

3GPP TSG-T (Terminals) Meeting #18
New Orleans, Louisiana, USA
4 - 6 December, 2002

TP-020315

3GPP TSG-T3 Meeting #25
Maastricht, The Netherlands, 5-8 November 2002.

T3-020913

Title: LS on SIM toolkit test specification
Source: TSG-T3
To: GERAN5, GERAN
Cc: TSG-T

Contact Person:

Name: Jean-Francois Rubon
Tel. Number: +33 4 43 36 66 39
E-mail Address: jean-francois.rubon@gemplus.com

Attachments: T3-020931 (CR 11.10-4 R99)

1. Overall Description:

T3 would like to inform GERAN5 and GERAN that it has prepared a CR on TS 11.10-4 for their consideration (attached, see Tdoc T3-020931).

This CR upgrades 11.10-4 from R96 to R99, and encompasses tests included in R96 to R99 MEs. This is the result of a very long work that started in 1998.

T3 would recommend GERAN5 and GERAN to approve the CR on their specification, after checking. It has to be noted that a related CR to 11.10-2 will be provided to GERAN5.

Then, T3 would like to ask GERAN to transfer ownership of the specification from GERAN to T3, because it's in T3 where the SIM experts are, and there are already some activities related to test specifications elaboration. Therefore, it is the opinion of T3 that further evolution of the specification would be handled more efficiently within T3.

2. Actions:

GERAN5

ACTION: Agree on the attached CR to 11.10-4 to upgrade the specification to R99.

GERAN

ACTION1: Approve the CR if agreed previously by GERAN5.

ACTION2: Consider transfer of responsibility of the resulting specification to T3; liaise back to TSG-T and TSG-T3 to inform them of their decision.

3. Date of Next TSG-T3 Meetings:

TSG-T3 Meeting #26	11th – 14th February 2003	Lisbon, Portugal
TSG-T3 Meeting #27	20th – 23rd May 2003	Japan (TBD)

CR-Form-v4

CHANGE REQUEST

⌘ **11.10-4 CR** ⌘ ev **-** ⌘ Current version: **5.5.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title: ⌘ CR to upgrade the Mobile Station SIM Application Toolkit Test Specification to Release 99

Source: ⌘ TSG-T3

Work item code: ⌘ TEI **Date:** ⌘ 07/11/2002

<p>Category: ⌘ B</p> <p>Use <u>one</u> of the following categories:</p> <p>F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	<p>Release: ⌘ R99</p> <p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p>
--	---

Reason for change: ⌘ Existing version is limited to R96 toolkit mobile testing. This CR introduces an enhanced test coverage from R96 to R99.

Summary of change: ⌘ Document reorganised and upgraded. Existing test scripts are enhanced. Document layout is improved.

Consequences if not approved: ⌘ No test specification for R97 to R99.

Clauses affected: ⌘ All

Other specs affected: ⌘ Other core specifications ⌘ Test specifications ⌘ TS 11.10-2
 O&M Specifications

Other comments: ⌘

3GPP TS 11.10-4 ~~V5.5.0~~V8.0.0 (200~~21~~-1~~12~~)

Technical Specification

**3rd Generation Partnership Project;
Technical Specification Group
GSM/EDGE Radio Access Network;
Digital cellular telecommunications system (Phase 2+);
Mobile Station (MS) conformance specification;
Part 4: SIM Application Toolkit conformance specification
(Release ~~1996~~1999)**



The present document has been developed within the 3rd Generation Partnership Project (3GPP™) and may be further elaborated for the purposes of 3GPP.

The present document has not been subject to any approval process by the 3GPP Organizational Partners and shall not be implemented. This Specification is provided for future development work within 3GPP only. The Organizational Partners accept no liability for any use of this Specification. Specifications and reports for implementation of the 3GPP™ system should be obtained via the 3GPP Organizational Partners' Publications Offices.

Keywords

<keyword[, keyword]>

3GPP

Postal address

3GPP support office address

650 Route des Lucioles - Sophia Antipolis
Valbonne - FRANCE
Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Internet

<http://www.3gpp.org>

Copyright Notification

No part may be reproduced except as authorized by written permission.
The copyright and the foregoing restriction extend to reproduction in all media.

© 2002, 3GPP Organizational Partners (ARIB, CWTS, ETSI, T1, TTA, TTC).
All rights reserved.

Contents

1	Scope	7
2	References	8
3	Definitions, symbols and abbreviations	10
3.1	Mobile station definition and configurations	10
3.2	Applicability	10
3.2.1	Applicability of this specification	10
3.2.2	Applicability of the individual tests	11
3.2.3	Applicability to terminal equipment	26
3.3	Definitions	26
3.4	Conventions for mathematical notations	26
3.5	Conventions on electrical terms	27
3.6	Terms on test conditions	27
4	Test Equipment	27
5	Testing methodology in general	27
5.1	Testing of optional functions and procedures	27
5.2	Test interfaces and facilities	27
5.3	Different protocol layers	27
5.4	Information to be provided by the apparatus supplier	27
5.5	Definitions of transmit and receive times	27
6	Reference test methods	27
7	Implicit testing	28
8	Measurement uncertainty	28
9	Format of tests	28
10	Generic call set up procedures	31
11 - 26	Not used	31
27	Testing of the SIM/ME interface	32
27.1 - 27.21	Not used	32
27.22	SIM Application Toolkit	32
	General Test Purpose	32
	Definition of default values for SIM Application Toolkit testing	32
27.22.1	Initialisation of SIM Application Toolkit Enabled SIM by SIM Application Toolkit Enabled ME (Profile Download)	36
27.22.1.1	Definition and applicability	36
27.22.1.2	Conformance requirement	36
27.22.1.3	Test Purpose	36
27.22.1.4	Method of test	36
27.22.1.5	Test Requirement	39
27.22.2	Contents of the TERMINAL PROFILE command	39
27.22.2.1	Definition and applicability	39
27.22.2.2	Conformance requirement	39
27.22.2.3	Test Purpose	39
27.22.2.4	Method of Test	40
27.22.2.5	Test Requirement	40
27.22.3	Servicing of Proactive SIM Commands	40
27.22.3.1	Definition and applicability	40
27.22.3.2	Conformance requirement	40
27.22.3.3	Test Purpose	40
27.22.3.4	Method of test	40
27.22.3.5	Test Requirement	41
27.22.4	Proactive SIM Commands	41

27.22.4.1	DISPLAY TEXT	41
27.22.4.2	GET INKEY	67
27.22.4.3	GET INPUT	94
27.22.4.4	MORE TIME	133
27.22.4.5	PLAY TONE	135
27.22.4.6	POLL INTERVAL	150
27.22.4.7	REFRESH	151
27.22.4.8	SET UP MENU and ENVELOPE MENU SELECTION	165
27.22.4.9	SELECT ITEM	194
27.22.4.10	SEND SHORT MESSAGE	227
27.22.4.11	SEND SS	256
27.22.4.12	SEND USSD	273
27.22.4.13	SET UP CALL	295
27.22.4.14	POLLING OFF	325
27.22.4.14	POLLING OFF	325
27.22.4.15	PROVIDE LOCAL INFORMATION	327
27.22.4.16	SET UP EVENT LIST	333
27.22.4.17	PERFORM CARD APDU	343
27.22.4.18	POWER OFF CARD	363
27.22.4.19	POWER ON CARD	368
27.22.4.20	GET READER STATUS	373
27.22.4.21	TIMER MANAGEMENT and ENVELOPE TIMER EXPIRATION	386
27.22.4.21.1	TIMER MANAGEMENT (normal)	386
27.22.4.21.2	ENVELOPE TIMER EXPIRATION (normal)	424
27.22.4.22	SET UP IDLE MODE TEXT	431
27.22.4.23	RUN AT COMMAND	456
27.22.4.24	SEND DTMF	465
27.22.4.25	LANGUAGE NOTIFICATION	478
27.22.4.26	LAUNCH BROWSER	480
27.22.4.27	OPEN CHANNEL	501
27.22.4.28	CLOSE CHANNEL	519
27.22.4.29	RECEIVE DATA	522
27.22.4.30	SEND DATA	528
27.22.4.31	GET CHANNEL STATUS	539
27.22.5	DATA DOWNLOAD TO SIM	544
27.22.5	Data Download to SIM	544
27.22.5.1	SMS-PP Data Download	544
27.22.5.2	SMS-CB Data Download	554
27.22.6	CALL CONTROL BY SIM	558
27.22.6.1	Procedure for Mobile Originated calls	558
27.22.6.2	Procedure for Supplementary (SS) Services	572
27.22.6.3	Interaction with Fixed Dialling Number (FDN)	576
27.22.6.4	Support of Barred Dialling Number (BDN) service	580
27.22.7	EVENT DOWNLOAD	585
27.22.7.1	MT Call Event	585
27.22.7.2	Call Connected Event	588
27.22.7.3	Call Disconnected Event	593
27.22.7.4	Location Status Event	599
27.22.7.5	User Activity Event	601
27.22.7.6	Idle screen available event	603
27.22.7.7	Card reader status event	606
27.22.7.8	Language selection event	614
27.22.7.9	Browser termination event	616
27.22.7.10	Data available event	618
27.22.7.11	Channel Status event	619

Annex A (normative): The Requirement Table.....	622
A.1 Introduction to the Requirement Table	622
A.2 Format of the tables.....	622
A.3 References to EN.....	622
A.4 Notations used in the RT.....	623
A.4.1 Status Notations.....	623
A.4.2 Support Answer Notations	623
A.5 The Requirement Tables	623
Annex B (informative): Proactive Command Validation Tables	624
Annex C (normative): Initial Conditions for Icon Management	625
Annex ,D' (normative): Details of Test-SIM (TestSIM)	629
Annex E (informative): Change History	Error! Bookmark not defined.

1 Scope

The present document describes the technical characteristics and methods of test for testing the SIM Application Toolkit implemented in Mobile Stations (MS) for the Pan European digital cellular communications system and Personal Communication Systems (PCS) operating in the 450 MHz, 480 MHz, 700 MHz, 750 MHz, 850 MHz, 900 MHz, 1 800 MHz and 1 900 MHz frequency band (GSM 400, GSM 700, GSM 750, GSM 850, GSM 900, DCS 1 800 and PCS 1 900) within the European digital cellular telecommunications system, in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [19] and ETS 300 406 [20].

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

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

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

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

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

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

2 References

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

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the relevant Release*.
 - For a GSM Phase 2+ Release 1999 MS, references to GSM documents are to version 8.x.y (for 01.-series to 12.-series) or (3.x.y for 21.-series to 35.-series), when available.
 - For a GSM Phase 2+ Release 1998 MS, references to GSM documents are to version 7.x.y, when available.
 - For a GSM Phase 2+ Release 1997 MS, references to GSM documents are to version 6.x.y, when available.
 - For a GSM Phase 2+ Release 1996 MS, references to GSM documents are to version 5.x.y, when available.
 - For a GSM Phase 2 MS, references to GSM documents are to version 4.x.y.

NOTE: References to 3GPP Technical Specifications and Technical Reports throughout the present document shall be interpreted according to the Release shown in the formal reference in this clause, based upon the Release of the implementation under test.

EXAMPLE 1: References for a Ph2 MS shall be interpreted as:

- [1] 3GPP TS 01.04 Ph2
- [2] 3GPP TS 02.01 Ph2
- etc.

EXAMPLE 2: References for a R99 MS shall be interpreted as:

- [1] 3GPP TS 21.905 R99
- [2] 3GPP TS 22.001 R99
- etc.

[1] 3GPP TS 01.04 (Ph2 to R98): "Abbreviations and acronyms".
3GPP TR 21.905 (R99 onwards): "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 02.01 (Ph2 to R98): "Principles of telecommunication services supported by a GSM Public Land Mobile Network (PLMN)".

3GPP TS 22.001 (R99 onwards): "Principles of circuit telecommunication services supported by a Public Land Mobile Network (PLMN)".

[3] 3GPP TS 02.03 (Ph2 to R98): "Teleservices supported by a GSM Public Land Mobile Network (PLMN)".
3GPP TS 22.003 (R99 onwards): "Circuit Teleservices supported by a Public Land Mobile Network (PLMN)".

- [4] [3GPP TS 02.04 \(Ph2 to R98\): "General on supplementary services".](#)
[3GPP TS 22.004 \(R99 onwards\): "General on supplementary services".](#)
- [5] [3GPP TS 02.06 \(Ph2 to R98\): "Types of Mobile Stations \(MS\)".](#)
- [6] [3GPP TS 02.07 \(Ph2 to R98\): "Mobile Station \(MS\) features".](#)
- [7] [3GPP TS 03.38 \(Ph2 to R98\): "Alphabets and language-specific information".](#)
[3GPP TS 23.038 \(R99 onwards\): "Alphabets and language-specific information".](#)
- [8] [3GPP TS 03.40 \(Ph2 to R98\): "Technical realization of the Short Message Service \(SMS\); Point-to-Point \(PP\)".](#)
[3GPP TS 23.040 \(R99 onwards\): "Technical realization of the Short Message Service \(SMS\)".](#)
- [9] [3GPP TS 03.41 \(Ph2 to R98\): "Technical realization of Cell Broadcast Service \(CBS\)".](#)
[3GPP TS 23.041 \(R99 onwards\): "Technical realization of Cell Broadcast Service \(CBS\)".](#)
- [10] [3GPP TS 04.08 \(Ph2 to R99\): "Mobile radio interface layer 3 specification" \(see note 1\).](#)
[3GPP TS 24.008 \(R99 onwards\): "Mobile radio interface layer 3 specification; Core network protocols; Stage 3" \(see note 1\).](#)
- [11] [3GPP TS 04.11 \(Ph2 to R98\): "Point-to-Point \(PP\) Short Message Service \(SMS\) support on mobile radio interface".](#)
[3GPP TS 24.011 \(R99 onwards\): "Point-to-Point \(PP\) Short Message Service \(SMS\) Support on mobile radio interface".](#)
- [12] [3GPP TS 11.10-1 \(Ph2+ to R99\): " Digital cellular telecommunications system - Mobile Station \(MS\) conformance specification Part 1: Conformance specification ".](#)
- [13] [3GPP TS 11.11 \(Ph2 to R99\): "Specification of the Subscriber Identity Module - Mobile Equipment \(SIM-ME\) interface".](#)
- [14] [3GPP TS 11.12 \(Ph2\): "Specification of the 3 Volt Subscriber Identity Module - Mobile Equipment \(SIM-ME\) interface".](#)
- [15] [3GPP TS 11.14 \(R96 to R99\): "Specification of the SIM application toolkit for the Subscriber Identity Module – Mobile Equipment \(SIM – ME\) interface".](#)
- [16] [3GPP TS 11.10-2 \(Ph2+ to R99\): " Digital cellular telecommunications system - Mobile Station \(MS\) conformance specification Part 2: Protocol Implementation Conformance Statement \(PICS\) Proforma Specification".](#)
- [17] [ISO/IEC 10646-1 "Universal Multiple Octet Coded Character Set \(UCS\) Part 1: Architecture and Basic Multilingual Plane "](#)
[ISO/IEC 10646-2 "Universal Multiple Octet Coded Character Set \(UCS\) Part 2: Supplementary Planes "](#)
- [18] [3GPP TS 27.007 \(R99 onwards\): "AT Command Set for User Equipment \(UE\)".](#)
- [19] [ISO/IEC 9646-7 \(1995\): "Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 7: Implementation Conformance Statements".](#)
- [20] [ETS 300 406 \(January 1995\): "Methods for Testing and Specification \(MTS\); Protocol and profile conformance testing specifications; Standardization methodology".](#)

3 Definitions, symbols and abbreviations

3.1 Mobile station definition and configurations

The mobile station definition and configurations specified in 3GPP TSM 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 3GPP TS 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

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

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

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

For the detailed format and notations of this Requirement Table 1, see Annex A.

Table 1: Applicability of tests

<u>Item</u>	<u>Description</u>	<u>Release</u>	<u>Test sequence(s)</u>	<u>Rel 96 ME</u>	<u>Rel 97 ME</u>	<u>Rel 98 ME</u>	<u>Rel 99 ME</u>	<u>Support</u>
<u>1</u>	<u>PROFILE DOWNLOAD 27.22.1</u>	<u>R96</u>	<u>1</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
<u>2</u>	<u>Contents of the TERMINAL PROFILE command 27.22.2</u>	<u>R96</u>		<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
<u>3</u>	<u>Servicing of Proactive SIM Commands 27.22.3</u>	<u>R96</u>		<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
<u>4</u>	<u>DISPLAY TEXT 27.22.4.1</u>	<u>R96</u>		<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>Unpacked</u>	<u>R96</u>	<u>1.1</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>Screen busy</u>	<u>R96</u>	<u>1.2</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>high priority</u>	<u>R96</u>	<u>1.3</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>packed</u>	<u>R96</u>	<u>1.4</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>clear after delay</u>	<u>R96</u>	<u>1.5</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>clear after user confirmation</u>	<u>R96</u>	<u>1.1</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>long text up to 160 bytes</u>	<u>R96</u>	<u>1.6</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>Backwards move in SIM session</u>	<u>R96</u>	<u>1.7</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>Session terminated by user</u>	<u>R96</u>	<u>1.8</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>Command not understood by ME</u>	<u>R96</u>	<u>1.9</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>no response from user</u>	<u>R96</u>	<u>2.1</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>Long text up to 240 bytes</u>	<u>R98</u>	<u>3.1</u>			<u>M</u>	<u>M</u>	
	<u>sustained text</u>	<u>R98</u>	<u>4.1, 4.2, 4.3, 4.4</u>			<u>M</u>	<u>M</u>	
	<u>icons</u>	<u>R98</u>	<u>5.1, 5.2, 5.3</u>			<u>C4</u>	<u>C4</u>	

	UCS2 display	R97	6.1		M	M	M	
5	GET INKEY 27.22.4.2	R96			M	M	M	M
	prompt unpacked	R96	1.1		M	M	M	M
	prompt packed	R96	1.2		M	M	M	M
	digits only	R96	1.1		M	M	M	M
	Backwards move in SIM session	R96	1.3		M	M	M	M
	Session terminated by user	R96	1.4		M	M	M	M
	SMS alphabet	R96	1.5		M	M	M	M
	Long text up to 160 bytes	R96	1.6		M	M	M	M
	no response from user	R96	2.1		M	M	M	M
	UCS2 display	R97	3.1			M	M	M
	UCS2 display, Long text up to 70 chars	R97	3.2			M	M	M
	UCS2 format of entry	R97	4.1			M	M	M
	"Yes/No" response	R98	5.1				M	M
	Icons	R98	6.1, 6.2, 6.3, 6.4				C4	C4
	help information	R97	7.1			M	M	M
6	GET INPUT 27.22.4.3	R96			M	M	M	M
	input unpacked	R96	1.1		M	M	M	M
	input packed	R96	1.2		M	M	M	M
	digits only	R96	1.1		M	M	M	M
	SMS alphabet	R96	1.3		M	M	M	M
	hidden input	R96	1.4		M	M	M	M
	min / max acceptable length	R96	1.5, 1.9		M	M	M	M
	Backwards move in SIM session	R96	1.6		M	M	M	M
	Session terminated by user	R96	1.7		M	M	M	M
	Prompt text up to 160 bytes	R96	1.8		M	M	M	M

	SMS default alphabet, ME to echo text, packing not required	R96	1.9	M	M	M	M	
	Null length for the text string	R96	1.10	M	M	M	M	
	no response from user	R96	2.1	M	M	M	M	
	UCS2 display	R97	3.1, 3.2		M	M	M	
	UCS2 entry	R97	4.1, 4.2		M	M	M	
	default text for the input	R97	5.1, 5.2		M	M	M	
	icons	R98	6.1, 6.2, 6.3, 6.4			C4	C4	
	help information	R97	7.1		M	M	M	
7	MORE TIME 27.22.4.4	R96	1.1	M	M	M	M	
8	PLAY TONE 27.22.4.5	R96		M	M	M	M	
	play all tones	R96	1.1	M	M	M	M	
	display alpha	R96	1.1	M	M	M	M	
	user termination	R96	1.1	M	M	M	M	
	superimpose	R96	1.1	M	M	M	M	
	backwards move key not interacting with play tone	R96	1.2	M	M	M	M	
	UCS2 display	R97	TBD		M	M	M	
	icons	R98	TBD			C4	C4	
9	POLL INTERVAL 27.22.4.6	R96		M	M	M	M	
	duration	R96	1.1	M	M	M	M	
10	REFRESH 27.22.4.7	R96		M	M	M	M	
	SIM initialisation, enabling FDN mode	R96	1.1	M	M	M	M	
	file change notification of FDN file	R96	1.2	M	M	M	M	
	SIM initialisation and file change notification of PLMN	R96	1.3	M	M	M	M	
	SIM initialisation and full file change notification, enabling FDN mode	R96	1.4	M	M	M	M	

	SIM reset	R96	1.5	M	M	M	M	
	SIM Initialisation after SMS-PP data download	R96	1.6	M	M	M	M	
	MM restart in case of IMSI change	R98	2.1			M	M	
11	SET UP MENU 27.22.4.8	R96		M	M	M	M	
	Set up, menu selection, replace and remove menu	R96	1.1	M	M	M	M	
	Large menu	R96	1.2	M	M	M	M	
	help information	R97	2.1		M	M	M	
	next action indicator	R97	3.1		M	M	M	
	icons	R98	4.1, 4.2			C4	C4	
	soft key access	R99 class "d"	5.1				C5	
12	SELECT ITEM 27.22.4.9	R96		M	M	M	M	
	Mandatory features	R96	1.1	M	M	M	M	
	Large menu	R96	1.2, 1.3, 1.5, 1.6	M	M	M	M	
	Backwards move	R96	1.4	M	M	M	M	
	user termination	R96	1.4	M	M	M	M	
	no response	R96		M	M	M	M	
	help information	R97	4.1		M	M	M	
	default selected item	R97	3.1		M	M	M	
	next action indicator	R97	2.1		M	M	M	
	Presentation style	R98	6.1, 6.2			M	M	
	icons	R98	5.1, 5.2			C4	C4	
	Soft keys	R99 class "d"	7.1				C5	
13	SEND SMS 27.22.4.10	R96		M	M	M	M	
	Packing not required	R96	1.1, 1.3, 1.5	M	M	M	M	
	Packing required	R96	1.2, 1.4	M	M	M	M	

	8 bit data	R96	1.1, 1.2	M	M	M	M	
	SMS default alphabet	R96	1.3, 1.4, 1.5	M	M	M	M	
	160 bytes length	R96	1.4, 1.5	M	M	M	M	
	Alpha identifier	R96	1.6, 1.7, 1.8	M	M	M	M	
	UCS2 SMS	R97	2.1		M	M	M	
	icons	R98	3.1, 3.2			C4	C4	
14	SEND SS 27.22.4.11	R96		M	M	M	M	
	call forward unconditional, all bearers, successful	R96	1.1	M	M	M	M	
	call forward unconditional, all bearers, Return Error	R96	1.2	M	M	M	M	
	call forward unconditional, all bearers, Reject	R96	1.3	M	M	M	M	
	call forward unconditional, all bearers, successful, SS request size limit	R96	1.4	M	M	M	M	
	interrogate CLIR status, successful, alpha identifier limits	R96	1.5	M	M	M	M	
	call forward unconditional, all bearers, successful, null data alpha identifier	R96	1.6	M	M	M	M	
	UCS2 display	R97	3.1		M	M	M	
	call forward unconditional, all bearers, successful, icon support	R98	2.1, 2.2, 2.3, 2.4			C4	C4	
15	SEND USSD 27.22.4.12	R96		M	M	M	M	
	7-bit data, successful	R96	1.1	M	M	M	M	
	8-bit data, successful	R96	1.2	M	M	M	M	
	UCS2 data, successful	R96	1.3	M	M	M	M	
	7-bit data, unsuccessful	R96	1.4	M	M	M	M	
	7-bit data, unsuccessful	R96	1.5	M	M	M	M	
	256 octets, 7-bit data, successful, long alpha identifier	R96	1.6	M	M	M	M	

	7-bit data, successful, no alpha identifier	R96	1.7	M	M	M	M	
	7-bit data, successful, null length alpha identifier	R96	1.8	M	M	M	M	
	7-bit data, basic icon self explanatory	R98	2.1, 2.2, 2.3, 2.4			C4	C4	
	7-bit data, successful, UCS2 text	R97	3.1		M	M	M	
16	SET UP CALL 27.22.4.13	R96		M	M	M	M	
	Call confirmed by the user and connected	R96	1.1	M	M	M	M	
	call rejected by the user	R96	1.2	M	M	M	M	
	redial	R96	1.3	M	C1	C1	C1	
	putting all other calls on hold, ME busy	R96	1.4	M	M	M	M	
	disconnecting all other calls, ME busy	R96	1.5	M	M	M	M	
	only if not currently busy on another call, ME busy	R96	1.6	M	M	M	M	
	putting all other calls on hold, call hold is not allowed	R96	1.7	M	M	M	M	
	Capability configuration	R96	1.8	C2	C2	C2	C2	
	long dialing number string	R96	1.9	M	M	M	M	
	long first alpha identifier	R96	1.10	M	M	M	M	
	Called party subaddress	R96	1.11	C3	C3	C3	C3	
	maximum duration for the redial mechanism	R96	1.12	M	M	M	M	
	second alpha identifier	R98	2.1			M	M	
	icons	R98	3.1, 3.2, 3.3, 3.4			C4	C4	
17	POLLING OFF 27.22.4.14	R96	1.1	M	M	M	M	
18	PROVIDE LOCAL INFO 27.22.4.15	R96		M	M	M	M	
	location information	R96	1.1	M	M	M	M	
	IMEI	R96	1.2	M	M	M	M	
	network measurement	R98	1.3			M	M	

	results and BCCH channel list							
	Date, time and time zone	R98	1.4			M	M	
	language setting	R99	1.5				M	
	Timing advance	R99	1.6				M	
19	SET UP EVENT LIST 27.22.4.16	R97				M	M	M
	Set up call connected event	R97	1.1			M	M	M
	Replace by new event list	R97	1.2			M	M	M
	Remove event	R97	1.3			M	M	M
	Remove Event on ME Power Cycle	R97	1.4			M	M	M
20	PERFORM CARD APDU 27.22.4.17	R98 clas s "a"					C5	C5
	Additional card inserted, Select MF and Get Response	R98 clas s "a"	1.1				C5	C5
	Additional card inserted, Select DF GSM, Select EF PLMN , Update Binary, Read Binary on EF PLMN	R98 clas s "a"	1.2				C5	C5
	Additional card inserted, card powered off	R98 clas s "a"	1.3				C5	C5
	No card inserted, card powered off	R98 clas s "a"	1.4				C5	C5
	Invalid card reader identifier	R98 clas s "a"	1.5				C5	C5
	Card reader detached	R98 clas s "a"	2.1				C7	C7
21	POWER OFF CARD 27.22.4.18	R98 clas s "a"					C5	C5
	Additional card inserted	R98 clas s "a"	1.1				C5	C5

	No card inserted	R98 class "a"	1.2			C5	C5	
	Detachable card reader	R98 class "a"	2.1			C7	C7	
22	POWER ON CARD 27.22.4.19	R98 class "a"				C5	C5	
	Additional card inserted	R98 class "a"	1.1			C5	C5	
	No ATR	R98 class "a"	1.2			C5	C5	
	No card inserted	R98 class "a"	1.3			C5	C5	
	Detachable card reader	R98 class "a"	2.1			C7	C7	
23	GET READER STATUS 27.22.4.20	R98 class "a"				C5	C5	
	Additional card inserted, card powered	R98 class "a"	1.1			C5	C5	
	Additional card inserted, card not powered	R98 class "a"	1.2			C5	C5	
	Additional card inserted, card not present	R98 class "a"	1.3			C5	C5	
	Detachable card reader	R98 class "a"	2.1			C7	C7	
24	TIMER MANAGEMENT 27.22.4.21.1	R98				M	M	
	Start timer 1 several times, get the current value of the timer and deactivate the timer successfully	R98	1.1			M	M	
	Start timer 2 several times, get the current value of the timer and deactivate the timer	R98	1.2			M	M	

	successfully							
	Start timer 8 several times, get the current value of the timer and deactivate the timer successfully	R98	1.3			M	M	
	Try to get the current value of a timer which is not started: action in contradiction with the current timer state	R98	1.4			M	M	
	Try to deactivate a timer which is not started: action in contradiction with the current timer state	R98	1.5			M	M	
	Start 8 timers successfully	R98	1.6			M	M	
25	ENVELOPPE TIMER EXPIRATION 27.22.4.21.2	R98				M	M	
	Pending proactive SIM command	R98	2.1			M	M	
	SIM application toolkit busy	R98	2.2			M	M	
26	SET UP IDLE MODE TEXT 27.22.4.22	R98				M	M	
	Display idle mode text	R98	1.1			M	M	
	Replace idle mode text	R98	1.2			M	M	
	Remove idle mode test	R98	1.3			M	M	
	Competing information on ME display	R98	1.4			M	M	
	ME powered cycled	R98	1.5			M	M	
	Refresh with SIM initialisation	R98	1.6			M	M	
	Large text string	R98	1.7			M	M	
	Followed by a Display Text	R98	1.8			M	M	
	Followed by a Play Tone	R98	1.9			M	M	
	icons	R98	2.1, 2.2, 2.3, 2.4			C4	C4	
	UCS2 display	R98	3.1			M	M	

<u>27</u>	<u>RUN AT COMMAND</u> <u>27.22.4.23</u>	<u>R98</u> <u>clas</u> <u>s</u> <u>“b”</u>				<u>C5</u>	<u>C5</u>	
	<u>No alpha Identifier</u>	<u>R98</u> <u>clas</u> <u>s “b”</u>	<u>1.1</u>			<u>C5</u>	<u>C5</u>	
	<u>null data alpha identifier presented</u>	<u>R98</u> <u>clas</u> <u>s “b”</u>	<u>1.2</u>			<u>C5</u>	<u>C5</u>	
	<u>alpha identifier presented</u>	<u>R98</u> <u>clas</u> <u>s “b”</u>	<u>1.3</u>			<u>C5</u>	<u>C5</u>	
	<u>icons</u>	<u>R98</u> <u>clas</u> <u>s “b”</u>	<u>2.1, 2.2,</u> <u>2.3, 2.4,</u> <u>2.5</u>			<u>C6</u>	<u>C6</u>	
<u>28</u>	<u>SEND DTMF</u> <u>27.22.4.24</u>	<u>R98</u>				<u>M</u>	<u>M</u>	
	<u>A call has been successfully established before the beginning of the test</u>	<u>R98</u>	<u>1.1</u>			<u>M</u>	<u>M</u>	
	<u>alpha identifier</u>	<u>R98</u>	<u>1.2, 1.3</u>			<u>M</u>	<u>M</u>	
	<u>Mobile is not in a speech call</u>	<u>R98</u>	<u>1.4</u>			<u>M</u>	<u>M</u>	
	<u>Icons</u>	<u>R98</u>	<u>2.1, 2.2,</u> <u>2.3</u>			<u>C4</u>	<u>C4</u>	
	<u>UCS2 display</u>	<u>R98</u>	<u>3.1</u>			<u>M</u>	<u>M</u>	
<u>29</u>	<u>LANGUAGE NOTIFICATION</u> <u>27.22.4.25</u>	<u>R99</u>					<u>M</u>	
	<u>Specific language notification</u>	<u>R99</u>	<u>1.1</u>				<u>M</u>	
	<u>Non specific language notification</u>	<u>R99</u>	<u>1.2</u>				<u>M</u>	
<u>30</u>	<u>LAUNCH BROWSER</u> <u>27.22.4.26</u>	<u>R99</u> <u>clas</u> <u>s</u> <u>“c”</u>					<u>C5</u>	
	<u>No session already launched : Connect to the default URL</u>	<u>R99</u> <u>clas</u> <u>s “c”</u>	<u>1.1</u>				<u>C5</u>	
	<u>connect to the specified URL, alpha identifier length=0</u>	<u>R99</u> <u>clas</u> <u>s “c”</u>	<u>1.2</u>				<u>C5</u>	

	Browser identity, no alpha identifier	R99 class "c"	1.3				C5	
	one bearer specified and gateway/proxy identity	R99 class "c"	1.4				C5	
	several bearers specified, gateway/proxy id specified	R99 class "c"	1.5				C5	
	Interaction with current session : use the existing browser, connect to the default URL	R99 class "c"	2.1				C5	
	close the existing browser session and launch new browser session, connect to the default URL	R99 class "c"	2.2				C5	
	if not already launched	R99 class "c"	2.3				C5	
	UCS2 display	R99 class "c"	3.1				C5	
	icons	R99 class "c"	4.1, 4.2				C6	
31	OPEN CHANNEL 27.22.4.27	R99 class "e"					C5	
	Immediate link establishment, CSD, 9600 bps	R99 class "e"	1.1, 1.2, 1.3, 1.4, 1.5, 1.6				C5	
	immediate link establishment, CSD, 9600 bps, performed with modification	R99 class "e"	1.7				C5	
	immediate link establishment, CSD, Network currently unable to process command	R99 class "e"	1.8				C5	
	immediate link establishment, CSD, No channel available	R99 class "e"	1.9				C5	
	ME busy	R99 class "e"	1.10				C8	
32	CLOSE CHANNEL	R99 class					C5	

	27.22.4.28	“e”						
	successful	R99 class “e”	1.1				C5	
	with an invalid channel identifier	R99 class “e”	1.2				C5	
	on an already closed channel	R99 class “e”	1.3				C5	
33	RECEIVE DATA 27.22.4.29	R99 class “e”					C5	
	already opened channel	R99 class “e”	1.1				C5	
34	SEND DATA 27.22.4.30	R99 class “e”					C5	
	immediate mode	R99 class “e”	1.1				C5	
	Store mode	R99 class “e”	1.2				C5	
	Store mode, Tx buffer fully used	R99 class “e”	1.3				C5	
	2 consecutive SEND DATA Store mode	R99 class “e”	1.4				C5	
	immediate mode with a bad channel identifier	R99 class “e”	1.5				C5	
	immediate mode, Proactive SIM session terminated by the user	R99 class “e”	1.6				C5	
35	GET CHANNEL STATUS 27.22.4.31	R99 class “e”					C5	
	without any BIP channel opened	R99 class “e”	1.1				C5	
	with a BIP channel currently opened	R99 class “e”	1.2				C5	
	after a link dropped	R99 class	1.3				C5	

		<u>e</u>						
36	<u>DATA DOWNLOAD TO SIM 27.22.5</u>	<u>R96</u>		<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
37	<u>SMS-PP DATA DOWNLOAD 27.22.5.1</u>	<u>R96</u>		<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>General data coding, SIM responds with '90 00'</u>	<u>R96</u>	<u>1.1</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>SIM responds with '91 XX'</u>	<u>R96</u>	<u>1.2</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>More time</u>	<u>R96</u>	<u>1.3</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>8 bit alphabet</u>	<u>R96</u>	<u>1.4</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>Data coding / message class</u>	<u>R96</u>	<u>1.5, 1.6</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
38	<u>SMS-CB DATA DOWNLOAD 27.22.5.2</u>	<u>R96</u>		<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>ME does not display message</u>	<u>R96</u>	<u>1.1</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>More time</u>	<u>R96</u>	<u>1.2</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
	<u>ME displays message</u>	<u>R96</u>	<u>1.3</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	
39	<u>CALL CONTROL BY SIM 27.22.6</u>	<u>R97</u>			<u>M</u>	<u>M</u>	<u>M</u>	
	<u>Call set up by user : Allowed with no modifications, SIM responds 90 00</u>	<u>R97</u>	<u>1.1</u>		<u>M</u>	<u>M</u>	<u>M</u>	
	<u>Call set up by user : Allowed with no modifications</u>	<u>R97</u>	<u>1.2</u>		<u>M</u>	<u>M</u>	<u>M</u>	
	<u>Proactive Call set up : allowed with no modification</u>	<u>R97</u>	<u>1.3</u>					
	<u>Call set up by user : not allowed</u>	<u>R97</u>	<u>1.4</u>		<u>M</u>	<u>M</u>	<u>M</u>	
	<u>Proactive Call set up : not allowed</u>	<u>R97</u>	<u>1.5</u>					
	<u>Call set up by user : Allowed with modifications</u>	<u>R97</u>	<u>1.6</u>		<u>M</u>	<u>M</u>	<u>M</u>	

	Proactive Call set up : allowed with modification	R97	1.7		M	M	M	
	Call set up by user : allowed with modifications, emergency call	R97	1.8		M	M	M	
	Call set up by user : allowed with modifications, number in EF_{ECC}	R97	1.9		M	M	M	
	Emergency call set up by user	R97	1.10		M	M	M	
	Call set up through call register, SIM responds 90 00	R97	1.11		M	M	M	
	Call set up through call register, allowed with no modifications	R97	1.12		M	M	M	
	Call set up through call register, not allowed	R97	1.13		M	M	M	
	Call set up through call register, allowed with modifications	R97	1.14		M	M	M	
	Supplementary services : Send SS, SIM responds 90 00	R97	2.1		M	M	M	
	Supplementary services : Send SS, allowed with no modifications	R97	2.2		M	M	M	
	Supplementary services : Send SS, not allowed	R97	2.3		M	M	M	
	Supplementary services : Send SS, allowed with modifications	R97	2.4		M	M	M	
	Interaction with FDN : call set up not in EF_{FDN}	R97	3.1		M	M	M	
	Interaction with FDN : call set up present in EF_{FDN}, SIM responds 90 00	R97	3.2		M	M	M	
	Interaction with FDN : call set up present in EF_{FDN}, allowed with no modifications	R97	3.3		M	M	M	
	Interaction with FDN : call set up present in EF_{FDN}, not allowed	R97	3.4		M	M	M	
	Interaction with FDN : call set up present in EF_{FDN}, allowed with modifications	R97	3.5		M	M	M	
	Support of BDN : call set up present in EF_{BDN}, not	R97	4.1		M	M	M	

	allowed							
	Support of BDN : call set up present in EF_{BDN}, allowed with no modifications	R97	4.2		M	M	M	
	Support of BDN : call set up present in EF_{BDN}, allowed with modifications	R97	4.3		M	M	M	
	BDN and FDN enabled : call set up present in EF_{FDN}, allowed with modifications	R97	4.4		M	M	M	
	Cell identity in envelope call control	R97	1.1 to 1.9, 2.1 to 2.4, 3.1 to 3.5, 4.1 to 4.4		M	M	M	
	MO SMS control by SIM	R97	TBD		M	M	M	
40	EVENT DOWNLOAD 27.22.7	R97			M	M	M	
	27.22.7.1 : MT call event	R97	1.1		M	M	M	
	27.22.7.2 : call connected event	R97	1.1		M	M	M	
	ME supporting SET UP CALL	R97	2.1		C9	C9	C9	
	27.22.7.3 : call disconnected event	R97	1.1		M	M	M	
	27.22.7.4 : location status event	R97	1.1		M	M	M	
	27.22.7.5 : user activity event	R97	1.1		M	M	M	
	27.22.7.6 : idle screen available event	R97	1.1		M	M	M	
	27.22.7.7 : card reader status event	R98 class "a"				C5	C5	
	27.22.7.7.1 : Card reader status normal	R98 class "a"	1.1			C5	C5	
	27.22.7.7.2 : Detachable card reader	R98 class "a"	2.1			C7	C7	
	27.22.7.8 : language selection event	R99	1.1				M	
	27.22.7.9 : Browser	R99 class	1.1				C5	

	termination event	s "c"						
	27.22.7.10 : Data available event	R99 class "e"	1.1				C5	
	27.22.7.11 : Channel status event	R99 class "e"	1.1				C5	

[C1](#) [F "Redial" supported by the ME THEN M](#)

[C2](#) [IF "Capability Configuration" is supported by the ME THEN M](#)

[C3](#) [IF "Called Party Subaddress" is supported by the ME THEN M](#)

[C4](#) [IF ME supports display of Icons as specified in the "Icon Identifier" for the Test Sequence x.y](#)

[THEN Test Sequences "x.yA" M](#)

[ELSE Test Sequences "x.yB" M](#)

[Where x.y represents the Expected Sequence x.y](#)

[C5](#) [IF corresponding Optional class letter supported THEN M](#)

[C6](#) [IF C4 AND IF C5 THEN M](#)

[C7](#) [IF C5 AND IF ME supports "Detachable Card Reader" THEN M](#)

[C8](#) [IF C5 AND IF ME supports "SET UP CALL" Proactive command](#)

[THEN M](#)

[C9](#) [IF ME supports "SET UP CALL" Proactive command THEN M](#)

[3.2.3 Applicability to terminal equipment](#)

[The applicability to terminal equipment specified in 3GPP TS 11.10-1 \[12\] clause 3.2.3 shall apply, unless otherwise specified in the present clause.](#)

[3.3 Definitions](#)

[The definitions specified in 3GPP TS 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 3GPP TS 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 3GPP TS 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 3GPP TS 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 3GPP TS 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.

5.2 Test interfaces and facilities

The test interfaces and facilities specified in 3GPP TS 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 3GPP TS 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 3GPP TS 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 3GPP TS 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 3GPP TS 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:

27.22.X.X. **Tested command**

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

27.22.X.X. 1.1 **Definition and applicability**

This section refers back to Section 3.2.2..

27.22.X.X. 1.2 **Conformance requirement**

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

27.22.X.X. 1.3 **Test Purpose**

This section details the purpose of the test.

27.22.X.X. 1.4 **Method of test**

27.22.X.X. 1.4.1. **Initial Conditions**

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

27.22.X.X. 1.4.2 **Procedure**

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

- Sequence 1.1 (further initial conditions, added here)

<u>Command 1.1.1</u>
<u>TERMINAL RESPONSE1.1.1A</u> <u>or 1.1.1B</u>
<u>Command 1.1.2</u>

TERMINAL RESPONSE1.1.2
--

[PROACTIVE COMMAND 1.1. 1](#)

[TERMINAL RESPONSE 1.1.1A](#)

[TERMINAL RESPONSE 1.1.1B](#)

[PROACTIVE COMMAND 1.1.2](#)

[TERMINAL RESPONSE 1.1.2](#)

• [Sequence 1.2](#)

Command 1. 2.1

TERMINAL RESPONSE1.2.1
--

Command 1.2 .2

TERMINAL RESPONSE1.2.2 (same as TERMINAL RESPONSE1.2.1)

Command 1.2.3

TERMINAL RESPONSE1.2.3
--

[PROACTIVE COMMAND 1.2 .1](#)

[PROACTIVE COMMAND 1.2 .2](#)

[PROACTIVE COMMAND 1.2 .3](#)

[TERMINAL RESPONSE 1.2.1, TERMINAL RESPONSE 1.2.2](#)

[TERMINAL RESPONSE 1.2.3](#)

• [Sequence 1.3](#)

Command 1.3.1

TERMINAL RESPONSE1.3.1
--

[PROACTIVE COMMAND1.3 .1](#)

[TERMINAL RESPONSE1.3.1](#)

[27.22.X.X.1.5 Test Requirement](#)

[This section details the conditions to be met for successful completion of the test.](#)

[27.22.X.X.2. Command tested in « environment #2 » \(NORMAL, ICONS, UCS2 ...\)](#)

[27.22.X.X. 2.1 Definition and applicability](#)

27.22.X.X. 2.2 Conformance requirement

27.22.X.X. 2.3 Test Purpose

27.22.X.X. 2.4 Method of test

27.22.X.X. 2.4.1.1 Initial Conditions

27.22.X.X. 2.4.1.2 Procedure

• Sequence 2.1

<u>Command 2.1.1</u>
<u>TERMINAL RESPONSE2.1.1A or 2.1.1B</u>
<u>Command 2.1.2</u>
<u>TERMINAL RESPONSE2.1.2</u>

PROACTIVE COMMAND 2.1. 1

TERMINAL RESPONSE 2.1.1A

TERMINAL RESPONSE 2.1.1B

PROACTIVE COMMAND 2.1.2

TERMINAL RESPONSE 2.1.2

• Sequence 2.2

<u>Command 2.2.1</u>
<u>TERMINAL RESPONSE2.2.1</u>
<u>Command 2.2 .2</u>
<u>TERMINAL RESPONSE2.2.2 (same as TERMINAL RESPONSE2.2.1)</u>
<u>Command 2.2.3</u>
<u>TERMINAL RESPONSE2.2.3</u>

PROACTIVE COMMAND2.2 .1

PROACTIVE COMMAND2.2 .2

PROACTIVE COMMAND2.2 .3

Coding TERMINAL RESPONSE2.2.1, TERMINAL RESPONSE2.2.2

Coding TERMINAL RESPONSE2.2.3

27.22.X.X.2.5 Test Requirement

10 Generic call set up procedures

The generic call set up procedure specified in 3GPP TS 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 3GPP TS 11.10- [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 3GPP TS 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.

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

<u>Coding:</u>	<u>B1</u> <u>xx1111xx</u>	<u>B2</u> <u>xxxxxxx</u>	<u>B3</u> <u>xx1111xx</u>	<u>B4</u> <u>xxxx11xx (binary)</u>
	<u>B5</u> <u>xxxxxxx</u>	<u>B6</u> <u>xxxxxxx</u>	<u>B7</u> <u>11111111</u>	<u>B8</u> <u>11111111 (binary)</u>
	<u>B9</u> <u>xxxxxxx (binary)</u>			

EF_{Phase} (SIM Phase Identification)

Logically: Phase 2+

Coding: '03'

EF_{IMSI} (International Mobile Subscriber Identity)

Logically:

<u>Length:</u>	<u>8 bytes</u>
<u>IMSI:</u>	<u>001 01 0123456789</u>

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

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

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

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

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

EF_{BDN} (Barred Dialling Numbers)Logically:At least 10 records

<u>Record 1:</u>	
<u>Length of alpha identifier:</u>	<u>32 characters</u>
<u>Alpha identifier:</u>	<u>"CBA"</u>
<u>Length of BCD number:</u>	<u>"03"</u>
<u>TON and NPI:</u>	<u>Telephony and Unknown</u>
<u>Dialled number:</u>	<u>321</u>
<u>CCI:</u>	<u>None</u>
<u>Ext4:</u>	<u>None</u>
<u>Comparison Method Info:</u>	<u>None</u>

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

EF_{ECC} (Emergency Call Codes)Logically:

<u>Emergency Call Code 1:</u>	<u>'1020'</u>
-------------------------------	---------------

<u>Coding:</u>	<u>01</u>	<u>02</u>	<u>FF</u>
----------------	-----------	-----------	-----------

EF_{SMSP} (Short message service parameters)

Logically:

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

<u>Coding:</u>	<u>B1</u>	<u>B2</u>	<u>B3</u>	<u>...</u>	<u>B13</u>	<u>B14</u>	<u>B15</u>	<u>B16</u>	<u>B17</u>	<u>B18</u>	<u>B19</u>	<u>B20</u>	<u>B21</u>	<u>B22</u>	<u>B23</u>
<u>Record 1:</u>	<u>FD</u>	<u>FF</u>	<u>FF</u>	<u>...</u>	<u>FF</u>	<u>09</u>	<u>91</u>	<u>11</u>	<u>22</u>	<u>33</u>	<u>44</u>	<u>55</u>	<u>66</u>	<u>77</u>	<u>F8</u>
	<u>B24</u>	<u>B25</u>	<u>B26</u>	<u>B27</u>	<u>B28</u>										
	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>										

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

See Section 3.2.2.

27.22.1.2 Conformance requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile).

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

Expected Sequence 1 (PROFILE DOWNLOAD)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	USER → ME	Power on ME	
2	ME → USER	PIN entry request	
3	USER → ME	Enter "1111"	
...			
4	ME → SIM	VERIFY CHV1 1.1A	[CHV1 code: "1111"]
5	SIM → ME	VERIFY CHV ATTEMPT UNSUCCESSFUL 1.1A	
...			
6	ME → USER	PIN entry request	
7	USER → ME	Enter "1234"	
8	ME → SIM	VERIFY CHV1 1.1B	[CHV1 code: "1234"]
9	SIM → ME	NORMAL ENDING OF COMMAND 1.1A	
10	ME → SIM	SELECT EF PHASE 1.2	
11	ME → SIM	READ BINARY (EF PHASE) 1.3	Expected PHASE = 03 returned by SIM
12	ME → SIM	TERMINAL PROFILE 1.4	PROFILE DOWNLOAD
13	SIM → ME	NORMAL ENDING OF COMMAND 1.1A	
14	ME → SIM	SELECT EF IMSI 1.5 or SELECT EF LOCI 1.6	

VERIFY CHV1 : 1.1A

Logically:

Coding:

APDU: CLA=A0 INS=20 P1=00 P2=01 P3=08

DATA IN: 31 31 31 31 FF FF FF FF

VERIFY CHV1 ATTEMPT UNSUCCESSFUL : 1.1A

Logically:

Coding: _____

SW1=98 SW2=04

VERIFY CHV1 : 1.1B

Logically:

Coding: _____

APDU: CLA=A0 INS=20 P1=00 P2=01 P3=08

DATA IN: 31 32 33 34 FF FF FF FF

NORMAL ENDING OF COMMAND : 1.1A

Logically:

Coding: _____

SW1=90 SW2=00

SELECT EF PHASE : 1.2

Logically:

Coding:

APDU: CLA=A0 INS=A4 P1=00 P2=00 P3=02

Response
DATA IN: 6F AE

SW1=9F SW2=0F

SW1= 9F , SW2= 0F

READ BINARY (EF PHASE) : 1.3

Logically:

Coding:

APDU: CLA=A0 INS=B0 P1=00 P2=00 P3=01

Response

DATA OUT: 03

SW1=90 SW2=00

TERMINAL PROFILE : 1.4

Logically:

Coding: _____

APDU: CLA=A0 INS=10 P1=00 P2=01 P3=XX

DATA IN: YY ZZ ...

With XX representing the length of the following DATA IN depending on the SIM Toolkit commands supported by the ME, and with YY, ZZ, ... representing here the bytes of the TERMINAL PROFILE data, as specified in the 11.14 [15], clause 5.2

SELECT EF IMSI : 1.5

Logically:

Coding: _____

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

SELECT EF LOCI : 1.6

Logically:

Coding: _____

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

27.22.1.5 Test Requirement

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

27.22.2 Contents of the TERMINAL PROFILE command

27.22.2.1 Definition and applicability

See Section 3.2.2.

27.22.2.2 Conformance requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile).

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

See Section 3.2.2.

27.22.3.2 Conformance requirement

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

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

3GPP TS 11.14 [15] clause 6.3.

27.22.3.3 Test Purpose

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

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

27.22.3.4 Method of test

27.22.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

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

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

The SIM Simulator is configured to monitor the SIM - ME interface.

27.22.3.4.2 Procedure

- a) The ME is powered on.
- b) After the ME has performed the PROFILE DOWNLOAD procedure, the SIM Simulator indicates that a Proactive SIM Command is pending with SW1 / SW2 of '91 0B'.
- c) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 2.1: MORE TIME.

27.22.3.5 Test Requirement

- 1) After step b) the ME shall send the FETCH command to the SIM.
- 2) After step c) the ME shall send the TERMINAL REPOSE command with command number "01", type of command "02" and command qualifier "00".

27.22.4 Proactive SIM Commands27.22.4.1 DISPLAY TEXT27.22.4.1.1 DISPLAY TEXT (Normal)27.22.4.1.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.1.1.2 Conformance requirements

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.1 (Display Text), clause 6.5.4 (Icon Identifier), clause 6.6.1 (Display Text), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.31 (Icon identifier).

27.22.4.1.1.3 Test Purpose

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

27.22.4.1.1.4 Method of test27.22.4.1.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

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

27.22.4.1.1.4.2 Procedure

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

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
-------------	------------------	-------------------------	-----------------

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

PROACTIVE COMMAND : DISPLAY TEXT 1.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, wait for user to clear message
<u>Device identities</u>	
Source device:	SIM
Destination device:	Display
<u>Text String</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"Toolkit Test 1"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>1A</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>21</u>	<u>80</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>02</u>	<u>8D</u>
	<u>0F</u>	<u>04</u>	<u>54</u>	<u>6F</u>	<u>6F</u>	<u>6C</u>	<u>6B</u>	<u>69</u>	<u>74</u>	<u>20</u>	<u>54</u>	<u>65</u>
	<u>73</u>	<u>74</u>	<u>20</u>	<u>31</u>								

TERMINAL RESPONSE : DISPLAY TEXT 1.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, wait for user to clear message
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>21</u>	<u>80</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

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

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
-------------	------------------	-------------------------	-----------------

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

PROACTIVE COMMAND : DISPLAY TEXT 1.2.1 : same as 1.1.1
TERMINAL RESPONSE : DISPLAY TEXT 1.2.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, wait for user to clear message
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	ME currently unable to process command
Additional information:	Screen is busy

Coding:

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

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

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

PROACTIVE COMMAND : DISPLAY TEXT 1.3.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	high priority, wait for user to clear message
<u>Device identities</u>	
Source device:	SIM
Destination device:	Display
<u>Text String</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"Toolkit Test 2"

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 1.3.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	high priority, wait for user to clear message
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>21</u>	<u>81</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

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

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

PROACTIVE COMMAND : DISPLAY TEXT 1.4.1

Logically:

Command details
Command number: 1
Command type: DISPLAY TEXT
Command qualifier: normal priority, wait for user to clear message
Device identities
Source device: SIM
Destination device: Display
Text string
Data coding scheme: packed, SMS default alphabet
Text: "Toolkit Test 3"

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 1.4.1

Logically:

Command details
Command number: 1
Command type: DISPLAY TEXT
Command qualifier: normal priority, wait for user to clear message
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully

Coding:

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

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

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

PROACTIVE COMMAND : DISPLAY TEXT 1.5.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, clear message after a delay
<u>Device identities</u>	
Source device:	SIM
Destination device:	Display
<u>Text string</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"Toolkit Test 4"

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 1.5.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, clear message after a delay
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>21</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

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

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

PROACTIVE COMMAND : DISPLAY TEXT 1.6.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, wait for user to clear message
<u>Device identities</u>	
Source device:	SIM
Destination device:	Display
<u>Text String</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"This command instructs the ME to display a text message. It allows the SIM to define the priority of that message, and the text string format. Two types of prio"

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 1.6.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, wait for user to clear message
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

<u>BER-TLV:</u>	81	03	01	21	80	82	02	82	81	83	01	00
-----------------	----	----	----	----	----	----	----	----	----	----	----	----

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

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.7.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : DISPLAY TEXT 1.7.1	
4	ME → USER	Display "<GO-BACKWARDS"	

5	<u>USER → ME</u>	<u>Indicate the need to go backwards in the proactive SIM application session</u>	
6	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : DISPLAY TEXT 1.7.1</u>	<u>[Backward move in the proactive SIM session requested by the user]</u>

PROACTIVE COMMAND : DISPLAY TEXT 1.7.1

Logically:

Command details

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

Device identities

<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>Display</u>

Text string

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

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 1.7.1

Logically:

Command details

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

Device identities

<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>

Result

<u>General Result:</u>	<u>Backward move in the proactive SIM session requested by the user</u>
------------------------	---

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>21</u>	<u>80</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>11</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

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

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.8.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : DISPLAY TEXT 1.8.1</u>	
4	<u>ME → USER</u>	<u>Display "<ABORT>"</u>	

5	<u>USER → ME</u>	<u>Indicate the need to end the proactive SIM application session</u>	
6	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : DISPLAY TEXT 1.8.1</u>	<u>[Proactive SIM session terminated by the user]</u>
7	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION ENDED</u>	

PROACTIVE COMMAND : DISPLAY TEXT 1.8.1

Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>DISPLAY TEXT</u>
<u>Command qualifier:</u>	<u>normal priority, wait for user to clear message</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>Display</u>
<u>Text string</u>	
<u>Data coding scheme:</u>	<u>unpacked, 8 bit data</u>
<u>Text:</u>	<u>"<ABORT>"</u>

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 1.8.1

Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>DISPLAY TEXT</u>
<u>Command qualifier:</u>	<u>normal priority, wait for user to clear message</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Proactive SIM session terminated by the user</u>

Coding:

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

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

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.9.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : DISPLAY TEXT 1.9.1</u>	<u>Including icon identifier, icon shall be displayed together with the alpha text string, but no text string given</u>

4	ME → SIM	TERMINAL RESPONSE : DISPLAY TEXT 1.9.1	[Command data not understood by ME (clause 6.5.4)]
5	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : DISPLAY TEXT 1.9.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: SIM

Destination device: Display

Text string

Contents: null data object

Icon Identifier:

Icon qualifier: icon is self-explanatory

Icon Identifier: record 1 in EF_(IMG)

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 1.9.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command data not understood by ME

Coding:

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

27.22.4.1.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1 to 8.

