV) is 9 octets, i.e. maxiimum of X=232).

A.5.1.2.2.11 Send SS

The supplier of the implementation shall state the support of possible qualifiers for the Send SS in the table below.

Table A.14: Send SS

Prerequisite: A4/11: Pro_Send SS

Item	Send SS	Reference	Status	Support	Mnemonic	Value	
						Allowed	Supported
1	Alpha identifier supported	GSM 11.14, 6.4.11, 6.5.3, 11.2	O		Send_SS_Alp ha_Len	1..X	

Comments:
Item 1: See comment for table A.8/1
X = 256-1-2-5-4-3- length(SS/USSD string simple TLV)
(Minumum length of length (SS/USSD string simple TLV) is 4 octets, (one octet for the SS/USSD string) i.e. maximum of X = 237).

A.5.1.2.2.12 Not used

Not necessary

A.5.1.2.2.13 Set Up Call

The supplier of the implementation shall state the support of possible qualifiers for the Set Up Cal in the table below.

Table A.16: Set Up Call

Prerequisite: A4/12: Pro_Setup_Call

Item	Set up Call	Reference	Status	Support	Mnemonic	Value	
						Allowed	Supported
1	Alpha identifier supported	GSM 11.14, 6.4.11, 6.5.3, 11.2	O		Send_SS_Alpha_Len	1..240	
2	Subaddress	GSM 02.07, B.1.18, GSM 11.14,6.6.12	C.1601		Feat_Subaddress	N/A	
3	At least one autocalling feature.	GSM 02.07, 2, GSM 11.14, 6.6.12	C.1602		Feat_Autocall	N/A	
C.1601 A.1/1 C.1602 A.1/6							

Comments:
Item 1: See comment for table A.8/1
240 = 256-1-2-5-4-4

A.5.1.2.2.14 Polling Offl

Not necessary

A.5.1.2.2.15 Provide Local Information

Not necessary

A.5.1.2.3 Data Download

The supplier of the implementation shall state the support of possible qualifiers for the Data Download in the table below.

Table A.17: Data Download

Prerequisite: A.2/6: SAT_FEA_DDSIM

Item	Data Download	Ref.	Status	Support	Mnemonic
1	The SIMPLE-TLV Address used in BER-TLV ENVELOPE for SMS-PP Download.	GSM 11.14, 7.1.2	O		DDSIM_SubAddr

Comments:

A.5.1.2.4 Menu Selection

Not necessary

A.5.1.2.5 Call Control

The supplier of the implementation shall state the support of possible qualifiers for the Call Control in the table below.

Table A.18: Call Control

Prerequisite: A.2/8: SAT_FEA_CC

Item	Call Control	Ref.	Status	Support	Mnemonic
1	SIMPLE-TLV "Called Party Subadress" used in BER-TLV ENVELOPE.	GSM 11.14, 9.5	C.1801		CC_SubAddr
2	Emergency Call Codes (ECC).	GSM 11.14, 9. GSM 11.11, 10.3.27	O		CC_ECC
3	Fixed Number Dialling	GSM 02.07 B.3.2	C.1802		Feat_FND
C.1801 IFA.1/1 THEN O ELSE X C.1802 A.1/3					

Comments:

Annex B (informative): Proactive Command Validation Tables

B.1 Display Text

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

		Proactive SIM Command Facilities						
Proactive SIM Command Number	Test Requirement	Normal priority	High priority	Wait for user to clear message	Clear message after a delay	Unpacked text string	Packed text string	Text String Length
21.1	1, 2, 4	x		x		x		14
21.2	5, 6		x	x		x		14
21.3	7, 8	x		x			x	14
21.4	9	x			x	x		14
21.5	10, 11	x			x	x		160
21.6	12, 13	x		x		x		14
21.7	14, 15	x		x		x		7

B.2 Get Inkey

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

		Proactive SIM Command Facilities				
Proactive SIM Command Number	Test Requirement	Digits (0-9, *, # and +) only	SMS default alphabet	Unpacked text string	Packed text string	Text String Length
22.1	1, 2	x		x		9
22.2	9, 10		x	x		9
22.3	3, 4	x			x	9
22.4	5, 6	x		x		14
22.5	7, 8	x		x		7
22.6	11, 12		x	x		160

B.3 Get Input

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

		Proactive SIM Command Facilities										
Proactive SIM Command Number	Test Requirement	Digits (0-9, *, # and +) only	SMS default alphabet	ME to echo input	ME to hide input	Input unpacked	Input SMS packed	Packed text string	Unpacked text string	Text string length	Minimum response length	Maximum response length
23.1	1, 2	x		x		x			x	11	5	5
23.2	3, 4	x		x			x		x	11	5	5
23.3	18, 19		x	x		x			x	11	5	5
23.4	5, 6, 7	x			x	x			x	23	4	8
23.5	8, 9	x		x		x			x	20	1	8
23.6	10, 11	x		x		x			x	14	0	20
23.7	12, 13	x		x		x			x	7	0	8
23.8	14, 15	x		x		x			x	160	160	160
23.9	16, 17		x	x		x			x	6	0	1
23.10	-	x		x		x			x	10	160	160