27.22.4.1.2 DISPLAY TEXT (Support of “No response from user”)

27.22.4.1.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.1.2.2 Conformance requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.1 (Display Text), clause 6.6.1 (Display Text), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme) 27.22.4.1.2.3 Test Purpose

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

27.22.4.1.2.4 Method of test27.22.4.1.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

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

ME Manufacturers shall set the “no response from user” period of time.

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

27.22.4.1.2.4.1 Procedure

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

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

PROACTIVE COMMAND : DISPLAY TEXT 2.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, wait for user to clear message
<u>Device identities</u>	
Source device:	SIM
Destination device:	Display
<u>Text string</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"<TIME-OUT>"

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 2.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, wait for user to clear message
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	No response from user

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>21</u>	<u>80</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>12</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

27.22.4.1.2.5 Test RequirementThe ME shall operate in the manner defined in expected sequence 1.27.22.4.1.3 DISPLAY TEXT (Display of extension text)27.22.4.1.3.1 Definition and applicabilitySee Section 3.2.2.27.22.4.1.3.2 Conformance requirementThe ME shall support the DISPLAY TEXT command as defined in the following technical specifications:3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.1 (Display Text), clause 6.6.1 (Display Text), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme).27.22.4.1.3.3 Test Purpose

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

27.22.4.1.3.4 Method of test

27.22.4.1.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

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

27.22.4.1.3.4.2 Procedure

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

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

PROACTIVE COMMAND : DISPLAY TEXT 3.1.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: SIM

Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data

Text: "This command instructs the ME to display a text

message and/or an icon (see 6.5.4). It allows the SIM to define the priority of that message, and the text string format. Two types of priority are defined:- display normal priority text and/”

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 3.1.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>21</u>	<u>80</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

27.22.4.1.3.5 Test Requirement

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

27.22.4.1.4 DISPLAY TEXT (Sustained text)

27.22.4.1.4.1 Definition and applicability

See Section 3.2.2.

27.22.4.1.4.2 Conformance requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.1 (Display Text), clause 6.6.1 (Display Text), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme) and clause 12.43 (immediate response).

27.22.4.1.4.3 Test Purpose

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

27.22.4.1.4.4 Method of test27.22.4.1.4.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

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

27.22.4.1.4.4.2 Procedure

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

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

PROACTIVE COMMAND : DISPLAY TEXT 4.1.1

Logically:

Command details
Command number: 1
Command type: DISPLAY TEXT
Command qualifier: normal priority, wait for user to clear message
Device identities
Source device: SIM
Destination device: Display
Text String
Data coding scheme: unpacked, 8 bit data
Text: "Toolkit Test 1"
Immediate Response

Coding:

BER-TLV: D0 1C 81 03 01 21 80 82 02 81 02 8D
 0F 04 54 6F 6F 6C 6B 69 74 20 54 65
 73 74 20 31 AB 00

TERMINAL RESPONSE : DISPLAY TEXT 4.1.1

Logically:

Command details
Command number: 1
Command type: DISPLAY TEXT
Command qualifier: normal priority, wait for user to clear message
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully

Coding:

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

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

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

PROACTIVE COMMAND : DISPLAY TEXT 4.2.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, clear message after a delay
<u>Device identities</u>	
Source device:	SIM
Destination device:	Display
<u>Text String</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"Toolkit Test 2"
<u>Immediate Response</u>	

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 4.2.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, clear message after a delay
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>21</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

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

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

PROACTIVE COMMAND : DISPLAY TEXT 4.3.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, wait for user to clear message
<u>Device identities</u>	
Source device:	SIM
Destination device:	Display
<u>Text String</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"Toolkit Test 3"
<u>Immediate Response</u>	

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>1C</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>21</u>	<u>80</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>02</u>	<u>8D</u>
	<u>0F</u>	<u>04</u>	<u>54</u>	<u>6F</u>	<u>6F</u>	<u>6C</u>	<u>6B</u>	<u>69</u>	<u>74</u>	<u>20</u>	<u>54</u>	<u>65</u>
	<u>73</u>	<u>74</u>	<u>20</u>	<u>33</u>	<u>AB</u>	<u>00</u>						

TERMINAL RESPONSE : DISPLAY TEXT 4.3.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, wait for user to clear message
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>21</u>	<u>80</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

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

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

PROACTIVE COMMAND : DISPLAY TEXT 4.4.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, wait for user to clear message
<u>Device identities</u>	
Source device:	SIM
Destination device:	Display
<u>Text String</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"Toolkit Test 4"
<u>Immediate Response</u>	

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 4.4.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, wait for user to clear message
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

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

27.22.4.1.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1 to 4.

27.22.4.1.5 DISPLAY TEXT (Display of icons)27.22.4.1.5.1 Definition and applicability

See section 3.2.2

27.22.4.1.5.2 Conformance requirement

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

[3GPP TS 11.14 \[15\] clause 5.2 \(Terminal Profile\), clause 6.4.1 \(Display Text\), clause 6.5.4 \(Icon Identifier\), clause 6.6.1 \(Display Text\), clause 6.8 \(Terminal Response\), clause 6.11, clause 12.6 \(Commands details\), clause 12.15 \(Text String\), clause 12.15.1/2/3 \(Data Coding Scheme\), clause 12.31 \(Icon identifier\).27.22.4.1.5.3 Test Purpose](#)

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

[27.22.4.1.5.4 Method of test](#)

[27.22.4.1.5.4.1 Initial Conditions](#)

[See Annex C](#)

[27.22.4.1.5.4.2 Procedure](#)

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

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

PROACTIVE COMMAND : DISPLAY TEXT 5.1.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: SIM

Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data

Text: "Basic Icon"

Icon Identifier:

Icon qualifier: icon is self-explanatory

Icon Identifier: record 1 in EF_(IMG)

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 5.1.1A

Logically:

Command details
Command number: 1
Command type: DISPLAY TEXT
Command qualifier: normal priority, wait for user to clear message
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully

Coding:

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

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

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

TERMINAL RESPONSE : DISPLAY TEXT 5.1.1B

Logically:

Command details
Command number: 1
Command type: DISPLAY TEXT
Command qualifier: normal priority, wait for user to clear message
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully, but requested icon could not be displayed

Coding:

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

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

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
7	SIM → ME	PROACTIVE COMMAND PENDING: DISPLAY TEXT 5.2.1	
8	ME → SIM	FETCH	
9	SIM → ME	PROACTIVE COMMAND : DISPLAY TEXT 5.2.1	[COLOUR-ICON]
10	ME → USER	Display the COLOUR-ICON	
11	USER → ME	Clear Message	
12	ME → SIM	TERMINAL RESPONSE : DISPLAY TEXT 5.2.1A	[Command performed successfully]

PROACTIVE COMMAND : DISPLAY TEXT 5.2.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: SIM

Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data

Text: "Colour Icon"

Icon Identifier:

Icon qualifier: icon is self-explanatory

Icon Identifier: record 2 in EF_(IMG)

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 5.2.1A

Logically:

Command details
Command number: 1
Command type: DISPLAY TEXT
Command qualifier: normal priority, wait for user to clear message
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully

Coding:

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

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

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
7	SIM → ME	PROACTIVE COMMAND PENDING: DISPLAY TEXT 5.2.1	
8	ME → SIM	FETCH	
9	SIM → ME	PROACTIVE COMMAND : DISPLAY TEXT 5.2.1	[COLOUR-ICON]
10	ME → USER	Display "Colour Icon" without the icon	
11	USER → ME	Clear Message	
12	ME → SIM	TERMINAL RESPONSE : DISPLAY TEXT 5.2.1B	[Command performed successfully, but requested icon could not be displayed]

TERMINAL RESPONSE : DISPLAY TEXT 5.2.1B

Logically:

Command details
Command number: 1
Command type: DISPLAY TEXT
Command qualifier: normal priority, wait for user to clear message
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully, but requested icon could not be displayed

Coding:

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

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

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
13	SIM → ME	PROACTIVE COMMAND PENDING: DISPLAY TEXT 5.3.1	

14	ME → SIM	FETCH	
15	SIM → ME	PROACTIVE COMMAND : DISPLAY TEXT 5.3.1	[BASIC-ICON, not self-explanatory]
16	ME → USER	Display the BASIC-ICON And	
17	USER → ME	Display "Basic Icon" Clear Message	
18	ME → SIM	TERMINAL RESPONSE : DISPLAY TEXT 5.3.1A	[Command performed successfully]
19	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : DISPLAY TEXT 5.3.1

Logically:

Command details

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

Device identities

Source device: SIM
 Destination device: Display

Text String

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

Icon Identifier:

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

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 5.3.1A

Logically:

Command details

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

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

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

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: DISPLAY TEXT 5.3.1</u>	
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND :</u> <u>DISPLAY TEXT 5.3.1</u>	<u>[BASIC-ICON, not self-explanatory]</u>
<u>16</u>	<u>ME →</u> <u>USER</u>	<u>Display "Basic Icon" without the</u> <u>icon</u>	
<u>17</u>	<u>USER →</u> <u>ME</u>	<u>Clear Message</u>	
<u>18</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE :</u> <u>DISPLAY TEXT 5.3.1B</u>	<u>[Command performed successfully, but</u> <u>requested icon could not be displayed]</u>
<u>19</u>	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	

TERMINAL RESPONSE : DISPLAY TEXT 5.3.1B

Logically:

Command details

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

Device identities

Source device: ME
Destination device: SIM

Result

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

Coding:

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

27.22.4.1.5.5 Test Requirement

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

27.22.4.1.6 DISPLAY TEXT (UCS2 display supported)

27.22.4.1.6.1 Definition and applicability

See Section 3.2.2.

27.22.4.1.6.2 Conformance requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.1 (Display Text), clause 6.5.4 (Icon Identifier), clause 6.6.1 (Display Text), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text

String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.31 (Icon identifier).The ME shall support the UCS2 alphabet for the coding of the Cyrillic alphabet, as defined in the following technical specification:

ISO/IEC 10646 [17], “Universal Multiple Octet Coded Character Set (UCS)”.

27.22.4.1.6.3 Test Purpose

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

27.22.4.1.6.4 Method of test

27.22.4.1.6.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

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

27.22.4.1.6.4.2 Procedure

Expected Sequence 6.1 (DISPLAY TEXT, UCS2 coded)

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

PROACTIVE COMMAND : DISPLAY TEXT 6.1.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: SIM

Destination device: Display

Text String

Data coding scheme: UCS2 (16bit)

Text: “ЗДРАВСТВУЙТЕ”

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>24</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>21</u>	<u>80</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>02</u>	<u>8D</u>
	<u>19</u>	<u>08</u>	<u>04</u>	<u>17</u>	<u>04</u>	<u>14</u>	<u>04</u>	<u>20</u>	<u>04</u>	<u>10</u>	<u>04</u>	<u>12</u>
	<u>04</u>	<u>21</u>	<u>04</u>	<u>22</u>	<u>04</u>	<u>12</u>	<u>04</u>	<u>23</u>	<u>04</u>	<u>19</u>	<u>04</u>	<u>22</u>
	<u>04</u>	<u>15</u>										

TERMINAL RESPONSE : DISPLAY TEXT 6.1.1Logically:Command detailsCommand number: 1Command type: DISPLAY TEXTCommand qualifier: normal priority, wait for user to clear messageDevice identitiesSource device: MEDestination device: SIMResultGeneral Result: Command performed successfullyCoding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>21</u>	<u>80</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

27.22.4.1.6.5 Test RequirementThe ME shall operate in the manner defined in expected sequence 1.27.22.4.2 GET INKEY27.22.4.2.1 GET INKEY(normal)27.22.4.2.1.1 Definition and applicabilitySee Section 3.2.2.27.22.4.2.1.2 Conformance RequirementThe ME shall support the GET INKEY command as defined in the following technical specifications :3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.2 (Get Inkey), clause 6.6.2 (Get Inkey), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme).27.22.4.2.1.3 Test PurposeTo verify that the ME displays the text contained in the GET INKEY proactive SIM command, and returns the single character entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.2.1.4 Method of Test

27.22.4.2.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

27.22.4.2.1.4.2 Procedure

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

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

PROACTIVE COMMAND : GET INKEY 1.1.1

Logically:

Command details

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

Device identities

Source device: SIM
 Destination device: ME

Text string

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

Coding:

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

Terminal Response: GET INKEY 1.1.1

Logically:

Command details
Command number: 1
Command type: GET INKEY
Command qualifier: digits (0-9, *, # and +) only, no help information available
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully
Text String "+"

Coding:

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

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

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

PROACTIVE COMMAND : GET INKEY 1.2.1

Logically:

Command details
Command number: 1
Command type: GET INKEY
Command qualifier: digits (0-9, *, # and +) only, no help information available
Device identities
Source device: SIM
Destination device: ME
Text string
Data coding scheme: SMS default alphabet
Text: "Enter "0""

Coding:

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

TERMINAL RESPONSE : GET INKEY 1.2.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INKEY
Command qualifier:	digits (0-9, *, # and +) only, no help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
Text String	"0"

Coding:

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

Expected Sequence 1.3 (GET INKEY, backward move)

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

PROACTIVE COMMAND : GET INKEY 1.3.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INKEY
Command qualifier:	digits (0-9, *, # and +) only, no help information available
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Text string</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"<GO-BACKWARDS>"

Coding:

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

TERMINAL RESPONSE : GET INKEY 1.3.1

Logically:

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

Device identities
 Source device: ME
 Destination device: SIM

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

Coding:

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

Expected Sequence 1.4 (GET INKEY, abort)

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

PROACTIVE COMMAND : GET INKEY 1.4.1

Logically:

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

Device identities
 Source device: SIM
 Destination device: ME

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

Coding:

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

TERMINAL RESPONSE : GET INKEY 1.4.1

Logically:

Command details
Command number: 1
Command type: GET INKEY
Command qualifier: digits (0-9, *, # and +) only, no help information available
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Proactive SIM session terminated by the user

Coding:

BER-TLV: 81 03 01 22 80 82 02 82 81 83 01 10

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

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

PROACTIVE COMMAND : GET INKEY 1.5.1

Logically:

Command details
Command number: 1
Command type: GET INKEY
Command qualifier: SMS default alphabet, no help information available
Device identities
Source device: SIM
Destination device: ME
Text string
Data coding scheme: unpacked, 8 bit data
Text: "Enter "q"

Coding:

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

TERMINAL RESPONSE : GET INKEY 1.5.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INKEY
Command qualifier:	SMS default alphabet, no help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
Text String	"q"

Coding:

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

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

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

PROACTIVE COMMAND : GET INKEY 1.6.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INKEY
Command qualifier:	SMS default alphabet, no help information available
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Text string</u>	
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 A1 04 45 6E 74 65 72 20 22 78
 22 2E 20 54 68 69 73 20 63 6F 6D 6D
 61 6E 64 20 69 5E 73 74 72 75 63 74
 73 20 74 68 65 20 4D 45 20 74 6F 20

<u>64</u>	<u>69</u>	<u>73</u>	<u>70</u>	<u>6C</u>	<u>61</u>	<u>79</u>	<u>20</u>	<u>74</u>	<u>65</u>	<u>78</u>	<u>74</u>
<u>2C</u>	<u>20</u>	<u>61</u>	<u>6E</u>	<u>64</u>	<u>20</u>	<u>74</u>	<u>6F</u>	<u>20</u>	<u>65</u>	<u>78</u>	<u>70</u>
<u>65</u>	<u>63</u>	<u>74</u>	<u>20</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>20</u>	<u>75</u>	<u>73</u>	<u>65</u>	<u>72</u>
<u>20</u>	<u>74</u>	<u>6F</u>	<u>20</u>	<u>65</u>	<u>6E</u>	<u>74</u>	<u>65</u>	<u>72</u>	<u>20</u>	<u>61</u>	<u>20</u>
<u>73</u>	<u>69</u>	<u>6E</u>	<u>67</u>	<u>6C</u>	<u>65</u>	<u>20</u>	<u>53</u>	<u>68</u>	<u>61</u>	<u>72</u>	<u>61</u>
<u>63</u>	<u>74</u>	<u>65</u>	<u>72</u>	<u>2E</u>	<u>20</u>	<u>41</u>	<u>6E</u>	<u>79</u>	<u>20</u>	<u>72</u>	<u>65</u>
<u>73</u>	<u>70</u>	<u>6F</u>	<u>6E</u>	<u>73</u>	<u>65</u>	<u>20</u>	<u>65</u>	<u>6E</u>	<u>74</u>	<u>65</u>	<u>72</u>
<u>65</u>	<u>64</u>	<u>20</u>	<u>62</u>	<u>79</u>	<u>20</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>20</u>	<u>75</u>	<u>73</u>
<u>65</u>	<u>72</u>	<u>20</u>	<u>73</u>	<u>68</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>62</u>	<u>65</u>	<u>20</u>
<u>70</u>	<u>61</u>	<u>73</u>	<u>73</u>	<u>65</u>	<u>64</u>	<u>20</u>	<u>74</u>				

TERMINAL RESPONSE : GET INKEY 1.6.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: SMS default alphabet, no help information available

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Text String "x"

Coding:

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

27.22.4.2.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1 to 6.

27.22.4.2.2 GET INKEY (No response from User)

27.22.4.2.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.2.2.2 Conformance Requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.2 (Get Inkey), clause 6.6.2 (Get Inkey), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme).

27.22.4.2.2.3 Test Purpose

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

27.22.4.2.2.4 Method of Test

27.22.4.2.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

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

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

ME Manufacturers shall set the “no response from user” period of time.

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

27.22.4.2.2.4.2 Procedure

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

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

PROACTIVE COMMAND : GET INKEY 2.1.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: “<TIME-OUT>”

Response length

Minimum length: 0

Maximum length: 10

Coding:

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

TERMINAL RESPONSE : GET INKEY 2.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INKEY
Command qualifier:	digits (0-9, *, # and +) only, no help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	No response from user

Coding:

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

27.22.4.2.2.5 Test Requirement

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

27.22.4.2.3 GET INKEY (UCS2 format display)27.22.4.2.3.1 Definition and applicability

See Section 3.2.2.

27.22.4.2.3.2 Conformance Requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.2 (Get Inkey), clause 6.6.2 (Get Inkey), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme).

Additionally, the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications:

ISO/IEC 10646 [17], “Universal Multiple Octet Coded Character Set (UCS)”.

27.22.4.2.3.3 Test Purpose

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

27.22.4.2.3.4 Method of Test27.22.4.2.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

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

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

27.22.4.2.3.4.2 Procedure

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

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

PROACTIVE COMMAND : GET INKEY 3.1.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: 16 bit data UCS2 alphabet format

Text: “ ЗДРАВСТВУЙТЕ ”

Coding:

BER-TLV: D0 24 81 03 01 22 00 82 02 81 82 8D
 19 08 04 17 04 14 04 20 04 10 04 12
 04 21 04 22 04 12 04 23 04 19 04 22
 04 15

TERMINAL RESPONSE : GET INKEY 3.1.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Text String: “+”

Coding:

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

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

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

PROACTIVE COMMAND : GET INKEY 3.2.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: 16 bit data UCS2 alphabet format

Text: "ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ

ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ

ЗДРАВСТВУЙТЕЗДРАВСТВУЙ"

Coding:

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

TERMINAL RESPONSE : GET INKEY 3.2.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INKEY
Command qualifier:	digits (0-9, *, # and +) only, no help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
Text String:	“+”

Coding:

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

27.22.4.2.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1 to 2.

27.22.4.2.4 GET INKEY (UCS2 format of entry)27.22.4.2.4.1 Definition and applicability

See Section 3.2.2.

27.22.4.2.4.2 Conformance Requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.2 (Get Inkey), clause 6.6.2 (Get Inkey), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme).

Addionnally, the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications:

ISO/IEC 10646 [17], “Universal Multiple Octet Coded Character Set (UCS)”.

27.22.4.2.4.3 Test Purpose

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

27.22.4.2.4.4 Method of Test27.22.4.2.4.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

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

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

27.22.4.2.4.4.2 Procedure

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

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

PROACTIVE COMMAND : GET INKEY 4.1.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: characters from UCS2 alphabet, no help information available

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: "Enter"

Coding:

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

TERMINAL RESPONSE : GET INKEY 4.1.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: characters from UCS2 alphabet, no help information available

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Text String: "Д"

Coding:

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

27.22.4.2.4.5 Test Requirement

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

27.22.4.2.5 GET INKEY (“Yes/No” Response)

27.22.4.2.5.1 Definition and applicability

See Section 3.2.2.

27.22.4.2.5.2 Conformance Requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.2 (Get Inkey), clause 6.6.2 (Get Inkey), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme).

27.22.4.2.5.3 Test Purpose

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

27.22.4.2.5.4 Method of Test

27.22.4.2.5.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

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

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

27.22.4.2.5.4.2 Procedure

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

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

PROACTIVE COMMAND : GET INKEY 5.1.1

Logically:

Command details

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

Device identities

Source device: SIM
Destination device: ME

Text string

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

Coding:

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

TERMINAL RESPONSE : GET INKEY 5.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INKEY
Command qualifier:	“Yes/No” Response, no help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
Text String:	“1”

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>22</u>	<u>04</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>8D</u>	<u>02</u>	<u>04</u>	<u>01</u>								

PROACTIVE COMMAND : GET INKEY 5.1.2 : same as 5.1.1**TERMINAL RESPONSE : GET INKEY 5.1.2**Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INKEY
Command qualifier:	“Yes/No” Response, no help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
Text String:	“0”

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>22</u>	<u>04</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>8D</u>	<u>02</u>	<u>04</u>	<u>00</u>								

27.22.4.2.5.5 Test RequirementThe ME shall operate in the manner defined in expected sequence 1.27.22.4.2.6 GET INKEY (display of Icon)27.22.4.2.6.1 Definition and applicabilitySee section 3.2.2.

27.22.4.2.6.2 Conformance Requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.2 (Get Inkey), clause 6.5.4 (Icon Identifier), clause 6.6.2 (Get Inkey), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme) , clause 12.31 (Icon identifier).

27.22.4.2.6.3 Test Purpose

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

27.22.4.2.6.4 Method of Test27.22.4.2.6.4.1 Initial Conditions

See Annex C

27.22.4.2.6.4.2 Procedure

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

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

PROACTIVE COMMAND : GET INKEY 6.1.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: "<NO-ICON>"

Icon Identifier

Icon qualifier: self-explanatory

Icon identifier: 1 (number of record in EF_{img})

Coding:

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

TERMINAL RESPONSE : GET INKEY 6.1.1A

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INKEY
Command qualifier:	digits (0-9, *, # and +) only, no help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
Text String	“+”

Coding:

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

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

)

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

TERMINAL RESPONSE : GET INKEY 6.1.1B

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INKEY
Command qualifier:	digits (0-9, *, # and +) only, no help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully but requested icon could not be displayed
Text String:	“+”

Coding:

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

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

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

PROACTIVE COMMAND : GET INKEY 6.2.1

Logically:

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

Device identities
Source device: SIM
Destination device: ME

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

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

Coding:

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

TERMINAL RESPONSE : GET INKEY 6.2.1A

Logically:

```

Command details
Command number: 1
Command type: GET INKEY
Command qualifier: digits (0-9, *, # and +) only, no help information available
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully
Text String: "+"
    
```

Coding:

```

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

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

)

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

TERMINAL RESPONSE : GET INKEY 6.2.1B

Logically:

```

Command details
Command number: 1
Command type: GET INKEY
Command qualifier: digits (0-9, *, # and +) only, no help information available
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully but requested icon could not be
displayed
Text String: "+"
    
```

Coding:

```

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


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

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

PROACTIVE COMMAND : GET INKEY 6.3.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: "<NO-ICON>"

Icon Identifier

Icon qualifier: self-explanatory

Icon identifier: 2 (number of record in EF_{img})

Coding:

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

TERMINAL RESPONSE : GET INKEY 6.3.1A

Logically:

Command details
Command number: 1
Command type: GET INKEY
Command qualifier: digits (0-9, *, # and +) only, no help information available
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully
Text String: "+"

Coding:

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

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

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

TERMINAL RESPONSE : GET INKEY 6.3.1B

Logically:

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

Coding:

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

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

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

PROACTIVE COMMAND : GET INKEY 6.4.1

Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>GET INKEY</u>
<u>Command qualifier:</u>	<u>digits (0-9, *, # and +) only, no help information available</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>
<u>Text string</u>	
<u>Data coding scheme:</u>	<u>unpacked, 8 bit data</u>
<u>Text:</u>	<u>"<COLOUR-ICON>"</u>
<u>Icon Identifier</u>	
<u>Icon qualifier:</u>	<u>not self-explanatory</u>
<u>Icon identifier:</u>	<u>2 (number of record in EF_{Img})</u>

Coding:

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

TERMINAL RESPONSE : GET INKEY 6.4.1A

Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>GET INKEY</u>
<u>Command qualifier:</u>	<u>digits (0-9, *, # and +) only, no help information available</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Text String:</u>	<u>"+"</u>

Coding:

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

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

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

TERMINAL RESPONSE : GET INKEY 6.4.1B

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME

Destination device: SIM

Result

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

Text String: "+"

Coding:

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

27.22.4.2.6.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1 to 4.

27.22.4.2.7 GET INKEY (Help Information)

27.22.4.2.7.1 Definition and applicability

See Section 3.2.2.

27.22.4.2.7.2 Conformance Requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.2 (Get Inkey), clause 6.5.4 (Icon Identifier), clause 6.6.2 (Get Inkey), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme) , clause 12.31 (Icon identifier).

27.22.4.2.7.3 Test Purpose

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

27.22.4.2.7.4 Method of Test27.22.4.2.7.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

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

27.22.4.2.7.4.2 Procedure

Expected Sequence 7.1 (GET INKEY, help information available)

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

PROACTIVE COMMAND : GET INKEY 7.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INKEY
Command qualifier:	digits (0-9, *, # and +) only, help information available
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Text string</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"Enter '+'"

Coding:

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

TERMINAL RESPONSE : GET INKEY 7.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INKEY
Command qualifier:	digits (0-9, *, # and +) only, help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Help information required by the user

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>22</u>	<u>80</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

PROACTIVE COMMAND : GET INKEY 7.1.2Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INKEY
Command qualifier:	digits (0-9, *, # and +) only, help information available
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Text string</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"Enter '+'"

Coding:

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

TERMINAL RESPONSE : GET INKEY 7.1.2Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>GET INKEY</u>
<u>Command qualifier:</u>	<u>digits (0-9, *, # and +) only, help information available</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Text String:</u>	<u>“+”</u>

Coding:

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

27.22.4.2.7.5 Test Requirement

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

27.22.4.3. GET INPUT27.22.4.3.1 GET INPUT (normal)27.22.4.3.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.3.1.2 Conformance Requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.3 (Get Input), clause 6.6.3 (Get Input), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.13 (Default text).

27.22.4.3.1.3 Test Purpose

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

27.22.4.3.1.4 Method of Test27.22.4.3.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.3.1.4.2 Procedure

Expected Sequence 1.1 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

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

PROACTIVE COMMAND : GET INPUT 1.1.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

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

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: "Enter 12345"

Response length

Minimum length: 5

Maximum length: 5

Coding:

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

TERMINAL RESPONSE : GET INPUT 1.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INPUT
Command qualifier:	digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Text string</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"12345"

Coding:

BER-TLV: 81 03 01 23 80 82 02 82 81 83 01 00
 8D 06 04 31 32 33 34 35

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

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

PROACTIVE COMMAND : GET INPUT 1.2.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INPUT
Command qualifier:	digits (0-9, *, # and +) only, SMS default alphabet, input in packed SMS format, ME to echo text, no help information available
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Text string</u>	
Data coding scheme:	SMS default alphabet
Text:	"Enter 67*#+"
<u>Response length</u>	
Minimum length:	5
Maximum length:	5

Coding:

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

TERMINAL RESPONSE : GET INPUT 1.2.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INPUT
Command qualifier:	digits (0-9, *, # and +) only, SMS default alphabet, input in packed SMS format, ME to echo text, no help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Text string</u>	
Data coding scheme:	packed SMS format Text: "67*#+"

Coding:

BER-TLV: 81 03 01 23 08 82 02 82 81 83 01 00
 8D 08 00 36 37 2A 23 2B 22

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

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

PROACTIVE COMMAND : GET INPUT 1.3.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INPUT
Command qualifier:	Character set, SMS default alphabet, input in unpacked format, ME to echo text, no help information available
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Text string</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"Enter AbCdE"
<u>Response length</u>	
Minimum length:	5
Maximum length:	5

Coding:

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

TERMINAL RESPONSE : GET INPUT 1.3.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INPUT
Command qualifier:	Character set, SMS default alphabet, input in unpacked format, ME to echo text, no help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Text string</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"AbCdE"

Coding:

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

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

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

PROACTIVE COMMAND : GET INPUT 1.4.1

Logically:

Command details

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

Device identities

<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>

Text string

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

Response length

<u>Minimum length:</u>	<u>4</u>
<u>Maximum length:</u>	<u>8</u>

Coding:

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

TERMINAL RESPONSE : GET INPUT 1.4.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INPUT
Command qualifier:	<u>digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to hide text, no help information available</u>
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Text string</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"2345678"

Coding:

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

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

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

PROACTIVE COMMAND : GET INPUT 1.5.1

Logically:Command detailsCommand number: 1Command type: GET INPUTCommand qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information availableDevice identitiesSource device: SIMDestination device: METext stringData coding scheme: unpacked, 8 bit dataText: " Enter 1..9,0..9,0(1)"Response lengthMinimum length: 1Maximum length: 20Coding:

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

TERMINAL RESPONSE : GET INPUT 1.5.1Logically:Command detailsCommand number: 1Command type: GET INPUTCommand qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information availableDevice identitiesSource device: MEDestination device: SIMResultGeneral Result: Command performed successfullyText stringData coding scheme: unpacked, 8 bit dataText: "12345678901234567890"Coding:

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

Expected Sequence 1.6 (GET INPUT, backwards move,)

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

PROACTIVE COMMAND : GET INPUT 1.6.1Logically:Command detailsCommand number: 1Command type: GET INPUTCommand qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information availableDevice identitiesSource device: SIMDestination device: METext stringData coding scheme: unpacked, 8 bit dataText: "<GO-BACKWARDS>"Response lengthMinimum length: 0Maximum length: 8Coding:

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

TERMINAL RESPONSE : GET INPUT 1.6.1Logically:Command detailsCommand number: 1Command type: GET INPUTCommand qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information availableDevice identitiesSource device: MEDestination device: SIMResultGeneral Result: backward move in the proactive SIM session requested by the userCoding:

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

Expected Sequence 1.7 (GET INPUT, abort)

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

PROACTIVE COMMAND : GET INPUT 1.7.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

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

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: "<ABORT>"

Response length

Minimum length: 0

Maximum length: 8

Coding:

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

TERMINAL RESPONSE : GET INPUT 1.7.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INPUT
Command qualifier:	digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Proactive SIM session terminated by the user

Coding:

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

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

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: GET INPUT 1.8.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : GET INPUT 1.8.1	[digits only, SMS default alphabet, ME to echo text, packing not required, no help information available]
4	ME → USER	Display ****1111111111###**222222 222###**3333333333###**4 4444444444###**555555555 ###**6666666666###**777 777777###**8888888888###** **9999999999###**00000000 00###"	Range of length expected is 160-160 Text string coding in unpacked format
5	USER → ME	Enter the input ****1111111111###**222222 222###**3333333333###**4 4444444444###**555555555 ###**6666666666###**777 777777###**8888888888###** **9999999999###**00000000 00###"	
6	ME → SIM	and completion TERMINAL RESPONSE : GET INPUT 1.8.1	[command performed successfully]

PROACTIVE COMMAND : GET INPUT 1.8.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

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

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text:

****1111111111###**2222222222###**3333333333###**4444444444
 4###**5555555555###**6666666666###**7777777777###**888888
 8888###**9999999999###**0000000000###**

Response length

Minimum length: 160

Maximum length: 160

Coding:

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

TERMINAL RESPONSE : GET INPUT 1.8.1

Logically:

Command details

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

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Text string

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

Coding:

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

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

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

PROACTIVE COMMAND : GET INPUT 1.9.1

Logically:Command detailsCommand number: 1Command type: GET INPUTCommand qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information availableDevice identitiesSource device: SIMDestination device: METext stringData coding scheme: unpacked, 8 bit dataText: "<SEND>"Response lengthMinimum length: 0Maximum length: 1Coding:

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

TERMINAL RESPONSE : GET INPUT 1.9.1Logically:Command detailsCommand number: 1Command type: GET INPUTCommand qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information availableDevice identitiesSource device: MEDestination device: SIMResultGeneral Result: Command performed successfullyText stringData coding scheme: unpacked, 8 bit dataText: empty stringCoding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>23</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>8D</u>	<u>01</u>	<u>04</u>									

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

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: GET INPUT 1.1.10	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : GET INPUT 1.1.10	[digits only, SMS default alphabet, ME to echo text, packing not required, no help info available]
4	ME → USER	Request for input	Range of expected length is 0-5 Null Text string
5	USER → ME	Enter the input "12345" and completion	
6	ME → SIM	TERMINAL RESPONSE : GET INPUT 1.1.10	[command performed successfully]

PROACTIVE COMMAND : GET INPUT 1.1.10

Logically:

Command details

Command number: 1

Command type: GET INPUT

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

Device identities

Source device: SIM

Destination device: ME

Text string

Text: length null (00).

Response length

Minimum length: 1

Maximum length: 5

Coding:

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

TERMINAL RESPONSE : GET INPUT 1.1.10

Logically:

Command details

Command number: 1

Command type: GET INPUT

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

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "12345"

Coding:

BER-TLV: 81 03 01 23 80 82 02 82 81 83 01 00
8D 06 04 31 32 33 34 35

27.22.4.3.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 9.

27.22.4.3.2 GET INPUT (No response from User)27.22.4.3.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.3.2.2 Conformance Requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.3 (Get Input), clause 6.6.3 (Get Input), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.13 (Default text).

27.22.4.3.2.3 Test Purpose

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

27.22.4.3.2.4 Method of Test27.22.4.3.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

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

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

ME Manufacturers shall set the “no response from user” period of time.

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

27.22.4.3.2.4.2 Procedure

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

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u>	
<u>2</u>	<u>ME → SIM</u>	<u>PENDING: GET INPUT 2.1.1</u>	
<u>3</u>	<u>SIM → ME</u>	<u>FETCH</u>	
<u>4</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : GET INPUT 2.1</u>	<u>[digits only, SMS default alphabet ME to echo text, packing not required, no help information available]</u>
<u>5</u>	<u>ME → USER</u>	<u>Display “<TIME-OUT>”</u>	<u>Range of expected length is 0-10 Text string coding in unpacked format</u>
<u>6</u>	<u>USER</u>	<u>Waiting and no completion</u>	
	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : GET INPUT 2.1.1</u>	<u>[No response from user] within 5 seconds after the end of that defined period of time</u>

PROACTIVE COMMAND : GET INPUT 2.1.1

Logically:Command detailsCommand number: 1Command type: GET INPUTCommand qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information availableDevice identitiesSource device: SIMDestination device: METext stringData coding scheme: unpacked, 8 bit dataText: "<TIME-OUT>"Response lengthMinimum length: 0Maximum length: 10Coding:

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

TERMINAL RESPONSE : GET INPUT 2.1.1Logically:Command detailsCommand number: 1Command type: GET INPUTCommand qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information availableDevice identitiesSource device: MEDestination device: SIMResultGeneral Result: No response from userCoding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>23</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>12</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

27.22.4.3.2.5 Test RequirementThe ME shall operate in the manner defined in expected sequence 1.27.22.4.3.3 GET INPUT (UCS2 format display)27.22.4.3.3.1 Definition and applicabilitySee Section 3.2.2.

27.22.4.3.3.2 Conformance Requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.3 (Get Input), clause 6.6.3 (Get Input), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.13 (Default text).

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications:

ISO/IEC 10646 [17], “Universal Multiple Octet Coded Character Set (UCS)”.

27.22.4.3.3.3 Test Purpose

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

27.22.4.3.3.4 Method of Test27.22.4.3.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

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

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

27.22.4.3.3.4.2 Procedure

Expected Sequence 3.1 (GET INPUT, text string coding in UCS2, successful)

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

PROACTIVE COMMAND : GET INPUT 3.1.1

Logically:Command detailsCommand number: 1Command type: GET INPUTCommand qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information availableDevice identitiesSource device: SIMDestination device: METext stringData coding scheme: 16 bit data UCS2 alphabet formatText: “ЗДРАВСТВУЙТЕ”Response lengthMinimum length: 5Maximum length: 5Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>28</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>23</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>8D</u>
	<u>19</u>	<u>08</u>	<u>04</u>	<u>17</u>	<u>04</u>	<u>14</u>	<u>04</u>	<u>20</u>	<u>04</u>	<u>10</u>	<u>04</u>	<u>12</u>
	<u>04</u>	<u>21</u>	<u>04</u>	<u>22</u>	<u>04</u>	<u>12</u>	<u>04</u>	<u>23</u>	<u>04</u>	<u>19</u>	<u>04</u>	<u>22</u>
	<u>04</u>	<u>15</u>	<u>91</u>	<u>02</u>	<u>05</u>	<u>05</u>						

TERMINAL RESPONSE : GET INPUT 3.1.1Logically:Command detailsCommand number: 1Command type: GET INPUTCommand qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information availableDevice identitiesSource device: MEDestination device: SIMResultGeneral Result: Command performed successfullyText stringData coding scheme: unpacked, 8 bit dataText: “HELLO”Coding:

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

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

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

PROACTIVE COMMAND : GET INPUT 3.2.1

Logically:

Command details

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

Device identities

<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>

Text string

<u>Data coding scheme:</u>	<u>16 bit data UCS2 alphabet format</u>
<u>Text:</u>	<u>”ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ</u> <u>ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ</u> <u>ЗДРАВСТВУЙТЕЗДРАВСТВУЙ”</u>

Response length

<u>Minimum length:</u>	<u>5</u>
<u>Maximum length:</u>	<u>5</u>

Coding:

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

TERMINAL RESPONSE : GET INPUT 3.2.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INPUT
Command qualifier:	digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Text string</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"HELLO"

Coding:

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

27.22.4.3.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1 to 2.

27.22.4.3.4 GET INPUT (UCS2 format of entry)27.22.4.3.4.1 Definition and applicability

See Section 3.2.2.

27.22.4.3.4.2 Conformance Requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.3 (Get Input), clause 6.6.3 (Get Input), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.13 (Default text).

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications:

ISO/IEC 10646 [17], "Universal Multiple Octet Coded Character Set (UCS)".

27.22.4.3.4.3 Test Purpose

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

27.22.4.3.4.4 Method of Test27.22.4.3.4.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

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

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

27.22.4.3.4.4.2 Procedure

Expected Sequence 4.1 (GET INPUT, character set from UCS2 alphabet, successful)

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

PROACTIVE COMMAND : GET INPUT 4.1.1Logically:Command details

Command number: 1

Command type: GET INPUT

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

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: "Enter Hello"

Response length

Minimum length: 5

Maximum length: 5

Coding:

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

TERMINAL RESPONSE : GET INPUT 4.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INPUT
Command qualifier:	character set, UCS2 alphabet, input in unpacked format, ME to echo text, no help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Text string</u>	
Data coding scheme:	UCS2
Text:	"ЗДРАВСТВУЙТЕ"

Coding:

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

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

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

PROACTIVE COMMAND : GET INPUT 4.2.1

Logically:Command detailsCommand number: 1Command type: GET INPUTCommand qualifier: character set, UCS2 alphabet, input in unpacked format, ME to echo text, no help information availableDevice identitiesSource device: SIMDestination device: METext stringData coding scheme: unpacked, 8 bit dataText: "Enter Hello"Response lengthMinimum length: 5Maximum length: 5Coding:

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

TERMINAL RESPONSE : GET INPUT 4.2.1Logically:Command detailsCommand number: 1Command type: GET INPUTCommand qualifier: character set, UCS2 alphabet, input in unpacked format, ME to echo text, no help information availableDevice identitiesSource device: MEDestination device: SIMResultGeneral Result: Command performed successfullyData coding scheme: UCS2Text: "ЗДРАВСТВУЙТЕ...ЗДРАВСТВУЙ" (70 chars)Coding:

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

27.22.4.3.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1 to 2.

27.22.4.3.5 GET INPUT (default text)27.22.4.3.5.1 Definition and applicability

See Section 3.2.2.

27.22.4.3.5.2 Conformance Requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.3 (Get Input), clause 6.6.3 (Get Input), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.13 (Default text).

27.22.4.3.5.3 Test Purpose

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

27.22.4.3.5.4 Method of Test27.22.4.3.5.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

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

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

27.22.4.3.5.4.2 Procedure

Expected Sequence 5.1(GET INPUT, default text for the input, successful)

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

PROACTIVE COMMAND : GET INPUT 5.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INPUT
Command qualifier:	digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Text string</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"Enter 12345"
<u>Response length</u>	
Minimum length:	5
Maximum length:	5
<u>Default Text</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"12345"

Coding:

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

TERMINAL RESPONSE : GET INPUT 5.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INPUT
Command qualifier:	digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Text string</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"12345"

Coding:

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

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

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

PROACTIVE COMMAND : GET INPUT 5.2.1

Logically:

Command details

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

Device identities

Source device: SIM
 Destination device: ME

Text string

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

Response length

Minimum length: 160
 Maximum length: 160

Default Text

Data coding scheme: unpacked, 8 bit data
 Text:

***1111111111###**2222222222###**3333333333###**4444444444
 4###**5555555555###**6666666666###**7777777777###**888888
 8888###**9999999999###**0000000000###"

Coding:

BER-TLV:	D0	1B	81	03	01	23	00	82	02	81	82	8D
	06	04	45	6E	74	65	72	20	91	02	A0	A0
	17	81	A0	04	2A	2A	2A	31	31	31	31	31
	31	31	31	31	23	23	23	2A	2A	2A	32	31
	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	23	23	23	23

TERMINAL RESPONSE : GET INPUT 5.2.1

Logically:

```

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

Device identities
Source device: ME
Destination device: SIM

Result
General Result: Command performed successfully
Data coding scheme: unpacked, 8 bit data
Text:
****1111111111###**2222222222###**3333333333###**4444444444
4###**5555555555###**6666666666###**7777777777###**888888
8888###**9999999999###**0000000000###**
    
```

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>23</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>17</u>	<u>81</u>	<u>A0</u>	<u>04</u>	<u>2A</u>	<u>2A</u>	<u>2A</u>	<u>31</u>	<u>31</u>	<u>31</u>	<u>31</u>	<u>31</u>
	<u>31</u>	<u>31</u>	<u>31</u>	<u>31</u>	<u>31</u>	<u>23</u>	<u>23</u>	<u>23</u>	<u>2A</u>	<u>2A</u>	<u>2A</u>	<u>32</u>
	<u>32</u>	<u>32</u>	<u>32</u>	<u>32</u>	<u>32</u>	<u>32</u>	<u>32</u>	<u>32</u>	<u>32</u>	<u>23</u>	<u>23</u>	<u>23</u>
	<u>2A</u>	<u>2A</u>	<u>2A</u>	<u>33</u>	<u>33</u>	<u>33</u>	<u>33</u>	<u>33</u>	<u>33</u>	<u>33</u>	<u>33</u>	<u>33</u>
	<u>33</u>	<u>23</u>	<u>23</u>	<u>23</u>	<u>2A</u>	<u>2A</u>	<u>2A</u>	<u>34</u>	<u>34</u>	<u>34</u>	<u>34</u>	<u>34</u>
	<u>34</u>	<u>34</u>	<u>34</u>	<u>34</u>	<u>34</u>	<u>23</u>	<u>23</u>	<u>23</u>	<u>2A</u>	<u>2A</u>	<u>2A</u>	<u>35</u>
	<u>35</u>	<u>35</u>	<u>35</u>	<u>35</u>	<u>35</u>	<u>35</u>	<u>35</u>	<u>35</u>	<u>35</u>	<u>23</u>	<u>23</u>	<u>23</u>
	<u>2A</u>	<u>2A</u>	<u>2A</u>	<u>36</u>	<u>36</u>	<u>36</u>	<u>36</u>	<u>36</u>	<u>36</u>	<u>36</u>	<u>36</u>	<u>36</u>
	<u>36</u>	<u>23</u>	<u>23</u>	<u>23</u>	<u>2A</u>	<u>2A</u>	<u>2A</u>	<u>37</u>	<u>37</u>	<u>37</u>	<u>37</u>	<u>37</u>
	<u>37</u>	<u>37</u>	<u>37</u>	<u>37</u>	<u>37</u>	<u>23</u>	<u>23</u>	<u>23</u>	<u>2A</u>	<u>2A</u>	<u>2A</u>	<u>38</u>
	<u>38</u>	<u>38</u>	<u>38</u>	<u>38</u>	<u>38</u>	<u>38</u>	<u>38</u>	<u>38</u>	<u>38</u>	<u>23</u>	<u>23</u>	<u>23</u>
	<u>2A</u>	<u>2A</u>	<u>2A</u>	<u>39</u>	<u>39</u>	<u>39</u>	<u>39</u>	<u>39</u>	<u>39</u>	<u>39</u>	<u>39</u>	<u>39</u>
	<u>39</u>	<u>23</u>	<u>23</u>	<u>23</u>	<u>2A</u>	<u>2A</u>	<u>2A</u>	<u>30</u>	<u>30</u>	<u>30</u>	<u>30</u>	<u>30</u>
	<u>D0</u>	<u>1D</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>23</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>8D</u>
	<u>0A</u>	<u>04</u>	<u>3C</u>	<u>4E</u>	<u>4F</u>	<u>2D</u>	<u>49</u>	<u>43</u>	<u>4F</u>	<u>4E</u>	<u>3E</u>	<u>91</u>
	<u>02</u>	<u>00</u>	<u>0A</u>	<u>1E</u>	<u>02</u>	<u>00</u>	<u>01</u>	<u>30</u>	<u>30</u>	<u>30</u>	<u>30</u>	<u>30</u>
	<u>23</u>	<u>23</u>	<u>23</u>									

27.22.4.3.5.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1 to 2.

27.22.4.3.6 GET INPUT (display of Icon)

27.22.4.3.6.1 Definition and applicability

See Section 3.2.2.

27.22.4.3.6.2 Conformance Requirement

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

[3GPP TS 11.14 \[15\] clause 5.2 \(Terminal Profile\)](#), [clause 6.4.3 \(Get Input\)](#), [clause 6.5.4 \(Icon Identifier\)](#), [clause 6.6.3 \(Get Input\)](#), [clause 6.8 \(Terminal Response\)](#), [clause 6.11](#), [clause 12.6 \(Commands details\)](#), [clause 12.15 \(Text String\)](#), [clause 12.15.1/2/3 \(Data Coding Scheme\)](#), [clause 12.13 \(Default text\)](#), [clause 12.31 \(Icon identifier\)](#).

[27.22.4.3.6.3 Test Purpose](#)

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

[27.22.4.3.6.4 Method of Test](#)

[27.22.4.3.6.4.1 Initial Conditions](#)

[27.22.4.3.6.4.2 See Annex C](#)

[27.22.4.3.6.4.3 Procedure](#)

[Expected Sequence 6.1A \(GET INPUT, Basic icon, self-explanatory, successful\)](#)

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

[PROACTIVE COMMAND : GET INPUT 6.1.1](#)

[Logically:](#)

[Command details](#)

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

[Device identities](#)

[Source device:](#) SIM
[Destination device:](#) ME

[Text string](#)

[Data coding scheme:](#) unpacked, 8 bit data
[Text:](#) "<NO-ICON>"

[Response length](#)

[Minimum length:](#) 0
[Maximum length:](#) 10Icon Identifier
[Icon qualifier:](#) self-explanatory
[Icon identifier:](#) 1 (number of record in EF_{img})

[Coding:](#)

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

TERMINAL RESPONSE : GET INPUT 6.1.1A

Logically:

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

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>23</u>	<u>04</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>8D</u>	<u>02</u>	<u>04</u>	<u>2B</u>								

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

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

TERMINAL RESPONSE : GET INPUT 6.1.1B

Logically:

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

Coding:

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

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

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

PROACTIVE COMMAND : : GET INPUT 6.2.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET INPUT
Command qualifier:	digits (0-9, *, # and +) only, no help information available
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Text string</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"<BASIC-ICON>"
<u>Response length</u>	
Minimum length:	0
Maximum length:	10
<u>Icon Identifier</u>	
Icon qualifier:	not self-explanatory
Icon identifier:	1 (number of record in EF _{Img})

<u>Coding:BE</u>	<u>D0</u>	<u>1C</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>23</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>8D</u>
<u>R-TLV:</u>	<u>8D</u>	<u>0D</u>	<u>04</u>	<u>3C</u>	<u>42</u>	<u>41</u>	<u>53</u>	<u>49</u>	<u>43</u>	<u>2D</u>	<u>49</u>	<u>43</u>
	<u>4F</u>	<u>4E</u>	<u>3E</u>	<u>91</u>	<u>02</u>	<u>00</u>	<u>0A</u>	<u>1E</u>	<u>02</u>	<u>01</u>	<u>01</u>	

TERMINAL RESPONSE : GET INPUT 6.2.1ALogically:

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

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>23</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>8D</u>	<u>02</u>	<u>04</u>	<u>2B</u>								

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

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

TERMINAL RESPONSE : GET INPUT 6.2.1B

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME

Destination device: SIM

Result

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

Text string

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

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

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

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

PROACTIVE COMMAND : GET INPUT 6.3.1

Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>GET INPUT</u>
<u>Command qualifier:</u>	<u>digits (0-9, *, # and +) only, no help information available</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>
<u>Text string</u>	
<u>Data coding scheme:</u>	<u>unpacked, 8 bit data</u>
<u>Text:</u>	<u>"<NO-ICON>"</u>
<u>Response length</u>	
<u>Minimum length:</u>	<u>0</u>
<u>Maximum length:</u>	<u>10</u>
<u>Icon Identifier</u>	
<u>Icon qualifier:</u>	<u>self-explanatory</u>
<u>Icon identifier:</u>	<u>2 (number of record in EF_{img})</u>

Coding:

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

TERMINAL RESPONSE : GET INPUT 6.3.1A

Logically:

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

Device identities
Source device: ME
Destination device: SIM

Result
General Result: Command performed successfully

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

Coding:

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

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

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: GET INPUT 6.3.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : GET</u> <u>INPUT 6.3.1</u>	<u>[COLOUR-ICON self-explanatory for the Text</u> <u>string]</u>
4	<u>ME → USER</u>	<u>Display the COLOUR-ICON for</u> <u>the prompt</u>	<u>Text string coding in unpacked format</u>
5	<u>USER → ME</u>	<u>Enter the input "+" and</u> <u>completion</u>	
6	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : GET</u> <u>INPUT 6.3.1B</u>	<u>[Command performed successfully, but</u> <u>requested icon could not be displayed]</u>

TERMINAL RESPONSE : GET INPUT 6.3.1B

Logically:

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

Device identities
Source device: ME
Destination device: SIM

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

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

Coding:

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

8D 02 04 2B

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

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

PROACTIVE COMMAND : GET INPUT 6.4.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: "<COLOUR-ICON>"

Response length

Minimum length: 0

Maximum length: 10

Icon Identifier

Icon qualifier: not self-explanatory

Icon identifier: 2 (number of record in EF_{Img})

Coding:

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

TERMINAL RESPONSE : GET INPUT 6.4.1A

Logically:

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

Coding:

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

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

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

TERMINAL RESPONSE : GET INPUT 6.4.1B

Logically:

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

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>23</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>04</u>
	<u>8D</u>	<u>02</u>	<u>04</u>	<u>2B</u>								

27.22.4.3.7 GET INPUT (Help Information)27.22.4.3.7.1 Definition and applicability

See Section 3.2.2.

27.22.4.3.7.2 Conformance Requirement

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

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.3 (Get Input), clause 6.6.3 (Get Input), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.13 (Default text).

27.22.4.3.7.3 Test Purpose

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

27.22.4.3.7.4 Method of Test27.22.4.3.7.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

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

27.22.4.3.7.4.2 Procedure

Expected Sequence 7.1 (GET INPUT, digits only, ME to echo text, ME supporting 8 bit data Message, help information available)

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

PROACTIVE COMMAND : GET INPUT 7.1.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

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

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: "Enter 12345"

Response length

Minimum length: 5

Maximum length: 5

Coding:

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

TERMINAL RESPONSE : GET INPUT 7.1.1

Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>GET INPUT</u>
<u>Command qualifier:</u>	<u>digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, help information available</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Help information required by the user</u>

Coding:

BER-TLV: 81 03 01 23 80 82 02 82 81 83 13 00

27.22.4.3.7.5 Test Requirement

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

27.22.4.4 MORE TIME27.22.4.4.1 Definition and applicability

See Section 3.2.2.

27.22.4.4.2 Conformance Requirement

The ME shall support the MORE TIME command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 6.4.4 (More time), clause 6.6.4. (More time), clause 5.2 (Terminal profile), clause 12.6 (Command details), clause 12.7 (Device identities)

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 Test27.22.4.4.4.1 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 ProcedureExpected Sequence 1.1 (MORE TIME)

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

PROACTIVE COMMAND : MORE TIME 1.1.1Logically:Command details

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

Device identities

Source device: SIM
Destination device: ME

Coding:

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

TERMINAL RESPONSE : MORE TIME 1.1.1Logically:Command details

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

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

27.22.4.4.5 Test Requirement

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

27.22.4.5 PLAY TONE

27.22.4.5.1 Definition and applicability

See Section 3.2.2.

27.22.4.5.2 Conformance Requirement

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

3GPP TS 11.14 [15] clause 6.1, clause 6.4.5 (Play Tone), clause 6.6.5. (Play Tone), clause 5.2 (Terminal Profile), clause 12.6 (Command details), clause 12.7 (Device identities), clause 12.2 (Alpha identifier), clause 12.16 (Tone), clause 12.8 (Duration)

27.22.4.5.3 Test Purpose

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

To verify that the ME plays the requested audio tone through the external ringer whilst not in call and shall superimpose the tone on top of the downlink audio whilst in call.

To verify that the ME displays the text contained in the PLAY TONE proactive SIM command.

27.22.4.5.4 Method of Test

27.22.4.5.4.1 Initial Conditions

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

The elementary files are coded as Toolkit default.

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

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

27.22.4.5.4.2 Procedure

Expected Sequence 1.1 (PLAY TONE)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : PLAY TONE 1.1.1	
4	ME → USER	Display "Dial Tone" Play a standard supervisory dial tone through the external ringer for a duration of 5 seconds	
5	ME → SIM	TERMINAL RESPONSE : PLAY TONE 1.1.1	[Command performed successfully]
6	SIM → ME	PROACTIVE SIM SESSION ENDED	

<u>7</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PLAY TONE 1.1.2</u>	
<u>8</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>9</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PLAY</u> <u>TONE 1.1.2</u>	
<u>10</u>	<u>ME →</u> <u>USER</u>	<u>Display "Sub. Busy"</u> <u>Play a standard supervisory called</u> <u>subscriber busy tone for a duration</u> <u>of 5 seconds</u>	
<u>11</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PLAY</u> <u>TONE 1.1.2</u>	<u>[Command performed successfully]</u>
<u>12</u>	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PLAY TONE 1.1.3</u>	
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PLAY</u> <u>TONE 1.1.3</u>	
<u>16</u>	<u>ME →</u> <u>USER</u>	<u>Display "Congestion"</u> <u>Play a standard supervisory</u> <u>congestion tone for a duration of 5</u> <u>seconds</u>	
<u>17</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PLAY</u> <u>TONE 1.1.3</u>	<u>[Command performed successfully]</u>
<u>18</u>	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
<u>19</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PLAY TONE 1.1.4</u>	
<u>20</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>21</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PLAY</u> <u>TONE 1.1.4</u>	
<u>22</u>	<u>ME →</u> <u>USER</u>	<u>Display "RP Ack"</u> <u>Play a standard supervisory radio</u> <u>path acknowledgement tone</u>	
<u>23</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PLAY</u> <u>TONE 1.1.4</u>	<u>[Command performed successfully]</u>
<u>24</u>	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
<u>25</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PLAY TONE 1.1.5</u>	
<u>26</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>27</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PLAY</u> <u>TONE 1.1.5</u>	
<u>28</u>	<u>ME →</u> <u>USER</u>	<u>Display "No RP"</u> <u>Play a standard supervisory radio</u> <u>path not available / call dropped</u> <u>tone for a duration of 5 seconds</u>	
<u>29</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PLAY</u> <u>TONE 1.1.5</u>	<u>[Command performed successfully]</u>
<u>30</u>	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	

31	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PLAY TONE 1.1.6</u>	
32	<u>ME → SIM</u>	<u>FETCH</u>	
33	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PLAY</u> <u>TONE 1.1.6</u>	
34	<u>ME →</u> <u>USER</u>	<u>Display "Spec Info"</u> <u>Play a standard supervisory error /</u> <u>special information tone for a</u> <u>duration of 5 seconds</u>	
35	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PLAY</u> <u>TONE 1.1.6</u>	<u>[Command performed successfully]</u>
36	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
37	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PLAY TONE 1.1.7</u>	
38	<u>ME → SIM</u>	<u>FETCH</u>	
39	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PLAY</u> <u>TONE 1.1.7</u>	
40	<u>ME →</u> <u>USER</u>	<u>Display "Call Wait"</u> <u>Play a standard supervisory call</u> <u>waiting tone for a duration of 5</u> <u>seconds</u>	
41	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PLAY</u> <u>TONE 1.1.7</u>	<u>[Command performed successfully]</u>
42	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
43	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PLAY TONE 1.1.8</u>	
44	<u>ME → SIM</u>	<u>FETCH</u>	
45	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PLAY</u> <u>TONE 1.1.8</u>	
46	<u>ME →</u> <u>USER</u>	<u>Display "Ring Tone"</u> <u>Play a standard supervisory</u> <u>ringing tone for duration of 5</u> <u>seconds</u>	
47	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PLAY</u> <u>TONE 1.1.8</u>	<u>[Command performed successfully]</u>
48	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
49	<u>USER →</u>	<u>Set up a voice call</u>	<u>[User dials 123456789 to connect to the</u> <u>network manually]</u>
50	<u>ME →</u> <u>Network</u>	<u>Establish voice call</u>	<u>[Voice call is established]</u>
51	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PLAY TONE 1.1.9</u>	
52	<u>ME → SIM</u>	<u>FETCH</u>	
53	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PLAY</u> <u>TONE 1.1.9</u>	
54	<u>ME →</u> <u>USER</u>	<u>Display "Dial Tone"</u> <u>Superimpose the standard</u> <u>supervisory dial tone on the audio</u> <u>downlink for the duration of 5</u> <u>seconds</u>	
55	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PLAY</u> <u>TONE 1.1.9</u>	<u>[Command performed successfully]</u>
56	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	

57	SIM → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.10	
58	ME → SIM	FETCH	
59	SIM → ME	PROACTIVE COMMAND : PLAY TONE 1.1.10	
60	ME → USER	Display "This command instructs the ME to play an audio tone. Upon receiving this command, the ME shall check if it is currently in, or in the process of setting up (SET-UP message sent to the network, see GSM"04.08"(8)), a speech call. - If the ME I"	
61	ME → SIM	Play a general beep TERMINAL RESPONSE : PLAY TONE 1.1.10a	[Command performed successfully]
		or TERMINAL RESPONSE : PLAY TONE 1.1.10b	or [Command beyond ME's capabilities]
62	SIM → ME	PROACTIVE SIM SESSION ENDED	
63	SIM → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.11	
64	ME → SIM	FETCH	
65	SIM → ME	PROACTIVE COMMAND : PLAY TONE 1.1.11	
66	ME → USER	Display "Beep"	
		Play a ME proprietary general beep	
67	ME → SIM	TERMINAL RESPONSE : PLAY TONE 1.1.11a	[Command performed successfully]
		Or TERMINAL RESPONSE : PLAY TONE 1.1.11b	or [Command beyond ME's capabilities]
68	SIM → ME	PROACTIVE SIM SESSION ENDED	
69	SIM → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.12	
70	ME → SIM	FETCH	
71	SIM → ME	PROACTIVE COMMAND : PLAY TONE 1.1.12	
72	ME → USER	Display "Positive"	
		Play a ME proprietary positive acknowledgement tone	
73	ME → SIM	TERMINAL RESPONSE : PLAY TONE 1.1.12a	[Command performed successfully]
		or TERMINAL RESPONSE : PLAY TONE 1.1.12b	or [Command beyond ME's capabilities]
74	SIM → ME	PROACTIVE SIM SESSION ENDED	

75	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PLAY TONE 1.1.13</u>	
76	<u>ME → SIM</u>	<u>FETCH</u>	
77	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PLAY</u> <u>TONE 1.1.13</u>	
78	<u>ME →</u> <u>USER</u>	<u>Display "Negative"</u> <u>Play a ME proprietary negative</u> <u>acknowledgement tone</u>	
79	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PLAY</u> <u>TONE 1.1.13a</u> <u>or</u> <u>TERMINAL RESPONSE : PLAY</u> <u>TONE 1.1.13b</u>	<u>[Command performed successfully]</u> <u>or</u> <u>[Command beyond ME's capabilities]</u>
80	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
81	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PLAY TONE 1.1.14</u>	
82	<u>ME → SIM</u>	<u>FETCH</u>	
83	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PLAY</u> <u>TONE 1.1.14</u>	
84	<u>ME →</u> <u>USER</u>	<u>Display "Quick"</u> <u>Play a ME proprietary general</u> <u>beep</u>	
85	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PLAY</u> <u>TONE 1.1.14a</u> <u>or</u> <u>TERMINAL RESPONSE : PLAY</u> <u>TONE 1.1.14b</u>	<u>[Command performed successfully]</u> <u>or</u> <u>[Command beyond ME's capabilities]</u>
86	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
87	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PLAY TONE 1.1.15</u>	
88	<u>ME → SIM</u>	<u>FETCH</u>	
89	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PLAY</u> <u>TONE 1.1.15</u>	
90	<u>ME →</u> <u>USER</u>	<u>Display "<ABORT>"</u> <u>Play a ME Error / Special</u> <u>information tone for 1 minute until</u> <u>user aborts this command</u>	
91	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PLAY</u> <u>TONE 1.1.15</u>	<u>[Proactive SIM session terminated by the</u> <u>user]</u>
92	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
93	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PLAY TONE 1.1.16</u>	
94	<u>ME → SIM</u>	<u>FETCH</u>	
95	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PLAY</u> <u>TONE 1.1.16</u>	<u>[No alpha identifier, no tone tag, no duration</u> <u>tag]</u>
96	<u>ME →</u> <u>User</u>	<u>ME plays general beep, or if not</u> <u>supported any (defined by ME-</u> <u>manufacturer) other supported</u> <u>tone</u>	<u>[ME uses default duration defined by ME-</u> <u>manufacturer]</u>
97	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PLAY</u> <u>TONE 1.1.16</u>	<u>[Command performed successfully]. [ME</u> <u>uses general beep, or if not supported any</u> <u>(defined by ME-manufacturer) other</u> <u>supported tone, uses default duration defined</u> <u>by ME-manufacturer]</u>
98	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	

PROACTIVE COMMAND : PLAY TONE 1.1.1Logically: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:

<u>BER-TLV:</u>	<u>D0</u>	<u>1B</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>20</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>03</u>	<u>85</u>
	<u>09</u>	<u>44</u>	<u>69</u>	<u>61</u>	<u>6C</u>	<u>20</u>	<u>54</u>	<u>6F</u>	<u>6E</u>	<u>65</u>	<u>8E</u>	<u>01</u>
	<u>01</u>	<u>84</u>	<u>02</u>	<u>01</u>	<u>05</u>							

PROACTIVE COMMAND : PLAY TONE 1.1.2Logically: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:

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

PROACTIVE COMMAND : PLAY TONE 1.1.3Logically:

<u>Command details</u>	
Command number:	1
Command type:	PLAY TONE
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	Earpiece
Alpha identifier:	"Congestion"
Tone:	Standard supervisory tones: congestion
<u>Duration</u>	
Time unit:	Seconds
Time interval:	5

Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.4Logically:

<u>Command details</u>	
Command number:	1
Command type:	PLAY TONE
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	Earpiece
Alpha identifier:	"RP Ack"
Tone:	Standard supervisory tones: radio path acknowledge
<u>Duration</u>	
Time unit:	Seconds
Time interval:	5

Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.5Logically:

<u>Command details</u>	
Command number:	1
Command type:	PLAY TONE
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	Earpiece
Alpha identifier:	"No RP"
Tone:	Standard supervisory tones: radio path not available
<u>Duration</u>	
Time unit:	Seconds
Time interval:	5

Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.6Logically:

<u>Command details</u>	
Command number:	1
Command type:	PLAY TONE
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	Earpiece
Alpha identifier:	"Spec Info"
Tone:	Standard supervisory tones: Error/ special information
<u>Duration</u>	
Time unit:	Seconds
Time interval:	5

Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.7Logically: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:

<u>BER-TLV:</u>	<u>D0</u>	<u>1B</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>20</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>03</u>	<u>85</u>
	<u>09</u>	<u>43</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>57</u>	<u>71</u>	<u>69</u>	<u>74</u>	<u>8E</u>	<u>01</u>
	<u>07</u>	<u>84</u>	<u>02</u>	<u>01</u>	<u>05</u>							

PROACTIVE COMMAND : PLAY TONE 1.1.8Logically: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:

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

PROACTIVE COMMAND : PLAY TONE 1.1.9Logically: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:

<u>BER-TLV:</u>	<u>D0</u>	<u>1B</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>20</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>03</u>	<u>85</u>
	<u>09</u>	<u>44</u>	<u>69</u>	<u>61</u>	<u>6C</u>	<u>20</u>	<u>54</u>	<u>6F</u>	<u>6E</u>	<u>65</u>	<u>8E</u>	<u>01</u>
	<u>01</u>	<u>84</u>	<u>02</u>	<u>01</u>	<u>05</u>							

PROACTIVE COMMAND : PLAY TONE 1.1.10Logically: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:

<u>BER-TLV:</u>	<u>D0</u>	<u>81</u>	<u>FD</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>20</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>03</u>
	<u>85</u>	<u>81</u>	<u>F1</u>	<u>54</u>	<u>68</u>	<u>69</u>	<u>73</u>	<u>20</u>	<u>63</u>	<u>6F</u>	<u>6D</u>	<u>6D</u>
	<u>61</u>	<u>6E</u>	<u>64</u>	<u>20</u>	<u>69</u>	<u>6E</u>	<u>73</u>	<u>74</u>	<u>72</u>	<u>75</u>	<u>63</u>	<u>74</u>
	<u>73</u>	<u>20</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>20</u>	<u>4D</u>	<u>45</u>	<u>20</u>	<u>74</u>	<u>6F</u>	<u>20</u>
	<u>70</u>	<u>6C</u>	<u>61</u>	<u>79</u>	<u>20</u>	<u>61</u>	<u>6E</u>	<u>20</u>	<u>61</u>	<u>75</u>	<u>64</u>	<u>69</u>
	<u>6F</u>	<u>20</u>	<u>74</u>	<u>6F</u>	<u>6E</u>	<u>65</u>	<u>2E</u>	<u>20</u>	<u>55</u>	<u>70</u>	<u>6F</u>	<u>6E</u>
	<u>20</u>	<u>72</u>	<u>65</u>	<u>63</u>	<u>65</u>	<u>69</u>	<u>76</u>	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>	<u>74</u>
	<u>68</u>	<u>69</u>	<u>73</u>	<u>20</u>	<u>63</u>	<u>6F</u>	<u>6D</u>	<u>6D</u>	<u>61</u>	<u>6E</u>	<u>64</u>	<u>2C</u>
	<u>20</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>20</u>	<u>4D</u>	<u>45</u>	<u>20</u>	<u>73</u>	<u>68</u>	<u>61</u>	<u>6C</u>
	<u>6C</u>	<u>20</u>	<u>63</u>	<u>68</u>	<u>65</u>	<u>63</u>	<u>6B</u>	<u>20</u>	<u>69</u>	<u>66</u>	<u>20</u>	<u>69</u>
	<u>74</u>	<u>20</u>	<u>69</u>	<u>73</u>	<u>20</u>	<u>63</u>	<u>75</u>	<u>72</u>	<u>72</u>	<u>65</u>	<u>6E</u>	<u>74</u>
	<u>6C</u>	<u>79</u>	<u>20</u>	<u>69</u>	<u>6E</u>	<u>2C</u>	<u>20</u>	<u>6F</u>	<u>72</u>	<u>20</u>	<u>69</u>	<u>6E</u>
	<u>20</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>20</u>	<u>70</u>	<u>72</u>	<u>6F</u>	<u>63</u>	<u>65</u>	<u>73</u>	<u>73</u>
	<u>20</u>	<u>6F</u>	<u>66</u>	<u>20</u>	<u>73</u>	<u>65</u>	<u>74</u>	<u>74</u>	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>
	<u>75</u>	<u>70</u>	<u>20</u>	<u>28</u>	<u>53</u>	<u>45</u>	<u>54</u>	<u>2D</u>	<u>55</u>	<u>50</u>	<u>20</u>	<u>6D</u>
	<u>65</u>	<u>73</u>	<u>73</u>	<u>61</u>	<u>67</u>	<u>65</u>	<u>20</u>	<u>73</u>	<u>65</u>	<u>6E</u>	<u>74</u>	<u>20</u>
	<u>74</u>	<u>6F</u>	<u>20</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>20</u>	<u>6E</u>	<u>65</u>	<u>74</u>	<u>77</u>	<u>6F</u>
	<u>72</u>	<u>6B</u>	<u>2C</u>	<u>20</u>	<u>73</u>	<u>65</u>	<u>65</u>	<u>20</u>	<u>47</u>	<u>53</u>	<u>4D</u>	<u>22</u>
	<u>30</u>	<u>34</u>	<u>2E</u>	<u>30</u>	<u>38</u>	<u>22</u>	<u>28</u>	<u>38</u>	<u>29</u>	<u>29</u>	<u>2C</u>	<u>20</u>
	<u>61</u>	<u>20</u>	<u>73</u>	<u>70</u>	<u>65</u>	<u>65</u>	<u>63</u>	<u>68</u>	<u>20</u>	<u>63</u>	<u>61</u>	<u>6C</u>
	<u>6C</u>	<u>2E</u>	<u>20</u>	<u>2D</u>	<u>20</u>	<u>49</u>	<u>66</u>	<u>20</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>20</u>
	<u>4D</u>	<u>45</u>	<u>20</u>	<u>49</u>								

PROACTIVE COMMAND : PLAY TONE 1.1.11Logically: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:	<u>D0</u>	<u>16</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>20</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>03</u>	<u>85</u>
	<u>04</u>	<u>42</u>	<u>65</u>	<u>65</u>	<u>70</u>	<u>8E</u>	<u>01</u>	<u>10</u>	<u>84</u>	<u>02</u>	<u>01</u>	<u>01</u>

PROACTIVE COMMAND : PLAY TONE 1.1.12Logically: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:	<u>D0</u>	<u>1A</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>20</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>03</u>	<u>85</u>
	<u>08</u>	<u>50</u>	<u>6F</u>	<u>73</u>	<u>69</u>	<u>74</u>	<u>69</u>	<u>76</u>	<u>65</u>	<u>8E</u>	<u>01</u>	<u>11</u>
	<u>84</u>	<u>02</u>	<u>01</u>	<u>01</u>								

PROACTIVE COMMAND : PLAY TONE 1.1.13

Logically:

<u>Command details</u>	
Command number:	1
Command type:	PLAY TONE
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	Earpiece
Alpha identifier:	"Negative"
Tone:	ME proprietary tones: negative acknowledgement tone
<u>Duration</u>	
Time unit:	Seconds
Time interval:	1

Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.14Logically:

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

Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.15

Logically:

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

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>19</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>20</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>03</u>	<u>85</u>
	<u>07</u>	<u>3B</u>	<u>41</u>	<u>42</u>	<u>4F</u>	<u>52</u>	<u>54</u>	<u>3E</u>	<u>8E</u>	<u>01</u>	<u>06</u>	<u>84</u>
	<u>02</u>	<u>00</u>	<u>01</u>									

PROACTIVE COMMAND : PLAY TONE 1.1.16

Logically:

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

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>09</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>20</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>03</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Expected Sequence 1.2 (PLAY TONE, backwards move key not interacting with play tone)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.17	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : PLAY TONE 1.1.17	
4	ME → USER	Display "<GO-BACKWARDS>"	
5	USER → ME	The user presses the key which normally corresponds to Backwards move MMI action	
6	ME → SIM	TERMINAL RESPONSE : PLAY TONE 1.1.17	[Command performed successfully]
7	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : PLAY TONE 1.1.17Logically:Command detailsCommand number: 1Command type: PLAY TONEDevice identitiesSource device: SIMDestination device: EarpieceAlpha identifier: "<GO-BACKWARDS>"Tone: Standard supervisory tones: dial toneDurationTime unit: SecondsTime interval: 5Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>20</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>20</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>03</u>	<u>85</u>
	<u>0E</u>	<u>3C</u>	<u>47</u>	<u>4F</u>	<u>2D</u>	<u>42</u>	<u>41</u>	<u>43</u>	<u>4B</u>	<u>57</u>	<u>41</u>	<u>52</u>
	<u>44</u>	<u>53</u>	<u>3E</u>	<u>8E</u>	<u>01</u>	<u>01</u>	<u>84</u>	<u>02</u>	<u>01</u>	<u>05</u>		

TERMINAL RESPONSE : PLAY TONE 1.1.17Logically:Command detailsCommand number: 1Command type: PLAY TONEDevice identitiesSource device: MEDestination device: SIMResultGeneral Result: Command performed successfullyCoding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>20</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

TERMINAL RESPONSE : PLAY TONE 1.1.1 ... 1.1.9, 1.1.16Logically:Command detailsCommand number: 1Command type: PLAY TONECommand qualifier: "00"Device identitiesSource device: MEDestination device: SIMResultGeneral Result: Command performed successfullyCoding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>20</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

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

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

Coding:

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

TERMINAL RESPONSE : PLAY TONE 1.1.10b ..1.1.10bLogically:

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

Coding:

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

TERMINAL RESPONSE : PLAY TONE 1.1.15Logically:

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

Coding:

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

27.22.4.5.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.6 POLL INTERVAL

27.22.4.6.1 Definition and applicability

See Section 3.2.2.

27.22.4.6.2 Conformance Requirement

The ME shall support the POLL INTERVAL command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 6.1, clause 6.4.6 (Poll interval), 6.6.6. (Poll interval), clause 5.2 (Terminal profile), clause 12.6 (Command details), clause 12.7 (Device identities), clause 12.8 (Duration)

27.22.4.6.3 Test Purpose

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

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

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

27.22.4.6.4 Method of Test

27.22.4.6.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

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

27.22.4.6.4.2 Procedure

Expected Sequence 1.1 (POLL INTERVAL, Seconds)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: POLL INTERVAL 1.1.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : POLL INTERVAL 1.1.1</u>	<u>[Duration: 20 seconds]</u>
<u>4</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : POLL INTERVAL 1.1.1</u>	<u>[Command performed successfully]</u>
<u>5</u>	<u>ME</u>	<u>ME polls in intervals of 20 seconds</u>	

PROACTIVE COMMAND : POLL INTERVAL 1.1.1Logically: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:	<u>D0</u>	<u>0D</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>03</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>84</u>
	<u>02</u>	<u>01</u>	<u>14</u>									

TERMINAL RESPONSE : POLL INTERVAL 1.1.1Logically:Command details

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

Device identities

Source device:	ME
Destination device:	SIM

Result

General Result:	Command performed successfully
-----------------	--------------------------------

Duration

Time unit:	Seconds
Time interval:	20

Coding:

BER-TLV:	<u>81</u>	<u>03</u>	<u>01</u>	<u>02</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>82</u>	<u>02</u>	<u>01</u>	<u>14</u>								

27.22.4.6.5 Test Requirement

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

27.22.4.7 REFRESH**27.22.4.7.1 REFRESH (normal)**27.22.4.7.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.7.1.2 Conformance requirement

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

3GPP TS 11.14 [15] clause 6.1, clause 6.4.7 (Refresh), 6.6.13.(Refresh), clause 5.2 (Terminal profile), clause 12.6 (Command details), clause 12.7 (Device identities), clause 12.18 (File list)

27.22.4.7.1.3 Test Purpose

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

27.22.4.7.1.4 Method of test27.22.4.7.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

The elementary files for the second SIM Simulator are coded as SIM Application Toolkit default with the following exceptions.

EF_{FDN} (Fixed Dialling Numbers)

Logically:

At least 10 records

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

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

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

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

27.22.4.7.1.4.2 ProcedureExpected Sequence 1.1 (REFRESH, SIM Initialisation)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: REFRESH 1.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>REFRESH 1.1.1</u>	
4	<u>SIM</u>	<u>Invalidate EF IMSI, EF LOCI and</u> <u>EF ADN</u>	<u>[Restricted dialling feature is enabled]</u>
5	<u>ME → SIM</u>	<u>SIM Initialisation</u>	<u>[ME performs SIM initialisation]</u>
6	<u>ME → SIM</u>	<u>TERMINAL RESPONSE:</u> <u>REFRESH 1.1.1A</u> <u>Or</u> <u>TERMINAL RESPONSE:</u> <u>REFRESH 1.1.1B</u>	
7	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
8	<u>USER →</u> <u>ME</u>	<u>Call setup to "321"</u>	
9	<u>ME →</u> <u>USER</u>	<u>Call set up not allowed</u>	
10	<u>USER →</u> <u>ME</u>	<u>Call setup to "123"</u>	
11	<u>ME → SS</u>	<u>Setup</u>	<u>Called party BCD number shall be "123"</u>

PROACTIVE COMMAND : REFRESH 1.1.1Logically: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

TERMINAL RESPONSE : REFRESH 1.1.1ALogically:Command details

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

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

TERMINAL RESPONSE : REFRESH 1.1.1B

Logically:

<u>Command details</u>	
Command number:	1
Command type:	REFRESH
Command qualifier:	SIM Initialisation
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	REFRESH performed with additional EFs read

Coding:

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

Expected Sequence 1.2 (REFRESH. File Change Notification)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: REFRESH 1.2.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>REFRESH 1.2.1</u>	
4	<u>SIM</u>	<u>Invalidate EF IMSI, EF LOCI and</u> <u>EF ADN</u>	<u>[Restricted dialling feature is enabled]</u>
5	<u>SIM</u>	<u>Update EF FDN RECORD 1</u>	<u>[EF FDN record 1 updated to contain the</u> <u>dialling string "0123456789"]</u>
6	<u>ME → SIM</u>	<u>READ RECORD: EF FDN</u>	
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE:</u> <u>REFRESH 1.2.1A</u> <u>Or</u> <u>TERMINAL RESPONSE:</u> <u>REFRESH 1.2.1B</u>	<u>[normal ending]</u> <u>[additional EFs read]</u>
8	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
9	<u>USER →</u> <u>ME</u>	<u>Call setup to "123"</u>	
10	<u>ME →</u> <u>USER</u>	<u>Call set up not allowed</u>	
11	<u>USER →</u> <u>ME</u>	<u>Call setup to "0123456789"</u>	
12	<u>ME → SS</u>	<u>Setup</u>	<u>Called party BCD number shall be</u> <u>"0123456789"</u>

PROACTIVE COMMAND : REFRESH 1.2.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	REFRESH
Command qualifier:	File Change Notification
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
File List:	EF FDN

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>12</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>01</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>92</u>
	<u>07</u>	<u>01</u>	<u>3F</u>	<u>00</u>	<u>7F</u>	<u>10</u>	<u>6F</u>	<u>3B</u>				

TERMINAL RESPONSE : REFRESH 1.2.1ALogically:

<u>Command details</u>	
Command number:	1
Command type:	REFRESH
Command qualifier:	File Change Notification
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>01</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

TERMINAL RESPONSE : REFRESH 1.2.1BLogically:

<u>Command details</u>	
Command number:	1
Command type:	REFRESH
Command qualifier:	File Change Notification
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	REFRESH performed with additional EFs read

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>01</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>83</u>	<u>01</u>	<u>03</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Expected Sequence .13 (REFRESH, SIM Initialisation and File Change Notification)

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

PROACTIVE COMMAND : REFRESH 1.3.1

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

TERMINAL RESPONSE : REFRESH 1.3.1A

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialisation and File Change Notification

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

TERMINAL RESPONSE : REFRESH 1.3.1B

Logically:

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

Device identities
 Source device: ME
 Destination device: SIM

Result
 General Result: REFRESH performed with additional EFs read

Coding:

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

Expected Sequence 1.4 (REFRESH, SIM Initialisation and Full File Change Notification)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: REFRESH 1.4.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>REFRESH 1.4.1</u>	
4	<u>SIM</u>	<u>Invalidate EF IMSI, EF LOCI and</u> <u>EF ADN</u>	<u>[Restricted dialling feature is enabled]</u>
5	<u>SIM</u>	<u>Update EF FDN</u>	<u>[EF FDN record 1 updated to contain the</u> <u>dialling string "0123456789"]</u>
6	<u>ME → SIM</u>	<u>SIM Initialisation</u>	<u>[ME performs SIM initialisation]</u>
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE:</u> <u>REFRESH 1.4.1A</u>	
8	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
9	<u>USER →</u> <u>ME</u>	<u>Call setup to "321"</u>	
10	<u>ME →</u> <u>USER</u>	<u>Call set up not allowed</u>	
11	<u>USER →</u> <u>ME</u>	<u>Call setup to "0123456789"</u>	
12	<u>ME → SS</u>	<u>Setup</u>	<u>Called party BCD number shall be</u> <u>"0123456789"</u>

PROACTIVE COMMAND : REFRESH 1.4.1A

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

TERMINAL RESPONSE : REFRESH 1.4.1A

Logically:

Command details

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

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

Expected Sequence 1.5 (REFRESH, SIM Reset)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: REFRESH 1.5.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: REFRESH 1.5.1	
4	ME → SIM	GSM Termination Procedure	
5	ME → SIM	GSM Activation Procedure	[At same voltage]
6	ME → SIM	SIM Initialisation	
7	ME → SIM		[NO TERMINAL RESPONSE]

PROACTIVE COMMAND : REFRESH 1.5.1

Logically:

Command details

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

Device identities

Source device: SIM
Destination device: ME

Coding:

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

Expected Sequence 1.6 (REFRESH, SIM Initialisation after SMS-PP data download)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	ME	The ME shall be in its normal idle mode	[Start a sequence to verify that the ME returns the RP-ACK message back to the system Simulator, if the SIM responds with '90 00']
2	SS → ME	SMS-PP Data Download Message 1.6.1	
3	ME → USER	The ME shall not display the message or alert the user of a short message waiting	
4	ME → SIM	ENVELOPE: SMS-PP DOWNLOAD 1.6.1	
5	SIM → ME	PROACTIVE COMMAND PENDING: REFRESH 1.1.1	
6	ME → SS	RP-ACK	
7	ME → SIM	FETCH	
8	SIM → ME	PROACTIVE COMMAND: REFRESH 1.1.1	
9	SIM	Invalidate EF IMSI, EF LOCI and EF ADN	[Restricted dialling feature is enabled]
10	ME → SIM	SIM Initialisation	[ME performs SIM initialisation]
11	ME → SIM	TERMINAL RESPONSE: REFRESH 1.1.1A Or TERMINAL RESPONSE: REFRESH 1.1.1B	
12	SIM → ME	PROACTIVE SIM SESSION ENDED	
13	USER → ME	Call setup to "321"	
14	ME → USER	Call set up not allowed	
15	USER → ME	Call setup to "123"	
16	ME → SS	Setup	Called party BCD number shall be "123"

SMS-PP (Data Download) Message 1.6.1Logically:

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

Coding:

<u>BER-TLV</u>	<u>04</u>	<u>03</u>	<u>91</u>	<u>21</u>	<u>43</u>	<u>7F</u>	<u>12</u>	<u>89</u>	<u>10</u>	<u>10</u>	<u>00</u>	<u>00</u>
	<u>00</u>	<u>00</u>	<u>0D</u>	<u>53</u>	<u>F4</u>	<u>5B</u>	<u>4E</u>	<u>07</u>	<u>35</u>	<u>CB</u>	<u>F3</u>	<u>79</u>
	<u>F8</u>	<u>5C</u>	<u>06</u>									

ENVELOPE: SMS-PP DOWNLOAD 1.6.1

Logically:

<u>SMS-PP Download</u>	
<u>Device identities</u>	
<u>Source device:</u>	<u>Network</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Address</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Dialling number string</u>	<u>"112233445566778"</u>
<u>SMS TPDU</u>	
<u>TP-MTI</u>	<u>SMS-DELIVER</u>
<u>TP-MMS</u>	<u>No more messages waiting for the MS in this SC</u>
<u>TP-RP</u>	<u>TP-Reply-Path is not set in this SMS-DELIVER</u>
<u>TP-UDHI</u>	<u>TP-UD field contains only the short message</u>
<u>TP-SRI</u>	<u>A status report will not be returned to the SME</u>
<u>TP-OA</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Address value</u>	<u>"1234"</u>
<u>TP-PID</u>	<u>SIM Data download</u>
<u>TP-DCS</u>	
<u>Coding Group</u>	<u>General Data Coding</u>
<u>Compression</u>	<u>Text is uncompressed</u>
<u>Message Class</u>	<u>Class 2 SIM Specific Message</u>
<u>Alphabet</u>	<u>Default Alphabet</u>
<u>TP-SCTS:</u>	<u>01/01/98 00:00:00 +0</u>
<u>TP-UDL</u>	<u>13</u>
<u>TP-UD</u>	<u>"Short Message"</u>

Coding:

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

27.22.4.7.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1, 2, 3, 4 and 5.

27.22.4.7.2 REFRESH (IMSI changing procedure)

27.22.4.7.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.7.2.2 Conformance requirement

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

[3GPP TS 11.14 \[15\] clause 6.1, clause 6.4.7 \(Refresh\), 6.6.13.\(Refresh\), clause 5.2 \(Terminal profile\), clause 12.6 \(Command details\), clause 12.7 \(Device identities\), clause 12.18 \(File list\)](#)

[Additionally the ME shall support the SIM Initialisation procedure as defined in the following technical specifications:](#)

[3GPP TS 11.11 \[13\] clause 12.2.1](#)

[27.22.4.7.2.3 Test Purpose](#)

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

[27.22.4.7.2.4 Method of test](#)

[27.22.4.7.2.4.1 Initial Conditions](#)

[The ME is connected to the SIM Simulator.](#)

[The elementary files are coded as SIM Application Toolkit default with the following exceptions.](#)

[Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.](#)

[The elementary files for the second SIM Simulator are coded as SIM Application Toolkit default with the following exceptions.](#)

[27.22.4.7.2.4.2 Procedure](#)

[Expected Sequence 2.1 \(REFRESH, SIM Initialisation and File Change Notification\)](#)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: REFRESH 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: REFRESH 2.1.1	
4	SIM	Update EF IMSI, EF LOCI and EF KC	[Update the contents of EF IMSI to "001010123456788", EF LOCI to not updated and EF KC to not valid]
5	ME	Invoke MM Restart Procedure	
6	ME → SIM	SIM INITIALISATION	[ME performs SIM initialisation; including reading EF IMSI, EF LOCI and EF KC]
7	ME → SIM	TERMINAL RESPONSE: REFRESH 2.1.1A Or TERMINAL RESPONSE: REFRESH 2.1.1B	[normal] [additional EFs read]
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	ME → SS	Location updating request (type "normal location updating")	[Send IMSI of "001010123456788" to System Simulator]

PROACTIVE COMMAND : REFRESH 2.1.1Logically:Command detailsCommand number: 1Command type: REFRESHCommand qualifier: SIM Initialisation and File Change NotificationDevice identitiesSource device: SIMDestination device: MEFile ListFile 1: EF IMSIFile 2: EF LOCIFile 3: EF KCCoding:

<u>BER-TLV:</u>	<u>D0</u>	<u>20</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>01</u>	<u>02</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>92</u>
	<u>13</u>	<u>03</u>	<u>3F</u>	<u>00</u>	<u>7F</u>	<u>20</u>	<u>6F</u>	<u>07</u>	<u>3F</u>	<u>00</u>	<u>7F</u>	<u>20</u>
	<u>6F</u>	<u>7E</u>	<u>3F</u>	<u>00</u>	<u>7F</u>	<u>20</u>	<u>6F</u>	<u>20</u>				

TERMINAL RESPONSE : REFRESH 2.1.1ALogically:Command detailsCommand number: 1Command type: REFRESHCommand qualifier: SIM Initialisation and File Change NotificationDevice identitiesSource device: MEDestination device: SIMResultGeneral Result: Command performed successfullyCoding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>01</u>	<u>02</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

TERMINAL RESPONSE : REFRESH 2.1.1BLogically:Command detailsCommand number: 1Command type: REFRESHCommand qualifier: SIM Initialisation and File Change NotificationDevice identitiesSource device: MEDestination device: SIMResultGeneral Result: REFRESH performed with additional EFs readCoding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>01</u>	<u>02</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>83</u>	<u>01</u>	<u>03</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Expected Sequence 2.2 (REFRESH, SIM Initialisation and Full File Change Notification)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: REFRESH 2.2.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>REFRESH 2.2.1</u>	
4	<u>SIM</u>	<u>Update EF IMSI</u>	<u>[Update the contents of EF IMSI to "001010123456787", -]</u>
5	<u>ME</u>	<u>Invoke MM Restart Procedure</u>	
6	<u>ME → SIM</u>	<u>SIM INITIALISATION</u>	<u>[ME performs SIM initialisation: including reading EF IMSI, EF LOCI and EF KC]</u>
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE:</u> <u>REFRESH 2.2.1</u>	<u>[normal]</u>
8	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
9	<u>ME → SS</u>	<u>IMSI ATTATCH</u>	<u>[Send IMSI of "001010123456787" to System Simulator]</u>

PROACTIVE COMMAND : REFRESH 2.2.1

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

TERMINAL RESPONSE : REFRESH 2.2.1

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialisation and File Change Notification

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

Expected Sequence 2.3 (REFRESH, SIM Reset)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: REFRESH 2.3.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>REFRESH 2.3.1</u>	
4	<u>SIM</u>	<u>Update EF IMSI</u>	<u>[Update the contents of EF IMSI to</u> <u>"001010123456786</u>]
5	<u>ME → SIM</u>	<u>GSM Termination Procedure</u>	
6	<u>ME → SIM</u>	<u>GSM Activation Procedure</u>	<u>[At same voltage]</u>
7	<u>ME → SIM</u>	<u>SIM Initialisation</u>	<u>[ME performs SIM initialisation: including</u> <u>reading EF IMSI, EF LOCI and EF KC]</u>
8	<u>ME → SS</u>	<u>IMSI ATTATCH</u>	<u>[Send IMSI of "001010123456786" to System</u> <u>Simulator]</u>

PROACTIVE COMMAND : REFRESH 2.3.1Logically:Command detailsCommand number: 1Command type: REFRESHCommand qualifier: SIM ResetDevice identitiesSource device: SIMDestination device: MECoding:BER-TLV: D0 09 81 03 01 01 04 82 02 81 8227.22.4.7.2.5 Test RequirementThe ME shall operate in the manner defined in expected sequences 1, 2 and 3.**27.22.4.8 SET UP MENU and ENVELOPE MENU SELECTION****27.22.4.8.1 SET UP MENU and ENVELOPE MENU SELECTION (normal)**27.22.4.8.1.1 Definition and applicabilitySee Section 3.2.2.**27.22.4.8.1.2 Conformance Requirement**The ME shall support the SET UP MENU command as defined in the following technical specifications:3GPP TS 11.14 clause 5 (Profile download), 6.4.8 (SET UP MENU), 6.6.7 (SET UP MENU), 6.8 (Structure of TERMINAL RESPONSE), 6.11 (Proactive commands versus possible Terminal response), 12.6 (Command details), 12.9 (Item), 13.4 (Type of Command and Next Action Indicator).

The ME shall support MENU SELECTION as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.4 (Menu Selection mechanism), 5.2 (Terminal Profile), clause 6.4.8 (Set Up Menu), clause 6.9, clause 8 (Menu Selection), clause 12.7 (Device Identities), clause 12.10 (Item Identifier).

27.22.4.8.1.3 Test Purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME replaces the current list of menu items with the list of menu items contained in the SET UP MENU command.

To verify that the ME removes the current list of menu items following receipt of a SET UP MENU command with no items.

To verify that the ME correctly passes the identifier of the selected menu item to the SIM using the ENVELOPE (MENU SELECTION) command.

To verify that when the help is available for the command and the user has indicated the need to get help information on one of the items, the ME informs properly the SIM about an HELP REQUEST, using the MENU SELECTION mechanism.

27.22.4.8.1.4 Method of Test

27.22.4.8.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

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

27.22.4.8.1.4.2 Procedure

Expected Sequence 1.1 (SET UP MENU and MENU SELECTION, without Help Request, Replace and Remove a Toolkit Menu)

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

<u>26</u>	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION ENDED</u>
<u>27</u>	<u>USER → ME</u>	<u>Has to unsuccessfully find the Toolkit Menu</u>

PROACTIVE COMMAND : SET UP MENU 1.1.1

Logically:

Command details

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

Device identities

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

Item

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

Item

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

Item

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

Item

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

Coding:

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

PROACTIVE COMMAND : SET UP MENU 1.1.2Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP MENU
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
Alpha identifier:	"Toolkit Menu"
<u>Item</u>	
Identifier of item:	"11"
Text string of item:	"One"
<u>Item</u>	
Identifier of item:	"12"
Text string of item:	"Two"

Coding:

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

PROACTIVE COMMAND : SET UP MENU 1.1.3Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP MENU
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
Item:	Empty

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>0D</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>25</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>85</u>
	<u>00</u>	<u>8F</u>	<u>00</u>									

TERMINAL RESPONSE : SET UP MENU 1.1.1, 1.1.2 and 1.1.3Logically:

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

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>25</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

ENVELOPE 1.1.1 : MENU SELECTIONLogically:

<u>Menu selection</u>	
<u>Device identities</u>	
<u>Source device:</u>	<u>Keypad</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Item identifier</u>	<u>02</u>

Coding:

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

ENVELOPE 1.2 : MENU SELECTIONLogically:

<u>Menu selection</u>	
<u>Device identities</u>	
<u>Source device:</u>	<u>Keypad</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Item identifier</u>	<u>12</u>

Coding:

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

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

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

19	<u>USER →</u> <u>ME</u>	Select the "5 Barring Of All Outgoing Calls" menu entry	
20	<u>ME →</u> <u>SIM</u>	Send the ENVELOPE 1.2.2 : MENU SELECTION (Identifier of item: 0xFB)	
21	<u>SIM → ME</u>	PROACTIVE COMMAND PENDING: SET UP MENU 1.2.3	[Third Large Menu with a Large Alpha Identifier and only one Short Item, Fetch of FF bytes]
22	<u>ME → SIM</u>	FETCH	
23	<u>SIM → ME</u>	PROACTIVE COMMAND SET UP MENU 1.2.3	
24	<u>ME →</u> <u>USER</u>	Integrate the new menu header of " The SIM shall supply a set of menu items, which shall be integrated with the menu system (or other MMI facility) in order to give the user the opportunity to choose one of these menu items at his own discretion. Each item comprises a sh" into it's menu system and have a menu item of "Y" under this header.	
25	<u>ME → SIM</u>	TERMINAL RESPONSE: SET UP MENU 1.2.3	[Command Performed Successfully]
26	<u>SIM → ME</u>	PROACTIVE SIM SESSION ENDED	
5	<u>USER</u> <u>→</u> <u>ME</u>	Select the Toolkit Menu "The SIM shall supply a set of menu items, which shall be integrated with the menu system (or other MMI facility) in order to give the user the opportunity to choose one of these menu items at his own discretion. Each item comprises a sh".	
6	<u>ME →</u> <u>USER</u>	Display "Y"	
7	<u>USER</u> <u>→ ME</u>	Select the item "Y"	
8	<u>ME →</u> <u>SI</u> <u>M</u>	Send the ENVELOPE 1.1.6 : MENU SELECTION (Identifier of item: 1)	

PROACTIVE COMMAND : SET UP MENU 1.2.1Logically:Command details

<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SET UP MENU</u>
<u>Command qualifier:</u>	<u>"00"</u>

Device identities

<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>
<u>Alpha Identifier:</u>	<u>"LargeMenu1"</u>

Item

<u>Identifier of item:</u>	<u>"50"</u>
<u>Text string of item:</u>	<u>"Zero"</u>

Item

<u>Identifier of item:</u>	<u>"4F"</u>
<u>Text string of item:</u>	<u>"One"</u>

Item

<u>Identifier of item:</u>	<u>"4E"</u>
<u>Text string of item:</u>	<u>"Two"</u>

Item

<u>Identifier of item:</u>	<u>"4D"</u>
<u>Text string of item:</u>	<u>"Three"</u>

Item

<u>Identifier of item:</u>	<u>"4C"</u>
<u>Text string of item:</u>	<u>"Four"</u>

Item

<u>Identifier of item:</u>	<u>"4B"</u>
<u>Text string of item:</u>	<u>"Five"</u>

Item

<u>Identifier of item:</u>	<u>"4A"</u>
<u>Text string of item:</u>	<u>"Six"</u>

Item

<u>Identifier of item:</u>	<u>"49"</u>
<u>Text string of item:</u>	<u>"Seven"</u>

Item

<u>Identifier of item:</u>	<u>"48"</u>
<u>Text string of item:</u>	<u>"Eight"</u>

Item

<u>Identifier of item:</u>	<u>"47"</u>
<u>Text string of item:</u>	<u>"Nine"</u>

<u>Item</u>	
Identifier of item:	"46"
Text string of item:	"Alpha"
<u>Item</u>	
Identifier of item:	"45"
Text string of item:	"Bravo"
<u>Item</u>	
Identifier of item:	"44"
Text string of item:	"Charlie"
<u>Item</u>	
Identifier of item:	"43"
Text string of item:	"Delta"
<u>Item</u>	
Identifier of item:	"42"
Text string of item:	"Echo"
<u>Item</u>	
Identifier of item:	"41"
Text string of item:	"Fox-trot"
<u>Item</u>	
Identifier of item:	"40"
Text string of item:	"Black"
<u>Item</u>	
Identifier of item:	"3F"
Text string of item:	"Brown"
<u>Item</u>	
Identifier of item:	"3E"
Text string of item:	"Red"
<u>Item</u>	
Identifier of item:	"3D"
Text string of item:	"Orange"
<u>Item</u>	
Identifier of item:	"3C"
Text string of item:	"Yellow"
<u>Item</u>	
Identifier of item:	"3B"
Text string of item:	"Green"
<u>Item</u>	
Identifier of item:	"3A"
Text string of item:	"Blue"
<u>Item</u>	
Identifier of item:	"39"
Text string of item:	"Violet"
<u>Item</u>	
Identifier of item:	"38"
Text string of item:	"Grey"
<u>Item</u>	
Identifier of item:	"37"
Text string of item:	"White"
<u>Item</u>	
Identifier of item:	"36"
Text string of item:	"milli"
<u>Item</u>	
Identifier of item:	"35"
Text string of item:	"micro"
<u>Item</u>	
Identifier of item:	"34"
Text string of item:	"nano"
<u>Item</u>	
Identifier of item:	"33"
Text string of item:	"pico"

Coding:

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

PROACTIVE COMMAND : SET UP MENU 1.2.2

Logically:

Command details

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

Device identities

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

Item

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

Item

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

Item

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

Item

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

Item

Identifier of item: "FB"
 Text string of item: "5 Barring Of All Outgoing Calls"

Item

Identifier of item: "FA"
 Text string of item: "6 Barring Of All Outgoing Int Calls"

Item

Identifier of item: "F9"
 Text string of item: "7 CLI Presentation"

Coding:

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

PROACTIVE COMMAND : SET UP MENU 1.2.3

Logically:

Command details

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

Device identities

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

Item

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

Coding:

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

TERMINAL RESPONSE : SET UP MENU 1.2.1, 1.2.2 and 1.2.3Logically:Command details

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

Device identities

Source device:	ME
Destination device:	SIM

Result

General Result:	Command performed successfully
-----------------	--------------------------------

Coding:

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

ENVELOPE 1.2.1 : MENU SELECTIONLogically:Menu selectionDevice identities

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

Coding:

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

ENVELOPE 1.2.2 : MENU SELECTIONLogically:Menu selectionDevice identities

Source device:	Keypad
Destination device:	SIM
Item identifier	FB

Coding:

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

ENVELOPE 1.2.3 : MENU SELECTIONLogically:

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

Coding:

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

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

Proactive SIM Command Facilities			
<u>Proactive SIM Command Number</u>	<u>Alpha Identifier Length</u>	<u>Number of items</u>	<u>Maximum length of item</u>
<u>1.1.1</u>	<u>12</u>	<u>4</u>	<u>6</u>
<u>1.1.2</u>	<u>12</u>	<u>2</u>	<u>3</u>
<u>1.1.3</u>	<u>10</u>	<u>0</u>	<u>-</u>
<u>1.2.1</u>	<u>10</u>	<u>30</u>	<u>8</u>
<u>1.2.2</u>	<u>10</u>	<u>7</u>	<u>37</u>
<u>1.2.3</u>	<u>235</u>	<u>1</u>	<u>1</u>

27.22.4.8.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1 and in expected sequence 2.

27.22.4.8.2 SET UP MENU (help request support)

27.22.4.8.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.8.2.2 Conformance Requirement

Requirements are the same as in 27.22.4.8.1.1, with an additional one: GSM 11.14 clause 12.21 (Help Request).

27.22.4.8.2.3 Test Purpose

To verify that when the help is available for the command and the user has indicated the need to get help information on one of the items, the ME informs properly the SIM about an HELP REQUEST, using the MENU SELECTION mechanism.

27.22.4.8.2.4 Method of Test

27.22.4.8.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

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

27.22.4.8.2.4.2 Procedure

Expected Sequence 2.1 (SET UP MENU and MENU SELECTION, with Help Request, Replace and Remove a Toolkit Menu)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SS → ME	PROACTIVE COMMAND PENDING: SET UP MENU 2.1.1	[First Set Up Menu]
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND SET UP MENU 2.1.1	
4	ME → USER	Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" and "Item 4" under this header.	
5	ME → SIM	TERMINAL RESPONSE: SET UP MENU 2.1.1	[Command Performed Successfully]
6	SIM → ME	PROACTIVE SIM SESSION ENDED	
7	USER → ME	Select the Toolkit Menu "Toolkit Menu"	
8	ME → USER	Display "Item 1", "Item 2", "Item 3", "Item 4"	
9	USER → ME	Select the Help Request on "Item 2" Menu entry	
10	ME → SIM	Send the ENVELOPE 2.1.1.1 : MENU SELECTION (Identifier of item: 2)	

PROACTIVE COMMAND : SET UP MENU 2.1.1

Logically:

Command details

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

Device identities

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

Item

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

Item

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

Item

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

Item

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

Coding:

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

02 49 74 65 6D 20 32 8F 07 03 49 74
65 6D 20 33 8F 07 04 49 74 65 6D 20
34

TERMINAL RESPONSE : SET UP MENU 2.1.1

Logically:

Command details
Command number: 1
Command type: SET UP MENU
Command qualifier: « help information available »
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully

Coding:

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

ENVELOPE 2.1.1 : MENU SELECTION

Logically:

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

Coding:

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

27.22.4.8.3 SET UP MENU (next action support)

27.22.4.8.3.1 Definition and applicability

See Section 3.2.2.

If the SIM provides an Items Next Action Indicator data object, the comprehension required flag shall be set to '0'.

27.22.4.8.3.2 Conformance Requirement

Requirements are the same as in 27.22.4.8.1.1, with an additional one: GSM 11.14 clause 12.24 (Items Next Action Indicator).27.22.4.8.3.3 Test Purpose

To verify that when the next action indicator is supported.

27.22.4.8.3.4 Method of Test

27.22.4.8.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

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

27.22.4.8.3.4.2 Procedure

Expected Sequence 3.1 (SET UP MENU, next action indicator “Send SM”, “Set Up Call”, “Launch Browser”, “Provide Local Information”, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SS → ME	PROACTIVE COMMAND PENDING: SET UP MENU 3.1.1	[First Set Up Menu]
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND SET UP MENU 3.1.1	
4	ME → USER	Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" and "Item 4" under this header.	
5	ME → SIM	TERMINAL RESPONSE: SET UP MENU 3.1.1	[Command Performed Successfully]
6	SIM → ME	PROACTIVE SIM SESSION ENDED	
7	USER → ME	Select the Toolkit Menu "Toolkit Menu"	
8	ME → USER	Display "Item 1", "Item 2", "Item 3", "Item 4"	
9	USER → ME	Navigate in the items, then select "Item 2".	Check that next action indicators should appear.

PROACTIVE COMMAND : SET UP MENU 3.1.1

Logically:

Command details

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

Device identities

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

Item

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

Item

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

Item

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

Item

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

Items next action indicator list

List: "Send SM", "Set Up Call", "Launch Browser", "Provide Local
Information"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>41</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>25</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>85</u>
	<u>0C</u>	<u>54</u>	<u>6F</u>	<u>6F</u>	<u>6C</u>	<u>6B</u>	<u>69</u>	<u>74</u>	<u>20</u>	<u>4D</u>	<u>65</u>	<u>6E</u>
	<u>75</u>	<u>8F</u>	<u>07</u>	<u>01</u>	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>31</u>	<u>8F</u>	<u>07</u>
	<u>02</u>	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>32</u>	<u>8F</u>	<u>07</u>	<u>03</u>	<u>49</u>	<u>74</u>
	<u>65</u>	<u>6D</u>	<u>20</u>	<u>33</u>	<u>8F</u>	<u>07</u>	<u>04</u>	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>
	<u>34</u>	<u>18</u>	<u>04</u>	<u>13</u>	<u>10</u>	<u>15</u>	<u>26</u>					

TERMINAL RESPONSE : SET UP MENU 3.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP MENU
Command qualifier:	« no help information available »
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

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

27.22.4.8.4 SET UP MENU (display of icons)27.22.4.8.4.1 Definition and applicability

See Section 3.2.2.

27.22.4.8.4.2 Conformance Requirement

Requirements are the same as in 27.22.4.8.1.1, with an additional one: GSM 11.14 clause 6.5.4, 12.31 and 12.32.

27.22.4.8.4.3 Test Purpose

To verify that icons are displayed with the command Set Up Menu in the Alpha Identifier and Items Data Objects.

27.22.4.8.4.4 Method of Test27.22.4.8.4.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

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

27.22.4.8.4.4.2 Procedure

Expected Sequence 4.1A (SET UP MENU, BASIC ICON NOT SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SS → ME	PROACTIVE COMMAND PENDING: SET UP MENU 4.1.1	[First Set Up Menu]
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND SET UP MENU 4.1.1	
4	ME → USER	Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header.	
5	ME → SIM	TERMINAL RESPONSE: SET UP MENU 4.1.1A	[Command Performed Successfully]
6	SIM → ME	PROACTIVE SIM SESSION ENDED	
7	USER → ME	Select the Toolkit Menu "Toolkit Menu"	Verify the icon is displayed with alpha id.
8	ME → USER	Display "Item 1", "Item 2", "Item 3".	
9	USER → ME	Navigate in the items, then select "Item 2".	Verify icons are displayed for each item.

PROACTIVE COMMAND : SET UP MENU 4.1.1

Logically:

Command details

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

Device identities

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

Item

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

Item

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

Item

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

Icon identifier

Icon qualifier: icon is not self explanatory
 Icon identifier: record 1 EF (IMG)

Item icon identifier list

Icon qualifier: icon is not self explanatory
 Icon identifier list: record 5 EF (IMG), record 5 EF (IMG), record 5 EF (IMG)

Coding:

BER-TLV:	D0	3C	81	03	01	25	00	82	02	81	82	85
	0C	54	6F	6F	6C	6B	69	74	20	4D	65	6E
	75	8F	07	01	49	74	65	6D	20	31	8F	07
	02	49	74	65	6D	20	32	8F	07	03	49	74
	65	6D	20	33	9E	02	01	01	9F	04	01	05
	05	05										

TERMINAL RESPONSE : SET UP MENU 4.1.1A

Logically:

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

Coding:

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

Expected Sequence 4.1B (SET UP MENU, BASIC ICON NOT SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, requested icon could not be displayed)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SS → ME	PROACTIVE COMMAND PENDING: SET UP MENU 4.1.1	[First Set Up Menu]
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND SET UP MENU 4.1.1	
4	ME → USER	Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header.	
5	ME → SIM	TERMINAL RESPONSE: SET UP MENU 4.1.1B	[Command performed successfully, but requested icon could not be displayed]
6	SIM → ME	PROACTIVE SIM SESSION ENDED	
7	USER → ME	Select the Toolkit Menu "Toolkit Menu"	No icon is displayed with alpha id.
8	ME → USER	Display "Item 1", "Item 2", "Item 3".	
9	USER → ME	Navigate in the items, then select "Item 2".	no icon is displayed for each item.

TERMINAL RESPONSE : SET UP MENU 4.1.1BLogically:Command details

<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SET UP MENU</u>
<u>Command qualifier:</u>	<u>« no help information available »</u>

Device identities

<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>

Result

<u>General Result:</u>	<u>Command performed successfully but requested icon could not be displayed</u>
------------------------	---

Coding:

BER-TLV: 81 03 01 25 00 82 02 82 81 83 01 04

Expected Sequence 4.2A (SET UP MENU, BASIC ICON SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SS → ME	PROACTIVE COMMAND PENDING: SET UP MENU 4.2.1	[First Set Up Menu]
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND SET UP MENU 4.2.1	
4	ME → USER	Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header.	
5	ME → SIM	TERMINAL RESPONSE: SET UP MENU 4.2.1A	[Command Performed Successfully]
6	SIM → ME	PROACTIVE SIM SESSION ENDED	
7	USER → ME	Select the Toolkit Menu "Toolkit Menu"	Verify the icon is displayed in alpha id.
8	ME → USER	Display "Item 1", "Item 2", "Item 3".	
9	USER → ME	Navigate in the items, then select "Item 2".	Verify icons are displayed for each item.

PROACTIVE COMMAND : SET UP MENU 4.2.1

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: ME

Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1

Text string of item: "Item 1"

Item

Identifier of item: 2

Text string of item: "Item 2"

Item

Identifier of item: 3

Text string of item: "Item 3"

Icon identifier

Icon qualifier: icon is self explanatory

Icon identifier: record 1 EF (IMG)

Item icon identifier list

Icon qualifier: icon is self explanatory

Icon identifier list: record 5 EF (IMG), record 5 EF (IMG), record 5 EF (IMG)

Coding:

BER-TLV:	D0	3C	81	03	01	25	00	82	02	81	82	85
	0C	54	6F	6F	6C	6B	69	74	20	4D	65	6E
	75	8F	07	01	49	74	65	6D	20	31	8F	07
	02	49	74	65	6D	20	32	8F	07	03	49	74
	65	6D	20	33	9E	02	00	01	9F	04	00	05
	05	05										

TERMINAL RESPONSE : SET UP MENU 4.2.1A

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP MENU
Command qualifier:	« no help information available »
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

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

Expected Sequence 4.2B (SET UP MENU, BASIC ICON SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, requested icon could not be displayed)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SS → ME	PROACTIVE COMMAND PENDING: SET UP MENU 4.2.1	[First Set Up Menu]
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND SET UP MENU 4.2.1	
4	ME → USER	Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header.	
5	ME → SIM	TERMINAL RESPONSE: SET UP MENU 4.2.1B	[Command Performed Successfully]
6	SIM → ME	PROACTIVE SIM SESSION ENDED	
7	USER → ME	Select the Toolkit Menu "Toolkit Menu"	No icon is displayed in alpha id.
8	ME → USER	Display "Item 1", "Item 2", "Item 3".	
9	USER → ME	Navigate in the items, then select "Item 2".	no icon is displayed for each item.

TERMINAL RESPONSE : SET UP MENU 4.2.1B

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: « no help information available »

Device identities

Source device: ME

Destination device: SIM

Result

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

Coding:

BER-TLV: 81 03 01 25 00 82 02 82 81 83 01 04

27.22.4.8.5 SET UP MENU (soft keys support)

27.22.4.8.5.1 Definition and applicability

See Section 3.2.2.

27.22.4.8.5.2 Conformance Requirement

Requirements are the same as in 27.22.4.8.1.1.

27.22.4.8.5.3 Test Purpose

To verify that if soft key preferred is indicated in the command details and soft key for SET UP MENU is supported by the ME and the number of icon items does not exceed the number of soft keys available, then the ME displays those icons as soft key.