B.4 More Time

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

Proactive SIM Command Number	Test Requirement
2.1	1

B.5 Play Tone

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

		Proactive SIM Command Facilities			
Proactive SIM Command Number	Test Requirement	Tone	Alpha Identifier Length	Time unit	Time interval
20.1	1, 9	Dial Tone	9	Seconds	5
20.2	2	Called subscriber busy	9	Seconds	5
20.3	3	Congestion	10	Seconds	5
20.4	4	Radio path acknowledge	6	Seconds	5
20.5	5	Radio path not available	5	Seconds	5
20.6	6	Special information	9	Seconds	5
20.7	7	Call waiting tone	9	Seconds	5
20.8	8	Ringing tone	9	Seconds	5
20.9	11	General beep	4	Seconds	1
20.10	12	Positive acknowledgment	8	Seconds	1
20.11	13	Negative acknowledgment	8	Seconds	1
20.12	14	Congestion	5	Tenths of seconds	2
20.13	20	-	-	-	241

B.6 Poll Interval

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

		Proactive SIM Command Facilities	
Proactive SIM Command Number	Test Requirement	Time unit	Time interval
3.1	1, 2	Tenths of seconds	1
3.2	3, 4	Seconds	20

B.7 Refresh

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

		Proactive SIM Command Facilities				
Proactive SIM Command Number	Test Requirement	SIM Initialisation and Full File Change Notification	File Change Notification	SIM Initialisation and File Change Notification	SIM Initialisation	SIM Reset
1.1	3, 4, 5	x				
1.2	6, 7, 8		x			
1.3	10			x		
1.4	1, 2				X	
1.5	11					x

B.8 Set Up Menu

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

		Proactive SIM Command Facilities		
Proactive SIM Command Number	Test Requirement	Alpha Identifier Length	Number of items	Maximum length of item
25.1	1	12	4	6
25.2	2	12	2	3
25.3	3	10	0	-
25.4	4	10	30	8
25.5	5	10	7	37
25.6	6	235	1	1

B.9 Select Item

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

		Proactive SIM Command Facilities		
Proactive SIM Command Number	Test Requirement	Alpha Identifier Length	Number of items	Maximum length of item
24.1	1, 2	14	4	6
24.2	7, 8, 9, 10	11	2	3
24.3	3, 4	10	30	8
24.4	5, 6	10	7	43
24.5	13, 14	10	7	37
24.6	11, 12	236	1	1

B.10 Send Short Message

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

		Proactive SIM Command Facilities				
Proactive SIM Command Number	Test Requirement	Packing not required	Packing required	Alpha identifier length	Data Coding Scheme	User Data Length
13.1	1	x		7	8-bit data	12
13.2	2		x	7	8-bit data	7
13.3	3	x		13	SMS default alphabet	13
13.4	4		x	56	8-bit data	160
13.5	5	x		56	SMS default alphabet	160
13.6	6	x		230	SMS default alphabet	1

B.11 Send SS

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

		Proactive SIM Command Facilities	
Proactive SIM Command Number	Test Requirement	Alpha Identifier Length	SS String Length
11.1	1, 2, 3, 4, 5, 6	12	26
11.2	7, 8	12	50
11.3	9, 10	235	5

B.12 Set Up Call

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

		Proactive SIM Command Facilities								
Proactive SIM Command Number	Test Requirement	if not busy on another call	putting all other calls on hold	disconnecting all other calls	Redial	Capability configuration parameters	Called party subaddress	Time Unit	Time Interval	Alpha Identifier Length
10.1	1, 2, 3, 4, 11, 12	x								8
10.2	5, 6	x			x					20
10.3	7, 8		x							7
10.5	9, 10			x						10
10.7	14, 15	x				x				17
10.8	20, 21	x					x			12
10.9	22, 23	x			x			Seconds	10	8
10.10	16, 17	x			x					-
10.11	18, 19	x			x					237

B.13 Polling Off

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

Proactive SIM Command Number	Test Requirement
4.1	1, 2

B.14 Provide Local Information

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

		Proactive SIM Command Facilities	
Proactive SIM Command Number	Test Requirement	Location Information	IMEI
26.1	1	x	
26.2	2		x

Annex C (informative): Change History

SPEC	CR	RE	PHA	VERS	SUBJECT	CAT	NEW_VERS
11.10-4	-	96	2+	-	Approved as release 1996 at SMG#30	-	5.0.0
11.10-4	A001	96	2+	5.0.0	Corrections to SIM Application Toolkit Test Specification	F	5.1.0
11.10-4				5.1.0	Version update to 5.1.1 for Publication		5.1.1
11.10-4	A002	96	2+	5.1.0	Editorial and coding corrections	F	5.2.0

History

Document history				
V5.0.0	January 2000	One-step Approval Procedure	OAP 200019:	2000-01-12 to 2000-05-12
V5.1.0	March 2000	One-step Approval Procedure	OAP 20000721:	2000-03-22 to 2000-07-21
V5.0.1	June 2000	Publication as EN 300 607-4		
V5.1.1	September 2000	Publication as EN 300 607-4		
V5.2.0	November 2000	Publication		