27.22.4.8.5.4 Method of Test

27.22.4.8.5.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

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

27.22.4.8.5.4.2 Procedure

Expected Sequence 5.1 (SET UP MENU, SOFT KEY PREFERRED, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SS → ME	PROACTIVE COMMAND PENDING: SET UP MENU 5.1.1	[First Set Up Menu]
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND SET UP MENU 5.1.1	
4	ME → USER	Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2" under this header.	
5	ME → SIM	TERMINAL RESPONSE: SET UP MENU 5.1.1	[Command Performed Successfully]
6	SIM → ME	PROACTIVE SIM SESSION ENDED	
7	USER → ME	Select the Toolkit Menu "Toolkit Menu"	
8	ME → USER	Display "Item 1", "Item 2"	
9	USER → ME	Navigate in the items, then select "Item 2".	Verify we can select items through soft keys

PROACTIVE COMMAND : SET UP MENU 5.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: "01" (selection using soft key preferred)

Device identities

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

Item

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

Item

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

Coding:

BER-TLV:	D0	29	81	03	01	25	01	82	02	81	82	85
	0C	54	6F	6F	6C	6B	69	74	20	4D	65	6E
	75	8F	07	01	49	74	65	6D	20	31	8F	07
	02	49	74	65	6D	20	32					

TERMINAL RESPONSE : SET UP MENU 5.1.1

Logically:

Command details

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

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

27.22.4.9 SELECT ITEM

27.22.4.9.1 SELECT ITEM (mandatory features for ME supporting SELECT ITEM)

27.22.4.9.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.9.1.2 Conformance Requirement

The ME shall support the Proactive SIM: Select Item facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5 (Profile Download), 6.4.9 (Proactive SIM commands and procedures, SELECT ITEM), 6.6.8 (Structure of proactive SIM commands, SELECT ITEM), 6.8 (Structure of TERMINAL RESPONSE), 12.6 (Command details), 13.4 (Type of Command and Next Action Indicator), 14 (Allowed Type of command and Device identity combinations).

27.22.4.9.1.3 Test Purpose

To verify that the ME correctly presents the set of items contained in the SELECT ITEM proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM with the identifier of the item chosen.

To verify that the ME allows a SELECT ITEM proactive SIM command within the maximum 255 byte BER-TLV boundary.

To verify that the ME returns a TERMINAL RESPONSE with "Proactive SIM application session terminated by the user", if the user has indicated the need to end the proactive SIM session.

To verify that the ME returns a TERMINAL RESPONSE with "Backwards move in the proactive SIM application session requested by the user", if the user has indicated the need to go backwards in the proactive SIM application session.

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].

27.22.4.9.1.4 Method of Test

27.22.4.9.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.9.1.4.2 Procedure

Expected Sequence 1.1 (SELECT ITEM, mandatory features, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND	
2	ME → SIM	PENDING: SELECT ITEM 1.1.1	
3	SIM → ME	FETCH PROACTIVE COMMAND: SELECT ITEM 1.1.1	
4	ME → USER	Display items of "Item 1", "Item 2", "Item 3" and "Item 4" under the header of "Toolkit Select".	
5	USER → ME	Select "Item 2".	
6	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 1.1.1	Command performed successfully

PROACTIVE COMMAND : SELECT ITEM 1.1.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

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

Item

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

Item

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

Item

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

Item

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

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>3D</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>24</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>85</u>
	<u>0E</u>	<u>54</u>	<u>6F</u>	<u>6F</u>	<u>6C</u>	<u>6B</u>	<u>69</u>	<u>74</u>	<u>20</u>	<u>53</u>	<u>65</u>	<u>6C</u>
	<u>65</u>	<u>63</u>	<u>74</u>	<u>8F</u>	<u>07</u>	<u>01</u>	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>31</u>
	<u>8F</u>	<u>07</u>	<u>02</u>	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>32</u>	<u>8F</u>	<u>07</u>	<u>03</u>
	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>33</u>	<u>8F</u>	<u>07</u>	<u>04</u>	<u>49</u>	<u>74</u>	<u>65</u>
	<u>6D</u>	<u>20</u>	<u>34</u>									

TERMINAL RESPONSE : SELECT ITEM 1.1.1

Logically:

Command details

Command number: 1
Command type: SELECT ITEM
Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 02

Coding:

BER-TLV: 81 03 01 24 00 82 02 82 81 83 01 00
 90 01 02

Expected Sequence 1.2 (SELECT ITEM, large menu, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>7</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u>	
		<u>PENDING: SELECT ITEM 1.2.1</u>	
<u>8</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>9</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u>	
		<u>SELECT ITEM 1.2.1</u>	
<u>10</u>	<u>ME →</u> <u>USER</u>	<u>Present the items of "Zero", "One",</u> <u>"Two", "Three", "Four", "Five",</u> <u>"Six", "Seven", "Eight", "Nine",</u> <u>"Alpha", "Bravo", "Charlie",</u> <u>"Delta", "Echo", "Fox-trot", "Black",</u> <u>"Brown", "Red", "Orange",</u> <u>"Yellow", "Green", "Blue", "Violet",</u> <u>"Grey", "White", "milli", "micro",</u> <u>"nano" and "pico" under the</u> <u>header of "LargeMenu1"</u>	
<u>11</u>	<u>USER →</u> <u>ME</u>	<u>Select item "Orange".</u>	
<u>12</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: SELECT</u> <u>ITEM 1.2.1</u>	<u>Command performed successfully</u>

PROACTIVE COMMAND : SELECT ITEM 1.2.1

Logically:

Command details

Command number: 1
Command type: SELECT ITEM
Command qualifier: "00"

Device identities

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

Item

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

Item

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

Item

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

Item

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

Item

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

Item

Identifier of item: "4B"
Text string of item: "Five"

Item

Identifier of item: "4A"
Text string of item: "Six"

Item

Identifier of item: "49"
Text string of item: "Seven"

Item

Identifier of item: "48"
Text string of item: "Eight"

Item

Identifier of item: "47"
Text string of item: "Nine"

Item

Identifier of item: "46"

Text string of item:	"Alpha"
<u>Item</u>	
Identifier of item:	"45"
Text string of item:	"Bravo"
<u>Item</u>	
Identifier of item:	"44"
Text string of item:	"Charlie"
<u>Item</u>	
Identifier of item:	"43"
Text string of item:	"Delta"
<u>Item</u>	
Identifier of item:	"42"
Text string of item:	"Echo"
<u>Item</u>	
Identifier of item:	"41"
Text string of item:	"Fox-trot"
<u>Item</u>	
Identifier of item:	"40"
Text string of item:	"Black"
<u>Item</u>	
Identifier of item:	"3F"
Text string of item:	"Brown"
<u>Item</u>	
Identifier of item:	"3E"
Text string of item:	"Red"
<u>Item</u>	
Identifier of item:	"3D"
Text string of item:	"Orange"
<u>Item</u>	
Identifier of item:	"3C"
Text string of item:	"Yellow"
<u>Item</u>	
Identifier of item:	"3B"
Text string of item:	"Green"
<u>Item</u>	
Identifier of item:	"3A"
Text string of item:	"Blue"
<u>Item</u>	
Identifier of item:	"39"
Text string of item:	"Violet"
<u>Item</u>	
Identifier of item:	"38"
Text string of item:	"Grey"
<u>Item</u>	
Identifier of item:	"37"
Text string of item:	"White"
<u>Item</u>	
Identifier of item:	"36"
Text string of item:	"milli"
<u>Item</u>	
Identifier of item:	"35"
Text string of item:	"micro"
<u>Item</u>	
Identifier of item:	"34"
Text string of item:	"nano"
<u>Item</u>	
Identifier of item:	"33"
Text string of item:	"pico"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>81</u>	<u>FC</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>24</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>
	<u>85</u>	<u>0A</u>	<u>4C</u>	<u>61</u>	<u>72</u>	<u>67</u>	<u>65</u>	<u>4D</u>	<u>65</u>	<u>6E</u>	<u>75</u>	<u>31</u>
	<u>8F</u>	<u>05</u>	<u>50</u>	<u>5A</u>	<u>65</u>	<u>72</u>	<u>6F</u>	<u>8F</u>	<u>04</u>	<u>4F</u>	<u>4F</u>	<u>6E</u>
	<u>65</u>	<u>8F</u>	<u>04</u>	<u>4E</u>	<u>54</u>	<u>77</u>	<u>6F</u>	<u>8F</u>	<u>06</u>	<u>4D</u>	<u>54</u>	<u>68</u>
	<u>72</u>	<u>65</u>	<u>65</u>	<u>8F</u>	<u>05</u>	<u>4C</u>	<u>46</u>	<u>6F</u>	<u>75</u>	<u>72</u>	<u>8F</u>	<u>05</u>
	<u>4B</u>	<u>46</u>	<u>69</u>	<u>76</u>	<u>65</u>	<u>8F</u>	<u>04</u>	<u>4A</u>	<u>53</u>	<u>69</u>	<u>78</u>	<u>8F</u>
	<u>06</u>	<u>49</u>	<u>53</u>	<u>65</u>	<u>76</u>	<u>65</u>	<u>6E</u>	<u>8F</u>	<u>06</u>	<u>48</u>	<u>45</u>	<u>69</u>
	<u>67</u>	<u>68</u>	<u>74</u>	<u>8F</u>	<u>05</u>	<u>47</u>	<u>4E</u>	<u>69</u>	<u>6E</u>	<u>65</u>	<u>8F</u>	<u>06</u>
	<u>46</u>	<u>41</u>	<u>6C</u>	<u>70</u>	<u>68</u>	<u>61</u>	<u>8F</u>	<u>06</u>	<u>45</u>	<u>42</u>	<u>72</u>	<u>61</u>
	<u>76</u>	<u>6F</u>	<u>8F</u>	<u>08</u>	<u>44</u>	<u>43</u>	<u>68</u>	<u>61</u>	<u>72</u>	<u>6C</u>	<u>69</u>	<u>65</u>
	<u>8F</u>	<u>06</u>	<u>43</u>	<u>44</u>	<u>65</u>	<u>6C</u>	<u>74</u>	<u>61</u>	<u>8F</u>	<u>05</u>	<u>42</u>	<u>45</u>
	<u>63</u>	<u>68</u>	<u>6F</u>	<u>8F</u>	<u>09</u>	<u>41</u>	<u>46</u>	<u>6F</u>	<u>78</u>	<u>2D</u>	<u>74</u>	<u>72</u>
	<u>6F</u>	<u>74</u>	<u>8F</u>	<u>06</u>	<u>40</u>	<u>42</u>	<u>6C</u>	<u>61</u>	<u>63</u>	<u>6B</u>	<u>8F</u>	<u>06</u>
	<u>3F</u>	<u>42</u>	<u>72</u>	<u>6F</u>	<u>77</u>	<u>6E</u>	<u>8F</u>	<u>04</u>	<u>3E</u>	<u>52</u>	<u>65</u>	<u>64</u>
	<u>8F</u>	<u>07</u>	<u>3D</u>	<u>4F</u>	<u>72</u>	<u>61</u>	<u>6E</u>	<u>67</u>	<u>65</u>	<u>8F</u>	<u>07</u>	<u>3C</u>
	<u>59</u>	<u>65</u>	<u>6C</u>	<u>6C</u>	<u>6F</u>	<u>77</u>	<u>8F</u>	<u>06</u>	<u>3B</u>	<u>47</u>	<u>72</u>	<u>65</u>
	<u>65</u>	<u>6E</u>	<u>8F</u>	<u>05</u>	<u>3A</u>	<u>42</u>	<u>6C</u>	<u>75</u>	<u>65</u>	<u>8F</u>	<u>07</u>	<u>39</u>
	<u>56</u>	<u>69</u>	<u>6F</u>	<u>6C</u>	<u>65</u>	<u>74</u>	<u>8F</u>	<u>05</u>	<u>38</u>	<u>47</u>	<u>72</u>	<u>65</u>
	<u>79</u>	<u>8F</u>	<u>06</u>	<u>37</u>	<u>57</u>	<u>68</u>	<u>69</u>	<u>74</u>	<u>65</u>	<u>8F</u>	<u>06</u>	<u>36</u>
	<u>6D</u>	<u>69</u>	<u>6C</u>	<u>6C</u>	<u>69</u>	<u>8F</u>	<u>06</u>	<u>35</u>	<u>6D</u>	<u>69</u>	<u>63</u>	<u>72</u>
	<u>6F</u>	<u>8F</u>	<u>05</u>	<u>34</u>	<u>6E</u>	<u>61</u>	<u>6E</u>	<u>6F</u>	<u>8F</u>	<u>05</u>	<u>33</u>	<u>70</u>
	<u>69</u>	<u>63</u>	<u>6F</u>									

TERMINAL RESPONSE : SELECT ITEM 1.2.1Logically:Command detailsCommand number: 1Command type: SELECT ITEMCommand qualifier: "00"Device identitiesSource device: MEDestination device: SIMResultGeneral Result: Command performed successfullyItem identifierIdentifier of item chosen: 3DCoding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>24</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>90</u>	<u>01</u>	<u>3D</u>									

Expected Sequence 1.3 (SELECT ITEM, call options, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SELECT ITEM 1.3.1</u>	
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>SELECT ITEM 1.3.1</u>	
<u>16</u>	<u>ME →</u> <u>USER</u>	<u>Present the items of " Call</u> <u>Forwarding Unconditional", "Call</u> <u>Forward On User Busy", "Call</u> <u>Forward On No Reply", "Call</u> <u>Forward On User Not Reachable",</u> <u>"Barring Of All Outgoing Calls",</u> <u>"Barring Of All Outgoing</u> <u>International Calls" and "CLI</u> <u>Presentation" under the header of</u> <u>" LargeMenu2</u>	
<u>17</u>	<u>USER →</u> <u>ME</u>	<u>Select item "Barring Of All</u> <u>Outgoing Calls".</u>	
<u>18</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: SELECT</u> <u>ITEM 1.3.1</u>	<u>Command performed successfully</u>
<u>19</u>	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	

PROACTIVE COMMAND : SELECT ITEM 1.3.1Logically: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:

<u>BER-TLV:</u>	<u>D0</u>	<u>81</u>	<u>FB</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>24</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>
	<u>85</u>	<u>0A</u>	<u>4C</u>	<u>61</u>	<u>72</u>	<u>67</u>	<u>65</u>	<u>4D</u>	<u>65</u>	<u>6E</u>	<u>75</u>	<u>32</u>
	<u>8F</u>	<u>1E</u>	<u>FF</u>	<u>43</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>46</u>	<u>6F</u>	<u>72</u>	<u>77</u>
	<u>61</u>	<u>72</u>	<u>64</u>	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>	<u>55</u>	<u>6E</u>	<u>63</u>	<u>6F</u>	<u>6E</u>
	<u>64</u>	<u>69</u>	<u>74</u>	<u>69</u>	<u>6F</u>	<u>6E</u>	<u>61</u>	<u>6C</u>	<u>8F</u>	<u>1D</u>	<u>FE</u>	<u>43</u>
	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>46</u>	<u>6F</u>	<u>72</u>	<u>77</u>	<u>61</u>	<u>72</u>	<u>64</u>	<u>69</u>
	<u>6E</u>	<u>67</u>	<u>20</u>	<u>4F</u>	<u>6E</u>	<u>20</u>	<u>55</u>	<u>73</u>	<u>65</u>	<u>72</u>	<u>20</u>	<u>42</u>
	<u>75</u>	<u>73</u>	<u>79</u>	<u>8F</u>	<u>1C</u>	<u>FD</u>	<u>43</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>46</u>
	<u>6F</u>	<u>72</u>	<u>77</u>	<u>61</u>	<u>72</u>	<u>64</u>	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>	<u>4F</u>	<u>6E</u>
	<u>20</u>	<u>4E</u>	<u>6F</u>	<u>20</u>	<u>52</u>	<u>65</u>	<u>70</u>	<u>6C</u>	<u>79</u>	<u>8F</u>	<u>26</u>	<u>FC</u>
	<u>43</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>46</u>	<u>6F</u>	<u>72</u>	<u>77</u>	<u>61</u>	<u>72</u>	<u>64</u>
	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>	<u>4F</u>	<u>6E</u>	<u>20</u>	<u>55</u>	<u>73</u>	<u>65</u>	<u>72</u>	<u>20</u>
	<u>4E</u>	<u>6F</u>	<u>74</u>	<u>20</u>	<u>52</u>	<u>65</u>	<u>61</u>	<u>63</u>	<u>68</u>	<u>61</u>	<u>62</u>	<u>6C</u>
	<u>65</u>	<u>8F</u>	<u>1E</u>	<u>FB</u>	<u>42</u>	<u>61</u>	<u>72</u>	<u>72</u>	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>
	<u>4F</u>	<u>66</u>	<u>20</u>	<u>41</u>	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>4F</u>	<u>75</u>	<u>74</u>	<u>67</u>	<u>6F</u>
	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>	<u>43</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>73</u>	<u>8F</u>	<u>2C</u>	<u>FA</u>
	<u>42</u>	<u>61</u>	<u>72</u>	<u>72</u>	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>	<u>4F</u>	<u>66</u>	<u>20</u>	<u>41</u>
	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>4F</u>	<u>75</u>	<u>74</u>	<u>67</u>	<u>6F</u>	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>
	<u>49</u>	<u>6E</u>	<u>74</u>	<u>65</u>	<u>72</u>	<u>6E</u>	<u>61</u>	<u>74</u>	<u>69</u>	<u>6F</u>	<u>6E</u>	<u>61</u>
	<u>6C</u>	<u>20</u>	<u>43</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>73</u>	<u>8F</u>	<u>11</u>	<u>F9</u>	<u>43</u>	<u>4C</u>
	<u>49</u>	<u>20</u>	<u>50</u>	<u>72</u>	<u>65</u>	<u>73</u>	<u>65</u>	<u>6E</u>	<u>74</u>	<u>61</u>	<u>74</u>	<u>69</u>
	<u>6F</u>	<u>6E</u>										

TERMINAL RESPONSE : SELECT ITEM 1.3.1Logically:

<u>Command details</u>	
Command number:	<u>1</u>
Command type:	<u>SELECT ITEM</u>
Command qualifier:	<u>"00"</u>
<u>Device identities</u>	
Source device:	<u>ME</u>
Destination device:	<u>SIM</u>
<u>Result</u>	
General Result:	<u>Command performed successfully</u>
<u>Item identifier</u>	
Identifier of item chosen:	<u>FB</u>

Coding:

BER-TLV:	<u>81</u>	<u>03</u>	<u>01</u>	<u>24</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>90</u>	<u>01</u>	<u>FB</u>									

Expected Sequence 1.4 (SELECT ITEM, backward move by user, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>	
<u>20</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SELECT ITEM 1.4.1</u>	[
<u>21</u>	<u>ME → SIM</u>	<u>FETCH</u>		
<u>22</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>SELECT ITEM 1.4.1</u>		
<u>23</u>	<u>ME → USER</u>	<u>Present the items of "One" and "Two" under the header of "Select Item".</u>		
<u>24</u>	<u>USER → ME</u>	<u>Indicate to go backwards in the proactive SIM application session.</u>		
<u>25</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: SELECT ITEM 1.4.1</u>		<u>Backward move in the proactive SIM application session requested by user</u>
<u>26</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SELECT ITEM 1.4.2</u>		
<u>27</u>	<u>ME → SIM</u>	<u>FETCH</u>		
<u>28</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>SELECT ITEM 1.4.2</u>		
<u>29</u>	<u>ME → USER</u>	<u>Present the items of "One" and "Two" under the header of "Select Item".</u>		
<u>30</u>	<u>USER → ME</u>	<u>Indicate to end the proactive SIM application and return the ME to normal operation.</u>		
<u>31</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: SELECT ITEM 1.4.2</u>		<u>Proactive SIM application terminated by the user</u>
<u>32</u>	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION ENDED</u>		

PROACTIVE COMMAND : SELECT ITEM 1.4.1 and 1.4.2

Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SELECT ITEM</u>
<u>Command qualifier:</u>	<u>"00"</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>
<u>Alpha identifier:</u>	<u>"Select Item"</u>
<u>Item</u>	
<u>Identifier of item:</u>	<u>"11"</u>
<u>Text string of item:</u>	<u>"One"</u>
<u>Item</u>	
<u>Identifier of item:</u>	<u>"12"</u>
<u>Text string of item:</u>	<u>"Two"</u>

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>22</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>24</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>85</u>
	<u>0B</u>	<u>53</u>	<u>65</u>	<u>6C</u>	<u>65</u>	<u>63</u>	<u>74</u>	<u>20</u>	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>
	<u>8F</u>	<u>04</u>	<u>11</u>	<u>4F</u>	<u>6E</u>	<u>65</u>	<u>8F</u>	<u>04</u>	<u>12</u>	<u>54</u>	<u>77</u>	<u>6F</u>

TERMINAL RESPONSE : SELECT ITEM 1.4.1Logically:Command details

<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SELECT ITEM</u>
<u>Command qualifier:</u>	<u>"00"</u>

Device identities

<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>

Result

<u>General Result:</u>	<u>backward move in the proactive SIM session requested by the user</u>
------------------------	---

Coding:

BER-TLV: 81 03 01 24 00 82 02 82 81 83 01 11

TERMINAL RESPONSE : SELECT ITEM 1.4.2Logically:Command details

<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SELECT ITEM</u>
<u>Command qualifier:</u>	<u>"00"</u>

Device identities

<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>

Result

<u>General Result:</u>	<u>proactive SIM session terminated by the user</u>
------------------------	---

Coding:

BER-TLV: 81 03 01 24 00 82 02 82 81 83 01 10

Expected Sequence 1.5 (SELECT ITEM, "Y", successful)

Step	Direction	MESSAGE / Action	Comments
33	SIM → ME	PROACTIVE COMMAND	
34	ME → SIM	PENDING: SELECT ITEM 1.5.1	
35	SIM → ME	FETCH PROACTIVE COMMAND: SELECT ITEM 1.5.1	
36	ME → USER	Present the items of "Y" under the header of "The SIM shall supply a set of items from which the user may choose one. Each item comprises a short identifier (used to indicate the selection) and a text string. Optionally the SIM may include an alpha identifier. The alpha identifier i".	
37	USER → ME	Select item "Y"	
38	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 1.5.1	Command performed successfully
39	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : SELECT ITEM 1.5.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME

Alpha Identifier:

"The SIM shall supply a set of items from which the user may choose one. Each item comprises a short identifier (used to indicate the selection) and a text string. Optionally the SIM may include an alpha identifier. The alpha identifier i"

Item

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

Coding:

BER-TLV: D0 81 FD 81 03 01 24 00 82 02 81 82
 85 81 ED 54 68 65 20 53 49 4D 20 73
 68 61 6C 6C 20 73 75 70 70 6C 79 20
 61 20 73 65 74 20 6F 66 20 69 74 65
 6D 73 20 66 72 6F 6D 20 77 68 69 63
 68 20 74 68 65 20 75 73 65 72 20 6D
 61 79 20 63 68 6F 6F 73 65 20 6F 6E
 65 2E 20 45 61 63 68 20 69 74 65 6D
 20 63 6F 6D 70 72 69 73 65 73 20 61
 20 73 68 6F 72 74 20 69 64 65 6E 74
 69 66 69 65 72 20 28 75 73 65 64 20
 74 6F 20 69 6E 64 69 63 61 74 65 20
 74 68 65 20 73 65 6C 65 63 74 69 6F
 6E 29 20 61 6E 64 20 61 20 74 65 78
 74 20 73 74 72 69 6E 67 2E 20 4F 70
 74 69 6F 6E 61 6C 6C 79 20 74 68 65
 20 53 49 4D 20 6D 61 79 20 69 6E 63
 6C 75 64 65 20 61 6E 20 61 6C 70 68
 61 20 69 64 65 6E 74 69 66 69 65 72
 2E 20 54 68 65 20 61 6C 70 68 61 20
 69 64 65 6E 74 69 66 69 65 72 20
 69 8F 02 01 59

TERMINAL RESPONSE : SELECT ITEM 1.5.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SELECT ITEM
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Item identifier</u>	
Identifier of item chosen:	01

Coding:

BER-TLV: 81 03 01 24 00 82 02 82 81 83 01 00
 90 01 01

Expected Sequence 1.6 (SELECT ITEM, Large menu, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
40	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 1.6.1	
41	ME → SIM	FETCH	
42	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 1.6.1	
43	ME → USER	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".	
44	USER → ME	Select item "5 Barring Of All Outgoing Calls".	
45	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 1.6.1	Command performed successfully

PROACTIVE COMMAND : SELECT ITEM 1.6.1Logically: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:

<u>BER-TLV:</u>	<u>D0</u>	<u>81</u>	<u>F3</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>24</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>
	<u>85</u>	<u>0A</u>	<u>30</u>	<u>4C</u>	<u>61</u>	<u>72</u>	<u>67</u>	<u>65</u>	<u>4D</u>	<u>65</u>	<u>6E</u>	<u>75</u>
	<u>8F</u>	<u>1D</u>	<u>FF</u>	<u>31</u>	<u>20</u>	<u>43</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>46</u>	<u>6F</u>
	<u>72</u>	<u>77</u>	<u>61</u>	<u>72</u>	<u>64</u>	<u>20</u>	<u>55</u>	<u>6E</u>	<u>63</u>	<u>6F</u>	<u>6E</u>	<u>64</u>
	<u>69</u>	<u>74</u>	<u>69</u>	<u>6F</u>	<u>6E</u>	<u>61</u>	<u>6C</u>	<u>8F</u>	<u>1C</u>	<u>FE</u>	<u>32</u>	<u>20</u>
	<u>43</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>46</u>	<u>6F</u>	<u>72</u>	<u>77</u>	<u>61</u>	<u>72</u>	<u>64</u>
	<u>20</u>	<u>4F</u>	<u>6E</u>	<u>20</u>	<u>55</u>	<u>73</u>	<u>65</u>	<u>72</u>	<u>20</u>	<u>42</u>	<u>75</u>	<u>73</u>
	<u>79</u>	<u>8F</u>	<u>1B</u>	<u>FD</u>	<u>33</u>	<u>20</u>	<u>43</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>46</u>
	<u>6F</u>	<u>72</u>	<u>77</u>	<u>61</u>	<u>72</u>	<u>64</u>	<u>20</u>	<u>4F</u>	<u>6E</u>	<u>20</u>	<u>4E</u>	<u>6F</u>
	<u>20</u>	<u>52</u>	<u>65</u>	<u>70</u>	<u>6C</u>	<u>79</u>	<u>8F</u>	<u>25</u>	<u>FC</u>	<u>34</u>	<u>20</u>	<u>43</u>
	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>46</u>	<u>6F</u>	<u>72</u>	<u>77</u>	<u>61</u>	<u>72</u>	<u>64</u>	<u>20</u>
	<u>4F</u>	<u>6E</u>	<u>20</u>	<u>55</u>	<u>73</u>	<u>65</u>	<u>72</u>	<u>20</u>	<u>4E</u>	<u>6F</u>	<u>74</u>	<u>20</u>
	<u>52</u>	<u>65</u>	<u>61</u>	<u>63</u>	<u>68</u>	<u>61</u>	<u>62</u>	<u>6C</u>	<u>65</u>	<u>8F</u>	<u>20</u>	<u>FB</u>
	<u>35</u>	<u>20</u>	<u>42</u>	<u>61</u>	<u>72</u>	<u>72</u>	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>	<u>4F</u>	<u>66</u>
	<u>20</u>	<u>41</u>	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>4F</u>	<u>75</u>	<u>74</u>	<u>67</u>	<u>6F</u>	<u>69</u>	<u>6E</u>
	<u>67</u>	<u>20</u>	<u>43</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>73</u>	<u>8F</u>	<u>24</u>	<u>FA</u>	<u>36</u>	<u>20</u>
	<u>42</u>	<u>61</u>	<u>72</u>	<u>72</u>	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>	<u>4F</u>	<u>66</u>	<u>20</u>	<u>41</u>
	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>4F</u>	<u>75</u>	<u>74</u>	<u>67</u>	<u>6F</u>	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>
	<u>49</u>	<u>6E</u>	<u>74</u>	<u>20</u>	<u>43</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>73</u>	<u>8F</u>	<u>13</u>	<u>F9</u>
	<u>37</u>	<u>20</u>	<u>43</u>	<u>4C</u>	<u>49</u>	<u>20</u>	<u>50</u>	<u>72</u>	<u>65</u>	<u>73</u>	<u>65</u>	<u>6E</u>
	<u>74</u>	<u>61</u>	<u>74</u>	<u>69</u>	<u>6F</u>	<u>6E</u>						

TERMINAL RESPONSE : SELECT ITEM 1.5Logically:Command details

Command number: 1
Command type: SELECT ITEM

Command qualifier: "00"
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully
Item identifier
Identifier of item chosen: FB

Coding:

BER-TLV: 81 03 01 24 00 82 02 82 81 83 01 00
 90 01 FB

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

Proactive SIM Command Facilities			
<u>Proactive SIM Command SELECT ITEM Number</u>	<u>Alpha Identifier Length</u>	<u>Number of items</u>	<u>Maximum length of item</u>
1.1	14	4	6
1.2	10	30	8
1.3	10	7	43
1.4	11	2	3
1.5	236	1	1
1.6	10	7	37

27.22.4.9.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 (SELECT ITEM, mandatory features).

27.22.4.9.2 SELECT ITEM (next action support)

27.22.4.9.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.9.2.2 Conformance Requirement

Same as 27.22.4.9.1.2

27.22.4.9.2.3 Test Purpose

To verify that the mobile supports next action indicator mode.

27.22.4.9.2.4 Method of Test27.22.4.9.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.9.2.4.2 Procedure

Expected Sequence 2.1 (SELECT ITEM, next action indicator, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND	
2	ME → SIM	PENDING: SELECT ITEM 2.1.1	
3	SIM → ME	FETCH	
4	ME → USER	PROACTIVE COMMAND: SELECT ITEM 2.1.1 Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". It presents also the following next action indicators: Send SM, Set Up Call, Provide Local Info.	
5	USER → ME	Navigate in the items, then select "Item 2". Check that next action indicators appear.	
6	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 2.1.1	Command performed successfully

PROACTIVE COMMAND : SELECT ITEM 2.1.1

Logically:

Command details

Command number: 1
Command type: SELECT ITEM
Command qualifier: "00"

Device identities

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

Item

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

Item

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

Item

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

Items next action indicator

Items list "Send SM", "Set Up Call", "Provide Local Info."

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>39</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>24</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>85</u>
	<u>0E</u>	<u>54</u>	<u>6F</u>	<u>6F</u>	<u>6C</u>	<u>6B</u>	<u>69</u>	<u>74</u>	<u>20</u>	<u>53</u>	<u>65</u>	<u>6C</u>
	<u>65</u>	<u>63</u>	<u>74</u>	<u>8F</u>	<u>07</u>	<u>01</u>	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>31</u>
	<u>8F</u>	<u>07</u>	<u>02</u>	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>32</u>	<u>8F</u>	<u>07</u>	<u>03</u>
	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>33</u>	<u>18</u>	<u>03</u>	<u>13</u>	<u>10</u>	<u>26</u>	

TERMINAL RESPONSE : SELECT ITEM 2.1.1Logically:Command details

<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SELECT ITEM</u>
<u>Command qualifier:</u>	<u>“00”</u>

Device identities

<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>

Result

<u>General Result:</u>	<u>Command performed successfully</u>
------------------------	---------------------------------------

Item identifier

<u>Identifier of item chosen:</u>	<u>02</u>
-----------------------------------	-----------

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>24</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>90</u>	<u>01</u>	<u>02</u>									

27.22.4.9.3 SELECT ITEM (default item support)27.22.4.9.3.1 Definition and applicability

See Section 3.2.2.

27.22.4.9.3.2 Conformance Requirement

Same as 27.22.4.9.1.2

27.22.4.9.3.3 Test Purpose

To verify that the mobile supports “default item” mode.

27.22.4.9.3.4 Method of Test27.22.4.9.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.9.3.4.2 ProcedureExpected Sequence 3.1 (SELECT ITEM, default item, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u>	
		<u>PENDING: SELECT ITEM 3.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u>	
		<u>SELECT ITEM 3.1.1</u>	
4	<u>ME → USER</u>	<u>Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select".</u>	<u>Check that "Item 2" is selected by default.</u>
5	<u>USER → ME</u>	<u>Navigate in the items, then select "Item 3".</u>	
6	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: SELECT ITEM 3.1.1</u>	<u>Command performed successfully</u>

PROACTIVE COMMAND : SELECT ITEM 3.1.1

Logically:

Command details

Command number: 1
Command type: SELECT ITEM
Command qualifier: "00"

Device identities

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

Item

Identifier of item: 01
Text string of item: "Item 1"

Item

Identifier of item: 02
Text string of item: "Item 2"

Item

Identifier of item: 03
Text string of item: "Item 3"

Item identifier

Identifier of item chosen 02

Coding:

BER-TLV: D0 37 81 03 01 24 00 82 02 81 82 85
 0E 54 6F 6F 6C 6B 69 74 20 53 65 6C
 65 63 74 8F 07 01 49 74 65 6D 20 31
 8F 07 02 49 74 65 6D 20 32 8F 07 03
 49 74 65 6D 20 33 90 01 02

TERMINAL RESPONSE : SELECT ITEM 3.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SELECT ITEM
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Item identifier</u>	
Identifier of item chosen:	03

Coding:

BER-TLV: 81 03 01 24 00 82 02 82 81 83 01 00
90 01 03

27.22.4.9.4 SELECT ITEM (help request support)27.22.4.9.4.1 Definition and applicability

See Section 3.2.2.

27.22.4.9.4.2 Conformance Requirement

Same as 27.22.4.9.1.2

27.22.4.9.4.3 Test Purpose

To verify that the mobile supports "help request" for the command Select Item.

27.22.4.9.4.4 Method of Test27.22.4.9.4.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.9.4.4.2 Procedure

Expected Sequence 4.1 (SELECT ITEM, help request, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 4.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 4.1.1	[Help information available]
4	ME → USER	Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select".	
5	USER → ME	Navigate in the items until "Item 1".	
6	USER → ME	Select the Help Request on "Item 1" Menu entry	
7	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 4.1.1	[Help information required by the user]

PROACTIVE COMMAND : SELECT ITEM 4.1.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "80" help information available

Device identities

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

Item

Identifier of item: 01
 Text string of item: "Item 1"

Item

Identifier of item: 02
 Text string of item: "Item 2"

Item

Identifier of item: 03
 Text string of item: "Item 3"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>34</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>24</u>	<u>80</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>85</u>
	<u>0E</u>	<u>54</u>	<u>6F</u>	<u>6F</u>	<u>6C</u>	<u>6B</u>	<u>69</u>	<u>74</u>	<u>20</u>	<u>53</u>	<u>65</u>	<u>6C</u>
	<u>65</u>	<u>63</u>	<u>74</u>	<u>8F</u>	<u>07</u>	<u>01</u>	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>31</u>
	<u>8F</u>	<u>07</u>	<u>02</u>	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>32</u>	<u>8F</u>	<u>07</u>	<u>03</u>
	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>33</u>						

TERMINAL RESPONSE : SELECT ITEM 4.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SELECT ITEM
Command qualifier:	"80"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Help information required by the user
<u>Item identifier</u>	
Identifier of item chosen:	01

Coding:

BER-TLV: 81 03 01 24 80 82 02 82 81 83 01 13
90 01 01

27.22.4.9.5 SELECT ITEM (icons support)27.22.4.9.5.1 Definition and applicabilitySee Section 3.2.2.27.22.4.9.5.2 Conformance RequirementSame as 27.22.4.9.1.2, and GSM 11.14 clause 12.31, and clause 12.32.27.22.4.9.5.3 Test PurposeTo verify that the mobile displays icons with the command Select Item.27.22.4.9.5.4 Method of Test27.22.4.9.5.4.1 Initial ConditionsThe ME is connected to the SIM Simulator.The elementary files are coded as Toolkit default.Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.5.4.2 Procedure

Expected Sequence 5.1A (SELECT ITEM, BASIC ICON NOT SELF EXPLANATORY, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SELECT ITEM 5.1.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>SELECT ITEM 5.1.1</u>	
<u>4</u>	<u>ME →</u> <u>USER</u>	<u>Display items of "Item 1", "Item 2"</u> <u>and "Item 3" under the header of</u> <u>"Toolkit Select".</u>	<u>Verify icons are displayed in the alpha</u> <u>identifier and in the 3 items.</u>
<u>5</u>	<u>USER →</u> <u>ME</u>	<u>Navigate in the items, then select</u> <u>"Item 1".</u>	
<u>6</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: SELECT</u> <u>ITEM 5.1.1 A</u>	<u>[command performed successfully]</u>

PROACTIVE COMMAND: SELECT ITEM 5.1.1

Logically:

Command details

Command number: 1
Command type: SELECT ITEM
Command qualifier: "00"

Device identities

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

Item

Identifier of item: 01
Text string of item: "Item 1"

Item

Identifier of item: 02
Text string of item: "Item 2"

Item

Identifier of item: 03
Text string of item: "Item 3"

Icon Identifier:

Icon qualifier: "01" (icon is not self-explanatory)
Icon Identifier: record 1 in EF_(IMG)

Item icon identifier list:

Icon qualifier: "01" (icon is not self-explanatory)
Icon Identifier: record 5 in EF_(IMG), record 5 in EF_(IMG), record 5 in EF_(IMG)

Coding:

BER-TLV: D0 3E 81 03 01 24 00 82 02 81 82 85
0E 54 6F 6F 6C 6B 69 74 20 53 65 6C
65 63 74 8F 07 01 49 74 65 6D 20 31
8F 07 02 49 74 65 6D 20 32 8F 07 03
49 74 65 6D 20 33 9E 02 01 01 9F 04
01 05 05 05

TERMINAL RESPONSE: SELECT ITEM 5.1.1A

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SELECT ITEM
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Item identifier</u>	
Identifier of item chosen:	01

Coding:

BER-TLV: 81 03 01 24 00 82 02 82 81 83 01 00
 90 01 01

Expected Sequence 5.1B (SELECT ITEM, BASIC ICON NOT SELF EXPLANATORY, requested icon could not be displayed)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 5.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 5.1.1	
4	ME → USER	Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select".	<u>no icon is displayed in the alpha identifier nor in the 3 items.</u>
5	USER → ME	Navigate in the items, then select "Item 1".	
6	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 5.1.1 B	<u>[Command performed successfully, but requested icon could not be displayed]</u>

TERMINAL RESPONSE : SELECT ITEM 5.1.1B

Logically:

Command details

Command number: 1
Command type: SELECT ITEM
Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

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

Item identifier

Identifier of item chosen: 01

Coding:

BER-TLV: 81 03 01 24 00 82 02 82 81 83 01 04
90 01 01

Expected Sequence 5.2A (SELECT ITEM, BASIC ICON SELF EXPLANATORY, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND	
2	ME → SIM	PENDING: SELECT ITEM 5.2.1	
3	SIM → ME	FETCH PROACTIVE COMMAND: SELECT ITEM 5.2.1	
4	ME → USER	Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select".	Verify icons are displayed without text as alpha id and for the all 3 items.
5	USER → ME	Navigate in the items, then select "Item 1".	
6	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 5.2.1 A	[command performed successfully]

PROACTIVE COMMAND : SELECT ITEM 5.2.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01

Text string of item: "Item 1"

Item

Identifier of item: 02

Text string of item: "Item 2"

Item

Identifier of item: 03

Text string of item: "Item 3"

Icon Identifier:

Icon qualifier: "00" (icon is self-explanatory)

Icon Identifier: record 1 in EF_(IMG)

Item icon identifier list:

Icon qualifier: "00" (icon is self-explanatory)

Icon Identifier: record 5 in EF_(IMG), record 5 in EF_(IMG), record 5 in EF_(IMG)

Coding:

BER-TLV:	D0	3E	81	03	01	24	00	82	02	81	82	85
	0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
	65	63	74	8F	07	01	49	74	65	6D	20	31
	8F	07	02	49	74	65	6D	20	32	8F	07	03
	49	74	65	6D	20	33	9E	02	00	01	9F	04
	00	05	05	05								

TERMINAL RESPONSE : SELECT ITEM 5.2.1ALogically:

<u>Command details</u>	
Command number:	<u>1</u>
Command type:	<u>SELECT ITEM</u>
Command qualifier:	<u>"00"</u>
<u>Device identities</u>	
Source device:	<u>ME</u>
Destination device:	<u>SIM</u>
<u>Result</u>	
General Result:	<u>Command performed successfully</u>
<u>Item identifier</u>	
Identifier of item chosen:	<u>01</u>

Coding:

BER-TLV: 81 03 01 24 00 82 02 82 81 83 01 00
90 01 01

Expected Sequence 5.2B (SELECT ITEM, BASIC ICON SELF EXPLANATORY, requested icon could not be displayed)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SELECT ITEM 5.2.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>SELECT ITEM 5.2.1</u>	
<u>4</u>	<u>ME →</u> <u>USER</u>	<u>Display items of "Item 1", "Item 2"</u> <u>and "Item 3" under the header of</u> <u>"Toolkit Select".</u>	<u>no icon is displayed with text as alpha id nor</u> <u>for the all 3 items.</u>
<u>5</u>	<u>USER →</u> <u>ME</u>	<u>Navigate in the items, then select</u> <u>"Item 1".</u>	
<u>6</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: SELECT</u> <u>ITEM 5.2.1B</u>	<u>[command performed successfully but</u> <u>requested icon could not be displayed]</u>

TERMINAL RESPONSE : SELECT ITEM 5.2.1BLogically:Command details

Command number:	1
Command type:	SELECT ITEM
Command qualifier:	"00"

Device identities

Source device:	ME
Destination device:	SIM

Result

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

Item identifier

Identifier of item chosen:	01
----------------------------	----

Coding:

BER-TLV:	<u>81</u>	<u>03</u>	<u>01</u>	<u>24</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>04</u>
	<u>90</u>	<u>01</u>	<u>01</u>									

27.22.4.9.6 SELECT ITEM (presentation style)27.22.4.9.6.1 Definition and applicabilitySee Section 3.2.2.27.22.4.9.6.2 Conformance RequirementSame as 27.22.4.9.1.2.27.22.4.9.6.3 Test PurposeTo verify that the mobile supports the "presentation style" with the command Select Item.27.22.4.9.6.4 Method of Test27.22.4.9.6.4.1 Initial ConditionsThe ME is connected to the SIM Simulator.The elementary files are coded as Toolkit default.Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.27.22.4.9.6.4.2 Procedure

Expected Sequence 6.1 (SELECT ITEM, PRESENTATION AS A CHOICE OF NAVIGATION OPTIONS, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 6.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 6.1.1	
4	ME → USER	Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select".	<u>Verify if presentation style appears.</u>
5	USER → ME	Navigate in the items, then select "Item 1".	
6	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 6.1.1	<u>[command performed successfully]</u>

PROACTIVE COMMAND : SELECT ITEM 6.1.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "03" (presentation as a choice of navigation options)

Device identities

Source device: SIM

Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01

Text string of item: "Item 1"

Item

Identifier of item: 02

Text string of item: "Item 2"

Item

Identifier of item: 03

Text string of item: "Item 3"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>34</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>24</u>	<u>03</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>85</u>
	<u>0E</u>	<u>54</u>	<u>6F</u>	<u>6F</u>	<u>6C</u>	<u>6B</u>	<u>69</u>	<u>74</u>	<u>20</u>	<u>53</u>	<u>65</u>	<u>6C</u>
	<u>65</u>	<u>63</u>	<u>74</u>	<u>8F</u>	<u>07</u>	<u>01</u>	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>31</u>
	<u>8F</u>	<u>07</u>	<u>02</u>	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>32</u>	<u>8F</u>	<u>07</u>	<u>03</u>
	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>33</u>						

TERMINAL RESPONSE : SELECT ITEM 6.1.1Logically:

<u>Command details</u>	
Command number:	<u>1</u>
Command type:	<u>SELECT ITEM</u>
Command qualifier:	<u>“03” (presentation as a choice of navigation options)</u>
<u>Device identities</u>	
Source device:	<u>ME</u>
Destination device:	<u>SIM</u>
<u>Result</u>	
General Result:	<u>Command performed successfully</u>
<u>Item identifier</u>	
Identifier of item chosen:	<u>01</u>

Coding:

BER-TLV: 81 03 01 24 03 82 02 82 81 83 01 00
90 01 01

Expected Sequence 6.2 (SELECT ITEM, PRESENTATION AS A CHOICE OF DATA VALUES, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND	
2	ME → SIM	PENDING: SELECT ITEM 6.2.1	
3	SIM → ME	FETCH	
4	ME → USER	PROACTIVE COMMAND: SELECT ITEM 6.2.1	Verify if presentation style appears
5	USER → ME	Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select".	
6	ME → SIM	Navigate in the items, then select "Item 1".	
		TERMINAL RESPONSE: SELECT ITEM 6.2.1	[command performed successfully]

PROACTIVE COMMAND: SELECT ITEM 6.2.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "01" (presentation as a choice of data values)

Device identities

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

Item

Identifier of item: 01
 Text string of item: "Item 1"

Item

Identifier of item: 02
 Text string of item: "Item 2"

Item

Identifier of item: 03
 Text string of item: "Item 3"

Coding:

BER-TLV:

D0	34	81	03	01	24	01	82	02	81	82	85
0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
65	63	74	8F	07	01	49	74	65	6D	20	31
8F	07	02	49	74	65	6D	20	32	8F	07	03
49	74	65	6D	20	33						

TERMINAL RESPONSE: SELECT ITEM 6.2.1Logically:

<u>Command details</u>	
Command number:	<u>1</u>
Command type:	<u>SELECT ITEM</u>
Command qualifier:	<u>“01”(presentation as a choice of data values)</u>
<u>Device identities</u>	
Source device:	<u>ME</u>
Destination device:	<u>SIM</u>
<u>Result</u>	
General Result:	<u>Command performed successfully</u>
<u>Item identifier</u>	
Identifier of item chosen:	<u>01</u>

Coding:

BER-TLV: 81 03 01 24 01 82 02 82 81 83 01 00
90 01 01

27.22.4.9.7 SELECT ITEM (soft keys support)27.22.4.9.7.1 Definition and applicabilitySee Section 3.2.2.27.22.4.9.7.2 Conformance RequirementSame as 27.22.4.9.1.2.27.22.4.9.7.3 Test PurposeTo verify that the mobile supports the “soft keys” with the command Select Item.27.22.4.9.7.4 Method of Test27.22.4.9.7.4.1 Initial ConditionsThe ME is connected to the SIM Simulator.The elementary files are coded as Toolkit default.Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.27.22.4.9.7.4.2 Procedure

Expected Sequence 7.1 (SELECT ITEM, SELECTING USING SOFT KEYS PREFERRED, successful, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 7.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 7.1.1	
4	ME → USER	Display items of "Item 1", "Item 2" under the header of "Toolkit Select".	
5	USER → ME	Navigate in the items, then select "Item 1".	Verify that we can choose an item through soft keys
6	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 7.1.1	[command performed successfully]

PROACTIVE COMMAND : SELECT ITEM 7.1.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "04" (selection using soft keys preferred)

Device identities

Source device: SIM

Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01

Text string of item: "Item 1"

Item

Identifier of item: 02

Text string of item: "Item 2"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>2B</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>24</u>	<u>04</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>85</u>
	<u>0E</u>	<u>54</u>	<u>6F</u>	<u>6F</u>	<u>6C</u>	<u>6B</u>	<u>69</u>	<u>74</u>	<u>20</u>	<u>53</u>	<u>65</u>	<u>6C</u>
	<u>65</u>	<u>63</u>	<u>74</u>	<u>8F</u>	<u>07</u>	<u>01</u>	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>31</u>
	<u>8F</u>	<u>07</u>	<u>02</u>	<u>49</u>	<u>74</u>	<u>65</u>	<u>6D</u>	<u>20</u>	<u>32</u>			

TERMINAL RESPONSE : SELECT ITEM 7.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SELECT ITEM
Command qualifier:	"04" (selection using soft keys preferred)
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Item identifier</u>	
Identifier of item chosen:	01

Coding:

BER-TLV: 81 03 01 24 04 82 02 82 81 83 01 00
 90 01 01

27.22.4.10 SEND SHORT MESSAGE**27.22.4.10.1 SEND SHORT MESSAGE (normal)**27.22.4.10.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.10.1.2 Conformance requirement

The ME shall support the Proactive SIM: SEND SHORT MESSAGE facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.10 (Send Short Message), clause 6.6.9 (Send Short Message), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpha Identifier), clause 12.1 (Address), clause 12.13 (SMS-TPDU), clause 12.31 (Icon Identifier), clause 5.2 (Terminal Profile)27.22.4.10.1.3 Test Purpose

To verify that the ME correctly formats and sends a short message to the network (System Simulator) as indicated in the SEND SHORT MESSAGE proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the Short Message.

27.22.4.10.1.4 Method of test27.22.4.10.1.4.1 Initial Conditions

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

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

27.22.4.10.1.4.2 ProcedureExpected Sequence 1.1(SEND SHORT MESSAGE, packing not required, 8-bit data, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND SHORT MESSAGE 1.1.1</u>	<u>[packing not required, 8-bit data]</u>
4	<u>ME → USER</u>	<u>Display "Send SM"</u>	<u>[Alpha Identifier]</u>
5	<u>ME → SS</u>	<u>Send SMS-PP "Test Message"</u>	
6	<u>SS → ME</u>	<u>SMS RP-ACK</u>	
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND SHORT MESSAGE 1.1.1</u>	<u>[Command performed successfully]</u>

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND SHORT MESSAGE
Command qualifier:	packing not required
<u>Device identities</u>	
Source device:	SIM
Destination device:	Network
Alpha identifier:	"Send SM"
<u>Address</u>	
TON:	International number
NPI:	"ISDN / telephone numbering plan"
Dialling number string	"112233445566778"
<u>SMS TPDU</u>	
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"
<u>TP-DA</u>	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345678"
TP-PID	Short message type 0
<u>TP-DCS</u>	
Message coding	8-bit data
Message class	class 0
TP-UDL	12
TP-UD	"Test Message"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>37</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>13</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>07</u>	<u>53</u>	<u>65</u>	<u>6E</u>	<u>64</u>	<u>20</u>	<u>53</u>	<u>4D</u>	<u>86</u>	<u>09</u>	<u>91</u>	<u>11</u>
	<u>22</u>	<u>33</u>	<u>44</u>	<u>55</u>	<u>66</u>	<u>77</u>	<u>F8</u>	<u>8B</u>	<u>18</u>	<u>01</u>	<u>00</u>	<u>09</u>
	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>F8</u>	<u>40</u>	<u>F4</u>	<u>0C</u>	<u>54</u>	<u>65</u>	<u>73</u>
	<u>74</u>	<u>20</u>	<u>4D</u>	<u>65</u>	<u>73</u>	<u>73</u>	<u>61</u>	<u>67</u>	<u>65</u>			

SMS-PP (SEND SHORT MESSAGE) Message 1.1Logically:

<u>SMS TPDU</u>	
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"
<u>TP-DA</u>	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345678"
TP-PID	Short message type 0
<u>TP-DCS</u>	
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

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.1.1

Logically:

Command details

Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 00

Expected Sequence 1.2 (SEND SHORT MESSAGE, packing required, 8-bit data, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 1.2.1	[packing required, 8-bit data]
4	ME → USER	Display "Send SM"	[Alpha Identifier]
5	ME → SS	Send SMS-PP "Send SM"	
6	SS → ME	SMS RP-ACK	
7	ME → SIM	TERMINAL RESPONSE : SEND SHORT MESSAGE 1.2.1	[Command performed successfully]

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.2.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing required

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier: "Send SM"

Address

TON: International number
 NPI: "ISDN / telephone numbering plan"
 Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT
 TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
 TP-VPF TP-VP field not present
 TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
 TP-UDHI The TP-UD field contains only the short message
 TP-SRR A status report is not requested
 TP-MR "00"

TP-DA

TON International number
 NPI "ISDN / telephone numbering plan"
 Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data
 Message class class 0

TP-UDL 7
 TP-UD "Send SM"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>32</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>13</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>07</u>	<u>53</u>	<u>65</u>	<u>6E</u>	<u>64</u>	<u>20</u>	<u>53</u>	<u>4D</u>	<u>86</u>	<u>09</u>	<u>91</u>	<u>11</u>
	<u>22</u>	<u>33</u>	<u>44</u>	<u>55</u>	<u>66</u>	<u>77</u>	<u>F8</u>	<u>8B</u>	<u>13</u>	<u>01</u>	<u>00</u>	<u>09</u>
	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>F8</u>	<u>40</u>	<u>F4</u>	<u>07</u>	<u>53</u>	<u>65</u>	<u>6E</u>
	<u>64</u>	<u>20</u>	<u>53</u>	<u>4D</u>								

SMS-PP (SEND SHORT MESSAGE) Message 1.2

Logically:

<u>SMS TPDU</u>	
<u>TP-MTI</u>	<u>SMS-SUBMIT</u>
<u>TP-RD</u>	<u>Instruct the SC to accept an SMS-SUBMIT for a SM</u>
<u>TP-VPF</u>	<u>TP-VP field not present</u>
<u>TP-RP</u>	<u>TP-Reply-Path is not set in this SMS-SUBMIT</u>
<u>TP-UDHI</u>	<u>The TP-UD field contains only the short message</u>
<u>TP-SRR</u>	<u>A status report is not requested</u>
<u>TP-MR</u>	<u>"00"</u>
<u>TP-DA</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Address value</u>	<u>"012345678"</u>
<u>TP-PID</u>	<u>Short message type 0</u>
<u>TP-DCS</u>	
<u>Message coding</u>	<u>SMS default alphabet</u>
<u>Message class</u>	<u>class 0</u>
<u>TP-UDL</u>	<u>7</u>
<u>TP-UD</u>	<u>"Send SM"</u>

Coding: 01 00 09 91 10 32 54 76 F8 40 F4 07
 D3 B2 9B 0C 9A 36 01

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.2.1

Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SEND SHORT MESSAGE</u>
<u>Command qualifier:</u>	<u>packing required</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>

Coding:

BER-TLV: 81 03 01 13 01 82 02 82 81 83 01 00

Expected Sequence 1.3 (SEND SHORT MESSAGE, packing not required, SMS default alphabet, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 1.3.1	[packing not required, SMS default alphabet]
4	ME → USER	Display "Short Message"	[Alpha Identifier]
5	ME → SS	Send SMS-PP "Short Message"	
6	SS → ME	SMS RP-ACK	
7	ME → SIM	TERMINAL RESPONSE : SEND SHORT MESSAGE 1.3.1	[Command performed successfully]

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.3.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing not required

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier: "Short Message"

Address

TON: International number
 NPI: "ISDN / telephone numbering plan"
 Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT
 TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
 TP-VPF TP-VP field not present
 TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
 TP-UDHI The TP-UD field contains only the short message
 TP-SRR A status report is not requested
 TP-MR "00"

TP-DA

TON International number
 NPI "ISDN / telephone numbering plan"
 Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding SMS default alphabet
 Message class class 0

TP-UDL 13
 TP-UD "Short Message"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>3D</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>13</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>0D</u>	<u>53</u>	<u>68</u>	<u>6F</u>	<u>72</u>	<u>74</u>	<u>20</u>	<u>4D</u>	<u>65</u>	<u>73</u>	<u>73</u>	<u>61</u>
	<u>67</u>	<u>65</u>	<u>86</u>	<u>09</u>	<u>91</u>	<u>11</u>	<u>22</u>	<u>33</u>	<u>44</u>	<u>55</u>	<u>66</u>	<u>77</u>
	<u>F8</u>	<u>8B</u>	<u>18</u>	<u>01</u>	<u>00</u>	<u>09</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>F8</u>
	<u>40</u>	<u>F0</u>	<u>0D</u>	<u>53</u>	<u>F4</u>	<u>5B</u>	<u>4E</u>	<u>07</u>	<u>35</u>	<u>CB</u>	<u>F3</u>	<u>79</u>
	<u>F8</u>	<u>5C</u>	<u>06</u>									

SMS-PP (SEND SHORT MESSAGE) Message 1.3

Logically:

<u>SMS TPDU</u>	
<u>TP-MTI</u>	<u>SMS-SUBMIT</u>
<u>TP-RD</u>	<u>Instruct the SC to accept an SMS-SUBMIT for a SM</u>
<u>TP-VPF</u>	<u>TP-VP field not present</u>
<u>TP-RP</u>	<u>TP-Reply-Path is not set in this SMS-SUBMIT</u>
<u>TP-UDHI</u>	<u>The TP-UD field contains only the short message</u>
<u>TP-SRR</u>	<u>A status report is not requested</u>
<u>TP-MR</u>	<u>"00"</u>
<u>TP-DA</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Address value</u>	<u>"012345678"</u>
<u>TP-PID</u>	<u>Short message type 0</u>
<u>TP-DCS</u>	
<u>Message coding</u>	<u>SMS default alphabet</u>
<u>Message class</u>	<u>class 0</u>
<u>TP-UDL</u>	<u>13</u>
<u>TP-UD</u>	<u>"Short Message"</u>

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

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.3.1

Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SEND SHORT MESSAGE</u>
<u>Command qualifier:</u>	<u>packing not required</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>

Coding:

BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 00

Expected Sequence 1.4 (SEND SHORT MESSAGE, packing required, SMS default alphabet, message of 160 bytes, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND SHORT</u> <u>MESSAGE 1.4.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>SHORT MESSAGE 1.4.1</u>	<u>[packing required, SMS default alphabet]</u>
4	<u>ME →</u> <u>USER</u>	<u>Display " The address data object</u> <u>holds the</u> <u>RP_Destination_Address "</u>	<u>[Alpha Identifier]</u>
5	<u>ME → SS</u>	<u>Send SMS-PP "Two types are</u> <u>defined: - A short message to be</u> <u>sent to the network in an SMS-</u> <u>SUBMIT message, or an SMS-</u> <u>COMMAND message, where the</u> <u>user data can be passed transp"</u>	<u>[message of 160 bytes]</u>
6	<u>SS → ME</u>	<u>SMS RP-ACK</u>	
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>SHORT MESSAGE 1.4.1</u>	<u>[Command performed successfully]</u>

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.4.1

Logically:

Command details

Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing required

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "The address data object holds the RP_Destination_Address"

Address

TON: International number
NPI: "ISDN / telephone numbering plan"
Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT
TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF TP-VP field not present
TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI The TP-UD field contains only the short message
TP-SRR A status report is not requested
TP-MR "00"

TP-DA

TON International number
NPI "ISDN / telephone numbering plan"
Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 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 FD 81 03 01 13 00 82 02 81 83
85 38 54 68 65 20 61 64 64 72 65 73

<u>73</u>	<u>20</u>	<u>64</u>	<u>61</u>	<u>74</u>	<u>61</u>	<u>20</u>	<u>6F</u>	<u>62</u>	<u>6A</u>	<u>65</u>	<u>63</u>
<u>74</u>	<u>20</u>	<u>68</u>	<u>6F</u>	<u>6C</u>	<u>64</u>	<u>73</u>	<u>20</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>20</u>
<u>52</u>	<u>50</u>	<u>11</u>	<u>44</u>	<u>65</u>	<u>73</u>	<u>74</u>	<u>69</u>	<u>6E</u>	<u>61</u>	<u>74</u>	<u>69</u>
<u>6F</u>	<u>6E</u>	<u>11</u>	<u>41</u>	<u>64</u>	<u>64</u>	<u>72</u>	<u>65</u>	<u>73</u>	<u>73</u>	<u>86</u>	<u>09</u>
<u>91</u>	<u>11</u>	<u>22</u>	<u>33</u>	<u>44</u>	<u>55</u>	<u>66</u>	<u>77</u>	<u>F8</u>	<u>8B</u>	<u>81</u>	<u>AC</u>
<u>01</u>	<u>00</u>	<u>09</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>F8</u>	<u>40</u>	<u>F4</u>	<u>A0</u>
<u>54</u>	<u>77</u>	<u>6F</u>	<u>20</u>	<u>74</u>	<u>79</u>	<u>70</u>	<u>65</u>	<u>73</u>	<u>20</u>	<u>61</u>	<u>72</u>
<u>65</u>	<u>20</u>	<u>64</u>	<u>65</u>	<u>66</u>	<u>69</u>	<u>6E</u>	<u>65</u>	<u>64</u>	<u>3A</u>	<u>20</u>	<u>2D</u>
<u>20</u>	<u>41</u>	<u>20</u>	<u>73</u>	<u>68</u>	<u>6F</u>	<u>72</u>	<u>74</u>	<u>20</u>	<u>6D</u>	<u>65</u>	<u>73</u>
<u>73</u>	<u>61</u>	<u>67</u>	<u>65</u>	<u>20</u>	<u>74</u>	<u>6F</u>	<u>20</u>	<u>62</u>	<u>65</u>	<u>20</u>	<u>73</u>
<u>65</u>	<u>6E</u>	<u>74</u>	<u>20</u>	<u>74</u>	<u>6F</u>	<u>20</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>20</u>	<u>6E</u>
<u>65</u>	<u>74</u>	<u>77</u>	<u>6F</u>	<u>72</u>	<u>6B</u>	<u>20</u>	<u>69</u>	<u>6E</u>	<u>20</u>	<u>61</u>	<u>6E</u>
<u>20</u>	<u>53</u>	<u>4D</u>	<u>53</u>	<u>2D</u>	<u>53</u>	<u>55</u>	<u>42</u>	<u>4D</u>	<u>49</u>	<u>54</u>	<u>20</u>
<u>6D</u>	<u>65</u>	<u>73</u>	<u>73</u>	<u>61</u>	<u>67</u>	<u>65</u>	<u>2C</u>	<u>20</u>	<u>6F</u>	<u>72</u>	<u>20</u>
<u>61</u>	<u>6E</u>	<u>20</u>	<u>53</u>	<u>4D</u>	<u>53</u>	<u>2D</u>	<u>43</u>	<u>4F</u>	<u>4D</u>	<u>4D</u>	<u>41</u>
<u>4E</u>	<u>44</u>	<u>20</u>	<u>6D</u>	<u>65</u>	<u>73</u>	<u>73</u>	<u>61</u>	<u>67</u>	<u>65</u>	<u>2C</u>	<u>20</u>
<u>77</u>	<u>68</u>	<u>65</u>	<u>72</u>	<u>65</u>	<u>20</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>20</u>	<u>75</u>	<u>73</u>
<u>65</u>	<u>72</u>	<u>20</u>	<u>64</u>	<u>61</u>	<u>74</u>	<u>61</u>	<u>20</u>	<u>63</u>	<u>61</u>	<u>6E</u>	<u>20</u>
<u>62</u>	<u>65</u>	<u>20</u>	<u>70</u>	<u>61</u>	<u>73</u>	<u>73</u>	<u>65</u>	<u>64</u>	<u>20</u>	<u>74</u>	<u>72</u>
<u>61</u>	<u>6E</u>	<u>73</u>	<u>70</u>								

SMS-PP (SEND SHORT MESSAGE) Message 1.4

Logically:

<u>SMS TPDU</u>	
<u>TP-MTI</u>	<u>SMS-SUBMIT</u>
<u>TP-RD</u>	<u>Instruct the SC to accept an SMS-SUBMIT for a SM</u>
<u>TP-VPF</u>	<u>TP-VP field not present</u>
<u>TP-RP</u>	<u>TP-Reply-Path is not set in this SMS-SUBMIT</u>
<u>TP-UDHI</u>	<u>The TP-UD field contains only the short message</u>
<u>TP-SRR</u>	<u>A status report is not requested</u>
<u>TP-MR</u>	<u>"00"</u>
<u>TP-DA</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Address value</u>	<u>"012345678"</u>
<u>TP-PID</u>	<u>Short message type 0</u>
<u>TP-DCS</u>	
<u>Message coding</u>	<u>SMS default alphabet</u>
<u>Message class</u>	<u>class 0</u>
<u>TP-UDL</u>	<u>160</u>
<u>TP-UD</u>	<u>"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"</u>

Coding:

<u>BER-TLV:</u>	<u>98</u>	<u>01</u>	<u>00</u>	<u>09</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>F8</u>	<u>40</u>	<u>F0</u>
	<u>A0</u>	<u>D4</u>	<u>FB</u>	<u>1B</u>	<u>44</u>	<u>CF</u>	<u>C3</u>	<u>CB</u>	<u>73</u>	<u>50</u>	<u>58</u>	<u>5E</u>
	<u>06</u>	<u>91</u>	<u>CB</u>	<u>E6</u>	<u>B4</u>	<u>BB</u>	<u>4C</u>	<u>D6</u>	<u>81</u>	<u>5A</u>	<u>A0</u>	<u>20</u>
	<u>68</u>	<u>8E</u>	<u>7E</u>	<u>CB</u>	<u>E9</u>	<u>A0</u>	<u>76</u>	<u>79</u>	<u>3E</u>	<u>0F</u>	<u>9F</u>	<u>CB</u>
	<u>20</u>	<u>FA</u>	<u>1B</u>	<u>24</u>	<u>2E</u>	<u>83</u>	<u>E6</u>	<u>65</u>	<u>37</u>	<u>1D</u>	<u>44</u>	<u>7F</u>
	<u>83</u>	<u>E8</u>	<u>E8</u>	<u>32</u>	<u>C8</u>	<u>5D</u>	<u>A6</u>	<u>DF</u>	<u>DF</u>	<u>F2</u>	<u>35</u>	<u>28</u>
	<u>ED</u>	<u>06</u>	<u>85</u>	<u>DD</u>	<u>A0</u>	<u>69</u>	<u>73</u>	<u>DA</u>	<u>9A</u>	<u>56</u>	<u>85</u>	<u>CD</u>
	<u>24</u>	<u>15</u>	<u>D4</u>	<u>2E</u>	<u>CF</u>	<u>E7</u>	<u>E1</u>	<u>73</u>	<u>99</u>	<u>05</u>	<u>7A</u>	<u>CB</u>
	<u>41</u>	<u>61</u>	<u>37</u>	<u>68</u>	<u>DA</u>	<u>9C</u>	<u>B6</u>	<u>86</u>	<u>CF</u>	<u>66</u>	<u>33</u>	<u>E8</u>
	<u>24</u>	<u>82</u>	<u>DA</u>	<u>E5</u>	<u>F9</u>	<u>3C</u>	<u>7C</u>	<u>2E</u>	<u>B3</u>	<u>40</u>	<u>77</u>	<u>74</u>
	<u>59</u>	<u>5E</u>	<u>06</u>	<u>D1</u>	<u>D1</u>	<u>65</u>	<u>50</u>	<u>7D</u>	<u>5E</u>	<u>96</u>	<u>83</u>	<u>C8</u>
	<u>61</u>	<u>7A</u>	<u>18</u>	<u>34</u>	<u>0E</u>	<u>BB</u>	<u>41</u>	<u>E2</u>	<u>32</u>	<u>08</u>	<u>1E</u>	<u>9E</u>
	<u>CF</u>	<u>CB</u>	<u>64</u>	<u>10</u>	<u>5D</u>	<u>1E</u>	<u>76</u>	<u>CF</u>	<u>E1</u>			

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.4.1Logically:Command detailsCommand number: 1Command type: SEND SHORT MESSAGECommand qualifier: packing not requiredDevice identitiesSource device: MEDestination device: SIMResultGeneral Result: Command performed successfullyCoding:BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 00

Expected Sequence 1.5 (SEND SHORT MESSAGE, packing not required, SMS default alphabet, message of 160 bytes, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.5.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 1.5.1	[packing not required, SMS default alphabet]
4	ME → USER	Display " The address data object holds the RP_Destination_Address "	[Alpha Identifier]
5	ME → SS	Send SMS-PP "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"	[message of 160 bytes]
6	SS → ME	SMS RP-ACK	
7	ME → SIM	TERMINAL RESPONSE : SEND SHORT MESSAGE 1.5.1	[Command performed successfully]

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.5.1

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE

Command qualifier: packing not required

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "The address data object holds the RP Destination Address"

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT

TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding SMS default alphabet

Message class class 0

TP-UDL 160

TP-UD

"Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transp"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>81</u>	<u>E9</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>13</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>
	<u>85</u>	<u>38</u>	<u>54</u>	<u>68</u>	<u>65</u>	<u>20</u>	<u>61</u>	<u>64</u>	<u>64</u>	<u>72</u>	<u>65</u>	<u>73</u>
	<u>73</u>	<u>20</u>	<u>64</u>	<u>61</u>	<u>74</u>	<u>61</u>	<u>20</u>	<u>6F</u>	<u>62</u>	<u>6A</u>	<u>65</u>	<u>63</u>
	<u>74</u>	<u>20</u>	<u>68</u>	<u>6F</u>	<u>6C</u>	<u>64</u>	<u>73</u>	<u>20</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>20</u>
	<u>52</u>	<u>50</u>	<u>20</u>	<u>44</u>	<u>65</u>	<u>73</u>	<u>74</u>	<u>69</u>	<u>6E</u>	<u>61</u>	<u>74</u>	<u>69</u>
	<u>6F</u>	<u>6E</u>	<u>20</u>	<u>41</u>	<u>64</u>	<u>64</u>	<u>72</u>	<u>65</u>	<u>73</u>	<u>73</u>	<u>86</u>	<u>09</u>
	<u>91</u>	<u>11</u>	<u>22</u>	<u>33</u>	<u>44</u>	<u>55</u>	<u>66</u>	<u>77</u>	<u>F8</u>	<u>8B</u>	<u>81</u>	<u>98</u>
	<u>01</u>	<u>00</u>	<u>09</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>F8</u>	<u>40</u>	<u>F0</u>	<u>A0</u>
	<u>D4</u>	<u>FB</u>	<u>1B</u>	<u>44</u>	<u>CF</u>	<u>C3</u>	<u>CB</u>	<u>73</u>	<u>50</u>	<u>58</u>	<u>5E</u>	<u>06</u>
	<u>91</u>	<u>CB</u>	<u>E6</u>	<u>B4</u>	<u>BB</u>	<u>4C</u>	<u>D6</u>	<u>81</u>	<u>5A</u>	<u>A0</u>	<u>20</u>	<u>68</u>
	<u>8E</u>	<u>7E</u>	<u>CB</u>	<u>E9</u>	<u>A0</u>	<u>76</u>	<u>79</u>	<u>3E</u>	<u>0F</u>	<u>9F</u>	<u>CB</u>	<u>20</u>
	<u>FA</u>	<u>1B</u>	<u>24</u>	<u>2E</u>	<u>83</u>	<u>E6</u>	<u>65</u>	<u>37</u>	<u>1D</u>	<u>44</u>	<u>7F</u>	<u>83</u>
	<u>E8</u>	<u>E8</u>	<u>32</u>	<u>C8</u>	<u>5D</u>	<u>A6</u>	<u>DF</u>	<u>DF</u>	<u>F2</u>	<u>35</u>	<u>28</u>	<u>ED</u>
	<u>06</u>	<u>85</u>	<u>DD</u>	<u>A0</u>	<u>69</u>	<u>73</u>	<u>DA</u>	<u>9A</u>	<u>56</u>	<u>85</u>	<u>CD</u>	<u>24</u>
	<u>15</u>	<u>D4</u>	<u>2E</u>	<u>CF</u>	<u>E7</u>	<u>E1</u>	<u>73</u>	<u>99</u>	<u>05</u>	<u>7A</u>	<u>CB</u>	<u>41</u>
	<u>61</u>	<u>37</u>	<u>68</u>	<u>DA</u>	<u>9C</u>	<u>B6</u>	<u>86</u>	<u>CF</u>	<u>66</u>	<u>33</u>	<u>E8</u>	<u>24</u>
	<u>82</u>	<u>DA</u>	<u>E5</u>	<u>F9</u>	<u>3C</u>	<u>7C</u>	<u>2E</u>	<u>B3</u>	<u>40</u>	<u>77</u>	<u>74</u>	<u>59</u>
	<u>5E</u>	<u>06</u>	<u>D1</u>	<u>D1</u>	<u>65</u>	<u>50</u>	<u>7D</u>	<u>5E</u>	<u>96</u>	<u>83</u>	<u>C8</u>	<u>61</u>
	<u>7A</u>	<u>18</u>	<u>34</u>	<u>0E</u>	<u>BB</u>	<u>41</u>	<u>E2</u>	<u>32</u>	<u>08</u>	<u>1E</u>	<u>9E</u>	<u>CF</u>
	<u>CB</u>	<u>64</u>	<u>10</u>	<u>5D</u>	<u>1E</u>	<u>76</u>	<u>CF</u>	<u>E1</u>				

SMS-PP (SEND SHORT MESSAGE) Message 1.5

Logically:

<u>SMS TPDU</u>	
<u>TP-MTI</u>	<u>SMS-SUBMIT</u>
<u>TP-RD</u>	<u>Instruct the SC to accept an SMS-SUBMIT for a SM</u>
<u>TP-VPF</u>	<u>TP-VP field not present</u>
<u>TP-RP</u>	<u>TP-Reply-Path is not set in this SMS-SUBMIT</u>
<u>TP-UDHI</u>	<u>The TP-UD field contains only the short message</u>
<u>TP-SRR</u>	<u>A status report is not requested</u>
<u>TP-MR</u>	<u>"00"</u>
<u>TP-DA</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Address value</u>	<u>"012345678"</u>
<u>TP-PID</u>	<u>Short message type 0</u>
<u>TP-DCS</u>	
<u>Message coding</u>	<u>SMS default alphabet</u>
<u>Message class</u>	<u>class 0</u>
<u>TP-UDL</u>	<u>160</u>
<u>TP-UD</u>	<u>"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"</u>

<u>Coding:</u>	<u>01</u>	<u>00</u>	<u>09</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>F8</u>	<u>40</u>	<u>F0</u>	<u>A0</u>
	<u>D4</u>	<u>FB</u>	<u>1B</u>	<u>44</u>	<u>CF</u>	<u>C3</u>	<u>CB</u>	<u>73</u>	<u>50</u>	<u>58</u>	<u>5E</u>	<u>06</u>
	<u>91</u>	<u>CB</u>	<u>E6</u>	<u>B4</u>	<u>BB</u>	<u>4C</u>	<u>D6</u>	<u>81</u>	<u>5A</u>	<u>A0</u>	<u>20</u>	<u>68</u>
	<u>8E</u>	<u>7E</u>	<u>CB</u>	<u>E9</u>	<u>A0</u>	<u>76</u>	<u>79</u>	<u>3E</u>	<u>0F</u>	<u>9F</u>	<u>CB</u>	<u>20</u>
	<u>FA</u>	<u>1B</u>	<u>24</u>	<u>2E</u>	<u>83</u>	<u>E6</u>	<u>65</u>	<u>37</u>	<u>1D</u>	<u>44</u>	<u>7F</u>	<u>83</u>
	<u>E8</u>	<u>E8</u>	<u>32</u>	<u>C8</u>	<u>5D</u>	<u>A6</u>	<u>DF</u>	<u>DF</u>	<u>F2</u>	<u>35</u>	<u>28</u>	<u>ED</u>
	<u>06</u>	<u>85</u>	<u>DD</u>	<u>A0</u>	<u>69</u>	<u>73</u>	<u>DA</u>	<u>9A</u>	<u>56</u>	<u>85</u>	<u>CD</u>	<u>24</u>
	<u>15</u>	<u>D4</u>	<u>2E</u>	<u>CF</u>	<u>E7</u>	<u>E1</u>	<u>73</u>	<u>99</u>	<u>05</u>	<u>7A</u>	<u>CB</u>	<u>41</u>
	<u>61</u>	<u>37</u>	<u>68</u>	<u>DA</u>	<u>9C</u>	<u>B6</u>	<u>86</u>	<u>CF</u>	<u>66</u>	<u>33</u>	<u>E8</u>	<u>24</u>
	<u>82</u>	<u>DA</u>	<u>E5</u>	<u>F9</u>	<u>3C</u>	<u>7C</u>	<u>2E</u>	<u>B3</u>	<u>40</u>	<u>77</u>	<u>74</u>	<u>59</u>
	<u>5E</u>	<u>06</u>	<u>D1</u>	<u>D1</u>	<u>65</u>	<u>50</u>	<u>7D</u>	<u>5E</u>	<u>96</u>	<u>83</u>	<u>C8</u>	<u>61</u>
	<u>7A</u>	<u>18</u>	<u>34</u>	<u>0E</u>	<u>BB</u>	<u>41</u>	<u>E2</u>	<u>32</u>	<u>08</u>	<u>1E</u>	<u>9E</u>	<u>CF</u>
	<u>CB</u>	<u>64</u>	<u>10</u>	<u>5D</u>	<u>1E</u>	<u>76</u>	<u>CF</u>	<u>E1</u>				

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.5.1

Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SEND SHORT MESSAGE</u>
<u>Command qualifier:</u>	<u>packing not required</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>13</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Expected Sequence 1.6 (SEND SHORT MESSAGE, alpha identifier 160 bytes long, SMS default alphabet, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.6.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 1.6.1	[packing not required, SMS default alphabet]
4	ME → USER	Display "Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transparently; - A short message to be sent to the network in an SMS-SUBMIT "	[Alpha Identifier of 160 bytes]
5	ME → SS	Send SMS-PP " "	[space]
6	SS → ME	SMS RP-ACK	
7	ME → SIM	TERMINAL RESPONSE : SEND SHORT MESSAGE 1.6.1	[Command performed successfully]

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.6.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing not required

Device identities

Source device: SIM
 Destination device: Network

Alpha identifier: "Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transparently; - A short message to be sent to the network in an SMS-SUBMIT "

SMS TPDU

TP-MTI SMS-SUBMIT
 TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
 TP-VPF TP-VP field not present
 TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
 TP-UDHI The TP-UD field contains only the short message
 TP-SRR A status report is not requested
 TP-MR "00"
 TP-DA
 TON International number
 NPI "ISDN / telephone numbering plan"
 Address value "01"
 TP-PID Short message type 0
 TP-DCS
 Message coding SMS default alphabet
 Message class class 0
 TP-UDL 1
 TP-UD " "

Coding:

BER-TLV:	D0	81	FD	81	03	01	13	00	82	02	81	83
	85	81	E6	54	77	6F	20	74	79	70	65	73
	20	61	72	65	20	64	65	66	69	6E	65	64

3A	20	2D	20	41	20	73	68	6F	72	74	20
6D	65	73	73	61	67	65	20	74	6F	20	62
65	20	73	65	6E	74	20	74	6F	20	74	68
65	20	6E	65	74	77	6F	72	6B	20	69	6E
20	61	6E	20	53	4D	53	2D	53	55	42	4D
49	54	20	6D	65	73	73	61	67	65	2C	20
6F	72	20	61	6E	20	53	4D	53	2D	43	4F
4D	4D	41	4E	44	20	6D	65	73	73	61	67
65	2C	20	77	68	65	72	65	20	74	68	65
20	75	73	65	72	20	64	61	74	61	20	63
61	6E	20	62	65	20	70	61	73	73	65	64
20	74	72	61	6E	73	70	61	72	65	6E	74
6C	79	3B	20	2D	20	41	20	73	68	6F	72
74	20	6D	65	73	73	61	67	65	20	74	6F
20	62	65	20	73	65	6E	74	20	74	6F	20
74	68	65	20	6E	65	74	77	6F	72	6B	20
69	6E	20	61	6E	20	53	4D	53	2D	53	55
42	4D	49	54	20	8B	09	01	00	09	91	10
40	F0	01	20								

SMS-PP (SEND SHORT MESSAGE) Message 1.6

Logically:

<u>SMS TPDU</u>	
<u>TP-MTI</u>	<u>SMS-SUBMIT</u>
<u>TP-RD</u>	<u>Instruct the SC to accept an SMS-SUBMIT for a SM</u>
<u>TP-VPF</u>	<u>TP-VP field not present</u>
<u>TP-RP</u>	<u>TP-Reply-Path is not set in this SMS-SUBMIT</u>
<u>TP-UDHI</u>	<u>The TP-UD field contains only the short message</u>
<u>TP-SRR</u>	<u>A status report is not requested</u>
<u>TP-MR</u>	<u>"00"</u>
<u>TP-DA</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Address value</u>	<u>"01"</u>
<u>TP-PID</u>	<u>Short message type 0</u>
<u>TP-DCS</u>	
<u>Message coding</u>	<u>SMS default alphabet</u>
<u>Message class</u>	<u>class 0</u>
<u>TP-UDL</u>	<u>1</u>
<u>TP-UD</u>	<u>" "</u>

Coding: 01 00 09 91 10 40 F0 01 20

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.6.1

Logically:

Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 00

Expected Sequence 1.7(SEND SHORT MESSAGE, alpha identifier length '00', packing not required, 8-bit data, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.7.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 1.7.1	[packing not required, 8-bit data]
4	ME	No information to user	[Alpha identifier length '00']
5	ME → SS	Send SMS-PP "Test Message"	
6	SS → ME	SMS RP-ACK	
7	ME → SIM	TERMINAL RESPONSE : SEND SHORT MESSAGE 1.7.1	[Command performed successfully]

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.7.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND SHORT MESSAGE
Command qualifier:	packing not required
<u>Device identities</u>	
Source device:	SIM
Destination device:	Network
<u>Alpha identifier:</u>	
<u>Address</u>	
TON:	International number
NPI:	"ISDN / telephone numbering plan"
Dialling number string	"112233445566778"
<u>SMS TPDU</u>	
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"
<u>TP-DA</u>	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345678"
TP-PID	Short message type 0
<u>TP-DCS</u>	
Message coding	8-bit data
Message class	class 0
TP-UDL	12
TP-UD	"Test Message"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>37</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>13</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>00</u>	<u>86</u>	<u>09</u>	<u>91</u>	<u>11</u>	<u>22</u>	<u>33</u>	<u>44</u>	<u>55</u>	<u>66</u>	<u>77</u>	<u>F8</u>
	<u>8B</u>	<u>18</u>	<u>01</u>	<u>00</u>	<u>09</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>F8</u>	<u>40</u>
	<u>F4</u>	<u>0C</u>	<u>54</u>	<u>65</u>	<u>73</u>	<u>74</u>	<u>20</u>	<u>4D</u>	<u>65</u>	<u>73</u>	<u>73</u>	<u>61</u>
	<u>67</u>	<u>65</u>										

SMS-PP (SEND SHORT MESSAGE) Message 1.7Logically:

<u>SMS TPDU</u>	
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"
<u>TP-DA</u>	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345678"
TP-PID	Short message type 0
<u>TP-DCS</u>	
Message coding	8-bit data
Message class	class 0

TP-UDL	12											
TP-UD	"Test Message"											
Coding:	<u>01</u>	<u>00</u>	<u>09</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>F8</u>	<u>40</u>	<u>F4</u>	<u>0C</u>
	<u>54</u>	<u>65</u>	<u>73</u>	<u>74</u>	<u>20</u>	<u>4D</u>	<u>65</u>	<u>73</u>	<u>73</u>	<u>61</u>	<u>67</u>	<u>65</u>

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.7.1

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE

Command qualifier: packing not required

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 00

Expected Sequence 1.8 (SEND SHORT MESSAGE, packing not required, 8-bit data, no alpha identifier, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.8.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 1.8.1	[packing not required, 8-bit data]
4	ME → USER	May give information to user concerning what is happening	[No Alpha Identifier]
5	ME → SS	Send SMS-PP "Test Message"	
6	SS → ME	SMS RP-ACK	
7	ME → SIM	TERMINAL RESPONSE : SEND SHORT MESSAGE 1.8.1	[Command performed successfully]

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.8.1Logically:Command details

Command number:	1
Command type:	SEND SHORT MESSAGE
Command qualifier:	packing not required

Device identities

Source device:	SIM
Destination device:	Network

Address

TON:	International number
NPI:	"ISDN / telephone numbering plan"
Dialling number string	"112233445566778"

SMS TPDU

TP-MTI	SMS-SUBMIT
TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF	TP-VP field not present
TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI	The TP-UD field contains only the short message
TP-SRR	A status report is not requested
TP-MR	"00"

TP-DA

TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345678"

TP-PID	Short message type 0
--------	----------------------

TP-DCS

Message coding	8-bit data
Message class	class 0
TP-UDL	12
TP-UD	"Test Message"

Coding:

BER-TLV:	D0	2E	81	03	01	13	00	82	02	81	83	86
	09	91	11	22	33	44	55	66	77	F8	8B	18
	01	00	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

SMS-PP (SEND SHORT MESSAGE) Message 1.8Logically:SMS TPDU

TP-MTI	SMS-SUBMIT
TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF	TP-VP field not present
TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI	The TP-UD field contains only the short message
TP-SRR	A status report is not requested
TP-MR	"00"

TP-DA

TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345678"

TP-PID	Short message type 0
--------	----------------------

TP-DCS

Message coding	8-bit data
Message class	class 0
TP-UDL	12

TP-UD "Test Message"

Coding:	01	00	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.8.1

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE

Command qualifier: packing not required

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00
----------	----	----	----	----	----	----	----	----	----	----	----	----

27.22.4.10.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1 to 8.

27.22.4.10.2 SEND SHORT MESSAGE (UCS2 support)

27.22.4.10.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.10.2.2 Conformance requirement

The ME shall support the Proactive SIM: SEND SHORT MESSAGE facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.10 (Send Short Message), clause 6.6.9 (Send Short Message), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpha Identifier), clause 12.1 (Address), clause 12.13 (SMS-TPDU), clause 12.31 (Icon Identifier), clause 5.2 (Terminal Profile)

Additionally, the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications:

ISO/IEC 10646 [17], "Universal Multiple Octet Coded Character Set (UCS)".

27.22.4.10.2.3 Test Purpose

To verify that the ME correctly formats and sends a short message to the network (System Simulator) as indicated in the SEND SHORT MESSAGE proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the Short Message.

27.22.4.10.2.4 Method of test

27.22.4.10.2.4.1 Initial Conditions

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

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

27.22.4.10.2.4.2 Procedure

Expected Sequence 2.1 (SEND SHORT MESSAGE, packing not required, UCS2 (16-bit data))

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 2.1.1	[packing not required, 16-bit data]
4	ME → USER	Display "Send SM"	[Alpha Identifier]
5	ME → SS	Send SMS-PP "ЗДРАВСТВУЙТЕ"	["Hello" in russian]
6	SS → ME	SMS RP-ACK	
7	ME → SIM	TERMINAL RESPONSE : SEND SHORT MESSAGE 2.1.1	[Command performed successfully]

PROACTIVE COMMAND : SEND SHORT MESSAGE : 2.1.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing not required

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier: "Send SM"

Address

TON: International number
 NPI: "ISDN / telephone numbering plan"
 Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT
 TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM
 TP-VPF TP-VP field not present
 TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
 TP-UDHI The TP-UD field contains only the short message
 TP-SRR A status report is not requested
 TP-MR "00"

TP-DA

TON International number
 NPI "ISDN / telephone numbering plan"
 Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 16-bit data
 Message class class 0

TP-UDL 24

TP-UD ЗДРАВСТВУЙТЕ "

Coding:

BER-TLV:	D0	4D	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	08	18	04	17	04
	14	04	20	04	10	04	12	04	21	04	22	04
	12	04	23	04	19	04	22	04	15			

SMS-PP (SEND SHORT MESSAGE) Message 2.1Logically:

<u>SMS TPDU</u>	
<u>TP-MTI</u>	<u>SMS-SUBMIT</u>
<u>TP-RD</u>	<u>Instruct the SC to accept an SMS-SUBMIT for a SM</u>
<u>TP-VPF</u>	<u>TP-VP field not present</u>
<u>TP-RP</u>	<u>TP-Reply-Path is not set in this SMS-SUBMIT</u>
<u>TP-UDHI</u>	<u>The TP-UD field contains only the short message</u>
<u>TP-SRR</u>	<u>A status report is not requested</u>
<u>TP-MR</u>	<u>"00"</u>
<u>TP-DA</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Address value</u>	<u>"012345678"</u>
<u>TP-PID</u>	<u>Short message type 0</u>
<u>TP-DCS</u>	
<u>Message coding</u>	<u>UCS2 (16-bit data)</u>
<u>Message class</u>	<u>class 0</u>
<u>TP-UDL</u>	<u>24</u>
<u>TP-UD</u>	<u>" ЗДРАВСТВУЙТЕ "</u>

<u>Coding:</u>	<u>01</u>	<u>00</u>	<u>09</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>F8</u>	<u>40</u>	<u>08</u>	<u>18</u>
	<u>04</u>	<u>17</u>	<u>04</u>	<u>14</u>	<u>04</u>	<u>20</u>	<u>04</u>	<u>10</u>	<u>04</u>	<u>12</u>	<u>04</u>	<u>21</u>
	<u>04</u>	<u>22</u>	<u>04</u>	<u>12</u>	<u>04</u>	<u>23</u>	<u>04</u>	<u>19</u>	<u>04</u>	<u>22</u>	<u>04</u>	<u>15</u>

TERMINAL RESPONSE : SEND SHORT MESSAGE 2.2.1Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SEND SHORT MESSAGE</u>
<u>Command qualifier:</u>	<u>packing not required</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>13</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

27.22.4.10.2.5 Test Requirement

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

27.22.4.10.3 SEND SHORT MESSAGE (icon support)27.22.4.10.3.1 Definition and applicability

See Section 3.2.2.

[27.22.4.10.3.2 Conformance requirement](#)[27.22.4.10.3.3 Test Purpose](#)

To verify that the ME correctly formats and sends a short message to the network (System Simulator) as indicated in the SEND SHORT MESSAGE proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the Short Message.

[27.22.4.10.3.4 Method of test](#)[27.22.4.10.3.4.1 Initial Conditions](#)

[See Annex C](#)

[27.22.4.10.3.4.2 Procedure](#)

Expected Sequence 3.1A (SEND SHORT MESSAGE, basic icon self-explanatory, packing not required, 8-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 3.1.1	[packing not required, 8-bit data]
4	ME → USER	Displays the icon and not the alpha identifier	[basic icon self-explanatory]
5	ME → SS	Send SMS-PP "Test Message "	
6	SS → ME	SMS RP-ACK	
7	ME → SIM	TERMINAL RESPONSE : SEND SHORT MESSAGE 3.1.1A	[Command performed successfully]

PROACTIVE COMMAND : SEND SHORT MESSAGE 3.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND SHORT MESSAGE
Command qualifier:	packing not required
<u>Device identities</u>	
Source device:	SIM
Destination device:	Network
Alpha identifier:	"NO ICON"
<u>Address</u>	
TON:	International number
NPI:	"ISDN / telephone numbering plan"
Dialling number string	"112233445566778"
<u>SMS TPDU</u>	
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"
<u>TP-DA</u>	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345678"
TP-PID	Short message type 0
<u>TP-DCS</u>	
Message coding	8bit-data
Message class	class 0
TP-UDL	12
TP-UD	"Test Message "
<u>Icon Identifier</u>	
Icon Qualifier	self-explanatory
Icon Identifier	1 (number of record in EF IMG)

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>3B</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>13</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>07</u>	<u>4E</u>	<u>4F</u>	<u>20</u>	<u>49</u>	<u>43</u>	<u>4F</u>	<u>4E</u>	<u>86</u>	<u>09</u>	<u>91</u>	<u>11</u>
	<u>22</u>	<u>33</u>	<u>44</u>	<u>55</u>	<u>66</u>	<u>77</u>	<u>F8</u>	<u>8B</u>	<u>18</u>	<u>01</u>	<u>00</u>	<u>09</u>
	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>F4</u>	<u>40</u>	<u>F4</u>	<u>0C</u>	<u>54</u>	<u>65</u>	<u>73</u>
	<u>74</u>	<u>20</u>	<u>4D</u>	<u>65</u>	<u>73</u>	<u>73</u>	<u>61</u>	<u>67</u>	<u>65</u>	<u>9E</u>	<u>02</u>	<u>00</u>
	<u>01</u>											

SMS-PP (SEND SHORT MESSAGE) Message 3.1Logically:

<u>SMS TPDU</u>	
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"
<u>TP-DA</u>	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345678"
TP-PID	Short message type 0

<u>TP-DCS</u>	
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

TERMINAL RESPONSE : SEND SHORT MESSAGE 3.1.1A

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND SHORT MESSAGE
Command qualifier:	packing not required
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 00

Expected Sequence 3.1B (SEND SHORT MESSAGE, basic icon self-explanatory, packing not required, 8-bit data, requested icon could not be displayed)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 3.1.1	[packing not required, 8-bit data, basic icon self-explanatory]
4	ME → USER	Displays the alpha identifier without the icon	
5	ME → SS	Send SMS-PP "Test Message "	
6	SS → ME	SMS RP-ACK	
7	ME → SIM	TERMINAL RESPONSE : SEND SHORT MESSAGE 3.1.1B	[Command performed successfully, but requested icon could not be displayed]

TERMINAL RESPONSE : SEND SHORT MESSAGE 3.1.1B

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND SHORT MESSAGE
Command qualifier:	packing not required
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 04

Expected Sequence 3.2A (SEND SHORT MESSAGE, basic icon non-self-explanatory, packing not required, 8-bit data, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 3.2.1	[packing not required, 8-bit data]
4	ME → USER	display the icon and "Send SM"	[basic icon non-self-explanatory]
5	ME → SS	Send SMS-PP " Test Message "	
6	SS → ME	SMS RP-ACK	
7	ME → SIM	TERMINAL RESPONSE : SEND SHORT MESSAGE 3.2.1A	[Command performed successfully]

PROACTIVE COMMAND : SEND SHORT MESSAGE 3.2.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND SHORT MESSAGE
Command qualifier:	packing not required
<u>Device identities</u>	
Source device:	SIM
Destination device:	Network
Alpha Identifier	"Send SM"
<u>Address</u>	
TON:	International number
NPI:	"ISDN / telephone numbering plan"
Dialling number string	"112233445566778"
<u>SMS TPDU</u>	
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"
<u>TP-DA</u>	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345678"
TP-PID	Short message type 0
<u>TP-DCS</u>	
Message coding	8bit-data
Message class	class 0
TP-UDL	12
TP-UD	" Test Message"
<u>Icon Identifier</u>	
Icon Qualifier	non-self-explanatory
Icon Identifier	1 (number of record in EF IMG)

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>3B</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>13</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>07</u>	<u>53</u>	<u>65</u>	<u>6E</u>	<u>64</u>	<u>20</u>	<u>53</u>	<u>4D</u>	<u>86</u>	<u>09</u>	<u>91</u>	<u>11</u>
	<u>22</u>	<u>33</u>	<u>44</u>	<u>55</u>	<u>66</u>	<u>77</u>	<u>F8</u>	<u>8B</u>	<u>18</u>	<u>01</u>	<u>00</u>	<u>09</u>
	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>F8</u>	<u>40</u>	<u>F4</u>	<u>0C</u>	<u>54</u>	<u>65</u>	<u>73</u>
	<u>74</u>	<u>20</u>	<u>4D</u>	<u>65</u>	<u>73</u>	<u>73</u>	<u>61</u>	<u>67</u>	<u>65</u>	<u>1E</u>	<u>02</u>	<u>01</u>
	<u>01</u>											

SMS-PP (SEND SHORT MESSAGE) Message 3.2Logically:

<u>SMS TPDU</u>	
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"
<u>TP-DA</u>	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345678"
TP-PID	Short message type 0

<u>TP-DCS</u>	
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

TERMINAL RESPONSE : SEND SHORT MESSAGE 3.2.1A

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND SHORT MESSAGE
Command qualifier:	packing not required
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 00

Expected Sequence 3.2B (SEND SHORT MESSAGE, basic icon non-self-explanatory, packing not required, 8-bit data, requested icon could not be displayed)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND SHORT</u> <u>MESSAGE 3.2.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>SHORT MESSAGE 3.2.1</u>	<u>[packing not required, 8-bit data, basic icon</u> <u>non-self-explanatory]</u>
4	<u>ME →</u> <u>USER</u>	<u>display "Send SM" without the icon</u>	
5	<u>ME → SS</u>	<u>Send SMS-PP " Test Message "</u>	
6	<u>SS → ME</u>	<u>SMS RP-ACK</u>	
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>SHORT MESSAGE 3.2.1B</u>	<u>[Command performed successfully, but</u> <u>requested icon could not be displayed]</u>

TERMINAL RESPONSE : SEND SHORT MESSAGE 3.2.1B

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND SHORT MESSAGE
Command qualifier:	packing not required
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully, but requested icon could not be displayed;

Coding:

BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 04

27.22.4.10.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.11 SEND SS

Continuous length error in T.R. Result field.

27.22.4.11.1 SEND SS (normal)

27.22.4.11.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.11.1.2 Conformance requirement

The ME shall support the Proactive SIM: Send SS facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.11 (Send SS), 6.6.10 (Send SS), clause 12.12.1 (Additional information for Send SS), clause 5.2 (Terminal Profile), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpa identifier), clause 12.14 (SS String), clause 12.31 (Icon identifier), clause 6.5.4 (Icon identifiers).

27.22.4.11.1.3 Test Purpose

To verify that the ME correctly translates and sends the supplementary service request indicated in the SEND SS proactive SIM command to the system Simulator.

To verify that the ME returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the SS and any contents of the SS result as additional data.

27.22.4.11.1.4 Method of test

27.22.4.11.1.4.1 Initial Conditions

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

The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator

27.22.4.11.1.4.2 Procedure

Expected Sequence 1.1 (SEND SS, call forward unconditional, all bearers, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 1.1.1	
4	ME → USER	Display "Call Forward"	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	[Successful]
7	ME → SIM	TERMINAL RESPONSE : SEND SS 1.1.1	

PROACTIVE COMMAND: SEND SS 1.1.1

Logically:

Command details

Command number: 1
 Command type: SEND SS
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier: "Call Forward"

SS String

TON: International
 NPI: "ISDN / telephone numbering plan"
 SS string: "**21*+01234567890123456789#"

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							

REGISTER 1.1

Logically (only SS argument):

REGISTER SS ARGUMENT

SS-Code:
 - Call Forwarding Unconditional
 TeleserviceCode
 - All Tele Services
 ForwardedToNumber
 - nature of address ind. : international
 - numbering plan ind. : ISDN/Telephony (E.164)
 - TBCD String : 01234567890123456789

Coding:

BER-TLV	30	13	04	01	21	83	01	00	84	0B	91	10
	32	54	76	98	10	32	54	76	98			

RELEASE COMPLETE (SS RETURN RESULT) 1.1

Logically (only from operation code):

REGISTER SS RETURN RESULT
ForwardingInfo
SS-Code
 - Call Forwarding Unconditional
ForwardFeatureList
ForwardingFeature
TeleserviceCode
 - All Tele Services
SS-Status
 - state ind. : operative
 - provision ind. : provisioned
 - registration ind. : registered
 - activation ind. : active
ForwardedToNumber
 - nature of address ind. : international
 - numbering plan ind. : ISDN/Telephony (E.164)
 - TBCD String : 01234567890123456789

Coding:

<u>BER-TLV</u>	<u>0A</u>	<u>A0</u>	<u>1A</u>	<u>04</u>	<u>01</u>	<u>21</u>	<u>30</u>	<u>15</u>	<u>30</u>	<u>13</u>	<u>83</u>	<u>01</u>
	<u>00</u>	<u>84</u>	<u>01</u>	<u>07</u>	<u>84</u>	<u>0B</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>98</u>
	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>98</u>							

TERMINAL RESPONSE : SEND SS 1.1.1

Logically:

Command details
Command number: 1
Command type: SEND SS
Command qualifier: "00"
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully
Additional information: Operation Code and SS Parameters

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>11</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>03</u>	<u>1E</u>
	<u>00</u>	<u>0A</u>	<u>A0</u>	<u>1A</u>	<u>04</u>	<u>01</u>	<u>21</u>	<u>30</u>	<u>15</u>	<u>30</u>	<u>13</u>
	<u>83</u>	<u>01</u>	<u>00</u>	<u>84</u>	<u>01</u>	<u>07</u>	<u>85</u>	<u>0B</u>	<u>91</u>	<u>10</u>	<u>32</u>
	<u>54</u>	<u>76</u>	<u>98</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>98</u>			

Expected Sequence 1.2 (SEND SS, call forward unconditional, all bearers, Return Error)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u>	
		<u>PENDING: SEND SS 1.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u>	
		<u>SS 1.1.1</u>	
4	<u>ME →</u> <u>USER</u>	<u>Display "Call Forward"</u>	
5	<u>ME → SS</u>	<u>REGISTER 1.1</u>	
6	<u>SS → ME</u>	<u>RELEASE COMPLETE (SS</u>	<u>[Return Error]</u>
		<u>RETURN ERROR) 1.1</u>	
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u>	
		<u>SS 1.2.1</u>	

RELEASE COMPLETE (SS RETURN ERROR) 1.1

Logically (only from error code):

Error Code: _____ Facility not supported

Coding:

BER-TLV 02 11 15

TERMINAL RESPONSE : SEND SS 1.2.1

Logically:

Command details

Command number: _____ 1

Command type: _____ SEND SS

Command qualifier: _____ "00"

Device identities

Source device: _____ ME

Destination device: _____ SIM

Result

General Result: _____ SS Return Error

Additional information: _____ Error Code

Coding: _____

BER-TLV: 81 03 01 11 00 82 02 82 81 03 02
 34 15

Expected Sequence 1.3 (SEND SS, call forward unconditional, all bearers, Reject)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 1.1.1	
4	ME → USER	Display "Call Forward"	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS REJECT) 1.1.	[Reject]
7	ME → SIM	TERMINAL RESPONSE : SEND SS 1.3.1	

RELEASE COMPLETE (SS REJECT) 1.1

Logically (only from problem code):

Problem Code:

- General problem
- Unrecognized component

Coding:

BER-TLV

80 01 00

TERMINAL RESPONSE : SEND SS 1.3.1

Logically:

Command details

Command number: 1

Command type: SEND SS

Command qualifier: "00"

Device identities

Source device: ME

Destination device: SIM

Result

General Result: SS Return Error

Additional information: No specific cause can be given

Coding:

BER-TLV: 81 03 01 11 00 82 02 82 81 03 02
34 00

[Expected Sequence 1.4 \(SEND SS, call forward unconditional, all bearers, successful, SS request size limit\)](#)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 1.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 1.4.1	
4	ME → USER	Display "Call Forward"	
5	ME → SS	REGISTER 1.2	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.2	[Successful]
7	ME → SIM	TERMINAL RESPONSE : SEND SS 1.4.1	

PROACTIVE COMMAND : SEND SS 1.4.1

Logically:

Command details

Command number: 1
 Command type: SEND SS
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier: "Call Forward"

SS String

TON: International
 NPI: "ISDN / telephone numbering plan"
 SS string: "***21*+01234567890123456789012345678901234567*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								

REGISTER 1.2

Logically (only SS argument):

REGISTER SS ARGUMENT

RegisterSSArg
SS-Code
 - Call Forwarding Unconditional
TeleserviceCode
 - Telephony
ForwardedToNumber
 - nature of address ind. : international
 - numbering plan ind. : ISDN/Telephony (E.164)
 - TBCD String : 01234567890123456789012345678901234567

Coding:

BER-TLV	30	1C	04	01	21	83	01	11	84	14	91	10
	32	54	76	98	10	32	54	76	98	10	32	54
	76	98	10	32	54	76						

RELEASE COMPLETE (SS RETURN RESULT) 1.2

Logically (only from operation code):

REGISTER SS RETURN RESULT

- ForwardingInfo
- SS-Code
 - Call Forwarding Unconditional
- ForwardFeatureList
- ForwardingFeature
- TeleserviceCode
 - Telephony
- SS-Status
 - state ind. : operative
 - provision ind. : provisioned
 - registration ind. : registered
 - activation ind. : active
- ForwardedToNumber
 - nature of address ind. : international
 - numbering plan ind. : ISDN/Telephony (E.164)
 - TBCD String : 01234567890123456789012345678901234567

Coding:

<u>BER-TLV</u>	<u>0A</u>	<u>A0</u>	<u>23</u>	<u>04</u>	<u>01</u>	<u>21</u>	<u>30</u>	<u>1E</u>	<u>30</u>	<u>1C</u>	<u>83</u>	<u>01</u>
	<u>11</u>	<u>84</u>	<u>01</u>	<u>07</u>	<u>84</u>	<u>14</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>98</u>
	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>98</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>98</u>	<u>10</u>	<u>32</u>
	<u>54</u>	<u>76</u>										

TERMINAL RESPONSE : SEND SS 1.4.1

Logically:

- Command details
- Command number: 1
- Command type: SEND SS
- Command qualifier: “00”
- Device identities
- Source device: ME
- Destination device: SIM
- Result
- General Result: Command performed successfully
- Additional information: Operation Code and SS Parameters

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>11</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>03</u>	<u>27</u>
	<u>00</u>	<u>0A</u>	<u>A0</u>	<u>23</u>	<u>04</u>	<u>01</u>	<u>21</u>	<u>30</u>	<u>1E</u>	<u>30</u>	<u>1C</u>
	<u>83</u>	<u>01</u>	<u>11</u>	<u>84</u>	<u>01</u>	<u>07</u>	<u>84</u>	<u>14</u>	<u>91</u>	<u>10</u>	<u>32</u>
	<u>54</u>	<u>76</u>	<u>98</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>98</u>	<u>10</u>	<u>32</u>	<u>54</u>
	<u>76</u>	<u>98</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>					

[Expected Sequence 1.5 \(SEND SS, interrogate CLIR status, successful, alpha identifier limits\)](#)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 1.5.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 1.5.1	
4	ME → USER	Display "Even if the Fixed Dialling Number service is enabled, the supplementary service control string included in the SEND SS proactive command shall not be checked against those of the FDN list. Upon receiving this command, the ME shall deci"	
5	ME → SS	REGISTER 1.3	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.3	[Successful]
7	ME → SIM	TERMINAL RESPONSE : SEND SS 1.5.1	

PROACTIVE COMMAND : SEND SS 1.5.1

Logically:

Command details

Command number:	1
Command type:	SEND SS
Command qualifier:	"00"

Device identities

Source device:	SIM
Destination device:	Network
Alpha identifier:	"Even if the Fixed Dialling Number service is enabled, the supplementary service control string included in the SEND SS proactive command shall not be checked against those of the FDN list. Upon receiving this command, the ME shall deci"

SS String

TON:	Undefined
NPI:	Undefined
SS string:	"*#31#"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>81</u>	<u>FD</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>11</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>
	85	81	EB	45	76	65	6E	20	69	66	20	74
	68	65	20	46	69	78	65	64	20	44	69	61
	6C	6C	69	6E	67	20	4E	75	6D	62	65	72
	20	73	65	72	76	69	63	65	20	69	73	20
	65	6E	61	62	6C	65	64	2C	20	74	68	65
	20	73	75	70	70	6C	65	6D	65	6E	74	61
	72	79	20	73	65	72	76	69	63	65	20	63
	6F	6E	74	72	6F	6C	20	73	74	72	69	6E
	67	20	69	6E	63	6C	75	64	65	64	20	69
	6E	20	74	68	65	20	53	45	4E	44	20	53
	53	20	70	72	6F	61	63	74	69	76	65	20
	63	6F	6D	6D	61	6E	64	20	73	68	61	6C
	6C	20	6E	6F	74	20	62	65	20	63	68	65
	63	6B	65	64	20	61	67	61	69	6E	73	74
	20	74	68	6F	73	65	20	6F	66	20	74	68
	65	20	46	44	4E	20	6C	69	73	74	2E	20
	55	70	6F	6E	20	72	65	63	65	69	76	69
	6E	67	20	74	68	69	73	20	63	6F	6D	6D
	61	6E	64	2C	20	74	68	65	20	4D	45	20
	73	68	61	6C	6C	20	64	65	63	69	89	04
	FF	BA	13	FB								

REGISTER 1.3

Logically (only SS argument):

<u>INTERROGATE SS ARGUMENT</u>
<u>SS-Code</u>
<u>- Calling Line Id Restriction</u>

Coding:

<u>BER-TLV</u>	<u>30</u>	<u>03</u>	<u>04</u>	<u>01</u>	<u>12</u>
----------------	-----------	-----------	-----------	-----------	-----------

RELEASE COMPLETE (SS RETURN RESULT) 1.3

Logically (only from operation code):

INTERROGATE SS RESULT
 CliRestrictionInfo
 SS-Status
 - state ind. : operative
 - provision ind. : provisioned
 - registration ind. : registered
 - activation ind. : not active
 CliRestrictionOption
 - Temporary Def Allowed

Coding:

BER-TLV 0E A4 06 04 01 06 0A 01 02

TERMINAL RESPONSE : SEND SS 1.5.1

Logically:

 Command details
 Command number: 1
 Command type: SEND SS
 Command qualifier: "00"
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully
 Additional information
 Operation Code: SS Code
 Parameters: SS Return Result

Coding:

BER-TLV: 81 03 01 11 00 82 02 82 81 03 01
 00 0E A4 06 04 01 06 0A 01 02

Expected Sequence 1.6 (SEND SS, call forward unconditional, all bearers, successful, null data alpha identifier)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND SS 1.6.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>SS 1.6.1</u>	
<u>4</u>	<u>ME</u>	<u>Should not give any information to</u> <u>the user on the fact that the ME is</u> <u>sending an SS request</u>	
<u>5</u>	<u>ME → SS</u>	<u>REGISTER 1.1</u>	
<u>6</u>	<u>SS → ME</u>	<u>RELEASE COMPLETE (SS</u> <u>RETURN RESULT) 1.1</u>	<u>[Successful]</u>
<u>7</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>SS 1.1.1</u>	

PROACTIVE COMMAND : SEND SS 1.6.1Logically:Command details

Command number:	1
Command type:	SEND SS
Command qualifier:	"00"

Device identities

Source device:	SIM
Destination device:	Network
Alpha identifier:	null data object

SS String

TON:	International
NPI:	"ISDN / telephone numbering plan"
SS string:	"**21*+01234567890123456789#"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>1B</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>11</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>00</u>	<u>89</u>	<u>0E</u>	<u>91</u>	<u>AA</u>	<u>12</u>	<u>0A</u>	<u>21</u>	<u>43</u>	<u>65</u>	<u>87</u>	<u>09</u>
	<u>21</u>	<u>43</u>	<u>65</u>	<u>87</u>	<u>B9</u>							

27.22.4.11.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1, 2, 3, 4, 5 and 6.

27.22.4.11.2 SEND SS (Icon support)27.22.4.11.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.11.2.2 Conformance requirement27.22.4.11.2.3 Test Purpose

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

In addition to verify that if an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.11.2.4 Method of test27.22.4.11.2.4.1 Initial Conditions

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

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator

See Annex C for coding of the elementary files on SIM

.27.22.4.11.2.4.2 Procedure

Expected Sequence 2.1A (SEND SS, call forward unconditional, all bearers, successful, basic icon self explanatory, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 2.1.1	[BASIC-ICON, self-explanatory]
4	ME → USER	Display the icon without the alpha identifier	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	[Successful]
7	ME → SIM	TERMINAL RESPONSE : SEND SS 2.1.1A	[Command performed successfully]

PROACTIVE COMMAND : SEND SS 2.1.1

Logically:

Command details

Command number: 1

Command type: SEND SS

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha Identifier: "Basic Icon" SS String

TON: International

NPI: "ISDN / telephone numbering plan"

SS string: "***21*+01234567890123456789#"

Icon Identifier:

Icon qualifier: icon is self-explanatory

Icon Identifier: record 1 in EF_(IMG)

Coding:

BER-TLV: D0 2A 81 03 01 11 00 82 02 81 83 85
 0B 04 42 61 73 69 63 20 49 63 6F 6E
 89 0E 91 AA 12 0A 21 43 65 87 09 21
 43 65 87 B9 9E 02 00 01

TERMINAL RESPONSE : SEND SS 2.1.1A

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND SS
Command qualifier:	“00”
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
Additional information:	Operation Code and SS Parameters

Coding:

<u>BER-TLV:</u>	81	03	01	11	00	82	02	82	81	03	1E
	00	0A	A0	1A	04	01	21	30	15	30	13
	83	01	00	84	01	07	85	0B	91	10	32
	54	76	98	10	32	54	76	98			

Expected Sequence 2.1B (SEND SS, call forward unconditional, all bearers, successful, basic icon self explanatory, requested icon could not be displayed)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 2.1.1	[BASIC-ICON, self-explanatory]
4	ME → USER	Display “Basic Icon” without the icon	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	[Successful]
7	ME → SIM	TERMINAL RESPONSE : SEND SS 2.1.1B	[Command performed successfully, but requested icon could not be displayed]

TERMINAL RESPONSE : SEND SS 2.1.1B

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND SS
Command qualifier:	“00”
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully, but requested icon could not be displayed
Additional information:	Operation Code and SS Parameters

Coding:

BER-TLV: 81 03 01 11 00 82 02 82 81 03 1E
 04 0A A0 1A 04 01 21 30 15 30 13
 83 01 00 84 01 07 85 0B 91 10 32
 54 76 98 10 32 54 76 98

Expected Sequence 2.2A (SEND SS, call forward unconditional, all bearers, successful, colour icon self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 2.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 2.2.1	[COLOUR-ICON, self-explanatory]
4	ME → USER	Display the icon	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	[Successful]
7	ME → SIM	TERMINAL RESPONSE : SEND SS 2.1.1A	[Command performed successfully]

PROACTIVE COMMAND : SEND SS 2.2.1

Logically:

Command details

Command number: 1
 Command type: SEND SS
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier : « Colour Icon »

SS String

TON: International
 NPI: "ISDN / telephone numbering plan"
 SS string: "***21*+01234567890123456789#"

Icon Identifier:

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

Coding:

BER-TLV: D0 81 03 01 11 00 82 02 81 83 85
 43 6F 6C 6F 75 72 20 49 63 6F 6E
 89 0E 91 AA 12 0A 21 43 65 87 09 21
 43 65 87 B9 9E 02 00 02

Expected Sequence 2.2B (SEND SS, call forward unconditional, all bearers, successful, colour icon self explanatory, requested icon could not be displayed)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND SS 2.2.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>SS 2.2.1</u>	<u>[COLOUR-ICON, self-explanatory]</u>
4	<u>ME →</u> <u>USER</u>	<u>Display "Colour Icon" without the</u> <u>icon</u>	
5	<u>ME → SS</u>	<u>REGISTER 1.1</u>	
6	<u>SS → ME</u>	<u>RELEASE COMPLETE (SS</u> <u>RETURN RESULT) 1.1</u>	<u>[Successful]</u>
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>SS 2.1.1B</u>	<u>[Command performed but requested icon</u> <u>could not be displayed]</u>

Expected Sequence 2.3A (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND SS 2.3.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>SS 2.3.1</u>	<u>[BASIC-ICON, non self-explanatory]</u>
4	<u>ME →</u> <u>USER</u>	<u>Display "Basic Icon" and the icon</u>	
5	<u>ME → SS</u>	<u>REGISTER 1.1</u>	
6	<u>SS → ME</u>	<u>RELEASE COMPLETE (SS</u> <u>RETURN RESULT) 1.1</u>	<u>[Successful]</u>
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>SS 2.1.1A</u>	<u>[Command performed successfully]</u>

PROACTIVE COMMAND : SEND SS 2.3.1

Logically:

Command details

Command number: 1

Command type: SEND SS

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha Identifier

Data coding scheme: unpacked, 8 bit data

Text: "Basic Icon"

SS String

TON: International

NPI: "ISDN / telephone numbering plan"

SS string: "**21*+01234567890123456789#"

Icon Identifier

Icon qualifier: icon is non self-explanatory

Icon Identifier: record 1 in EF_(MG)

Coding:

BER-TLV: D0 2A 81 03 01 11 00 82 02 81 83 85
 0B 04 42 61 73 69 63 20 49 63 6F 6E
 89 0E 91 AA 12 0A 21 43 65 87 09 21
 43 65 87 B9 9E 02 01 01

Expected Sequence 2.3B (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND SS 2.3.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>SS 2.3.1</u>	<u>[BASIC-ICON, non self-explanatory]</u>
4	<u>ME →</u> <u>USER</u>	<u>Display "Basic Icon" without the</u> <u>icon</u>	
5	<u>ME → SS</u>	<u>REGISTER 1.1</u>	
6	<u>SS → ME</u>	<u>RELEASE COMPLETE (SS</u> <u>RETURN RESULT) 1.1</u>	<u>[Successful]</u>
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>SS 2.1.1B</u>	<u>[Command performed but requested icon</u> <u>could not be displayed]</u>

Expected Sequence 2.4 (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory, no alpha identifier presented)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND SS 2.4.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>SS 2.4.1</u>	<u>[BASIC-ICON, non self-explanatory]</u>
4	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>SS 2.4.1</u>	<u>[Command data not understood by ME]</u>

PROACTIVE COMMAND : SEND SS 2.4.1Logically:Command details

Command number: 1
Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

SS String

TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "**21*+01234567890123456789#"

Icon Identifier

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

Coding:

BER-TLV: D0 1D 81 03 01 11 00 82 02 81 83 89
 0E 91 AA 12 0A 21 43 65 87 09 21 43
 65 87 B9 9E 02 01 01

TERMINAL RESPONSE : SEND SS 2.4.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND SS
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command data not understood by ME

Coding:

BER-TLV: 81 03 01 11 00 82 02 82 81 83 01 32

27.22.4.11.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences .

27.22.4.11.2 SEND SS (UCS2 support)27.22.4.11.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.11.2.2 Conformance requirement

The ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications:

ISO/IEC 10646 [17], "Universal Multiple Octet Coded Character Set (UCS)".

27.22.4.11.2.3 Test Purpose

To verify that the ME displays the UCS2 text contained in the SEND SS proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.11.2.4 Method of test27.22.4.11.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

27.22.4.11.2.4.2 ProcedureExpected Sequence 3.1 (SEND SS, call forward unconditional, all bearers, successful, UCS2 text)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND SS 3.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND: SEND</u> <u>SS 3.1.1</u>	
4	<u>ME →</u> <u>USER</u>	<u>Display “ЗДРАВСТВУЙТЕ”</u>	<u>["Hello" in Russian]</u>
5	<u>ME → SS</u>	<u>REGISTER 1.1</u>	
6	<u>SS → ME</u>	<u>RELEASE COMPLETE (SS</u> <u>RETURN RESULT) 1.1</u>	<u>[Successful]</u>
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: SEND</u> <u>SS 1.1.1</u>	<u>[Command performed successfully]</u>

PROACTIVE COMMAND : SEND SS 3.1.1Logically:Command detailsCommand number: 1Command type: SEND SSCommand qualifier: "00"Device identitiesSource device: SIMDestination device: NetworkAlpha IdentifierData coding scheme: UCS2 (16bit)Text: “ЗДРАВСТВУЙТЕ”SS StringTON: InternationalNPI: “ISDN / telephone numbering plan”SS string: “**21*+01234567890123456789#”Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>34</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>11</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>19</u>	<u>80</u>	<u>04</u>	<u>17</u>	<u>04</u>	<u>14</u>	<u>04</u>	<u>20</u>	<u>04</u>	<u>10</u>	<u>04</u>	<u>12</u>
	<u>04</u>	<u>21</u>	<u>04</u>	<u>22</u>	<u>04</u>	<u>12</u>	<u>04</u>	<u>23</u>	<u>04</u>	<u>19</u>	<u>04</u>	<u>22</u>
	<u>04</u>	<u>15</u>	<u>89</u>	<u>0E</u>	<u>91</u>	<u>AA</u>	<u>12</u>	<u>0A</u>	<u>21</u>	<u>43</u>	<u>65</u>	<u>87</u>
	<u>09</u>	<u>21</u>	<u>43</u>	<u>65</u>	<u>87</u>	<u>B9</u>						

27.22.4.11.2.5 Test RequirementThe ME shall operate in the manner defined in expected sequence 1.**27.22.4.12 SEND USSD**27.22.4.12.1 SEND USSD (normal)27.22.4.12.1.1 Definition and applicabilitySee Section 3.2.2.

27.22.4.12.1.2 Conformance requirement

The ME shall support the Proactive SIM: Send USSD facility as defined in the following technical specifications:

TS GSM 11.14 [15] clause 6.1, clause 6.4.12 (Send USSD), 6.6.11 (Send USSD), clause 12.12.7 (Additional information for USSD problem), clause 5.2 (Terminal Profile), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpa identifier), clause 12.17 (USSD String), clause 12.31 (Icon identifier), clause 6.5.4 (Icon identifiers).

TS GSM 03.38 [7] clause 5 (Cell broadcast data coding scheme)

27.22.4.12.1.3 Test Purpose

To verify that the ME correctly translates and sends the unstructured supplementary service request indicated in the SEND USSD proactive SIM command to the system Simulator.

To verify that the ME returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the USSD request and including a USSD result as a text string in the TERMINAL RESPONSE.

27.22.4.12.1.4 Method of test27.22.4.12.1.4.1 Initial Conditions

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

The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator

27.22.4.12.1.4.2 Procedure

Expected Sequence 1.1 (SEND USSD, 7-bit data, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND USSD 1.1.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>USSD 1.1.1</u>	
<u>4</u>	<u>ME →</u> <u>USER</u>	<u>Display "7-bit USSD"</u>	
<u>5</u>	<u>ME → SS</u>	<u>REGISTER 1.1</u>	
<u>6</u>	<u>SS → ME</u>	<u>RELEASE COMPLETE (SS</u> <u>RETURN RESULT) 1.1</u>	<u>["USSD string received from SS"]</u>
<u>7</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>USSD 1.1.1</u>	

PROACTIVE COMMAND: SEND USSD 1.1.1Logically:Command details

Command number: 1
Command type: SEND USSD
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "7-bit USSD"

USSD String

Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-1234567890"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>50</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>12</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>0A</u>	<u>37</u>	<u>2D</u>	<u>62</u>	<u>69</u>	<u>74</u>	<u>20</u>	<u>55</u>	<u>53</u>	<u>53</u>	<u>44</u>	<u>8A</u>
	<u>39</u>	<u>F0</u>	<u>41</u>	<u>E1</u>	<u>90</u>	<u>58</u>	<u>34</u>	<u>1E</u>	<u>91</u>	<u>49</u>	<u>E5</u>	<u>92</u>
	<u>D9</u>	<u>74</u>	<u>3E</u>	<u>A1</u>	<u>51</u>	<u>E9</u>	<u>94</u>	<u>5A</u>	<u>B5</u>	<u>5E</u>	<u>B1</u>	<u>59</u>
	<u>6D</u>	<u>2B</u>	<u>2C</u>	<u>1E</u>	<u>93</u>	<u>CB</u>	<u>E6</u>	<u>33</u>	<u>3A</u>	<u>AD</u>	<u>5E</u>	<u>B3</u>
	<u>DB</u>	<u>EE</u>	<u>37</u>	<u>3C</u>	<u>2E</u>	<u>9F</u>	<u>D3</u>	<u>EB</u>	<u>F6</u>	<u>3B</u>	<u>3E</u>	<u>AF</u>
	<u>6F</u>	<u>C5</u>	<u>64</u>	<u>33</u>	<u>5A</u>	<u>CD</u>	<u>76</u>	<u>C3</u>	<u>E5</u>	<u>60</u>		

REGISTER 1.1Logically (only USSD argument)ProcessUnstructuredSS-Request ARGUMENT

USSD-DataCodingScheme:
- 7-bit default, no message class
USSD string:
- "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-1234567890"

Coding:

<u>BER-TLV</u>	<u>30</u>	<u>3D</u>	<u>04</u>	<u>01</u>	<u>F0</u>	<u>04</u>	<u>38</u>	<u>41</u>	<u>E1</u>	<u>90</u>	<u>58</u>	<u>34</u>
	<u>1E</u>	<u>91</u>	<u>49</u>	<u>E5</u>	<u>92</u>	<u>D9</u>	<u>74</u>	<u>3E</u>	<u>A1</u>	<u>51</u>	<u>E9</u>	<u>94</u>
	<u>5A</u>	<u>B5</u>	<u>5E</u>	<u>B1</u>	<u>59</u>	<u>6D</u>	<u>2B</u>	<u>2C</u>	<u>1E</u>	<u>93</u>	<u>CB</u>	<u>E6</u>
	<u>33</u>	<u>3A</u>	<u>AD</u>	<u>5E</u>	<u>B3</u>	<u>DB</u>	<u>EE</u>	<u>37</u>	<u>3C</u>	<u>2E</u>	<u>9F</u>	<u>D3</u>
	<u>EB</u>	<u>F6</u>	<u>3B</u>	<u>3E</u>	<u>AF</u>	<u>6F</u>	<u>C5</u>	<u>64</u>	<u>33</u>	<u>5A</u>	<u>CD</u>	<u>76</u>
	<u>C3</u>	<u>E5</u>	<u>60</u>									

RELEASE COMPLETE (SS RETURN RESULT) 1.1Logically (only from USSD result):ProcessUnstructuredSS-Request RETURN RESULT

USSD-DataCodingScheme:
- 7-bit default, no message class
USSD string:
- "USSD string received from SS"

Coding:

<u>BER-TLV</u>	<u>30</u>	<u>1E</u>	<u>04</u>	<u>01</u>	<u>F0</u>	<u>04</u>	<u>19</u>	<u>D5</u>	<u>E9</u>	<u>94</u>	<u>08</u>	<u>9A</u>
	<u>D3</u>	<u>E5</u>	<u>69</u>	<u>F7</u>	<u>19</u>	<u>24</u>	<u>2F</u>	<u>8F</u>	<u>CB</u>	<u>69</u>	<u>7B</u>	<u>99</u>
	<u>0C</u>	<u>32</u>	<u>CB</u>	<u>DF</u>	<u>6D</u>	<u>D0</u>	<u>74</u>	<u>0A</u>				

TERMINAL RESPONSE : SEND USSD 1.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND USSD
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Text string</u>	
Data coding scheme:	7-bit default, no message class
String:	"USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	F0	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

Expected Sequence 1.2 (SEND USSD, 8-bit data, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 1.2.1	
4	ME → USER	Display "8-bit USSD"	
5	ME → SS	REGISTER 1.2	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.2	["USSD string received from SS"]
7	ME → SIM	TERMINAL RESPONSE : SEND SS 1.2.1	

PROACTIVE COMMAND: SEND USSD 1.2.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: SIM
Destination device: Network
Alpha identifier: "8-bit USSD"
USSD String
Data coding scheme: Uncompressed, no message class meaning, 8-bit data
USSD string: "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-1234567890"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>58</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>12</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>0A</u>	<u>38</u>	<u>2D</u>	<u>62</u>	<u>69</u>	<u>74</u>	<u>20</u>	<u>55</u>	<u>53</u>	<u>53</u>	<u>44</u>	<u>8A</u>
	<u>41</u>	<u>44</u>	<u>41</u>	<u>42</u>	<u>43</u>	<u>44</u>	<u>45</u>	<u>46</u>	<u>47</u>	<u>48</u>	<u>49</u>	<u>4A</u>
	<u>4B</u>	<u>4C</u>	<u>4D</u>	<u>4E</u>	<u>4F</u>	<u>50</u>	<u>51</u>	<u>52</u>	<u>53</u>	<u>54</u>	<u>55</u>	<u>56</u>
	<u>57</u>	<u>58</u>	<u>59</u>	<u>5A</u>	<u>2D</u>	<u>61</u>	<u>62</u>	<u>63</u>	<u>64</u>	<u>65</u>	<u>66</u>	<u>67</u>
	<u>68</u>	<u>69</u>	<u>6A</u>	<u>6B</u>	<u>6C</u>	<u>6D</u>	<u>6E</u>	<u>6F</u>	<u>70</u>	<u>71</u>	<u>72</u>	<u>73</u>
	<u>74</u>	<u>75</u>	<u>76</u>	<u>77</u>	<u>78</u>	<u>79</u>	<u>7A</u>	<u>2D</u>	<u>31</u>	<u>32</u>	<u>33</u>	<u>34</u>
	<u>35</u>	<u>36</u>	<u>37</u>	<u>38</u>	<u>39</u>	<u>30</u>						

REGISTER 1.2

Logically (only USSD argument):

ProcessUnstructuredSS-Request ARGUMENT
USSD-DataCodingScheme:
 - Uncompressed, no message class meaning, 8-bit data
USSD string:
 - "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-1234567890"

Coding:

<u>BER-TLV</u>	<u>30</u>	<u>45</u>	<u>04</u>	<u>01</u>	<u>44</u>	<u>04</u>	<u>40</u>	<u>41</u>	<u>42</u>	<u>43</u>	<u>44</u>	<u>45</u>
	<u>46</u>	<u>47</u>	<u>48</u>	<u>49</u>	<u>4A</u>	<u>4B</u>	<u>4C</u>	<u>4D</u>	<u>4E</u>	<u>4F</u>	<u>50</u>	<u>51</u>
	<u>52</u>	<u>53</u>	<u>54</u>	<u>55</u>	<u>56</u>	<u>57</u>	<u>58</u>	<u>59</u>	<u>5A</u>	<u>2D</u>	<u>61</u>	<u>62</u>
	<u>63</u>	<u>64</u>	<u>65</u>	<u>66</u>	<u>67</u>	<u>68</u>	<u>69</u>	<u>6A</u>	<u>6B</u>	<u>6C</u>	<u>6D</u>	<u>6E</u>
	<u>6F</u>	<u>70</u>	<u>71</u>	<u>72</u>	<u>73</u>	<u>74</u>	<u>75</u>	<u>76</u>	<u>77</u>	<u>78</u>	<u>79</u>	<u>7A</u>
	<u>2D</u>	<u>31</u>	<u>32</u>	<u>33</u>	<u>34</u>	<u>35</u>	<u>36</u>	<u>37</u>	<u>38</u>	<u>39</u>	<u>30</u>	

RELEASE COMPLETE (SS RETURN RESULT) 1.2

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT
USSD-DataCodingScheme:
 - Uncompressed, no message class meaning, 8-bit data
USSD string:
 - "USSD string received from SS"

Coding:

<u>BER-TLV</u>	<u>30</u>	<u>21</u>	<u>04</u>	<u>01</u>	<u>44</u>	<u>04</u>	<u>1C</u>	<u>55</u>	<u>53</u>	<u>53</u>	<u>44</u>	<u>20</u>
	<u>73</u>	<u>74</u>	<u>72</u>	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>	<u>72</u>	<u>65</u>	<u>63</u>	<u>65</u>	<u>69</u>
	<u>76</u>	<u>65</u>	<u>64</u>	<u>20</u>	<u>66</u>	<u>72</u>	<u>6F</u>	<u>6D</u>	<u>20</u>	<u>53</u>	<u>53</u>	

TERMINAL RESPONSE : SEND USSD 1.2.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND USSD
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Text string</u>	
Data coding scheme:	Uncompressed, no message class meaning, 8-bit data
String:	"USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1D	44	55	53	53	44	20	73	74
	72	69	6E	67	20	72	65	63	65	69	76
	65	64	20	66	72	6F	6D	20	53	53	

Expected Sequence 1.3 (SEND USSD, UCS2 data, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 1.3.1	
4	ME → USER	Display "UCS2 USSD"	
5	ME → SS	REGISTER 1.3	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.3	["USSD string received from SS"]
7	ME → SIM	TERMINAL RESPONSE : SEND SS 1.3.1	

PROACTIVE COMMAND: SEND USSD 1.3.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND USSD
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	Network
Alpha identifier:	"UCS2 USSD"
<u>USSD String</u>	
Data coding scheme:	Uncompressed, no message class meaning, UCS2 (16 bit)
USSD string:	"ЗДРАВСТВУЙТЕ" ("Hello" in Russian)

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>2F</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>12</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>09</u>	<u>55</u>	<u>43</u>	<u>53</u>	<u>32</u>	<u>20</u>	<u>55</u>	<u>53</u>	<u>53</u>	<u>44</u>	<u>8A</u>	<u>19</u>
	<u>48</u>	<u>04</u>	<u>17</u>	<u>04</u>	<u>14</u>	<u>04</u>	<u>20</u>	<u>04</u>	<u>10</u>	<u>04</u>	<u>12</u>	<u>04</u>
	<u>21</u>	<u>04</u>	<u>22</u>	<u>04</u>	<u>12</u>	<u>04</u>	<u>23</u>	<u>04</u>	<u>19</u>	<u>04</u>	<u>22</u>	<u>04</u>
	<u>15</u>											

REGISTER 1.3Logically (only USSD argument):

<u>ProcessUnstructuredSS-Request ARGUMENT</u>	
<u>USSD-DataCodingScheme:</u>	
- Uncompressed, no message class meaning, UCS2 (16 bit)	
<u>USSD string:</u>	
- "ЗДРАВСТВУЙТЕ" ("Hello" in Russian)	

Coding:

<u>BER-TLV</u>	<u>30</u>	<u>1D</u>	<u>04</u>	<u>01</u>	<u>48</u>	<u>04</u>	<u>18</u>	<u>04</u>	<u>17</u>	<u>04</u>	<u>14</u>	<u>04</u>
	<u>20</u>	<u>04</u>	<u>10</u>	<u>04</u>	<u>12</u>	<u>04</u>	<u>21</u>	<u>04</u>	<u>22</u>	<u>04</u>	<u>12</u>	<u>04</u>
	<u>23</u>	<u>04</u>	<u>19</u>	<u>04</u>	<u>22</u>	<u>04</u>	<u>15</u>					

RELEASE COMPLETE (SS RETURN RESULT) 1.3Logically (only from USSD result):

<u>ProcessUnstructuredSS-Request RETURN RESULT</u>	
<u>USSD-DataCodingScheme:</u>	
- Uncompressed, no message class meaning, UCS2 (16 bit)	
<u>USSD string:</u>	
- "USSD string received from SS"	

Coding:

<u>BER-TLV</u>	<u>30</u>	<u>3D</u>	<u>04</u>	<u>01</u>	<u>48</u>	<u>04</u>	<u>38</u>	<u>00</u>	<u>55</u>	<u>00</u>	<u>53</u>	<u>00</u>
	<u>53</u>	<u>00</u>	<u>44</u>	<u>00</u>	<u>20</u>	<u>00</u>	<u>73</u>	<u>00</u>	<u>74</u>	<u>00</u>	<u>72</u>	<u>00</u>
	<u>69</u>	<u>00</u>	<u>6E</u>	<u>00</u>	<u>67</u>	<u>00</u>	<u>20</u>	<u>00</u>	<u>72</u>	<u>00</u>	<u>65</u>	<u>00</u>
	<u>63</u>	<u>00</u>	<u>65</u>	<u>00</u>	<u>69</u>	<u>00</u>	<u>76</u>	<u>00</u>	<u>65</u>	<u>00</u>	<u>64</u>	<u>00</u>
	<u>20</u>	<u>00</u>	<u>66</u>	<u>00</u>	<u>72</u>	<u>00</u>	<u>6F</u>	<u>00</u>	<u>6D</u>	<u>00</u>	<u>20</u>	<u>00</u>
	<u>53</u>	<u>00</u>	<u>53</u>									

TERMINAL RESPONSE : SEND USSD 1.3.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND USSD
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Text string</u>	
Data coding scheme:	Uncompressed, no message class meaning, UCS2 (16 bit)
String:	"USSD string received from SS"

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>12</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>
	<u>00</u>	<u>8D</u>	<u>39</u>	<u>48</u>	<u>00</u>	<u>55</u>	<u>00</u>	<u>53</u>	<u>00</u>	<u>53</u>	<u>00</u>
	<u>44</u>	<u>00</u>	<u>20</u>	<u>00</u>	<u>73</u>	<u>00</u>	<u>74</u>	<u>00</u>	<u>72</u>	<u>00</u>	<u>69</u>
	<u>00</u>	<u>6E</u>	<u>00</u>	<u>67</u>	<u>00</u>	<u>20</u>	<u>00</u>	<u>72</u>	<u>00</u>	<u>65</u>	<u>00</u>
	<u>63</u>	<u>00</u>	<u>65</u>	<u>00</u>	<u>69</u>	<u>00</u>	<u>76</u>	<u>00</u>	<u>65</u>	<u>00</u>	<u>64</u>
	<u>00</u>	<u>20</u>	<u>00</u>	<u>66</u>	<u>00</u>	<u>72</u>	<u>00</u>	<u>6F</u>	<u>00</u>	<u>6D</u>	<u>00</u>
	<u>20</u>	<u>00</u>	<u>53</u>	<u>00</u>	<u>53</u>						

Expected Sequence 1.4 (SEND USSD, 7-bit data, unsuccessful (Return Error))

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 1.1.1	
4	ME → USER	Display "7-bit USSD"	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN ERROR) 1.1	Return Error
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 1.4.1	

RELEASE COMPLETE (SS RETURN ERROR) 1.1

Logically (only from Return Error code):

ProcessUnstructuredSS-Request RETURN ERROR
Return Error code:
- Unknown alphabet

Coding:

<u>BER-TLV</u>	<u>02</u>	<u>01</u>	<u>47</u>
----------------	-----------	-----------	-----------

TERMINAL RESPONSE : SEND USSD 1.4.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND USSD
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	USSD Return Error
Additional information:	"Unknown alphabet"

Coding:

BER-TLV: 81 03 01 12 00 82 02 82 81 83 02
 37 46

Expected Sequence 1.5 (SEND USSD, 7-bit data, unsuccessful (Reject))

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 1.1.1	
4	ME → USER	Display "7-bit USSD"	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS REJECT) 1.1	Reject
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 1.5.1	

RELEASE COMPLETE (SS REJECT) 1.1

Logically (only from Problem code):

ProcessUnstructuredSS-Request REJECT
 Invoke Problem code:
 - Mistyped parameter

Coding:

BER-TLV 81 01 02

TERMINAL RESPONSE : SEND USSD 1.5.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND USSD
Command qualifier:	“00”
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	USSD Return Error
Additional information:	“No specific cause can be given”

Coding:

BER-TLV: 81 03 01 12 00 82 02 82 81 83 02
 37 00

Expected Sequence 1.6 (SEND USSD, 256 octets, 7-bit data, successful, long alpha identifier)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.6.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 1.6.1	
4	ME → USER	Display “once a RELEASE COMPLETE message containing the USSD Return Result message not containing an error has been received from the network, the ME shall inform the SIM that the command has”	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	[“USSD string received from SS”]
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 1.1.1	

PROACTIVE COMMAND: SEND USSD 1.6.1

Logically:

Command details

Command number: 1
 Command type: SEND USSD
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier: "once a RELEASE COMPLETE message containing the USSD Return Result message not containing an error has been received from the network, the ME shall inform the SIM that the command has"

USSD String

Data coding scheme: 7-bit default, no message class
 USSD string: "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-1234567890"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>81</u>	<u>FD</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>12</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>
	<u>85</u>	<u>81</u>	<u>B6</u>	<u>6F</u>	<u>6E</u>	<u>63</u>	<u>65</u>	<u>20</u>	<u>61</u>	<u>20</u>	<u>52</u>	<u>45</u>
	<u>4C</u>	<u>45</u>	<u>41</u>	<u>53</u>	<u>45</u>	<u>20</u>	<u>43</u>	<u>4F</u>	<u>4D</u>	<u>50</u>	<u>4C</u>	<u>45</u>
	<u>54</u>	<u>45</u>	<u>20</u>	<u>6D</u>	<u>65</u>	<u>73</u>	<u>73</u>	<u>61</u>	<u>67</u>	<u>65</u>	<u>20</u>	<u>63</u>
	<u>6F</u>	<u>6E</u>	<u>74</u>	<u>61</u>	<u>69</u>	<u>6E</u>	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>	<u>74</u>	<u>68</u>
	<u>65</u>	<u>20</u>	<u>55</u>	<u>53</u>	<u>53</u>	<u>44</u>	<u>20</u>	<u>52</u>	<u>65</u>	<u>74</u>	<u>75</u>	<u>72</u>
	<u>6E</u>	<u>20</u>	<u>52</u>	<u>65</u>	<u>73</u>	<u>75</u>	<u>6C</u>	<u>74</u>	<u>20</u>	<u>6D</u>	<u>65</u>	<u>73</u>
	<u>73</u>	<u>61</u>	<u>67</u>	<u>65</u>	<u>20</u>	<u>6E</u>	<u>6F</u>	<u>74</u>	<u>20</u>	<u>63</u>	<u>6F</u>	<u>6E</u>
	<u>74</u>	<u>61</u>	<u>69</u>	<u>6E</u>	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>	<u>61</u>	<u>6E</u>	<u>20</u>	<u>65</u>
	<u>72</u>	<u>72</u>	<u>6F</u>	<u>72</u>	<u>20</u>	<u>68</u>	<u>61</u>	<u>73</u>	<u>20</u>	<u>62</u>	<u>65</u>	<u>65</u>
	<u>6E</u>	<u>20</u>	<u>72</u>	<u>65</u>	<u>63</u>	<u>65</u>	<u>69</u>	<u>76</u>	<u>65</u>	<u>64</u>	<u>20</u>	<u>66</u>
	<u>72</u>	<u>6F</u>	<u>6D</u>	<u>20</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>20</u>	<u>6E</u>	<u>65</u>	<u>74</u>	<u>77</u>
	<u>6F</u>	<u>72</u>	<u>6B</u>	<u>2C</u>	<u>20</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>20</u>	<u>4D</u>	<u>45</u>	<u>20</u>
	<u>73</u>	<u>68</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>69</u>	<u>6E</u>	<u>66</u>	<u>6F</u>	<u>72</u>	<u>6D</u>
	<u>20</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>20</u>	<u>53</u>	<u>49</u>	<u>4D</u>	<u>20</u>	<u>74</u>	<u>68</u>	<u>61</u>
	<u>74</u>	<u>20</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>20</u>	<u>63</u>	<u>6F</u>	<u>6D</u>	<u>6D</u>	<u>61</u>	<u>6E</u>
	<u>64</u>	<u>20</u>	<u>68</u>	<u>61</u>	<u>73</u>	<u>8A</u>	<u>39</u>	<u>F0</u>	<u>41</u>	<u>E1</u>	<u>90</u>	<u>58</u>
	<u>34</u>	<u>1E</u>	<u>91</u>	<u>49</u>	<u>E5</u>	<u>92</u>	<u>D9</u>	<u>74</u>	<u>3E</u>	<u>A1</u>	<u>51</u>	<u>E9</u>
	<u>94</u>	<u>5A</u>	<u>B5</u>	<u>5E</u>	<u>B1</u>	<u>59</u>	<u>6D</u>	<u>2B</u>	<u>2C</u>	<u>1E</u>	<u>93</u>	<u>CB</u>
	<u>E6</u>	<u>33</u>	<u>3A</u>	<u>AD</u>	<u>5E</u>	<u>B3</u>	<u>DB</u>	<u>EE</u>	<u>37</u>	<u>3C</u>	<u>2E</u>	<u>9F</u>
	<u>D3</u>	<u>EB</u>	<u>F6</u>	<u>3B</u>	<u>3E</u>	<u>AF</u>	<u>6F</u>	<u>C5</u>	<u>64</u>	<u>33</u>	<u>5A</u>	<u>CD</u>
	<u>76</u>	<u>C3</u>	<u>E5</u>	<u>60</u>								

Expected Sequence 1.7 (SEND USSD, 7-bit data, successful, no alpha identifier)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.7.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 1.7.1	
4	ME → USER	Optionally display an informative message	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	["USSD string received from SS"]
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 1.1.1	

PROACTIVE COMMAND: SEND USSD 1.7.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND USSD
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	Network
<u>USSD String</u>	
Data coding scheme:	7-bit default, no message class
USSD string:	"ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-1234567890"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>44</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>12</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>8A</u>
	<u>39</u>	<u>F0</u>	<u>41</u>	<u>E1</u>	<u>90</u>	<u>58</u>	<u>34</u>	<u>1E</u>	<u>91</u>	<u>49</u>	<u>E5</u>	<u>92</u>
	<u>D9</u>	<u>74</u>	<u>3E</u>	<u>A1</u>	<u>51</u>	<u>E9</u>	<u>94</u>	<u>5A</u>	<u>B5</u>	<u>5E</u>	<u>B1</u>	<u>59</u>
	<u>6D</u>	<u>2B</u>	<u>2C</u>	<u>1E</u>	<u>93</u>	<u>CB</u>	<u>E6</u>	<u>33</u>	<u>3A</u>	<u>AD</u>	<u>5E</u>	<u>B3</u>
	<u>DB</u>	<u>EE</u>	<u>37</u>	<u>3C</u>	<u>2E</u>	<u>9F</u>	<u>D3</u>	<u>EB</u>	<u>F6</u>	<u>3B</u>	<u>3E</u>	<u>AF</u>
	<u>6F</u>	<u>C5</u>	<u>64</u>	<u>33</u>	<u>5A</u>	<u>CD</u>	<u>76</u>	<u>C3</u>	<u>E5</u>	<u>60</u>		

Expected Sequence 1.8 (SEND USSD, 7-bit data, successful, null length alpha identifier)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND USSD 1.8.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>USSD 1.8.1</u>	
4	<u>ME →</u> <u>USER</u>	<u>the ME should not give any</u> <u>information to the user on the fact</u> <u>that the ME is sending a USSD</u> <u>request</u>	
5	<u>ME → SS</u>	<u>REGISTER 1.1</u>	
6	<u>SS → ME</u>	<u>RELEASE COMPLETE (SS</u> <u>RETURN RESULT) 1.1</u>	<u>["USSD string received from SS"]</u>
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>USSD 1.1.1</u>	

PROACTIVE COMMAND: SEND USSD 1.8.1Logically:Command details

Command number: 1
Command type: SEND USSD
Command qualifier: "00"

Device identities

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

USSD String

Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-1234567890"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>46</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>12</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>00</u>	<u>8A</u>	<u>39</u>	<u>F0</u>	<u>41</u>	<u>E1</u>	<u>90</u>	<u>58</u>	<u>34</u>	<u>1E</u>	<u>91</u>	<u>49</u>
	<u>E5</u>	<u>92</u>	<u>D9</u>	<u>74</u>	<u>3E</u>	<u>A1</u>	<u>51</u>	<u>E9</u>	<u>94</u>	<u>5A</u>	<u>B5</u>	<u>5E</u>
	<u>B1</u>	<u>59</u>	<u>6D</u>	<u>2B</u>	<u>2C</u>	<u>1E</u>	<u>93</u>	<u>CB</u>	<u>E6</u>	<u>33</u>	<u>3A</u>	<u>AD</u>
	<u>5E</u>	<u>B3</u>	<u>DB</u>	<u>EE</u>	<u>37</u>	<u>3C</u>	<u>2E</u>	<u>9F</u>	<u>D3</u>	<u>EB</u>	<u>F6</u>	<u>3B</u>
	<u>3E</u>	<u>AF</u>	<u>6F</u>	<u>C5</u>	<u>64</u>	<u>33</u>	<u>5A</u>	<u>CD</u>	<u>76</u>	<u>C3</u>	<u>E5</u>	<u>60</u>

27.22.4.12.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1.1 – 1.8.

27.22.4.12.2 SEND USSD (Icon support)27.22.4.12.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.12.2.2 Conformance requirement27.22.4.12.2.3 Test Purpose

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

In addition to verify that if an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.12.2.4 Method of test27.22.4.12.2.4.1 Initial Conditions

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

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator

See Annex C for coding of the elementary files on SIM.

27.22.4.12.2.4.2 Procedure

Expected Sequence 2.1A (SEND USSD, 7-bit data, successful, basic icon self explanatory, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND USSD 2.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>USSD 2.1.1</u>	[BASIC-ICON, self-explanatory]
4	<u>ME →</u> <u>USER</u>	<u>Display BASIC ICON</u>	
5	<u>ME → SS</u>	<u>REGISTER 2.1</u>	
6	<u>SS → ME</u>	<u>RELEASE COMPLETE (SS</u> <u>RETURN RESULT) 2.1</u>	["USSD string received from SS"]
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>USSD 2.1.1A</u>	[Command performed successfully]

PROACTIVE COMMAND: SEND USSD 2.1.1

Logically:

Command details

Command number: 1
Command type: SEND USSD
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Basic Icon"

USSD String

Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHJKLMNPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-
 1234567890"

Icon Identifier:

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

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>55</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>12</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>0B</u>	<u>04</u>	<u>42</u>	<u>61</u>	<u>73</u>	<u>69</u>	<u>63</u>	<u>20</u>	<u>49</u>	<u>63</u>	<u>6F</u>	<u>6E</u>
	<u>8A</u>	<u>39</u>	<u>F0</u>	<u>41</u>	<u>E1</u>	<u>90</u>	<u>58</u>	<u>34</u>	<u>1E</u>	<u>91</u>	<u>49</u>	<u>E5</u>
	<u>92</u>	<u>D9</u>	<u>74</u>	<u>3E</u>	<u>A1</u>	<u>51</u>	<u>E9</u>	<u>94</u>	<u>5A</u>	<u>B5</u>	<u>5E</u>	<u>B1</u>
	<u>59</u>	<u>6D</u>	<u>2B</u>	<u>2C</u>	<u>1E</u>	<u>93</u>	<u>CB</u>	<u>E6</u>	<u>33</u>	<u>3A</u>	<u>AD</u>	<u>5E</u>
	<u>B3</u>	<u>DB</u>	<u>EE</u>	<u>37</u>	<u>3C</u>	<u>2E</u>	<u>9F</u>	<u>D3</u>	<u>EB</u>	<u>F6</u>	<u>3B</u>	<u>3E</u>
	<u>AF</u>	<u>6F</u>	<u>C5</u>	<u>64</u>	<u>33</u>	<u>5A</u>	<u>CD</u>	<u>76</u>	<u>C3</u>	<u>E5</u>	<u>60</u>	<u>9E</u>
	<u>02</u>	<u>00</u>	<u>01</u>									

REGISTER 2.1

Logically (only USSD argument)

ProcessUnstructuredSS-Request ARGUMENT

USSD-DataCodingScheme:

- 7-bit default, no message class

USSD string:

- "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV	<u>30</u>	<u>3D</u>	<u>04</u>	<u>01</u>	<u>F0</u>	<u>04</u>	<u>38</u>	<u>41</u>	<u>E1</u>	<u>90</u>	<u>58</u>	<u>34</u>
	<u>1E</u>	<u>91</u>	<u>49</u>	<u>E5</u>	<u>92</u>	<u>D9</u>	<u>74</u>	<u>3E</u>	<u>A1</u>	<u>51</u>	<u>E9</u>	<u>94</u>
	<u>5A</u>	<u>B5</u>	<u>5E</u>	<u>B1</u>	<u>59</u>	<u>6D</u>	<u>2B</u>	<u>2C</u>	<u>1E</u>	<u>93</u>	<u>CB</u>	<u>E6</u>
	<u>33</u>	<u>3A</u>	<u>AD</u>	<u>5E</u>	<u>B3</u>	<u>DB</u>	<u>EE</u>	<u>37</u>	<u>3C</u>	<u>2E</u>	<u>9F</u>	<u>D3</u>
	<u>EB</u>	<u>F6</u>	<u>3B</u>	<u>3E</u>	<u>AF</u>	<u>6F</u>	<u>C5</u>	<u>64</u>	<u>33</u>	<u>5A</u>	<u>CD</u>	<u>76</u>
	<u>C3</u>	<u>E5</u>	<u>60</u>									

RELEASE COMPLETE (SS RETURN RESULT) 2.1

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT

USSD-DataCodingScheme:

- 7-bit default, no message class

USSD string:

- "USSD string received from SS"

Coding:

BER-TLV	<u>30</u>	<u>1E</u>	<u>04</u>	<u>01</u>	<u>F0</u>	<u>04</u>	<u>19</u>	<u>D5</u>	<u>E9</u>	<u>94</u>	<u>08</u>	<u>9A</u>
	<u>D3</u>	<u>E5</u>	<u>69</u>	<u>F7</u>	<u>19</u>	<u>24</u>	<u>2F</u>	<u>8F</u>	<u>CB</u>	<u>69</u>	<u>7B</u>	<u>99</u>
	<u>0C</u>	<u>32</u>	<u>CB</u>	<u>DF</u>	<u>6D</u>	<u>D0</u>	<u>74</u>	<u>0A</u>				

TERMINAL RESPONSE : SEND USSD 2.1.1A

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: 7-bit default, no message class

String: "USSD string received from SS"

Coding:

BER-TLV:	<u>81</u>	<u>03</u>	<u>01</u>	<u>12</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>
	<u>00</u>	<u>8D</u>	<u>1A</u>	<u>F0</u>	<u>D5</u>	<u>E9</u>	<u>94</u>	<u>08</u>	<u>9A</u>	<u>D3</u>	<u>E5</u>
	<u>69</u>	<u>F7</u>	<u>19</u>	<u>24</u>	<u>2F</u>	<u>8F</u>	<u>CB</u>	<u>69</u>	<u>7B</u>	<u>99</u>	<u>0C</u>
	<u>32</u>	<u>CB</u>	<u>DF</u>	<u>6D</u>	<u>D0</u>	<u>74</u>	<u>0A</u>				

Expected Sequence 2.1B (SEND USSD, 7-bit data, successful, basic icon self explanatory, requested icon could not be displayed)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND USSD 2.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>USSD 2.1.1</u>	<u>[BASIC-ICON, self-explanatory]</u>
4	<u>ME →</u> <u>USER</u>	<u>Display "Basic Icon" without the</u> <u>icon</u>	
5	<u>ME → SS</u>	<u>REGISTER 2.1</u>	
6	<u>SS → ME</u>	<u>RELEASE COMPLETE (SS</u> <u>RETURN RESULT) 2.1</u>	<u>["USSD string received from SS"]</u>
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>USSD 2.1.1B</u>	<u>[Command performed but requested icon</u> <u>could not be displayed]</u>

TERMINAL RESPONSE : SEND USSD 2.1.1B

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME

Destination device: SIM

Result

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

Text string

Data coding scheme: 7-bit default, no message class

String: "USSD string received from SS"

Coding:

BER-TLV: 81 03 01 12 00 82 02 82 81 83 01
 04 8D 1A F0 D5 E9 94 08 9A D3 E5
 69 F7 19 24 2F 8F CB 69 7B 99 0C
 32 CB DF 6D D0 74 0A

Expected Sequence 2.2 (SEND USSD, 7-bit data, successful, colour icon self explanatory)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND USSD 2.2.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>USSD 2.2.1</u>	<u>[COLOUR-ICON, self-explanatory]</u>
4	<u>ME →</u> <u>USER</u>	<u>Display COLOUR-ICON</u> <u>or</u> <u>May give information to user</u> <u>concerning what is happening</u>	
5	<u>ME → SS</u>	<u>REGISTER 2.1</u>	
6	<u>SS → ME</u>	<u>RELEASE COMPLETE (SS</u> <u>RETURN RESULT) 2.1</u>	<u>["USSD string received from SS"]</u>
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>USSD 2.1.1A</u> <u>or</u> <u>TERMINAL RESPONSE : SEND</u> <u>USSD 2.1.1B</u>	<u>[Command performed successfully]</u> <u>or</u> <u>[Command performed but requested icon</u> <u>could not be displayed]</u>

PROACTIVE COMMAND: SEND USSD 2.2.1

Logically:

Command details

Command number: 1
Command type: SEND USSD
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier : « Color Icon »

USSD String

Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-
 1234567890"

Icon Identifier:

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

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>55</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>12</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>0B</u>	<u>04</u>	<u>43</u>	<u>6F</u>	<u>6C</u>	<u>6F</u>	<u>72</u>	<u>20</u>	<u>49</u>	<u>63</u>	<u>6F</u>	<u>6E</u>
	<u>8A</u>	<u>39</u>	<u>F0</u>	<u>41</u>	<u>E1</u>	<u>90</u>	<u>58</u>	<u>34</u>	<u>1E</u>	<u>91</u>	<u>49</u>	<u>E5</u>
	<u>92</u>	<u>D9</u>	<u>74</u>	<u>3E</u>	<u>A1</u>	<u>51</u>	<u>E9</u>	<u>94</u>	<u>5A</u>	<u>B5</u>	<u>5E</u>	<u>B1</u>
	<u>59</u>	<u>6D</u>	<u>2B</u>	<u>2C</u>	<u>1E</u>	<u>93</u>	<u>CB</u>	<u>E6</u>	<u>33</u>	<u>3A</u>	<u>AD</u>	<u>5E</u>
	<u>B3</u>	<u>DB</u>	<u>EE</u>	<u>37</u>	<u>3C</u>	<u>2E</u>	<u>9F</u>	<u>D3</u>	<u>EB</u>	<u>F6</u>	<u>3B</u>	<u>3E</u>
	<u>AF</u>	<u>6F</u>	<u>C5</u>	<u>64</u>	<u>33</u>	<u>5A</u>	<u>CD</u>	<u>76</u>	<u>C3</u>	<u>E5</u>	<u>60</u>	<u>9E</u>
	<u>02</u>	<u>00</u>	<u>02</u>									

Expected Sequence 2.3A (SEND USSD, 7-bit data, successful, basic icon non self-explanatory, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND USSD 2.3.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>USSD 2.3.1</u>	<u>[BASIC-ICON, non self-explanatory]</u>
4	<u>ME →</u> <u>USER</u>	<u>Display "Basic Icon" and BASIC-</u> <u>ICON</u>	
5	<u>ME → SS</u>	<u>REGISTER 2.1</u>	
6	<u>SS → ME</u>	<u>RELEASE COMPLETE (SS</u> <u>RETURN RESULT) 2.1</u>	<u>["USSD string received from SS"]</u>
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>USSD 2.1.1A</u>	<u>[Command performed successfully]</u>

PROACTIVE COMMAND: SEND USSD 2.3.1

Logically:

Command details

Command number: 1
Command type: SEND USSD
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha Identifier: "Basic Icon"

USSD String

Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxy-
 1234567890"

Icon Identifier

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

Coding:

BER-TLV:

<u>D0</u>	<u>55</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>12</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
<u>0B</u>	<u>04</u>	<u>42</u>	<u>61</u>	<u>73</u>	<u>69</u>	<u>63</u>	<u>20</u>	<u>49</u>	<u>63</u>	<u>6F</u>	<u>6E</u>
<u>8A</u>	<u>39</u>	<u>F0</u>	<u>41</u>	<u>E1</u>	<u>90</u>	<u>58</u>	<u>34</u>	<u>1E</u>	<u>91</u>	<u>49</u>	<u>E5</u>
<u>92</u>	<u>D9</u>	<u>74</u>	<u>3E</u>	<u>A1</u>	<u>51</u>	<u>E9</u>	<u>94</u>	<u>5A</u>	<u>B5</u>	<u>5E</u>	<u>B1</u>
<u>59</u>	<u>6D</u>	<u>2B</u>	<u>2C</u>	<u>1E</u>	<u>93</u>	<u>CB</u>	<u>E6</u>	<u>33</u>	<u>3A</u>	<u>AD</u>	<u>5E</u>
<u>B3</u>	<u>DB</u>	<u>EE</u>	<u>37</u>	<u>3C</u>	<u>2E</u>	<u>9F</u>	<u>D3</u>	<u>EB</u>	<u>F6</u>	<u>3B</u>	<u>3E</u>
<u>AF</u>	<u>6F</u>	<u>C5</u>	<u>64</u>	<u>33</u>	<u>5A</u>	<u>CD</u>	<u>76</u>	<u>C3</u>	<u>E5</u>	<u>60</u>	<u>9E</u>
<u>02</u>	<u>01</u>	<u>01</u>									

Expected Sequence 2.3B (SEND USSD, 7-bit data, successful, basic icon non self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 2.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 2.3.1	[BASIC-ICON, non self-explanatory]
4	ME → USER	Display "Basic Icon" without the icon	
5	ME → SS	REGISTER 2.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 2.1	["USSD string received from SS"]
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 2.1.1B	[Command performed but requested icon could not be displayed]

Expected Sequence 2.4 (SEND USSD, 7-bit data, basic icon non self-explanatory, no alpha identifier presented)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 2.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 2.4.1	[BASIC-ICON, non self-explanatory]
4	ME → SIM	TERMINAL RESPONSE : SEND USSD 2.4.1	[Command data not understood by ME]

PROACTIVE COMMAND : SEND USSD 2.4.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND USSD
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	Network
<u>USSD String</u>	
Data coding scheme:	7-bit default, no message class
USSD string:	"ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-
<u>Icon Identifier</u>	
Icon qualifier:	icon is non self-explanatory
Icon Identifier:	record 1 in EF _(IMG)

Coding:

<u>BER-TLV:</u>	D0	48	81	03	01	12	00	82	02	81	83	8A
	39	F0	41	E1	90	58	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	B3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E5	60	9E	02
	01	01										

TERMINAL RESPONSE : SEND USSD 2.4.1Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SEND USSD</u>
<u>Command qualifier:</u>	<u>“00”</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command data not understood by ME</u>

Coding:

BER-TLV: 81 03 01 12 00 82 02 82 81 83 01 32

27.22.4.12.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.1 – 2.4.

27.22.4.12.3 SEND USSD (UCS2 support)27.22.4.12.3.1 Definition and applicability

See Section 3.2.2.

27.22.4.12.3.2 Conformance requirement

The ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications:

ISO/IEC 10646 [17].

27.22.4.12.3.3 Test Purpose

To verify that the ME displays the UCS2 text contained in the SEND USSD proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.12.3.4 Method of test27.22.4.12.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

27.22.4.12.3.4.2 Procedure

Expected Sequence 3.1 (SEND USSD, 7-bit data, successful, UCS2 text)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND USSD 3.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND: SEND</u> <u>USSD 3.1.1</u>	
4	<u>ME →</u> <u>USER</u>	<u>Display “ЗДРАВСТВУЙТЕ”</u>	<u>["Hello" in Russian]</u>
5	<u>ME → SS</u>	<u>REGISTER 3.1</u>	
6	<u>SS → ME</u>	<u>RELEASE COMPLETE (SS</u> <u>RETURN RESULT) 3.1</u>	<u>[Successful]</u>
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: SEND</u> <u>USSD 3.1.1</u>	<u>[Command performed successfully]</u>

PROACTIVE COMMAND: SEND USSD 3.1.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha Identifier

Data coding scheme: UCS2 (16bit)

Text: “ЗДРАВСТВУЙТЕ”

USSD String

Data coding scheme: 7-bit default, no message class

USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwyz-

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>5F</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>12</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>19</u>	<u>80</u>	<u>04</u>	<u>17</u>	<u>04</u>	<u>14</u>	<u>04</u>	<u>20</u>	<u>04</u>	<u>10</u>	<u>04</u>	<u>12</u>
	<u>04</u>	<u>21</u>	<u>04</u>	<u>22</u>	<u>04</u>	<u>12</u>	<u>04</u>	<u>23</u>	<u>04</u>	<u>19</u>	<u>04</u>	<u>22</u>
	<u>04</u>	<u>15</u>	<u>8A</u>	<u>39</u>	<u>F0</u>	<u>41</u>	<u>E1</u>	<u>90</u>	<u>58</u>	<u>34</u>	<u>1E</u>	<u>91</u>
	<u>49</u>	<u>E5</u>	<u>92</u>	<u>D9</u>	<u>74</u>	<u>3E</u>	<u>A1</u>	<u>51</u>	<u>E9</u>	<u>94</u>	<u>5A</u>	<u>B5</u>
	<u>5E</u>	<u>B1</u>	<u>59</u>	<u>6D</u>	<u>2B</u>	<u>2C</u>	<u>1E</u>	<u>93</u>	<u>CB</u>	<u>E6</u>	<u>33</u>	<u>3A</u>
	<u>AD</u>	<u>5E</u>	<u>B3</u>	<u>DB</u>	<u>EE</u>	<u>37</u>	<u>3C</u>	<u>2E</u>	<u>9F</u>	<u>D3</u>	<u>EB</u>	<u>F6</u>
	<u>3B</u>	<u>3E</u>	<u>AF</u>	<u>6F</u>	<u>C5</u>	<u>64</u>	<u>33</u>	<u>5A</u>	<u>CD</u>	<u>76</u>	<u>C3</u>	<u>E5</u>
	<u>60</u>											

REGISTER 3.1

Logically (only USSD argument)ProcessUnstructuredSS-Request ARGUMENTUSSD-DataCodingScheme:- 7-bit default, no message classUSSD string:- "ABCDEFGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"Coding:

<u>BER-TLV</u>	<u>30</u>	<u>3D</u>	<u>04</u>	<u>01</u>	<u>F0</u>	<u>04</u>	<u>38</u>	<u>41</u>	<u>E1</u>	<u>90</u>	<u>58</u>	<u>34</u>
	<u>1E</u>	<u>91</u>	<u>49</u>	<u>E5</u>	<u>92</u>	<u>D9</u>	<u>74</u>	<u>3E</u>	<u>A1</u>	<u>51</u>	<u>E9</u>	<u>94</u>
	<u>5A</u>	<u>B5</u>	<u>5E</u>	<u>B1</u>	<u>59</u>	<u>6D</u>	<u>2B</u>	<u>2C</u>	<u>1E</u>	<u>93</u>	<u>CB</u>	<u>E6</u>
	<u>33</u>	<u>3A</u>	<u>AD</u>	<u>5E</u>	<u>B3</u>	<u>DB</u>	<u>EE</u>	<u>37</u>	<u>3C</u>	<u>2E</u>	<u>9F</u>	<u>D3</u>
	<u>EB</u>	<u>F6</u>	<u>3B</u>	<u>3E</u>	<u>AF</u>	<u>6F</u>	<u>C5</u>	<u>64</u>	<u>33</u>	<u>5A</u>	<u>CD</u>	<u>76</u>
	<u>C3</u>	<u>E5</u>	<u>60</u>									

RELEASE COMPLETE (SS RETURN RESULT) 3.1Logically (only from USSD result):ProcessUnstructuredSS-Request RETURN RESULTUSSD-DataCodingScheme:- 7-bit default, no message classUSSD string:- "USSD string received from SS"Coding:

<u>BER-TLV</u>	<u>30</u>	<u>1E</u>	<u>04</u>	<u>01</u>	<u>F0</u>	<u>04</u>	<u>19</u>	<u>D5</u>	<u>E9</u>	<u>94</u>	<u>08</u>	<u>9A</u>
	<u>D3</u>	<u>E5</u>	<u>69</u>	<u>F7</u>	<u>19</u>	<u>24</u>	<u>2F</u>	<u>8F</u>	<u>CB</u>	<u>69</u>	<u>7B</u>	<u>99</u>
	<u>0C</u>	<u>32</u>	<u>CB</u>	<u>DF</u>	<u>6D</u>	<u>D0</u>	<u>74</u>	<u>0A</u>				

TERMINAL RESPONSE : SEND USSD 3.1.1Logically:Command detailsCommand number: 1Command type: SEND USSDCommand qualifier: "00"Device identitiesSource device: MEDestination device: SIMResultGeneral Result: Command performed successfullyText stringData coding scheme: 7-bit default, no message classString: "USSD string received from SS"Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>12</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>
	<u>00</u>	<u>8D</u>	<u>1A</u>	<u>F0</u>	<u>D5</u>	<u>E9</u>	<u>94</u>	<u>08</u>	<u>9A</u>	<u>D3</u>	<u>E5</u>
	<u>69</u>	<u>F7</u>	<u>19</u>	<u>24</u>	<u>2F</u>	<u>8F</u>	<u>CB</u>	<u>69</u>	<u>7B</u>	<u>99</u>	<u>0C</u>
	<u>32</u>	<u>CB</u>	<u>DF</u>	<u>6D</u>	<u>D0</u>	<u>74</u>	<u>0A</u>				

27.22.4.12.3.5 Test RequirementThe ME shall operate in the manner defined in expected sequence 3.1

27.22.4.13 SET UP CALL

27.22.4.13.1 SET UP CALL (normal)

27.22.4.13.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.13.1.2 Conformance requirement

The ME shall support the Proactive SIM: Set Up Call facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.13 (Set Up Call), clause 6.6.12 (Set Up Call), clause 12.6 (Command details), clause 12.7 (Device Identities), clause 12.12 (Result), clause 12.12.3 (Additional information for network problem), clause 5.2 (Terminal Profile)

27.22.4.13.1.3 Test Purpose

To verify that the ME accepts the Proactive Command – Set Up Call , displays the alpha identifier to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.1.4 Method of test

27.22.4.13.1.4.1 Initial Conditions

The ME is connected to both the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the system simulator.

27.22.4.13.1.4.2 Procedure

Expected Sequence 1.1 (SET UP CALL, call confirmed by the user and connected)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP CALL 1.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET</u> <u>UP CALL 1.1.1</u>	
4	<u>ME →</u> <u>USER</u>	<u>ME displays "Not busy" during</u> <u>user confirmation phase.</u>	
5	<u>USER →</u> <u>ME</u>	<u>The user confirms the call set up</u>	<u>[user confirmation]</u>
6	<u>ME->SS</u>	<u>The ME attempts to set up a call</u> <u>to "+012340123456p1p2"</u>	
7	<u>SS → ME</u>	<u>The ME receives the CONNECT</u> <u>message from the system</u> <u>simulator.</u>	
8	<u>ME → SIM</u>	<u>TERMINAL RESPONSE 1.1.1</u> <u>The ME shall not update EF LND</u> <u>with the called party address.</u>	<u>[Command performed successfully]</u>
9	<u>USER →</u> <u>ME</u>	<u>The user ends the call after 5</u> <u>seconds.</u> <u>The ME returns to idle mode.</u>	

PROACTIVE COMMAND : SET UP CALL 1.1.1

Logically:

Command details

Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Not busy"

Address

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

Coding:

BER-TLV: D0 1E 81 03 01 10 00 82 02 81 83 85
 08 4E 6F 74 20 62 75 73 79 86 09 91
 10 32 04 21 43 65 1C 2C

TERMINAL RESPONSE : SET UP CALL 1.1.1Logically:Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

Expected Sequence 1.2 (SET UP CALL, call rejected by the user)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.1.1	
4	ME → USER	ME displays "Not busy" during the user confirmation phase	
5	USER → ME	The user rejects the set up call	[user rejects the call]
6	ME → SIM	TERMINAL RESPONSE 1.2.1	[User did not accept call set-up request]
7	ME -> USER	The ME returns in idle mode.	

TERMINAL RESPONSE : SET UP CALL 1.2.1Logically:Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME

Destination device: SIM

Result

General Result: User did not accept call set-up request

Coding:

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

Expected Sequence 1.3 (SET UP CALL, redial)The system simulator shall be configured such that call set up requests will be rejected with cause "User Busy".

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND	
2	ME → SIM	PENDING: SET UP CALL 1.2.1	
3	SIM → ME	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.2.1	[only if not currently busy on another call with redial]
4	ME → USER	ME displays "Not busy with redial" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirms the call]
6	ME -> SS	ME attempts to set up a call to "+012340123456p1p2" at least twice	[redial mechanism]
7	ME → SIM	TERMINAL RESPONSE 1.3.1	[network currently unable to process command]
8	ME -> USER	The ME returns in idle mode.	

PROACTIVE COMMAND : SET UP CALL 1.2.1

Logically:

Command details
 Command number: 1
 Command type: SET UP CALL
 Command qualifier: only if not currently busy on another call 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				

TERMINAL RESPONSE : SET UP CALL 1.3.1

Logically:

Command details
 Command number: 1
 Command type: SET UP CALL
 Command qualifier: only if not currently busy on another call with redial

Device identities
 Source device: ME
 Destination device: SIM

Result
 General Result: network currently unable to process command
 Additional Information: User Busy

Coding:

BER-TLV:	81	03	01	10	01	82	02	82	81	83	02	21
	91											

Expected Sequence 1.4 (SET UP CALL, putting all other calls on hold, ME busy)

ME is busy on a call

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP CALL 1.3.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET</u> <u>UP CALL 1.3.1</u>	<u>[putting all other calls on hold]</u>
<u>4</u>	<u>ME →</u> <u>USER</u>	<u>ME displays "On hold" during the</u> <u>user confirmation phase</u>	
<u>5</u>	<u>USER →</u> <u>ME</u>	<u>The user confirms the set up call</u>	<u>[user confirms the call]</u>
<u>6</u>	<u>ME → SS</u>	<u>The active call is put on hold</u>	
<u>7</u>	<u>ME → SS</u>	<u>The ME attempts to set up a call</u> <u>to "+012340123456p1p2"</u>	
<u>8</u>	<u>SS → ME</u>	<u>The ME receives the CONNECT</u> <u>message from the system</u> <u>simulator.</u>	
<u>9</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE 1.4.1</u>	<u>[Command performed successfully]</u>
<u>10</u>	<u>USER →</u> <u>ME</u>	<u>The user ends the call after 5</u> <u>seconds.</u> <u>The ME retrieves the previous call</u>	

PROACTIVE COMMAND : SET UP CALL 1.3.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: putting all other calls on hold

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "On hold"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Coding:

BER-TLV: D0 1D 81 03 01 10 02 82 02 81 83 85
 07 4F 6E 20 68 6F 6C 64 86 09 91 10
 32 04 21 43 65 1C 2C

TERMINAL RESPONSE : SET UP CALL 1.4.1Logically:Command details

Command number: 1
 Command type: SET UP CALL
 Command qualifier: putting all other calls on hold

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

Expected Sequence 1.5 (SET UP CALL, disconnecting all other calls, ME busy)ME is busy on a call

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.4.1	[disconnecting all other calls]
4	ME → USER	ME displays "Disconnect" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirms the call]
6	ME → SS	The ME disconnects the active call	
7	ME → SS	The ME attempts to set up a call to "+012340123456p1p2"	
8	SS → ME	The ME receives the CONNECT message from the system simulator.	
9	ME → SIM	TERMINAL RESPONSE 1.5.1	[Command performed successfully]
10	USER → ME	The user ends the call after 5 seconds.	

PROACTIVE COMMAND : SET UP CALL 1.4.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	disconnecting all other calls
<u>Device identities</u>	
Source device:	SIM
Destination device:	Network
Alpha identifier:	"Disconnect"
<u>Address</u>	
TON:	International
NPI:	ISDN / telephone numbering plan
Dialling number string	"012340123456p1p2"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>20</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>04</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>0A</u>	<u>44</u>	<u>69</u>	<u>73</u>	<u>63</u>	<u>6F</u>	<u>6E</u>	<u>6E</u>	<u>65</u>	<u>63</u>	<u>74</u>	<u>86</u>
	<u>09</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>04</u>	<u>21</u>	<u>43</u>	<u>65</u>	<u>1C</u>	<u>2C</u>		

TERMINAL RESPONSE : SET UP CALL 1.5.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	putting all other calls on hold
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>04</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Expected Sequence 1.6 (SET UP CALL, only if not currently busy on another call, ME busy)

ME is busy on a call

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.1.1	[only if not currently busy on another call]
4	ME → SIM	TERMINAL RESPONSE 1.6.1	[ME currently unable to process command]

TERMINAL RESPONSE : SET UP CALL 1.6.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	only if not currently busy on another call
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	ME currently unable to process command
Additional Information:	ME currently busy on call

Coding:

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

Expected Sequence 1.7 (SET UP CALL, putting all other calls on hold, call hold is not allowed)

ME is busy on a call.

The system simulator shall be configured to not allow Call Hold.

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.4.1	[putting all other calls on hold]
4	ME → USER	ME displays "On hold" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirms the call]
6	ME → SIM	TERMINAL RESPONSE 1.7.1	[Network currently unable to process command]

TERMINAL RESPONSE : SET UP CALL 1.7.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	putting all other calls on hold
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	ME currently unable to process command
Additional Information:	No specific cause can be given

Coding:

BER-TLV: 81 03 01 10 02 82 02 82 81 83 02 21
00

Expected Sequence 1.8 (SET UP CALL, Capability configuration)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.8.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SET UP CALL 1.8.1	[Capability configuration parameters: full rate support]
4	ME → USER	ME displays "Capability config" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME→SS	The ME attempts to set up a call to "+012340123456p1p2" using the capability configuration parameters supplied by SIM	
7	SS → ME	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE 1.8.1	[Command performed successfully]
9	USER → ME	The user ends the call The ME returns in idle mode.	

PROACTIVE COMMAND : SET UP CALL 1.8.1

Logically:

Command details

Command number: 1
Command type: SET UP CALL
Command qualifier: if not busy on another call

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Capability config"

Address

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

Capability configuration parameters

Information transfer cap: full rate support only MS

Coding:

BER-TLV: D0 2B 81 03 01 10 00 82 02 81 83 85
11 43 61 70 61 62 69 6C 69 74 79 20
63 6F 6E 66 69 67 86 09 91 10 32 04
21 43 65 1C 2C 87 02 01 20

TERMINAL RESPONSE : SET UP CALL 1.8.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	if not busy on another call
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

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

Expected Sequence 1.9 (SET UP CALL, max dialing number string, no alpha identifier)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.9.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE SET UP CALL 1.9.1	[dialing number string, no alpha identifier]
4	ME → USER	ME displays "Capability" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME->SS	The ME attempts to set up a call to "012345678901234567890123456789*##*##*##*#012345678901234567890123456789*##*##*##*#"	
7	SS → ME	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE 1.9.1	[Command performed successfully]
9	USER → ME	The user ends the call The ME returns in idle mode.	

PROACTIVE COMMAND : SET UP CALL 1.9.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call with redial

Device identities
Source device: SIM
Destination device: Network

Address
TON: International
NPI: ISDN / telephone numbering plan
Dialling number string: "012345678901234567890123456789*##*##*##*##*012345678901234567890123456789*##*##*##*##* "

Coding:

<u>BER-TLV:</u>	<u>D0</u>		<u>34</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>
	<u>86</u>		<u>29</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>98</u>	<u>10</u>	<u>32</u>	<u>54</u>
	<u>76</u>	<u>98</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>98</u>	<u>BA</u>	<u>BA</u>	<u>BA</u>	<u>BA</u>	<u>BA</u>
	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>98</u>	<u>10</u>	<u>32</u>	<u>45</u>	<u>67</u>	<u>89</u>	<u>01</u>	<u>32</u>
	<u>54</u>	<u>76</u>	<u>98</u>	<u>BA</u>	<u>BA</u>	<u>BA</u>	<u>BA</u>	<u>BA</u>				

TERMINAL RESPONSE : SET UP CALL 1.9.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call with redial

Device identities
Source device: ME
Destination device: SIM

Result
General Result: Command performed successfully

Coding:

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

Expected Sequence 1.10 (SET UP CALL,256 octets length, long first alpha identifier)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP CALL 1.10.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND: SET</u> <u>UP CALL 1.10.1</u>	<u>[alpha identifier]</u>
<u>4</u>	<u>ME →</u> <u>USER</u>	<u>ME displays "Three types are</u> <u>defined: - set up a call, but only if</u> <u>not currently busy on another call;</u> <u>- set up a call, putting all other</u> <u>calls (if any) on hold; - set up a</u> <u>call, disconnecting all other calls (if</u> <u>any) first. For each of these types,</u> <u>" during the user confirmation</u> <u>phase.</u>	
<u>5</u>	<u>USER →</u> <u>ME</u>	<u>The user confirms the set up call</u>	<u>[user confirmation]</u>
<u>6</u>	<u>ME → SS</u>	<u>The ME attempts to set up a call</u> <u>to "+01"</u>	
<u>7</u>	<u>SS → ME</u>	<u>The ME receives the CONNECT</u> <u>message from the system</u> <u>simulator.</u>	
<u>8</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE 1.10.1</u>	<u>[Command performed successfully]</u>
<u>9</u>	<u>USER →</u> <u>ME</u>	<u>The user ends the call</u> <u>The ME returns in idle mode.</u>	

PROACTIVE COMMAND : SET UP CALL 1.10.1

Logically:

Command details

Command number: 1
 Command type: SET UP CALL
 Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier: "Three types are defined: - set up a call, but only if not currently busy on another call; - set up a call, putting all other calls (if any) on hold; - set up a call, disconnecting all other calls (if any) first. For each of these types, "

Address

TON: International
 NPI: ISDN / telephone numbering plan
 Dialling number string: "01"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>81</u>	<u>FD</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>
	<u>85</u>	<u>81</u>	<u>ED</u>	<u>54</u>	<u>68</u>	<u>72</u>	<u>65</u>	<u>65</u>	<u>20</u>	<u>74</u>	<u>79</u>	<u>70</u>
	<u>65</u>	<u>73</u>	<u>20</u>	<u>61</u>	<u>72</u>	<u>65</u>	<u>20</u>	<u>64</u>	<u>65</u>	<u>66</u>	<u>69</u>	<u>6E</u>
	<u>65</u>	<u>64</u>	<u>3A</u>	<u>20</u>	<u>2D</u>	<u>20</u>	<u>73</u>	<u>65</u>	<u>74</u>	<u>20</u>	<u>75</u>	<u>70</u>
	<u>20</u>	<u>61</u>	<u>20</u>	<u>63</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>2C</u>	<u>20</u>	<u>62</u>	<u>75</u>	<u>74</u>
	<u>20</u>	<u>6F</u>	<u>6E</u>	<u>6C</u>	<u>79</u>	<u>20</u>	<u>69</u>	<u>66</u>	<u>20</u>	<u>6E</u>	<u>6F</u>	<u>74</u>
	<u>20</u>	<u>63</u>	<u>75</u>	<u>72</u>	<u>72</u>	<u>65</u>	<u>6E</u>	<u>74</u>	<u>6C</u>	<u>79</u>	<u>20</u>	<u>62</u>
	<u>75</u>	<u>73</u>	<u>79</u>	<u>20</u>	<u>6F</u>	<u>6E</u>	<u>20</u>	<u>61</u>	<u>6E</u>	<u>6F</u>	<u>74</u>	<u>68</u>
	<u>65</u>	<u>72</u>	<u>20</u>	<u>63</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>3B</u>	<u>20</u>	<u>2D</u>	<u>20</u>	<u>73</u>
	<u>65</u>	<u>74</u>	<u>20</u>	<u>75</u>	<u>70</u>	<u>20</u>	<u>61</u>	<u>20</u>	<u>63</u>	<u>61</u>	<u>6C</u>	<u>6C</u>
	<u>2C</u>	<u>20</u>	<u>70</u>	<u>75</u>	<u>74</u>	<u>74</u>	<u>69</u>	<u>6E</u>	<u>67</u>	<u>20</u>	<u>61</u>	<u>6C</u>
	<u>6C</u>	<u>20</u>	<u>6F</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>72</u>	<u>20</u>	<u>63</u>	<u>61</u>	<u>6C</u>	<u>6C</u>
	<u>73</u>	<u>20</u>	<u>28</u>	<u>69</u>	<u>66</u>	<u>20</u>	<u>61</u>	<u>6E</u>	<u>79</u>	<u>29</u>	<u>20</u>	<u>6F</u>
	<u>6E</u>	<u>20</u>	<u>68</u>	<u>6F</u>	<u>6C</u>	<u>64</u>	<u>3B</u>	<u>20</u>	<u>2D</u>	<u>20</u>	<u>73</u>	<u>65</u>
	<u>74</u>	<u>20</u>	<u>75</u>	<u>70</u>	<u>20</u>	<u>61</u>	<u>20</u>	<u>63</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>2C</u>
	<u>20</u>	<u>64</u>	<u>69</u>	<u>73</u>	<u>63</u>	<u>6F</u>	<u>6E</u>	<u>6E</u>	<u>65</u>	<u>63</u>	<u>74</u>	<u>69</u>
	<u>6E</u>	<u>67</u>	<u>20</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>20</u>	<u>6F</u>	<u>74</u>	<u>68</u>	<u>65</u>	<u>72</u>
	<u>20</u>	<u>63</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>73</u>	<u>20</u>	<u>28</u>	<u>69</u>	<u>66</u>	<u>20</u>	<u>61</u>
	<u>6E</u>	<u>79</u>	<u>29</u>	<u>20</u>	<u>66</u>	<u>69</u>	<u>72</u>	<u>73</u>	<u>74</u>	<u>2E</u>	<u>20</u>	<u>46</u>
	<u>6F</u>	<u>72</u>	<u>20</u>	<u>65</u>	<u>61</u>	<u>63</u>	<u>68</u>	<u>20</u>	<u>6F</u>	<u>66</u>	<u>20</u>	<u>74</u>
	<u>68</u>	<u>65</u>	<u>73</u>	<u>65</u>	<u>20</u>	<u>74</u>	<u>79</u>	<u>70</u>	<u>65</u>	<u>73</u>	<u>2C</u>	<u>20</u>
	<u>86</u>	<u>02</u>	<u>91</u>	<u>10</u>								

TERMINAL RESPONSE : SET UP CALL 1.10.1

Logically:

Command details

Command number: 1
 Command type: SET UP CALL
 Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Expected Sequence 1.11A (SET UP CALL, Called party subaddress, command performed successfully)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.11.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.11.1	[set up a call with called party subaddress]
4	ME → USER	ME displays "Called party" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME → SS	The ME attempts to set up a call to "+012340123456p1p2" with the called party subaddress information	
7	SS → ME	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE 1.11.1A	[Command performed successfully]
9	USER → ME	The user ends the call The ME returns in idle mode.	

Expected Sequence 1.11B (SET UP CALL, Called party subaddress, ME not supporting the called party subaddress)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.11.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.11.1	[set up a call with called party subaddress]
4	ME → SIM	TERMINAL RESPONSE 1.11.1B	[beyond ME's capabilities]

PROACTIVE COMMAND : SET UP CALL 1.11.1Logically: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:	<u>D0</u>	<u>2B</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>0C</u>	<u>43</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>65</u>	<u>64</u>	<u>20</u>	<u>70</u>	<u>61</u>	<u>72</u>	<u>74</u>
	<u>79</u>	<u>86</u>	<u>09</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>04</u>	<u>21</u>	<u>43</u>	<u>65</u>	<u>1C</u>	<u>2C</u>
	<u>88</u>	<u>07</u>	<u>80</u>	<u>50</u>	<u>95</u>	<u>95</u>	<u>95</u>	<u>95</u>	<u>95</u>			

TERMINAL RESPONSE : SET UP CALL 1.11.1ALogically:Command details

Command number:	1
Command type:	SET UP CALL
Command qualifier:	if not busy on another call

Device identities

Source device:	ME
Destination device:	SIM

Result

General Result:	Command performed successfully
-----------------	--------------------------------

Coding:

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

TERMINAL RESPONSE : SET UP CALL 1.11.1B

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: if not busy on another call
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Beyond ME's capabilities

Coding:

BER-TLV: 81 03 01 10 00 82 02 83 81 83 01 30

Expected Sequence 1.12 (SET UP CALL, maximum duration for the redial mechanism)

The system simulator shall be configured such that call set up requests will be rejected with cause "User Busy"..

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.12.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.12.1	[only if not currently busy on another call with redial]
4	ME → USER	ME displays "Duration" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirms the call]
6	ME -> SS	ME attempts to set up a call to "+012340123456p1p2". It stops its attempts after 10 seconds.	[redial mechanism with maximum duration of 10 seconds]
7	ME → SIM	TERMINAL RESPONSE 1.12.1	[network currently unable to process command]
8	ME -> USER	The ME returns in idle mode.	

PROACTIVE COMMAND : SET UP CALL 1.12.1Logically: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:

<u>BER-TLV:</u>	<u>D0</u>	<u>22</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>08</u>	<u>44</u>	<u>75</u>	<u>72</u>	<u>61</u>	<u>74</u>	<u>69</u>	<u>6F</u>	<u>6E</u>	<u>86</u>	<u>09</u>	<u>91</u>
	<u>10</u>	<u>32</u>	<u>04</u>	<u>21</u>	<u>43</u>	<u>65</u>	<u>1C</u>	<u>2C</u>	<u>84</u>	<u>02</u>	<u>01</u>	<u>0A</u>

TERMINAL RESPONSE : SET UP CALL 1.12.1Logically:Command details

Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: ME
Destination device: SIM

Result

General Result: network currently unable to process command
Additional Information: User Busy

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>21</u>
	<u>91</u>											

27.22.4.13.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.12

27.22.4.13.2 SET UP CALL (second alpha identifier)27.22.4.13.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.13.2.2 Conformance requirementSame as 27.22.4.13.2.1.27.22.4.13.2.3 Test PurposeTo verify that the ME accepts a Proactive Command – Set Up Call , displays the alpha identifiers to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.27.22.4.13.2.4 Method of test27.22.4.13.2.4.1 Initial ConditionsThe ME is connected to both the SIM Simulator and the System Simulator.The elementary files are coded as SIM Application Toolkit default.Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and is in updated idle mode on the system simulator27.22.4.13.1.4.2 ProcedureExpected Sequence 2.1 (SET UP CALL, two alpha identifiers)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP CALL 2.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET</u> <u>UP CALL 2.1.1</u>	
4	<u>ME →</u> <u>USER</u>	<u>ME displays "CONFIRMATION"</u> <u>during the user confirmation phase</u>	
5	<u>USER →</u> <u>ME</u>	<u>The user confirms the set up call</u>	<u>[user confirmation]</u>
6	<u>ME->SS</u>	<u>The ME attempts to set up a call</u> <u>to "+012340123456p1p2".</u> <u>The ME displays "CALL" if the ME</u> <u>supports 2nd alpha identifier or</u> <u>otherwise "CONFIRMATION"</u>	<u>[second alpha identifier]</u>
7	<u>SS → ME</u>	<u>The ME receives the CONNECT</u> <u>message from the system</u> <u>simulator.</u>	
8	<u>ME → SIM</u>	<u>TERMINAL RESPONSE 2.1.1</u> <u>The ME shall not update EF LND</u> <u>with the called party address.</u>	<u>[Command performed successfully]</u>
9	<u>USER →</u> <u>ME</u>	<u>The user ends the call after 5</u> <u>seconds.</u> <u>The ME returns in idle mode.</u>	

PROACTIVE COMMAND : SET UP CALL 2.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	only if not currently busy on another call
<u>Device identities</u>	
Source device:	SIM
Destination device:	Network
Alpha identifier:	"CONFIRMATION"
<u>Address</u>	
TON:	International
NPI:	ISDN / telephone numbering plan
Dialling number string	"012340123456p1p2"
Alpha identifier (call set up phase):	"CALL"

Coding:

BER-TLV:	D0	28	81	03	01	10	00	82	02	81	83	85
	0C	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	86	09	91	10	32	04	21	43	65	1C	2C
	85	04	43	41	4C	4C						

TERMINAL RESPONSE : SET UP CALL 2.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	only if not currently busy on another call
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

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

27.22.4.13.3.5 Test RequirementThe ME shall operate in the manner defined in expected sequence 2.127.22.4.13.3 SET UP CALL (display of icons)27.22.4.13.3.1 Definition and applicabilitySee Section 3.2.2.

27.22.4.13.3.2 Conformance requirement

27.22.4.13.3.3 Test Purpose

To verify that the ME accepts a Proactive Set Up Call , displays the message or icon to the user ,attempts to set up a call to the address, returns the result in the TERMINAL response.

27.22.4.13.3.4 Method of test

27.22.4.13.3.4.1 Initial Conditions

The ME is connected to both the SIM Simulator and the System Simulator.

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

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and is in updated idle mode on the system simulator.

Initial Conditions for Icon Management according to Annex C are valid.

27.22.4.13.3.4.2 Procedure

Expected Sequence 3.1A (SET UP CALL, display of basic icon during confirmation phase, not self-explanatory, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND	
2	ME → SIM	PENDING: SET UP CALL 3.1.1	
3	SIM → ME	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 3.1.1	Including icon identifier, icon shall be displayed in addition of the first alpha identifier
4	ME → USER	ME displays "Set up call Icon 3.1.1" and the basic icon during a user confirmation phase.	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME->SS	The ME attempts to set up a call to "+012340123456p1p2"	
7	SS → ME	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE 3.1.1A	[Command performed successfully]
9	USER → ME	The user ends the call after 5 seconds. The ME returns in idle mode.	

PROACTIVE COMMAND : SET UP CALL 3.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP CALL
 Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier: " Set up call Icon 3.1.1"

Address

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

Icon identifier

Icon qualifier: icon is not self-explanatory
 Icon identifier: <record 1 in EF IMG>

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>38</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>16</u>	<u>53</u>	<u>65</u>	<u>74</u>	<u>20</u>	<u>75</u>	<u>70</u>	<u>20</u>	<u>63</u>	<u>61</u>	<u>6C</u>	<u>6C</u>
	<u>20</u>	<u>49</u>	<u>63</u>	<u>6F</u>	<u>6E</u>	<u>20</u>	<u>33</u>	<u>2E</u>	<u>31</u>	<u>2E</u>	<u>31</u>	<u>86</u>
	<u>09</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>04</u>	<u>21</u>	<u>43</u>	<u>65</u>	<u>1C</u>	<u>2C</u>	<u>9E</u>	<u>02</u>
	<u>01</u>	<u>01</u>										

TERMINAL RESPONSE : SET UP CALL 3.1.1A

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	only if not currently busy on another call
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

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

Expected Sequence 3.1B (SET UP CALL, display of basic icon during confirmation phase, not self-explanatory, requested icon could not be displayed)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 3.1.1	<u>Including icon identifier, icon shall be displayed in addition of the first alpha identifier</u>
4	ME → USER	ME displays "Set up call Icon 3.1.1" without the basic icon during a user confirmation phase.	
5	USER → ME	The user confirms the set up call	<u>[user confirmation]</u>
6	ME->SS	The ME attempts to set up a call to "+012340123456p1p2"	
7	SS → ME	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE 3.1.1B	<u>[Command performed successfully, but requested icon could not be displayed].</u>
9	USER → ME	The user ends the call after 5 seconds. The ME returns in idle mode.	

TERMINAL RESPONSE : SET UP CALL 3.1.1B

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	only if not currently busy on another call
<u>Device identities</u>	
Source device:	Network
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV: 81 03 01 10 00 82 02 83 81 83 01 04

Expected Sequence 3.2A (SET UP CALL, display of basic icon during confirmation phase, self-explanatory, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 3.2.1	<u>Including icon identifier, icon shall be displayed instead of the first alpha identifier</u>
4	ME → USER	ME displays the basic icon during a user confirmation phase.	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME->SS	The ME attempts to set up a call to "+012340123456p1p2"	
7	SS → ME	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE 3.2.1A	[Command performed successfully]
9	USER → ME	The user ends the call after 5 seconds. The ME returns in idle mode.	

PROACTIVE COMMAND : SET UP CALL 3.2.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	only if not currently busy on another call
<u>Device identities</u>	
Source device:	SIM
Destination device:	Network
Alpha identifier:	" Set up call Icon 3.2.1"
<u>Address</u>	
TON:	International
NPI:	ISDN / telephone numbering plan
Dialling number string	"012340123456p1p2"
<u>Icon identifier</u>	
Icon qualifier:	icon is self-explanatory
Icon identifier:	<record 1 in EF IMG>

Coding:

BER-TLV:	<u>D0</u>	<u>38</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>16</u>	<u>53</u>	<u>65</u>	<u>74</u>	<u>20</u>	<u>75</u>	<u>70</u>	<u>20</u>	<u>63</u>	<u>61</u>	<u>6C</u>	<u>6C</u>
	<u>20</u>	<u>49</u>	<u>63</u>	<u>6F</u>	<u>6E</u>	<u>20</u>	<u>33</u>	<u>2E</u>	<u>32</u>	<u>2E</u>	<u>31</u>	<u>86</u>
	<u>09</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>04</u>	<u>21</u>	<u>43</u>	<u>65</u>	<u>1C</u>	<u>2C</u>	<u>9E</u>	<u>02</u>
	<u>00</u>	<u>01</u>										

TERMINAL RESPONSE : SET UP CALL 3.2.1ALogically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	only if not currently busy on another call
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV:	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Expected Sequence 3.2B (SET UP CALL, display of basic icon during confirmation phase, self-explanatory, requested icon could not be displayed)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP CALL 3.2.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET UP CALL 3.2.1</u>	<u>Including icon identifier, icon shall be displayed instead of the first alpha identifier</u>
4	<u>ME → USER</u>	<u>ME display " Set up call icon 3.2.1" without the icon</u>	
5	<u>USER → ME</u>	<u>The user confirms the set up call</u>	<u>[user confirmation]</u>
6	<u>ME->SS</u>	<u>The ME attempts to set up a call to "+012340123456p1p2"</u>	
7	<u>SS → ME</u>	<u>The ME receives the CONNECT message from the system simulator.</u>	
8	<u>ME → SIM</u>	<u>TERMINAL RESPONSE 3.2.1B</u>	<u>[Command performed successfully, but requested icon could not be displayed].</u>
9	<u>USER → ME</u>	<u>The user ends the call after 5 seconds.</u> <u>The ME returns in idle mode.</u>	

TERMINAL RESPONSE : SET UP CALL 3.2.1B

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call
Device identities
Source device: Network
Destination device: SIM
Result
General Result: Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV: 81 03 01 10 00 82 02 83 81 83 01 04

Expected Sequence 3.3A (SET UP CALL, display of colour icon during confirmation phase, not self-explanatory, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP CALL 3.3.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET UP CALL 3.3.1</u>	<u>Including icon identifier, icon shall be displayed in addition of the first alpha identifier</u>
4	<u>ME → USER</u>	<u>ME displays "Set up call Icon 3.3" and the colour icon during a user confirmation phase.</u>	
5	<u>USER → ME</u>	<u>The user confirms the set up call</u>	<u>[user confirmation]</u>
6	<u>ME->SS</u>	<u>The ME attempts to set up a call to "+012340123456p1p2"</u>	
7	<u>SS → ME</u>	<u>The ME receives the CONNECT message from the system simulator.</u>	
8	<u>ME → SIM</u>	<u>TERMINAL RESPONSE 3.3.1A</u>	<u>[Command performed successfully]]</u>
9	<u>USER → ME</u>	<u>The user ends the call after 5 seconds.</u> <u>The ME returns in idle mode.</u>	

PROACTIVE COMMAND : SET UP CALL 3.3.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: " Set up call Icon 3.3.1"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Icon identifier

Icon qualifier: icon is self-explanatory

Icon identifier: <record 2 in EF IMG>

Coding:

BER-TLV: D0 38 81 03 01 10 00 82 02 81 83 85
16 53 65 74 20 75 70 20 63 61 6C 6C
20 49 63 6F 6E 20 33 2E 33 2E 31 86
09 91 10 32 04 21 43 65 1C 2C 9E 02
01 02

TERMINAL RESPONSE : SET UP CALL 3.3.1ALogically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	only if not currently busy on another call
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

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

Expected Sequence 3.3B (SET UP CALL, display of colour icon during confirmation phase, not self-explanatory, requested icon could not be displayed)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 3.3.1	Including icon identifier, icon shall be displayed in addition of the first alpha identifier
4	ME → USER	ME only display alpha string : " Set up call Icon 3.3.1"	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME → SS	The ME attempts to set up a call to "+012340123456p1p2"	
7	SS → ME	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE 3.3.1B	[Command performed successfully, but requested icon could not be displayed].
9	USER → ME	The user ends the call after 5 seconds. The ME returns in idle mode.	

TERMINAL RESPONSE : SET UP CALL 3.3.1B

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	only if not currently busy on another call
<u>Device identities</u>	
Source device:	Network
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV: 81 03 01 10 00 82 02 83 81 83 01 04

Expected Sequence 3.4A (SET UP CALL, display of self explanatory basic icon during set up call, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 3.4.1	Including a second alpha identifier and two icons
4	ME → USER	ME displays the basic icon during a user confirmation phase.	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME->SS	The ME attempts to set up a call to "+012340123456p1p2". The ME displays the basic icon during the set up call. If the ME cannot display the icon, it displays " Set up call Icon 3.4.1"	
7	SS → ME	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE 3.4.1A	[Command performed successfully]
9	USER → ME	The user ends the call after 5 seconds. The ME returns in idle mode.	

PROACTIVE COMMAND : SET UP CALL 3.4.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	only if not currently busy on another call
<u>Device identities</u>	
Source device:	SIM
Destination device:	Network
Alpha identifier:	" Set up call Icon 3.4.1"
<u>Address</u>	
TON:	International
NPI:	ISDN / telephone numbering plan
Dialling number string	"012340123456p1p2"
Alpha identifier:	" Set up call Icon 3.4.2"
<u>Icon identifier</u>	
Icon qualifier:	icon is self-explanatory
Icon identifier:	<record 1 in EF IMG>

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>48</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>16</u>	<u>53</u>	<u>65</u>	<u>74</u>	<u>20</u>	<u>75</u>	<u>70</u>	<u>20</u>	<u>63</u>	<u>61</u>	<u>6C</u>	<u>6C</u>
	<u>20</u>	<u>49</u>	<u>63</u>	<u>6F</u>	<u>6E</u>	<u>20</u>	<u>33</u>	<u>2E</u>	<u>34</u>	<u>2E</u>	<u>31</u>	<u>86</u>
	<u>09</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>04</u>	<u>21</u>	<u>43</u>	<u>65</u>	<u>1C</u>	<u>2C</u>	<u>85</u>	<u>16</u>
	<u>53</u>	<u>65</u>	<u>74</u>	<u>20</u>	<u>75</u>	<u>70</u>	<u>20</u>	<u>63</u>	<u>61</u>	<u>6C</u>	<u>6C</u>	<u>20</u>
	<u>49</u>	<u>63</u>	<u>6F</u>	<u>6E</u>	<u>20</u>	<u>33</u>	<u>2E</u>	<u>34</u>	<u>2E</u>	<u>32</u>	<u>9E</u>	<u>02</u>
	<u>00</u>	<u>01</u>										

TERMINAL RESPONSE : SET UP CALL 3.4.1A

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	only if not currently busy on another call
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Expected Sequence 3.4B (SET UP CALL, display of self explanatory basic icon during set up call, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 3.4.1	Including a second alpha identifier and two icons
4	ME → USER	ME display " Set up call Icon 3.4.1" without the icon	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME→SS	The ME attempts to set up a call to "+012340123456p1p2". The ME displays the basic icon during the set up call. If the ME cannot display the icon, it displays " Set up call Icon 3.4.1"	
7	SS → ME	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE 3.4.1B	[Command performed successfully, but requested icon could not be displayed].
9	USER → ME	The user ends the call after 5 seconds. The ME returns in idle mode.	

TERMINAL RESPONSE : SET UP CALL 3.4.1B

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: Network

Destination device: SIM

Result

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

Coding:

BER-TLV: 81 03 01 10 00 82 02 83 81 83 01 04

27.22.4.13.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 3.1 to 3.4.

27.22.4.14 POLLING OFF27.22.4.14 POLLING OFF27.22.4.14.1 Definition and applicability

See Section 3.2.2.

27.22.4.14.2 Conformance Requirement

The ME shall support the POLLING OFF as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.14 (Polling Off), clause 6.6.14 (Polling Off), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.7 (Device identities).

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 Test27.22.4.14.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

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

27.22.4.14.4.2 ProcedureExpected Sequence 1.1 (POLLING OFF)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: POLLING INTERVAL 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: POLL INTERVAL 1.1.1	Interval = 1 min
4	ME → SIM	TERMINAL RESPONSE: POLL INTERVAL 1.1.1	[command performed successfully]
5	SIM → ME	PROACTIVE COMMAND PENDING: POLLING OFF 1.1.2	
6	ME → SIM	FETCH	
7	SIM → ME	PROACTIVE COMMAND: POLLING OFF 1.1.2	
8	ME → SIM	TERMINAL RESPONSE: POLLING OFF 1.1.2	[command performed successfully]
9	USER -> SIM	Call to be set up	
10	ME -> SIM	STATUS	SIM presence detection
11	ME	Time interval shall not exceed 30 seconds	
12	ME -> SIM	STATUS	SIM presence detection

PROACTIVE COMMAND : POLL INTERVAL 1.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	POLL INTERVAL
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Duration</u>	
Time unit:	Minutes
Time interval:	1

Coding:

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

TERMINAL RESPONSE : POLL INTERVAL 1.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	POLL INTERVAL
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

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

PROACTIVE COMMAND : POLLING OFF 1.1.2Logically:

<u>Command details</u>	
Command number:	1
Command type:	POLLING OFF
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME

Coding:

BER-TLV: D0 09 81 03 01 04 00 82 02 81 82

TERMINAL RESPONSE : POLLING OFF 1.1.2

Logically:

<u>Command details</u>	
Command number:	1
Command type:	POLLING OFF
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV: 81 03 01 04 00 82 02 82 81 83 01 00

27.22.4.14.5 Test Requirement

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

27.22.4.15 PROVIDE LOCAL INFORMATION27.22.4.15.1 Definition and applicability

See Section 3.2.2.

27.22.4.15.2 Conformance requirement

The ME shall support the PROVIDE LOCAL INFORMATION facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.4.15

27.22.4.15.3 Test Purpose

To verify that the ME returns the following requested local information within a TERMINAL RESPONSE :

- location information: the mobile country code (MCC), mobile network code (MNC), location area code (LAC) and cell ID of the current serving cell;
- the IMEI of the ME;
- the Network Measurement Results and the BCCH channel list;
- the current date, time and time zone;
- the current ME language setting;
- the Timing Advance,

if the local information is stored in the ME; otherwise, sends the correct error code to the SIM in the TERMINAL RESPONSE.

27.22.4.15.4 Method of tests27.22.4.15.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

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

The GSM parameters of the system simulator are :

Mobile country Code (MCC) = 1,

Mobile network code (MNC) = 1,

Location Area code (LAC) = 1,

Cell Identity value = 1,

Timing advance = 0,

Frequency parameters : DCS 1800, neighbour allocations = 561, 565, 568, 569, 573, 575, 577, 581, 582 and 585.

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

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

27.22.4.15.4.2 Procedure

Expected Sequence 1.1 (PROVIDE LOCAL INFORMATION, Local Info (MCC, MNC, LAC & Cell ID)).

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.1.1</u>	
4	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.1.1</u>	<u>[Command performed successfully, MCC MNC LAC and Cell Identity as system simulator]</u>

PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.1.1

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION

Qualifier : « 00 » Location information (MCC MNC LAC and Cell Identity)

Device identities

Source device: SIM

Destination device: ME

Coding:

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

TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.1.1

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION

Qualifier : « 00 » Location information (MCC MNC LAC and Cell Identity)

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Location Information

MCC & MNC: MCC = 1, MNC = 1

Location Area Code: 1

Cell Identity Value: 1

Coding:

BER-TLV: 81 03 01 26 00 82 02 82 81 83 01 00
 93 07 00 F1 10 00 01 00 01 01

Expected Sequence 1.2 (PROVIDE LOCAL INFORMATION, IMEI of the ME)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.2.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.2.1</u>	
4	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.2.1</u>	<u>[Command performed successfully, IMEI as system simulator]</u>

PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.2.1

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION

Qualifier : « 01 » IMEI of the ME

Device identities

Source device: SIM

Destination device: ME

Coding:

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

TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.2.1

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION

Qualifier : « 01 » IMEI of the ME

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

IMEI

IMEI of the ME: The IMEI of the ME

The result coding depends on the Mobile IMEI value

Coding:

BER-TLV: 81 03 01 26 01 82 02 82 81 83 01 00
 94 08 XX XX XX XX XX XX XX XX XX XX

As an example, if the IMEI of the mobile is “1234567890123456” then XX XX XX XX XX XX XX XX = 21 43 65 87 09 21 43 65

Expected Sequence 1.3 (PROVIDE LOCAL INFORMATION, Network measurement results (NMR))

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.3.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	

3	SIM → ME	PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.3.1	
4	ME → SIM	TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.3.1	[Command performed successfully, NMR as system simulator]

[PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.3.1](#)

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION

Qualifier : « 02 » Network Measurement Results

Device identities

Source device: SIM

Destination device: ME

Coding:

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

[TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.3.1](#)

The actual values of the measurements are not tested.

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION

Qualifier : « 02 » Network Measurement Results

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Network Measurement Results RXLEV-FULL-SERVING-CELL=52, BA not used, DTX not used, as an example in the BER-TLV)

BCCH channel list 561, 565, 568, 569, 573, 575, 577, 581, 582 and 585

Coding:

BER-TLV: 81 03 01 26 02 82 02 82 81 83 01 00
96 10 34 34 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 9D 0E 8C 63 58 E2
39 8F 63 F9 06 45 91 A4 90 00

Expected Sequence 1.4 (PROVIDE LOCAL INFORMATION, Date, Time, Time Zone)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.4.1	
4	ME → SIM	TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.4.1	[Command performed successfully]

[PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.4.1](#)

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 03 » Date Time and Time Zone
 Device identities
 Source device: SIM
 Destination device: ME

Coding:

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

TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.4.1

Logically:

Command details

Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 03 » Date Time and Time Zone
 Device identities
 Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully
 Date-Time and Time Zone date an time set by the user : 7th may 2002, 14h 08mn 17s, no time zone information, as an example in TLV

Coding:

BER-TLV: 81 03 01 26 03 82 02 82 81 83 01 00
A6 07 20 50 70 41 80 71 FF

Expected Sequence 1.5 (PROVIDE LOCAL INFORMATION, Language setting)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.5.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.5.1</u>	
<u>4</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.5.1</u>	<u>[Command performed successfully]</u>

PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.5.1

Logically:

Command details

Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 04 » Language setting
 Device identities
 Source device: SIM
 Destination device: ME

Coding:

BER-TLV: D0 09 81 03 01 26 04 82 02 81 82

TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.5.1

Logically:

Command details

Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 04 » Language setting
 Device identities
 Source device: ME

Destination device: SIM
 Result
 General Result: Command performed successfully
 Language english (« en ») as an example for TLV

Coding:

BER-TLV: 81 03 01 26 04 82 02 82 81 83 01 00
AD 02 65 6E

Expected Sequence 1.6 (PROVIDE LOCAL INFORMATION, Timing advance)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.6.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.6.1</u>	
4	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.6.1</u>	<u>[Command performed successfully]</u>

PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.6.1

Logically:

Command details

Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 05 » Timing Advance

Device identities

Source device: SIM
 Destination device: ME

Coding:

BER-TLV: D0 09 81 03 01 26 05 82 02 81 82

TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.6.1

Logically:

Command details

Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 05 » Timing Advance

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully
 Timing Advance 2 bytes
 ME status : « 00 » ME is in idle state Idle State
 Timing Advance : 0

Coding:

BER-TLV: 81 03 01 26 05 82 02 82 81 83 01 00
AE 02 00 00

27.22.4.16 SET UP EVENT LIST

27.22.4.16.1 SET UP EVENT LIST (normal)

27.22.4.16.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.16.1.2 Conformance requirement

The ME shall support the Proactive SIM: Set Up Event List facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.4.16, 6.6.16

Additionally the ME shall support the Event Download: Call Connect and the Event Download: Call Disconnected mechanism as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 11.2, 11.2.1, 11.2.2, 11.3, 11.3.1 and 11.3.2.

27.22.4.16.1.3 Test Purpose

To verify that the ME accepts a list of events that it shall monitor the current list of events supplied by the SIM, is able to have this current list of events replaced and is able to have the list of events removed.

To verify that when the ME has successfully accepted or removed the list of events, it shall send TERMINAL RESPONSE (OK) to the SIM and when the ME is not able to successfully accept or remove the list of events, it shall send TERMINAL RESPONSE (Command beyond ME's capabilities).

27.22.4.16.1.4 Method of test

27.22.4.16.1.4.1 Initial Conditions

The ME is connected to both the SIM Simulator and the System Simulator.

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

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

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

27.22.4.16.1.4.2 Procedure

Expected Sequence 1.1 (SET UP EVENT LIST, Set Up Call Connect Event)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP EVENT LIST</u> <u>1.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET</u> <u>UP EVENT LIST 1.1.1</u>	
4	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SET UP</u> <u>EVENT LIST 1.1.1</u>	
5	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
6	<u>SS → ME</u>	<u>SETUP 1.1.1</u>	<u>[Incoming call alert]</u>
7	<u>USER →</u> <u>ME</u>	<u>User shall accept the incoming call</u>	
8	<u>ME → SS</u>	<u>CONNECT 1.1.1</u>	
9	<u>ME → SIM</u>	<u>ENVELOPE: EVENT</u> <u>DOWNLOAD CALL CONNECTED</u> <u>1.1.1</u>	<u>[Call Connected Event]</u>
10	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Call Connected

Coding:

BER-TLV: D0 0C 81 03 01 05 00 82 02 81 82 99
 01 01

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1Logically:Command details

Command number:	1
Command type:	SET UP EVENT LIST
Command qualifier:	'00'

Device identities

Source device:	ME
Destination device:	SIM

Result

General Result:	Command performed successfully
-----------------	--------------------------------

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

SET UP 1.1.1Logically:

Transaction identifier	
Value:	XX XX
Address	
Value:	XX XX
Called party subaddress	
Value:	XX XX

CONNECT 1.1.1Logically:

Transaction identifier	
Value:	XX XX

ENVELOPE : EVENT DOWNLOAD CALL CONNECTED 1.1A.1Logically:

Event list	
Event 1:	Call Connected
Device identities	
Source device:	Network
Destination device:	SIM
Transaction identifier	
Value:	XXXX

Coding:

BER-TLV: D6 xx 99 01 01 82 02 83 81 9C xx ...

Expected Sequence 1.2 (SET UP EVENT LIST, Replace Event)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP EVENT LIST</u> <u>1.2.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET</u> <u>UP EVENT LIST 1.2.1</u>	<u>[Call Connected and Call Disconnected</u> <u>Events]</u>
	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SET UP</u> <u>EVENT LIST 1.2.1</u>	
4	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP EVENT LIST</u> <u>1.2.2</u>	
5	<u>ME → SIM</u>	<u>FETCH</u>	
6	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET</u> <u>UP EVENT LIST 1.2.2</u>	<u>[Call Disconnected Event]</u>
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SET UP</u> <u>EVENT LIST 1.2.2</u>	
8	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
10	<u>SS → ME</u>	<u>SETUP 1.2.2</u>	<u>[Incoming call alert]</u>
11	<u>USER →</u> <u>ME</u>	<u>User shall accept the incoming call</u>	
12	<u>ME → SS</u>	<u>CONNECT 1.2.2</u>	
13	<u>SS → ME</u> <u>ME → SIM</u>	<u>DISCONNECT 1.2.2</u> <u>ENVELOPE: EVENT</u> <u>DOWNLOAD CALL</u> <u>DISCONNECT 1.2.2</u>	<u>[Call Disconnect Event]</u>
14	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	

PROACTIVE COMMAND : SET UP EVENT LIST 1.2.1

Logically:

Command details

Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Call Connected
Event 2: Call Disconnected

Coding:

BER-TLV: D0 0D 81 03 01 05 00 82 02 81 82 99
 02 01 02

TERMINAL RESPONSE : SET UP EVENT LIST 1.2.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP EVENT LIST
Command qualifier:	'00'
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

PROACTIVE COMMAND : SET UP EVENT LIST 1.2.2Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP EVENT LIST
Command qualifier:	'00'
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Event list</u>	
Event 1:	Call Disconnected

Coding:

BER-TLV: D0 0C 81 03 01 05 00 82 02 81 82 99
01 02

TERMINAL RESPONSE : SET UP EVENT LIST 1.2.2Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP EVENT LIST
Command qualifier:	'00'
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

SET UP 1.2.2

Logically:

<u>Transaction identifier</u>	
Value:	<u>XX XX</u>
<u>Address</u>	
Value:	<u>XX XX</u>
<u>Called party subaddress</u>	
Value:	<u>XX XX</u>

CONNECT 1.2.2

Logically:

<u>Transaction identifier</u>	
Value:	<u>XX XX</u>

DISCONNECT 1.2.2

Logically:

<u>Transaction identifier</u>	
Value:	<u>XX XX</u>
<u>Cause</u>	
Value:	<u>XX XX</u>

ENVELOPE: EVENT DOWNLOAD CALL DISCONNECTED 1.2.2

Logically:

<u>Event list</u>	
Event 1:	<u>Call Disconnected</u>
<u>Device identities</u>	
Source device:	<u>Network</u>
Destination device:	<u>SIM</u>
<u>Transaction identifier</u>	
Value:	<u>XX XX</u>
<u>Cause</u>	
Value:	<u>XX XX</u>

Coding:

BER-TLV: D6 xx 99 01 02 82 02 83 81 9C xx ...
9A xx ...

Expected Sequence 1.3 (SET UP EVENT LIST, Remove Event)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP EVENT LIST</u> <u>1.3.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET</u> <u>UP EVENT LIST 1.3.1</u>	<u>[Call Connected Event]</u>
	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SET UP</u> <u>EVENT LIST 1.3.1</u>	
4	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP EVENT LIST</u> <u>1.3.1</u>	
5	<u>ME → SIM</u>	<u>FETCH</u>	
6	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET</u> <u>UP EVENT LIST 1.3.2</u>	<u>[Remove Event]</u>
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SET UP</u> <u>EVENT LIST 1.3.2</u>	
8	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
10	<u>SS → ME</u>	<u>SETUP 1.3.2</u>	<u>[Incoming call alert]</u>
11	<u>USER →</u> <u>ME</u>	<u>User shall accept the incoming call</u>	
12	<u>ME → SS</u>	<u>CONNECT 1.3.2</u>	
13	<u>SS → ME</u>	<u>DISCONNECT 1.3.2</u>	

PROACTIVE COMMAND : SET UP EVENT LIST 1.3.1

Logically:

Command details

Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Call Connected

Coding:

BER-TLV: D0 0C 81 03 01 05 00 82 02 81 82 99
 01 01

TERMINAL RESPONSE : SET UP EVENT LIST 1.3.1Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SET UP EVENT LIST</u>
<u>Command qualifier:</u>	<u>'00'</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

PROACTIVE COMMAND : SET UP EVENT LIST 1.3.2Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SET UP EVENT LIST</u>
<u>Command qualifier:</u>	<u>'00'</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>
<u>Event list: Empty</u>	

Coding:

BER-TLV: D0 0B 81 03 01 05 00 82 02 81 82 99
 00

TERMINAL RESPONSE : SET UP EVENT LIST 1.3.2Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SET UP EVENT LIST</u>
<u>Command qualifier:</u>	<u>'00'</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

SET UP 1.3.2Logically:

Transaction identifier	
Value:	XX XX
Address	
Value:	XX XX
Called party subaddress	
Value:	XX XX

CONNECT 1.3.2Logically:

Transaction identifier	
Value:	XX XX

DISCONNECT 1.3.2Logically:

Transaction identifier	
Value:	XX XX
Cause	
Value:	XX XX

Expected Sequence 1.4 (SET UP EVENT LIST, Remove Event on ME Power Cycle)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP EVENT LIST</u> <u>1.4.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET</u> <u>UP EVENT LIST 1.4.1</u>	<u>[Call Connected Event]</u>
	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SET UP</u> <u>EVENT LIST 1.4.1</u>	
4	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	
5	<u>User →</u> <u>ME</u>	<u>Power off ME</u>	
6	<u>User →</u> <u>ME</u>	<u>Power on ME</u>	
7	<u>SS → ME</u>	<u>SETUP 1.4A</u>	<u>[Incoming call alert]</u>
8	<u>USER →</u> <u>ME</u>	<u>User shall accept the incoming call</u>	
9	<u>ME → SS</u>	<u>CONNECT 1.4.1</u>	
10	<u>SS → ME</u>	<u>DISCONNECT 1.4.1</u>	

PROACTIVE COMMAND : SET UP EVENT LIST 1.4.1Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SET UP EVENT LIST</u>
<u>Command qualifier:</u>	<u>'00'</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>
<u>Event list</u>	
<u>Event 1:</u>	<u>Call Connected</u>

Coding:

BER-TLV: D0 0C 81 03 01 05 00 82 02 81 82 99
 01 01

TERMINAL RESPONSE : SET UP EVENT LIST 1.4.1Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SET UP EVENT LIST</u>
<u>Command qualifier:</u>	<u>'00'</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

SET UP 1.4.1Logically:

<u>Transaction identifier</u>	
Value:	<u>XX XX</u>
<u>Address</u>	
Value:	<u>XX XX</u>
<u>Called party subaddress</u>	
Value:	<u>XX XX</u>

CONNECT 1.4.1Logically:

<u>Transaction identifier</u>	
Value:	<u>XX XX</u>

DISCONNECT 1.4.1Logically:

<u>Transaction identifier</u>	
Value:	<u>XX XX</u>
<u>Cause</u>	
Value:	<u>XX XX</u>

27.22.4.16.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1, 2, 3 and 4.

27.22.4.17 PERFORM CARD APDU**27.22.4.17.1 PERFORM CARD APDU (normal)**27.22.4.17.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.17.1.2 Conformance requirement

The ME shall support the Proactive SIM: Perform Card APDU facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 5.2 (Terminal Profile), clause 6.4.17 (Perform Card APDU), clause 6.6.17 (Perform Card APDU), clause 6.8 (Structure of Terminal Response), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.35 (C-APDU), clause 12.36 (R-APDU), clause 12.12.9 (Additional information for MultipleCard Commands)

Additionally the ME shall support multiple card operation as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.4.19 (Power On Card), clause 6.6.19 (Power On Card), clause 6.4.18 (Power Off Card), clause 6.6.18 (Power Off Card)

27.22.4.17.1.3 Test Purpose

To verify that the ME sends an APDU command to the additional card identified in the PERFORM CARD APDU proactive SIM command, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

In this particular case a special Test-SIM (TestSIM) with T=0 protocol is chosen as additional card for the additional ME card reader (for coding of the TestSIM see Annex D).

27.22.4.17.1.4 Method of test

27.22.4.17.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The TestSIM is inserted in the additional ME card reader.

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

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

The elementary files of the TestSIM are coded as defined in Annex D.

27.22.4.17.1.4.2 ProcedureExpected Sequence 1.1 (PERFORM CARD APDU, card reader 1, additional card inserted, Select MF and Get Response)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: POWER ON CARD</u> <u>1.1.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>POWER ON CARD 1.1.1</u>	<u>[Power on card reader 1]</u>
<u>4</u>	<u>ME →</u> <u>SIM2</u>	<u>RESET CARD</u>	<u>[Perform electrical initialisation]</u>
<u>5</u>	<u>SIM2 →</u> <u>ME</u>	<u>ANSWER TO RESET 1.1</u>	<u>[ATR]</u>
<u>6</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: POWER</u> <u>ON CARD 1.1.1</u>	<u>[ATR]</u>
<u>7</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PERFORM CARD</u> <u>APDU 1.1.1</u>	
<u>8</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>9</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>PERFORM CARD APDU 1.1.1</u>	<u>[Select Masterfile]</u>
<u>10</u>	<u>ME →</u> <u>SIM2</u>	<u>C-APDU: SELECT 1.1</u>	<u>[Select Masterfile]</u>
<u>11</u>	<u>SIM2 →</u> <u>ME</u>	<u>R-APDU: SELECT 1.1</u>	<u>[Command performed successfully – length</u> <u>'1B' of response data]</u>
<u>12</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE:</u> <u>PERFORM CARD APDU 1.1.1</u>	
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PERFORM CARD</u> <u>APDU 1.1.2</u>	
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>PERFORM CARD APDU 1.1.2</u>	<u>[Get Response with length '1B']</u>
<u>16</u>	<u>ME →</u> <u>SIM2</u>	<u>C-APDU: GET RESPONSE 1.1</u>	<u>[Get Response with length '1B']</u>
<u>17</u>	<u>SIM2 →</u> <u>ME</u>	<u>R-APDU: GET RESPONSE 1.1</u>	<u>[Response data with length '1B']</u>
<u>18</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE:</u> <u>PERFORM CARD APDU 1.1.2</u>	<u>[Response data with length '1B']</u>

PROACTIVE COMMAND POWER ON CARD 1.1.1Logically:Command details

Command number: 1
Command type: POWER ON CARD
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Card reader 1

Coding:

BER-TLV: D0 09 81 03 01 31 00 82 02 81 11

ANSWER TO RESET 1.1

Logically:

TS (Initial character):	'3B'
T0 (Format character):	'86' (Following interface characters: TD(1), number of historical characters: 6)
TD1:	'00' (Following interface characters: none, Transfer protocol: T=0)
T1:	91
T2:	99
T3:	00
T4:	12
T5:	C1
T6:	00

Coding:

BER-TLV: 3B 86 00 91 99 00 12 C1 00

TERMINAL RESPONSE : POWER ON CARD 1.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	POWER ON CARD
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Card ATR</u>	
TS (Initial character):	'3B'
T0 (Format character):	'86' (Following interface characters: TD(1), number of historical characters: 6)
TD1:	'00' (Following interface characters: none, Transfer protocol: T=0)
T1:	91
T2:	99
T3:	00
T4:	12
T5:	C1
T6:	00

Coding:

BER-TLV: 81 03 01 31 00 82 02 82 81 83 01 00
A1 09 3B 86 00 91 99 00 12 C1 00

PROACTIVE COMMAND PERFORM CARD APDU 1.1.1Logically:Command details

Command number:	1
Command type:	PERFORM CARD APDU
Command qualifier:	"00"

Device identities

Source device:	SIM
Destination device:	Card Reader 1

C-APDU

Class:	'A0'
Instruction:	SELECT
P1 parameter:	'00'
P2 parameter:	'00'
Lc:	'02'
Data:	Master File

Coding:

BER-TLV:	<u>D0</u>	<u>12</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>30</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>11</u>	<u>A2</u>
	<u>07</u>	<u>A0</u>	<u>A4</u>	<u>00</u>	<u>00</u>	<u>02</u>	<u>3F</u>	<u>00</u>				

C-APDU: SELECT 1.1Logically:C-APDU

Class:	'A0'
Instruction:	SELECT
P1 parameter:	'00'
P2 parameter:	'00'
Lc:	'02'
Data:	Master File

Coding:

BER-TLV:	<u>A0</u>	<u>A4</u>	<u>00</u>	<u>00</u>	<u>02</u>	<u>3F</u>	<u>00</u>
----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

R-APDU: SELECT 1.1Logically:

Status Words SW1 / SW2: Command performed successfully – length '1B' of response data

Coding:

BER-TLV: 9F 1B

TERMINAL RESPONSE : PERFORM CARD APDU 1.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	PERFORM CARD APDU
Command qualifier:	“00”
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>R-APDU</u>	
<u>Status Words</u>	
SW1 / SW2:	Command performed successfully – length ‘1B’ of response data

Coding:

BER-TLV: 81 03 01 30 00 82 02 11 81 83 01 00
A3 02 9F 1B

PROACTIVE COMMAND PERFORM CARD APDU 1.1.2Logically:

<u>Command details</u>	
Command number:	1
Command type:	PERFORM CARD APDU
Command qualifier:	‘00’
<u>Device identities</u>	
Source device:	SIM
Destination device:	Card Reader 1
<u>C-APDU</u>	
Class:	‘A0’
Instruction:	GET RESPONSE
P1 parameter:	‘00’
P2 parameter:	‘00’
Le:	‘1B’

Coding:

BER-TLV: D0 10 81 03 01 30 00 82 02 81 11 A2
05 A0 C0 00 00 1B

C-APDU: GET RESPONSE 1.1

Logically:

<u>C-APDU</u>	
<u>Class:</u>	<u>'A0'</u>
<u>Instruction:</u>	<u>GET RESPONSE</u>
<u>P1 parameter:</u>	<u>'00'</u>
<u>P2 parameter:</u>	<u>'00'</u>
<u>Le:</u>	<u>'1B'</u>

Coding:

BER-TLV: A0 C0 00 00 1B

R-APDU: GET RESPONSE 1.1Logically:

<u>R-APDU data</u>	
<u>RFU:</u>	<u>'00 00'</u>
<u>Not allocated memory:</u>	<u>'653 bytes'</u>
<u>File ID:</u>	<u>Master File</u>
<u>Type of file:</u>	<u>MF</u>
<u>RFU:</u>	<u>00 00 22 FF 01'</u>
<u>Length of following data:</u>	<u>14 bytes'</u>
<u>File characteristics:</u>	
<u>Clock Stop:</u>	<u>Not allowed</u>
<u>Min. frequency for GSM algorithm:</u>	<u>13/8 MHz</u>
<u>Technology identification:</u>	<u>3V Technology SIM</u>
<u>CHV1:</u>	<u>disabled</u>
<u>DFs in current directory:</u>	<u>2</u>
<u>EFs in current directory:</u>	<u>8</u>
<u>Number of CHV and admin. Codes:</u>	<u>3</u>
<u>RFU byte 18:</u>	<u>00</u>
<u>CHV1 status:</u>	
<u>False representations remaining:</u>	<u>3</u>
<u>RFU-bits 7-5:</u>	<u>000</u>
<u>Secret code:</u>	<u>Initialised</u>
<u>Unlock CHV1 status:</u>	
<u>False representations remaining:</u>	<u>10</u>
<u>RFU-bits 7-5:</u>	<u>000</u>
<u>Secret code:</u>	<u>Initialised</u>
<u>CHV2 status:</u>	
<u>False representations remaining:</u>	<u>3</u>
<u>RFU-bits 7-5:</u>	<u>000</u>
<u>Secret code:</u>	<u>Initialised</u>
<u>Unlock CHV2 status:</u>	
<u>False representations remaining:</u>	<u>10</u>
<u>RFU-bits 7-5:</u>	<u>000</u>
<u>Secret code:</u>	<u>Initialised</u>
<u>RFU bytes 23:</u>	<u>00</u>
<u>Reserved for admin. management:</u>	<u>00 83 00 FF</u>
<u>Status Words</u>	
<u>SW1 / SW2:</u>	<u>Normal ending of command</u>

Coding:

BER-TLV: 00 00 02 8D 3F 00 01 00 00 22 FF 01
 0E 9B 02 08 03 00 83 8A 83 8A 00 00
 83 00 FF 90 00

TERMINAL RESPONSE : PERFORM CARD APDU 1.1.2Logically:Command details

Command number:	1
Command type:	PERFORM CARD APDU
Command qualifier:	"00"

Device identities

Source device:	ME
Destination device:	SIM

Result

General Result:	Command performed successfully
-----------------	--------------------------------

R-APDU data

RFU:	'00 00'
Not allocated memory:	'653 bytes'
File ID:	Master File
Type of file:	MF
RFU:	00 00 22 FF 01'
Length of following data:	14 bytes'

File characteristics:

Clock Stop:	Not allowed
Min. frequency for GSM algorithm:	13/8 MHz
Technology identification:	3V Technology SIM
CHV1:	disabled

DFs in current directory:	2
EFs in current directory:	8
Number of CHV and admin. Codes:	3
RFU byte 18:	00

CHV1 status:

False representations remaining:	3
RFU-bits 7-5:	000
Secret code:	Initialised

Unlock CHV1 status:

False representations remaining:	10
RFU-bits 7-5:	000
Secret code:	Initialised

CHV2 status:

False representations remaining:	3
RFU-bits 7-5:	000
Secret code:	Initialised

Unlock CHV2 status:

False representations remaining:	10
RFU-bits 7-5:	000
Secret code:	Initialised

RFU bytes 23:	00
---------------	----

Reserved for admin. management:	00 83 00 FF
---------------------------------	-------------

Status Words

SW1 / SW2:	Normal ending of command
------------	--------------------------

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>30</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>11</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>A3</u>	<u>0F</u>	<u>00</u>	<u>00</u>	<u>02</u>	<u>8D</u>	<u>3F</u>	<u>00</u>	<u>01</u>	<u>00</u>	<u>00</u>	<u>22</u>
	<u>FF</u>	<u>01</u>	<u>0E</u>	<u>90</u>	<u>00</u>							

Expected Sequence 1.2 (PERFORM CARD APDU, card reader 1, additional card inserted, Select DF GSM,
Select EF PLMN , Update Binary, Read Binary on EF PLMN)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: POWER ON CARD</u>	
<u>2</u>	<u>ME → SIM</u>	<u>1.1</u> <u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>POWER ON CARD 1.1</u>	<u>[Power on card reader 1]</u>
<u>4</u>	<u>ME →</u> <u>SIM2</u>	<u>RESET CARD</u>	<u>[Perform electrical initialisation]</u>
<u>5</u>	<u>SIM2 →</u> <u>ME</u>	<u>ANSWER TO RESET 1.1</u>	<u>[ATR]</u>
<u>6</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: POWER</u> <u>ON CARD 1.1</u>	<u>[ATR]</u>
<u>7</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PERFORM CARD</u> <u>APDU 1.2.1</u>	
<u>8</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>9</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>PERFORM CARD APDU 1.2.1</u>	<u>[Select GSM]</u>
<u>10</u>	<u>ME →</u> <u>SIM2</u>	<u>C-APDU: SELECT 1.2a</u>	<u>[Select GSM]</u>
<u>11</u>	<u>SIM2 →</u> <u>ME</u>	<u>R-APDU: SELECT 1.2a</u>	
<u>12</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE:</u> <u>PERFORM CARD APDU 1.2.1</u>	
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PERFORM CARD</u> <u>APDU 1.2.2</u>	
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>PERFORM CARD APDU 1.2.2</u>	<u>[Select PLMN]</u>
<u>16</u>	<u>ME →</u> <u>SIM2</u>	<u>C-APDU: SELECT 1.2b</u>	<u>[Select PLMN]</u>
<u>17</u>	<u>SIM2 →</u> <u>ME</u>	<u>R-APDU: SELECT 1.2b</u>	
<u>18</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE:</u> <u>PERFORM CARD APDU 1.2.2</u>	
<u>19</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PERFORM CARD</u> <u>APDU 1.2.3</u>	
<u>20</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>21</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>PERFORM CARD APDU 1.2.3</u>	<u>[Update Binary]</u>
<u>22</u>	<u>ME →</u> <u>SIM2</u>	<u>C-APDU: UPDATE BINARY 1.2</u>	<u>[Update Binary]</u>
<u>23</u>	<u>SIM2 →</u> <u>ME</u>	<u>R-APDU: UPDATE BINARY 1.2</u>	
<u>24</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE:</u> <u>PERFORM CARD APDU 1.2.3</u>	
<u>25</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PERFORM CARD</u> <u>APDU 1.2.4</u>	
<u>26</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>27</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>PERFORM CARD APDU 1.2.4</u>	<u>[Read Binary]</u>
<u>28</u>	<u>ME →</u> <u>SIM2</u>	<u>C-APDU: READ BINARY 1.2</u>	<u>[Read Binary]</u>
<u>29</u>	<u>SIM2 →</u> <u>ME</u>	<u>R-APDU: READ BINARY 1.2</u>	
<u>30</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE:</u> <u>PERFORM CARD APDU 1.2.4</u>	
<u>31</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>PERFORM CARD APDU 1.2.5</u>	<u>[Update Binary]</u>

32	ME → SIM2	C-APDU: UPDATE BINARY 1.2a	[Update Binary]
33	SIM2 → ME	R-APDU: UPDATE BINARY 1.2	
34	ME → SIM	TERMINAL RESPONSE: PERFORM CARD APDU 1.2.3	

PROACTIVE COMMAND PERFORM CARD APDU 1.2.1

Logically:

Command details

Command number: 1
Command type: PERFORM CARD APDU
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Card Reader 1

C-APDU

Class: 'A0'
Instruction: SELECT
P1 parameter: '00'
P2 parameter: '00'
Lc: '02'
Data: DF GSM

Coding:

BER-TLV: D0 12 81 03 01 30 00 82 02 81 11 A2
 07 A0 A4 00 00 02 7F 20

PROACTIVE COMMAND : PERFORM CARD APDU 1.2.2

Logically:

Command details

Command number: 1
Command type: PERFORM CARD APDU
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Card Reader 1

C-APDU

Class: 'A0'
Instruction: SELECT
P1 parameter: '00'
P2 parameter: '00'
Lc: '02'
Data: EF PLMN

Coding:

BER-TLV: D0 12 81 03 01 30 00 82 02 81 11 A2
 07 A0 A4 00 00 02 6F 30

PROACTIVE COMMAND : PERFORM CARD APDU 1.2.3

Logically:

<u>Command details</u>	
Command number:	1
Command type:	PERFORM CARD APDU
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	Card Reader 1
<u>C-APDU</u>	
Class:	'A0'
Instruction:	UPDATE BINARY
P1 parameter:	'00'
P2 parameter:	'00'
Lc:	'18'
Data:	'00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17'

Coding:

BER-TLV:	D0	28	81	03	01	30	00	82	02	81	11	A2
	1D	A0	D6	00	00	18	00	01	02	03	04	05
	06	07	08	09	0A	0B	0C	0D	0E	0F	10	11
	12	13	14	15	16	17						

PROACTIVE COMMAND : PERFORM CARD APDU 1.2.4

Logically:

<u>Command details</u>	
Command number:	1
Command type:	PERFORM CARD APDU
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	Card Reader 1
<u>C-APDU</u>	
Class:	'A0'
Instruction:	READ BINARY
P1 parameter:	'00'
P2 parameter:	'00'
Le:	'18'

Coding:

BER-TLV:	D0	10	81	03	01	30	00	82	02	81	11	A2
	05	A0	B0	00	00	18						

PROACTIVE COMMAND : PERFORM CARD APDU 1.2.5Logically:Command details

Command number:	1
Command type:	PERFORM CARD APDU
Command qualifier:	"00"

Device identities

Source device:	SIM
Destination device:	Card Reader 1

C-APDU

Class:	'A0'
Instruction:	UPDATE BINARY
P1 parameter:	'00'
P2 parameter:	'00'
Lc:	'18'
Data:	'FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF' FF FF FF FF FF FF FF FF'

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>28</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>30</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>11</u>	<u>A2</u>
	1D	A0	D6	00	00	18	FF	FF	FF	FF	FF	FF
	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
	FF	FF	FF	FF	FF	FF						

C-APDU: SELECT 1.2aLogically:C-APDU

Class:	'A0'
Instruction:	SELECT
P1 parameter:	'00'
P2 parameter:	'00'
Lc:	'02'
Data:	DF GSM

Coding:

<u>BER-TLV:</u>	<u>A0</u>	<u>A4</u>	<u>00</u>	<u>00</u>	<u>02</u>	<u>7F</u>	<u>20</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

C-APDU: SELECT 1.2bLogically:C-APDU

Class:	'A0'
Instruction:	SELECT
P1 parameter:	'00'
P2 parameter:	'00'
Lc:	'02'
Data:	EF PLMN

Coding:

<u>BER-TLV:</u>	<u>A0</u>	<u>A4</u>	<u>00</u>	<u>00</u>	<u>02</u>	<u>6F</u>	<u>30</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

C-APDU: UPDATE BINARY 1.2

Logically:

<u>C-APDU</u>	
Class:	'A0'
Instruction:	UPDATE BINARY
P1 parameter:	'00'
P2 parameter:	'00'
Lc:	'18'
Data:	'00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17'

Coding:

<u>BER-TLV:</u>	<u>A0</u>	<u>D6</u>	<u>00</u>	<u>00</u>	<u>18</u>	<u>00</u>	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>
	<u>07</u>	<u>08</u>	<u>09</u>	<u>0A</u>	<u>0B</u>	<u>0C</u>	<u>0D</u>	<u>0E</u>	<u>0F</u>	<u>10</u>	<u>11</u>	<u>12</u>
	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>							

C-APDU: READ BINARY 1.2Logically:

<u>C-APDU</u>	
Class:	'A0'
Instruction:	READ BINARY
P1 parameter:	'00'
P2 parameter:	'00'
Lc:	'18'

Coding:

<u>BER-TLV:</u>	<u>A0</u>	<u>B0</u>	<u>00</u>	<u>00</u>	<u>18</u>
-----------------	-----------	-----------	-----------	-----------	-----------

C-APDU: UPDATE BINARY 1.2aLogically:

<u>C-APDU</u>	
Class:	'A0'
Instruction:	UPDATE BINARY
P1 parameter:	'00'
P2 parameter:	'00'
Lc:	'18'
Data:	'FF FF'

Coding:

<u>BER-TLV:</u>	<u>A0</u>	<u>D6</u>	<u>00</u>	<u>00</u>	<u>18</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>
	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>
	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>							

R-APDU: SELECT 1.2aLogically:

<u>Status Words</u>	
SW1 / SW2:	Normal ending of command – length '1B' of response data

Coding:

<u>BER-TLV:</u>	<u>9F</u>	<u>1B</u>
-----------------	-----------	-----------

R-APDU: SELECT 1.2b

Logically:Status WordsSW1 / SW2: Normal ending of command - length '0F' of response dataCoding:BER-TLV: 9F 0FR-APDU: UPDATE BINARY 1.2Logically:Status WordsSW1 / SW2: Normal ending of commandCoding:BER-TLV: 90 00R-APDU: READ BINARY 1.2Logically:R-APDU dataData: '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
10 11 12 13 14 15 16 17 'Status WordsSW1 / SW2: Normal ending of commandCoding:BER-TLV: 00 01 02 03 04 05 06 07 08 09 0A 0B
0C 0D 0E 0F 10 11 12 13 14 15 16 17
90 00TERMINAL RESPONSE : PERFORM CARD APDU 1.2.1Logically:Command detailsCommand number: 1Command type: PERFORM CARD APDUCommand qualifier: "00"Device identitiesSource device: MEDestination device: SIMResultGeneral Result: Command performed successfullyR-APDUStatus WordsSW1 / SW2: Command performed successfully – length 1B of response dataCoding:BER-TLV: 81 03 01 30 00 82 02 11 81 83 01 00
A3 02 9F 1B

TERMINAL RESPONSE : PERFORM CARD APDU 1.2.2Logically:Command details

Command number:	1
Command type:	PERFORM CARD APDU
Command qualifier:	"00"

Device identities

Source device:	ME
Destination device:	SIM

Result

General Result:	Command performed successfully
-----------------	--------------------------------

R-APDUStatus Words

SW1 / SW2:	Command performed successfully – length 0F of response data
------------	---

Coding:

BER-TLV:	81	03	01	30	00	82	02	11	81	83	01	00
	A3	02	9F	0F								

TERMINAL RESPONSE : PERFORM CARD APDU 1.2.3Logically:Command details

Command number:	1
Command type:	PERFORM CARD APDU
Command qualifier:	"00"

Device identities

Source device:	ME
Destination device:	SIM

Result

General Result:	Command performed successfully
-----------------	--------------------------------

R-APDUStatus Words

SW1 / SW2:	Normal ending of command
------------	--------------------------

Coding:

BER-TLV:	81	03	01	30	00	82	02	11	81	83	01	00
	A3	02	90	00								

TERMINAL RESPONSE : PERFORM CARD APDU 1.2.4

Logically:

<u>Command details</u>	
Command number:	1
Command type:	PERFORM CARD APDU
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>R-APDU</u>	
<u>R-APDU data</u>	
Data:	'00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17 '
<u>Status Words</u>	
SW1 / SW2:	Normal ending of command

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>30</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>11</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>A2</u>	<u>81</u>	<u>EF</u>	<u>A0</u>	<u>D6</u>	<u>00</u>	<u>00</u>	<u>EC</u>	<u>00</u>	<u>01</u>	<u>02</u>	<u>03</u>
	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>0A</u>	<u>0B</u>	<u>0C</u>	<u>0D</u>	<u>0E</u>	<u>0F</u>
	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>90</u>	<u>00</u>		

Expected Sequence 1.3 (PERFORM CARD APDU, card reader 1, card inserted, card powered off)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: POWER OFF CARD</u> <u>1.3.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>POWER OFF CARD 1.3.1</u>	<u>[Power off card reader 1]</u>
<u>4</u>	<u>ME → SIM2</u>	<u>POWER OFF CARD</u>	<u>[Power off card reader 1]</u>
<u>5</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: POWER</u> <u>OFF CARD 1.3.1</u>	<u>[Successful]</u>
<u>6</u>	<u>ME</u>	<u>SIM2 is powered off from ME card</u> <u>reader</u>	
<u>7</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PEFORM CARD</u> <u>APDU 1.1.1</u>	
<u>8</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>9</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>PERFORM CARD APDU 1.1.1</u>	<u>[Select Master File]</u>
<u>10</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE:</u> <u>PERFORM CARD APDU 1.3.1</u>	<u>[Card powered off]</u>

PROACTIVE COMMAND : POWER OFF CARD 1.3.1Logically:Command details

<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>POWER OFF CARD</u>
<u>Command qualifier:</u>	<u>"00"</u>

Device identities

<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>Card reader 1</u>

Coding:

BER-TLV: D0 09 81 03 01 32 00 82 02 81 11

TERMINAL RESPONSE : POWER OFF CARD 1.3.1Logically:Command details

<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>POWER OFF CARD</u>
<u>Command qualifier:</u>	<u>"00"</u>

Device identities

<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>

Result

<u>General Result:</u>	<u>Command performed successfully</u>
------------------------	---------------------------------------

Coding:

BER-TLV: 81 03 01 32 00 82 02 82 81 01 00

TERMINAL RESPONSE : PERFORM CARD APDU 1.3.1Logically:Command details

<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>PERFORM CARD APDU</u>
<u>Command qualifier:</u>	<u>"00"</u>

Device identities

<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>

Result

<u>General Result:</u>	<u>MultipleCard commands error</u>
<u>Additional information:</u>	<u>Card powered off</u>

Coding:

BER-TLV: 81 03 01 32 00 82 02 82 81 02 38
04

Expected Sequence 1.4 (PERFORM CARD APDU, card reader 1, no card inserted)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	ME	SIM2 is removed from ME card reader	
2	SIM → ME	PROACTIVE COMMAND PENDING: PEFORM CARD APDU 1.1.1	
3	ME → SIM	FETCH	
4	SIM → ME	PROACTIVE COMMAND: PERFORM CARD APDU 1.1.1	[Select Master File]
5	ME → SIM	TERMINAL RESPONSE: PERFORM CARD APDU 1.4.1	[No card inserted]

TERMINAL RESPONSE : PERFORM CARD APDU 1.4.1Logically:Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME

Destination device: SIM

Result

General Result: MultipleCard commands error

Additional information: Card removed or not present

Coding:

BER-TLV: 81 03 01 32 00 82 02 82 81 02 38
02

Expected Sequence 1.5 (PERFORM CARD APDU, card reader 7 (which is not the valid card reader identifier of the additional ME card reader))

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: PEFORM CARD APDU 1.5.1	[invalid card reader ID]
3	ME → SIM	FETCH	
4	SIM → ME	PROACTIVE COMMAND: PERFORM CARD APDU 1.5.1	[Select Master File]
5	ME → SIM	TERMINAL RESPONSE: PERFORM CARD APDU 1.5.1	[Specified reader not valid]

PROACTIVE COMMAND:: PERFORM CARD APDU 1.1.1Logically:Command details

Command number:	1
Command type:	PERFORM CARD APDU
Command qualifier:	"00"

Device identities

Source device:	SIM
Destination device:	Card Reader 7

C-APDU

Class:	'A0'
Instruction:	SELECT
P1 parameter:	'00'
P2 parameter:	'00'
Lc:	'02'
Data:	Master File

Coding:

BER-TLV:	<u>D0</u>	<u>12</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>30</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>17</u>	<u>A2</u>
	<u>07</u>	<u>A0</u>	<u>A4</u>	<u>00</u>	<u>00</u>	<u>02</u>	<u>3F</u>	<u>00</u>				

C-APDU: SELECT 1.1Logically:C-APDU

Class:	'A0'
Instruction:	SELECT
P1 parameter:	'00'
P2 parameter:	'00'
Lc:	'02'
Data:	Master File

Coding:

BER-TLV:	<u>A0</u>	<u>A4</u>	<u>00</u>	<u>00</u>	<u>02</u>	<u>3F</u>	<u>00</u>
----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

TERMINAL RESPONSE : PERFORM CARD APDU 1.5.1Logically:Command details

Command number:	1
Command type:	PERFORM CARD APDU
Command qualifier:	"00"

Device identities

Source device:	ME
Destination device:	SIM

Result

General Result:	MultipleCard commands error
Additional information:	Specified reader not valid

Coding:

BER-TLV:	<u>81</u>	<u>03</u>	<u>01</u>	<u>32</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>02</u>	<u>38</u>
	<u>09</u>										

27.22.4.17.1.5 Test RequirementThe ME shall operate in the manner defined in expected sequences27.22.4.17.2 PERFORM CARD APDU (detachable card reader)27.22.4.17.2.1 Definition and applicabilitySee Section 3.2.2.27.22.4.17.2.2 Conformance requirement27.22.4.17.2.3 Test PurposeTo verify that the ME sends an APDU command to the additional card identified in the PERFORM CARD APDU proactive SIM command, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.27.22.4.17.2.4 Method of test27.22.4.17.2.4.1 Initial ConditionsThe ME is connected to the SIM Simulator.Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.The card reader shall be detached from the ME.27.22.4.17.2.4.2 ProcedureExpected Sequence 2.1 (PERFORM CARD APDU, card reader 1, card reader detached)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: PEFORM CARD</u> <u>APDU 2.1.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND:</u> <u>PERFORM CARD APDU 1.1.1</u>	<u>[Select Master File]</u>
<u>4</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE:</u> <u>PERFORM CARD APDU 2.1.1</u>	<u>[Card reader detached]</u>

PROACTIVE COMMAND : PERFORM CARD APDU 2.1.1Logically:Command details

Command number:	1
Command type:	PERFORM CARD APDU
Command qualifier:	"00"

Device identities

Source device:	SIM
Destination device:	Card Reader 1

C-APDU

Class:	'A0'
Instruction:	SELECT
P1 parameter:	'00'
P2 parameter:	'00'
Lc:	'02'
Data:	Master File

Coding:

BER-TLV:	D0	12	81	03	01	30	00	82	02	81	11	A2
	07	A0	A4	00	00	02	3F	00				

TERMINAL RESPONSE : PERFORM CARD APDU 2.1.1Logically:Command details

Command number:	1
Command type:	PERFORM CARD APDU
Command qualifier:	"00"

Device identities

Source device:	ME
Destination device:	SIM

Result

General Result:	MultipleCard commands error
Additional information:	Card reader removed or not present

Coding:

BER-TLV:	81	03	01	30	00	82	02	82	81	83	02
	38	01									

27.22.4.17.2.5 Test RequirementThe ME shall operate in the manner defined in expected sequence.

27.22.4.18 POWER OFF CARD**27.22.4.18.1 POWER OFF CARD (normal)**27.22.4.18.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.18.1.2 Conformance requirement

The ME shall support the Proactive SIM: Power Off Card facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.18 (Power Off Card), clause 6.6.18 (Power Off Card), clause 12.6 (Command details), clause 12.7 (Device Identities), clause 12.12 (Result), clause 12.12.9 (Additional information for MultipleCard commands), clause 5.2 (Terminal Profile), Annex H(Support of Multiple Card Operation),

;

27.22.4.18.1.3 Test Purpose

To verify that the ME closes a session with the additional card identified in the POWER OFF CARD proactive SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

27.22.4.18.1.4 Method of test27.22.4.18.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2).

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

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

27.22.4.18.1.4.2 Procedure

Expected Sequence 1.1 (POWER OFF CARD, card reader 1)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: POWER OFF CARD 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : POWER OFF CARD 1.1.1	[Power off card reader 1]
4	ME → SIM2	POWER OFF CARD	[Power off card reader 1]
5	ME → SIM	TERMINAL RESPONSE : POWER OFF CARD 1.1.1	[Successful]

PROACTIVE COMMAND : POWER OFF CARD 1.1.1

Logically:

Command details

Command number: 1
Command type: POWER OFF CARD
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Card reader 1

Coding:

BER-TLV: D0 09 81 03 01 32 00 82 02 81 11

TERMINAL RESPONSE : POWER OFF CARD 1.1.1

Logically:

Command details

Command number: 1
Command type: POWER OFF CARD
Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 32 00 82 02 82 81 01 00

Expected Sequence 1.2 (POWER OFF CARD, card reader 1, no card inserted)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM2</u>	<u>SIM2 is removed from ME card reader</u>	
2	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: POWER OFF CARD 1.1.1</u>	
3	<u>ME → SIM</u>	<u>FETCH</u>	
4	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : POWER OFF CARD 1.1.1</u>	<u>[Power off card reader 1]</u>
5	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : POWER OFF CARD 1.2.1</u>	<u>[No card inserted]</u>

TERMINAL RESPONSE : POWER OFF CARD 1.2.1Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>POWER OFF CARD</u>
<u>Command qualifier:</u>	<u>"00"</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>MultipleCard commands error</u>
<u>Additional information:</u>	<u>Card removed or not present</u>

Coding:

BER-TLV: 81 03 01 32 00 82 02 82 81 02 38
02

27.22.4.18.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.18.2 POWER OFF CARD (detachable card reader)27.22.4.18.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.18.2.2 Conformance requirement27.22.4.18.2.3 Test Purpose

To verify that the ME closes a session with the additional card identified in the POWER OFF CARD proactive SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.18.2.4 Method of test27.22.4.18.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2).

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

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

The card reader shall be detached from the ME.

27.22.4.18.2.4.2 Procedure

Expected Sequence 2.1 (POWER OFF CARD, card reader 1, no card reader attached)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: POWER OFF CARD 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : POWER OFF CARD 2.1.1	[Power off card reader 1]
4	ME → SIM	TERMINAL RESPONSE : POWER ON CARD 2.1.1	[Card reader removed or not present]

PROACTIVE COMMAND : POWER OFF CARD 2.1.1

Logically:

Command details

Command number: 1
 Command type: POWER OFF CARD
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Card reader 1

Coding:

BER-TLV: D0 09 81 03 01 32 00 82 02 81 11

TERMINAL RESPONSE : POWER OFF CARD 2.1.1

Logically:

Command details

Command number: 1
 Command type: POWER OFF CARD
 Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: MultipleCard commands error
 Additional information: Card reader removed or not present

Coding:

BER-TLV: 81 03 01 32 00 82 02 82 81 02 38
 01

27.22.4.18.2.5 Test RequirementThe ME shall operate in the manner defined in expected sequences

27.22.4.19 POWER ON CARD27.22.4.19.1 POWER ON CARD (normal)27.22.4.19.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.19.1.2 Conformance requirement

The ME shall support the Proactive SIM: Power On Card facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.19 (Power On Card), clause 6.6.19 (Power On Card),), clause 12.6 (Command details), clause 12.7 (Device Identities), clause 12.12 (Result), clause 12.12.9 (Additional information for MultipleCard commands), clause 12.34 (Card ATR), clause 5.2 (Terminal Profile), 3GPP TS 11.14 [15] Annex H(Support of Multiple Card Operation), ISO /IEC 7816-3

27.22.4.19.1.3 Test Purpose

To verify that the ME starts a session with the additional card identified in the POWER ON CARD proactive SIM command, and successfully returns the Answer To Reset within the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

27.22.4.19.1.4 Method of test27.22.4.19.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2).

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

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

27.22.4.19.1.4.2 Procedure

Expected Sequence 1.1 (POWER ON CARD, card reader 1)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : POWER ON CARD 1.1.1</u>	<u>[Power on card reader 1]</u>
4	<u>ME → SIM2</u>	<u>RESET CARD</u>	<u>[Perform electrical initialisation]</u>
5	<u>SIM2 → ME</u>	<u>ANSWER TO RESET 1.1.1</u>	<u>[ATR]</u>
6	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : POWER ON CARD 1.1.1</u>	<u>[ATR]</u>

PROACTIVE COMMAND : POWER ON CARD 1.1.1Logically:Command details

<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>POWER ON CARD</u>
<u>Command qualifier:</u>	<u>"00"</u>

Device identities

<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>Card reader 1</u>

Coding:

BER-TLV: D0 09 81 03 01 31 00 82 02 81 11

ANSWER TO RESET 1.1.1Logically:

<u>TS (Initial character):</u>	<u>'3B'</u>
<u>T0 (Format character):</u>	<u>0F</u>

<u>T1 (Historical character):</u>	<u>'P'</u>
<u>T2 (Historical character):</u>	<u>'o'</u>
<u>T3 (Historical character):</u>	<u>'w'</u>
<u>T4 (Historical character):</u>	<u>'e'</u>
<u>T5 (Historical character):</u>	<u>'r'</u>
<u>T6 (Historical character):</u>	<u>'O'</u>
<u>T7 (Historical character):</u>	<u>'n'</u>
<u>T8 (Historical character):</u>	<u>'C'</u>
<u>T9 (Historical character):</u>	<u>'a'</u>
<u>T10 (Historical character):</u>	<u>'r'</u>
<u>T11 (Historical character):</u>	<u>'d'</u>
<u>T12 (Historical character):</u>	<u>'T'</u>
<u>T13 (Historical character):</u>	<u>'e'</u>
<u>T14 (Historical character):</u>	<u>'s'</u>
<u>T15 (Historical character):</u>	<u>'t'</u>

Coding:

BER-TLV: A1 11 3B 0F 50 6F 77 65 72 4F 6E 43
 61 72 64 54 65 74 75

TERMINAL RESPONSE : POWER ON CARD 1.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	POWER ON CARD
Command qualifier:	“00”
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Card ATR</u>	
TS (Initial character):	‘3B’ T0 (Format character): 0F
T1 (Historical character):	‘P’
T2 (Historical character):	‘o’
T3 (Historical character):	‘w’
T4 (Historical character):	‘e’
T5 (Historical character):	‘r’
T6 (Historical character):	‘O’
T7 (Historical character):	‘n’
T8 (Historical character):	‘C’
T9 (Historical character):	‘a’
T10 (Historical character):	‘r’
T11 (Historical character):	‘d’
T12 (Historical character):	‘T’
T13 (Historical character):	‘e’
T14 (Historical character):	‘s’
T15 (Historical character):	‘t’

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>31</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>A1</u>	<u>11</u>	<u>3B</u>	<u>0F</u>	<u>50</u>	<u>6F</u>	<u>77</u>	<u>65</u>	<u>72</u>	<u>4F</u>	<u>6E</u>	<u>43</u>
	<u>61</u>	<u>72</u>	<u>64</u>	<u>54</u>	<u>65</u>	<u>74</u>	<u>75</u>					

Expected Sequence 1.2 (POWER ON CARD, card reader 1, no ATR)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : POWER ON CARD 1.1.1	[Power on card reader 1]
4	ME → SIM2	RESET CARD	[Perform electrical initialisation]
5	SIM2 → ME	NO ATR	[No ATR]
6	ME → SIM	TERMINAL RESPONSE : POWER ON CARD 1.2.1	[No ATR]

TERMINAL RESPONSE : POWER ON CARD 1.2.1

Logically:

Command details
Command number: 1
Command type: POWER ON CARD
Command qualifier: "00"
Device identities
Source device: ME
Destination device: SIM
Result
General Result: MultipleCard commands error
Additional information: Card mute

Coding:

BER-TLV: 81 03 01 31 00 82 02 82 81 83 02 38
 06

Expected Sequence 1.3 (POWER ON CARD, card reader 1, no card inserted)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM2	SIM2 is removed from ME card reader	
2	SIM → ME	PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1	
3	ME → SIM	FETCH	
4	SIM → ME	PROACTIVE COMMAND : POWER ON CARD 1.1.1	[Power on card reader 1]
5	ME → SIM	TERMINAL RESPONSE : POWER ON CARD 1.3.1	[Card removed or not present]

TERMINAL RESPONSE : POWER ON CARD 1.3.1

Logically:

Command details
Command number: 1
Command type: POWER ON CARD
Command qualifier: "00"
Device identities
Source device: Card reader 0
Destination device: SIM
Result
General Result: MultipleCard commands error
Additional information: Card removed or not present

Coding:

BER-TLV: 81 03 01 31 00 82 02 82 81 83 02 38
 02

27.22.4.19.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.19.2 POWER ON CARD (detachable card reader)27.22.4.19.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.19.2.2 Conformance requirement27.22.4.19.2.3 Test Purpose

To verify that the ME starts a session with the additional card identified in the POWER ON CARD proactive SIM command, and successfully returns the Answer To Reset within the TERMINAL RESPONSE command send to the SIM.

27.22.4.19.2.4 Method of test27.22.4.19.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

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

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

The card reader shall be detached from the ME.

27.22.4.19.2.4.2 ProcedureExpected Sequence 2.1 (POWER ON CARD, card reader 1, no card reader attached)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: POWER ON CARD 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : POWER ON CARD 2.1.1	[Power on card reader 1]
4	ME → SIM	TERMINAL RESPONSE : POWER ON CARD 2.1.1	[Card reader removed or not present]

PROACTIVE COMMAND : POWER ON CARD 2.1.1Logically:Command details

Command number:	1
Command type:	POWER ON CARD
Command qualifier:	"00"

Device identities

Source device:	SIM
Destination device:	Card reader 1

Coding:

BER-TLV: D0 09 81 03 01 31 00 82 02 81 11

TERMINAL RESPONSE : POWER ON CARD 1.1.1Logically:Command details

Command number:	1
Command type:	POWER ON CARD
Command qualifier:	"00"

Device identities

Source device:	Card reader 0
Destination device:	SIM

Result

General Result:	MultipleCard commands error
Additional information:	Card reader removed or not present

Coding:

BER-TLV: 81 03 01 31 00 82 02 82 81 83 02 38
01

27.22.4.19.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.20 GET READER STATUS**27.22.4.20.1 GET READER STATUS (normal)**27.22.4.20.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.20.1.2 Conformance requirement

The ME shall support the Proactive SIM: Get Card Reader Status facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1(Introduction), clause 5.2 (Terminal Profile), clause 6.4.20 (Get Reader Status), clause 6.6.20 (Get Reader Status), clause 6.8 (Terminal Response), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.33 (Card Reader Status), clause 12.57 (Card Reader Identifier), Annex H (Support of Multiple Card Operation)Additionally the ME shall support multiple card operation as defined in the following technical specifications:

3GPP TS 11.14 [] clause 6.4.19 (Power On Card), clause 6.6.19 (Power On Card), clause 6.4.18 (Power Off Card), 6.6.18 (Power Off Card)

27.22.4.20.1.3 Test Purpose

To verify that the ME sends starts a session with the additional card identified in the GET CARD READER STATUS proactive SIM command, and successfully returns information about all interfaces to additional card reader(s) in the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

In this test case the second SIM-Simulator (SIM2) shall response with the ATR "3B 00".

27.22.4.20.1.4 Method of test

27.22.4.20.1.4.1 Initial Conditions

The ME shall support the Proactive SIM: Get Card Reader Status (Card Reader Status) facility. The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2).

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

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

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

27.22.4.20.1.4.2 Procedure

Expected Sequence 1.1 (GET CARD READER STATUS, card reader 1, card inserted, card powered)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: POWER ON CARD</u> <u>1.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: POWER ON CARD</u> <u>1.1.1</u>	<u>[Power on card reader 1]</u>
4	<u>ME → SIM2</u>	<u>RESET CARD</u>	<u>[Perform electrical initialisation]</u>
5	<u>SIM2 → ME</u>	<u>ANSWER TO RESET 1.1.1</u>	<u>[ATR]</u>
6	<u>ME → SIM</u>	<u>TERMINAL RESPONSE :</u> <u>POWER ON CARD 1.1.1</u>	<u>[ATR]</u>
7	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: GET CARD READER</u> <u>STATUS 1.1.1</u>	
8	<u>ME → SIM</u>	<u>FETCH</u>	
9	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : GET</u> <u>CARD READER STATUS 1.1.1</u>	<u>[Get Card Reader Status]</u>
10	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : GET</u> <u>CARD READER STATUS 1.1.1a</u> <u>Or</u> <u>TERMINAL RESPONSE : GET</u> <u>CARD READER STATUS 1.1.1b</u> <u>or</u> <u>TERMINAL RESPONSE : GET</u> <u>CARD READER STATUS 1.1.1c</u> <u>or</u> <u>TERMINAL RESPONSE : GET</u> <u>CARD READER STATUS 1.1.1d</u>	<u>[Successful]</u> <u>[Successful]</u> <u>[Successful]</u> <u>[Successful]</u>

PROACTIVE COMMAND : POWER ON CARD 1.1.1

Logically:

Command details

Command number: 1
Command type: POWER ON CARD
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Card reader 1

Coding:

BER-TLV: D0 09 81 03 01 31 00 82 02 81 11

ANSWER TO RESET 1.1.1

Logically:

TS (Initial character):	'3B'
T0 (Format character):	'00'

Coding:

BER-TLV: A1 02 3B 00

TERMINAL RESPONSE : POWER ON CARD 1.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	POWER ON CARD
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Card ATR</u>	
TS (Initial character):	'3B'
T0 (Format character):	'00'

Coding:

BER-TLV: 81 03 01 31 00 82 02 82 81 83 01 00
 A1 02 3B 00

PROACTIVE COMMAND : GET CARD READER STATUS 1.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	GET CARD READER STATUS
Command qualifier:	Card reader status
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME

Coding:

BER-TLV: D0 09 81 03 01 33 00 82 02 81 82

TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1aLogically:

<u>Command details</u>	
Command number:	1
Command type:	GET CARD READER STATUS
Command qualifier:	Card reader status
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Card reader status</u>	
Identity of card reader:	'01'
Card reader removable:	'No'
Card reader present:	Yes
Card reader ID-1 size:	'Yes'
Card present in reader:	Yes
Card powered:	Yes

Coding:

BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
00 A0 01 F1

TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1bLogically:

<u>Command details</u>	
Command number:	1
Command type:	GET CARD READER STATUS
Command qualifier:	Card reader status
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Card reader status</u>	
Identity of card reader:	'01'
Card reader removable:	'No'
Card reader present:	Yes
Card reader ID-1 size:	'No'
Card present in reader:	Yes
Card powered:	Yes

Coding:

BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
00 A0 01 D1

TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1cLogically:

<u>Command details</u>	
Command number:	1
Command type:	GET CARD READER STATUS
Command qualifier:	Card reader status
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Card reader status</u>	
Identity of card reader:	'01'
Card reader removable:	'Yes'
Card reader present:	Yes
Card reader ID-1 size:	'Yes'
Card present in reader:	Yes
Card powered:	Yes

Coding:

BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
00 A0 01 F9

TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1dLogically:

<u>Command details</u>	
Command number:	1
Command type:	GET CARD READER STATUS
Command qualifier:	Card reader status
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Card reader status</u>	
Identity of card reader:	'01'
Card reader removable:	'Yes'
Card reader present:	Yes
Card reader ID-1 size:	'No'
Card present in reader:	Yes
Card powered:	Yes

Coding:

BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
00 A0 01 D9

Expected Sequence 1.2 (GET CARD READER STATUS, card reader 1, card inserted, card not powered)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: POWER OFF CARD</u> <u>1.2.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND :</u> <u>POWER OFF CARD 1.2.1</u>	<u>[Power off card reader 1]</u>
4	<u>ME → SIM2</u>	<u>POWER OFF CARD</u>	<u>[Power off card reader 1]</u>
5	<u>ME → SIM</u>	<u>TERMINAL RESPONSE :</u> <u>POWER OFF CARD 1.2.1</u>	<u>[Successful]</u>
6	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: GET CARD READER</u> <u>STATUS 1.1.1</u>	
7	<u>ME → SIM</u>	<u>FETCH</u>	
8	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : GET</u> <u>CARD READER STATUS 1.1.1</u>	<u>[Get Card Reader Status]</u>
9	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : GET</u> <u>CARD READER STATUS 1.2.1a</u> <u>Or</u> <u>TERMINAL RESPONSE : GET</u> <u>CARD READER STATUS 1.2.1b</u> <u>or</u> <u>TERMINAL RESPONSE : GET</u> <u>CARD READER STATUS 1.2.1c</u> <u>Or</u> <u>TERMINAL RESPONSE : GET</u> <u>CARD READER STATUS 1.2.1d</u>	<u>[Successful]</u> <u>[Successful]</u> <u>[Successful]</u> <u>[Successful]</u>

PROACTIVE COMMAND : POWER OFF CARD 1.2.1

Logically:

Command details

Command number: 1
Command type: POWER OFF CARD
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Card reader 1

Coding:

BER-TLV: D0 09 81 03 01 32 00 82 02 81 11

TERMINAL RESPONSE : POWER OFF CARD 1.2.1

Logically:

Command details

Command number: 1
Command type: POWER OFF CARD
Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 32 00 82 02 82 81 01 00

TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1aLogically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>GET CARD READER STATUS</u>
<u>Command qualifier:</u>	<u>Card reader status</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Card reader status</u>	
<u>Identity of card reader:</u>	<u>'01'</u>
<u>Card reader removable:</u>	<u>'No'</u>
<u>Card reader present:</u>	<u>Yes</u>
<u>Card reader ID-1 size:</u>	<u>'Yes'</u>
<u>Card present in reader:</u>	<u>Yes</u>
<u>Card powered:</u>	<u>No</u>

Coding:

BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
00 A0 01 71

TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1bLogically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>GET CARD READER STATUS</u>
<u>Command qualifier:</u>	<u>Card reader status</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Card reader status</u>	
<u>Identity of card reader:</u>	<u>'01'</u>
<u>Card reader removable:</u>	<u>'No'</u>
<u>Card reader present:</u>	<u>Yes</u>
<u>Card reader ID-1 size:</u>	<u>'No'</u>
<u>Card present in reader:</u>	<u>Yes</u>
<u>Card powered:</u>	<u>No</u>

Coding:

BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
00 A0 01 51

TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1cLogically:

<u>Command details</u>	
Command number:	1
Command type:	GET CARD READER STATUS
Command qualifier:	Card reader status
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Card reader status</u>	
Identity of card reader:	'01'
Card reader removable:	'Yes'
Card reader present:	Yes
Card reader ID-1 size:	'Yes'
Card present in reader:	Yes
Card powered:	No

Coding:

BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
00 A0 01 79

TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1dLogically:

<u>Command details</u>	
Command number:	1
Command type:	GET CARD READER STATUS
Command qualifier:	Card reader status
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Card reader status</u>	
Identity of card reader:	'01'
Card reader removable:	'Yes'
Card reader present:	Yes
Card reader ID-1 size:	'No'
Card present in reader:	Yes
Card powered:	No

Coding:

BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
00 A0 01 59

Expected Sequence 1.3 (GET CARD READER STATUS, card reader 1, card not present)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM2</u>	<u>SIM2 is removed from ME card reader</u>	
2	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: GET CARD READER STATUS 1.1.1</u>	
3	<u>ME → SIM</u>	<u>FETCH</u>	
4	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : GET CARD READER STATUS 1.1.1</u>	<u>[Get Card Reader Status]</u>
5	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1a</u> <u>Or</u> <u>TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1b</u> <u>or</u> <u>TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1c</u> <u>or</u> <u>TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1d</u>	<u>[Successful]</u> <u>[Successful]</u> <u>[Successful]</u> <u>[Successful]</u>

TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1a

Logically:

Command details

Command number: 1
Command type: GET CARD READER STATUS
Command qualifier: Card reader status

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '1'
Card reader removable: 'No'
Card reader present: Yes
Card reader ID-1 size: 'Yes'
Card present in reader: No
Card powered: No

Coding:

BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
 00 A0 01 31

TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1bLogically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>GET CARD READER STATUS</u>
<u>Command qualifier:</u>	<u>card reader status</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Card reader status</u>	
<u>Identity of card reader:</u>	<u>'1'</u>
<u>Card reader removable:</u>	<u>'No'</u>
<u>Card reader present:</u>	<u>Yes</u>
<u>Card reader ID-1 size:</u>	<u>'No'</u>
<u>Card present in reader:</u>	<u>No</u>
<u>Card powered:</u>	<u>No</u>

Coding:

BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
 00 A0 01 11

TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1cLogically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>GET CARD READER STATUS</u>
<u>Command qualifier:</u>	<u>card reader status</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Card reader status</u>	
<u>Identity of card reader:</u>	<u>'1'</u>
<u>Card reader removable:</u>	<u>'Yes'</u>
<u>Card reader present:</u>	<u>Yes</u>
<u>Card reader ID-1 size:</u>	<u>'Yes'</u>
<u>Card present in reader:</u>	<u>No</u>
<u>Card powered:</u>	<u>No</u>

Coding:

BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
 00 A0 01 39

TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1dLogically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>GET CARD READER STATUS</u>
<u>Command qualifier:</u>	<u>Card reader status</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Card reader status</u>	
<u>Identity of card reader:</u>	<u>'1'</u>
<u>Card reader removable:</u>	<u>'Yes'</u>
<u>Card reader present:</u>	<u>Yes</u>
<u>Card reader ID-1 size:</u>	<u>'No'</u>
<u>Card present in reader:</u>	<u>No</u>
<u>Card powered:</u>	<u>No</u>

Coding:

BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
00 A0 01 19

27.22.4.20.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.20.2 GET CARD READER STATUS (detachable card reader)27.22.4.20.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.20.2.2 Conformance requirement27.22.4.20.2.3 Test Purpose

To verify that the ME closes a session with the additional card identified in the GET CARD READER STATUS proactive SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.20.2.4 Method of test27.22.4.20.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

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

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

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

The card reader shall be detached from the ME.

27.22.4.20.2.4.2 Procedure

Expected Sequence 2.1 (GET CARD READER STATUS, no card reader attached)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: GET CARD READER STATUS 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : GET CARD READER STATUS 2.1.1	[Get Card Reader Status]
4	ME → SIM	TERMINAL RESPONSE : GET CARD READER STATUS 2.1.1a or TERMINAL RESPONSE : GET CARD READER STATUS 2.1.1b	[Successful] [Successful]

PROACTIVE COMMAND : GET CARD READER STATUS 2.1.1

Logically:

Command details

Command number: 1
 Command type: GET CARD READER STATUS
 Command qualifier: Card Reader Status

Device identities

Source device: SIM
 Destination device: ME

Coding:

BER-TLV: D0 09 81 03 01 33 00 82 02 81 82

TERMINAL RESPONSE : GET CARD READER STATUS 2.1.1a

Logically:

Command details

Command number: 1
 Command type: GET CARD READER STATUS
 Command qualifier: Card reader status

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: 01
 Card reader removable: Yes
 Card reader present: No
 Card reader ID-1 size: Yes
 Card present in reader: No
 Card powered: No

Coding:

BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
 00 A0 01 29

TERMINAL RESPONSE : GET CARD READER STATUS 2.1.1bLogically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>GET CARD READER STATUS</u>
<u>Command qualifier:</u>	<u>Card reader status</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Card reader status</u>	
<u>Identity of card reader:</u>	<u>01</u>
<u>Card reader removable:</u>	<u>Yes</u>
<u>Card reader present:</u>	<u>No</u>
<u>Card reader ID-1 size:</u>	<u>No</u>
<u>Card present in reader:</u>	<u>No</u>
<u>Card powered:</u>	<u>No</u>

Coding:

BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
 00 A0 01 09

27.22.4.20.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.21 TIMER MANAGEMENT and ENVELOPE TIMER EXPIRATION**27.22.4.21.1 TIMER MANAGEMENT (normal)**27.22.4.21.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.21.1.2 Conformance Requirement

The ME shall support the TIMER MANAGEMENT as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.21 (Timer Management), clause 6.8 (Terminal Response), clause 12.6 (Commands details), clause 12.7 (Device Identities), clause 12.37 (Timer Identifier), clause 12.38 (Timer Value).

27.22.4.21.1.3 Test Purpose

To verify that the ME manages correctly its internal timers, start a timer, deactivate a timer or return the current value of a timer according to the Timer Identifier defined in the TIMER MANAGEMENT proactive SIM command.

27.22.4.21.1.4 Method of Test27.22.4.21.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

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

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

27.22.4.21.1.4.2 Procedure

Expected Sequence 1.1 (TIMER MANAGEMENT, start timer 1 several times, get the current value of the timer and deactivate the timer successfully)

Step	Direction	MESSAGE / Action	Comments
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.1.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.1.1</u>	<u>[start timer 1]</u>
<u>4</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.1.1</u>	<u>[command performed successfully]</u>
<u>5</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.1.2</u>	<u>After 1 minute following reception of Terminal Response</u>
<u>6</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>7</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.1.2</u>	<u>[ask value of timer 1]</u>
<u>8</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.1.2</u>	<u>[command performed successfully]</u>
<u>9</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.1.3</u>	<u>Before timer expires!</u>
<u>10</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>11</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.1.3</u>	<u>[reinitialise timer 1]</u>
<u>12</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.1.3</u>	<u>[command performed successfully]</u>
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.1.4</u>	<u>After 30 seconds following reception of the Terminal Response</u>
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.1.4</u>	<u>[deactivate timer 1]</u>
<u>16</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.1.4</u>	<u>[command performed successfully]</u>

PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.1

Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: start the Timer
Device identities
Source device: SIM
Destination device: ME
Timer identifier:
Identifier of timer: 1
Timer value:
Value of timer: 5 min

Coding :

BER-TLV: D0 11 81 03 01 27 00 82 02 81 82 A4
 01 01 A5 03 00 50 00

PROACTIVE COMMAND : TIMER MANAGEMENT 1.1.2

Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer
Device identities
Source device: SIM
Destination device: ME
Timer identifier:
Identifier of timer: 1

Coding :

BER-TLV: D0 0C 81 03 01 27 10 82 02 81 82 A4
 01 01

PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.3

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier:

Identifier of timer: 1

Timer value:

Value of timer: 1min 30sec

Coding :

BER-TLV: D0 11 81 03 01 27 00 82 02 81 82 A4
 01 01 A5 03 00 10 03

PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.4Logically:Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier:

Identifier of timer: 1

Coding :

BER-TLV: D0 0C 81 03 01 27 01 82 02 81 82 A4
 01 01

TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.1 and 1.1.3

Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>TIMER MANAGEMENT</u>
<u>Command qualifier:</u>	<u>start the Timer</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Timer identifier:</u>	
<u>Identifier of timer:</u>	<u>1</u>

Coding :

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>A4</u>	<u>01</u>	<u>01</u>									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.2Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>TIMER MANAGEMENT</u>
<u>Command qualifier:</u>	<u>get the current value of the Timer</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Timer identifier:</u>	
<u>Identifier of timer:</u>	<u>1</u>
<u>Timer value:</u>	
<u>value of timer:</u>	<u>value < to the timer value of command 1.1.1</u>

Coding :

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>10</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>A4</u>	<u>01</u>	<u>01</u>	<u>A5</u>	<u>03</u>	<u>xx</u>	<u>xx</u>	<u>xx</u>				

TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.4

Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: deactivate the Timer
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully
Timer identifier:
Identifier of timer: 1
Timer value:
value of timer: value < to the timer value of command 1.1.3

Coding :

BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 00
 A4 01 01 A5 03 xx xx xx

Expected Sequence 1.2 (TIMER MANAGEMENT, start timer 2 several times, get the current value of the timer and deactivate the timer successfully)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.2.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.2.1</u>	<u>[start timer 2]</u>
4	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.2.1</u>	<u>[command performed successfully]</u>
5	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.2.2</u>	<u>After 1 minute following reception of Terminal Response</u>
6	<u>ME → SIM</u>	<u>FETCH</u>	
7		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.2.2</u>	<u>[ask value of timer 2]</u>
8	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.2.2</u>	<u>[command performed successfully]</u>
9	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.2.3</u>	<u>Before timer expires!</u>
10	<u>ME → SIM</u>	<u>FETCH</u>	
11		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.2.3</u>	<u>[reinitialise timer 2]</u>
12	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.2.3</u>	<u>[command performed successfully]</u>
13	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.2.4</u>	<u>After 10 seconds following reception of Terminal Response</u>
14	<u>ME → SIM</u>	<u>FETCH</u>	
15		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.2.4</u>	<u>[deactivate timer 2]</u>
16	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.2.4</u>	<u>[command performed successfully]</u>

PROACTIVE COMMAND:TIMER MANAGEMENT 1.2.1

Logically:Command details

Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier:

Identifier of timer: 2

Timer value:

Value of timer: 23h 59min 59sec

Coding :

BER-TLV: D0 11 81 03 01 27 00 82 02 81 82 A4
01 02 A5 03 32 95 95

PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.2Logically:Command details

Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier:

Identifier of timer: 2

Coding :

BER-TLV: D0 0C 81 03 01 27 10 82 02 81 82 A4
01 02

PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.3Logically:

Command details

Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier:

Identifier of timer: 2

Timer value:

Value of timer: 40 sec

Coding :

BER-TLV: D0 11 81 03 01 27 00 82 02 81 82 A4
01 02 A5 03 00 00 04

PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.4Logically:Command details

Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier:

Identifier of timer: 2

Coding :

BER-TLV: D0 0C 81 03 01 27 01 82 02 81 82 A4
01 02

TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.1 and 1.2.3

Logically:

<u>Command details</u>	
Command number:	1
Command type:	TIMER MANAGEMENT
Command qualifier:	start the Timer
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Timer identifier:</u>	
Identifier of timer:	2

Coding :

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>A4</u>	<u>01</u>	<u>02</u>									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.2Logically:

<u>Command details</u>	
Command number:	1
Command type:	TIMER MANAGEMENT
Command qualifier:	get the current value of the Timer
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Timer identifier:</u>	
Identifier of timer:	2
<u>Timer value:</u>	
value of timer:	value < to the timer value of command 1.2.1

Coding :

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>10</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>A4</u>	<u>01</u>	<u>02</u>	<u>A5</u>	<u>03</u>	<u>xx</u>	<u>xx</u>	<u>xx</u>				

TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.4

Logically:

<u>Command details</u>	
Command number:	1
Command type:	TIMER MANAGEMENT
Command qualifier:	deactivate the Timer
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Timer identifier:</u>	
Identifier of timer:	2
<u>Timer value:</u>	
value of timer:	value < to the timer value of command 1.2.3

Coding :

BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 00
A4 01 02 A5 03 xx xx xx

Expected Sequence 1.3 (TIMER MANAGEMENT, start timer 8 several times, get the current value of the timer and deactivate the timer successfully)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.3.1	
2	ME → SIM	FETCH	
3		PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.1	[start timer 8]
4	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.1	[command performed successfully]
5	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.3.2	After 1 minute following reception of Terminal Response
6	ME → SIM	FETCH	
7		PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.2	[ask value of timer 8]
8	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.2	[command performed successfully]
9	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.3.3	Before timer expires!
10	ME → SIM	FETCH	
11		PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.3	[reinitialise timer 8]
12	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.3	[command performed successfully]
13	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.3.4	After 30 seconds following reception of Terminal Response
14	ME → SIM	FETCH	
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.4	[deactivate timer 8]
16	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.4	[command performed successfully]

PROACTIVE COMMAND:TIMER MANAGEMENT 1.3.1

Logically:

<u>Command details</u>	
Command number:	<u>1</u>
Command type:	<u>TIMER MANAGEMENT</u>
Command qualifier:	<u>start the Timer</u>
<u>Device identities</u>	
Source device:	<u>SIM</u>
Destination device:	<u>ME</u>
<u>Timer identifier:</u>	
Identifier of timer:	<u>8</u>
<u>Timer value:</u>	
Value of timer:	<u>20min</u>

Coding :

<u>BER-TLV:</u>	<u>D0</u>	<u>11</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>A4</u>
	<u>01</u>	<u>08</u>	<u>A5</u>	<u>03</u>	<u>00</u>	<u>02</u>	<u>00</u>					

PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.2Logically:

<u>Command details</u>	
Command number:	<u>1</u>
Command type:	<u>TIMER MANAGEMENT</u>
Command qualifier:	<u>get the current value of the Timer</u>
<u>Device identities</u>	
Source device:	<u>SIM</u>
Destination device:	<u>ME</u>
<u>Timer identifier:</u>	
Identifier of timer:	<u>8</u>

Coding :

<u>BER-TLV:</u>	<u>D0</u>	<u>0C</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>10</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>A4</u>
	<u>01</u>	<u>08</u>										

PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.3Logically:

Command details

Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: start the Timer
Device identities
Source device: SIM
Destination device: ME
Timer identifier:
Identifier of timer: 8
Timer value:
Value of timer: 01h 00min 00sec

Coding :

BER-TLV: D0 11 81 03 01 27 00 82 02 81 82 A4
 01 08 A5 03 10 00 00

PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.4

Logically:

Command details

Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: deactivate the Timer
Device identities
Source device: SIM
Destination device: ME
Timer identifier:
Identifier of timer: 8

Coding :

BER-TLV: D0 0C 81 03 01 27 01 82 02 81 82 A4
 01 08

TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.1 and 1.3.3

Logically:

<u>Command details</u>	
Command number:	1
Command type:	TIMER MANAGEMENT
Command qualifier:	start the Timer
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Timer identifier:</u>	
Identifier of timer:	8

Coding :

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>A4</u>	<u>01</u>	<u>08</u>									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.2Logically:

<u>Command details</u>	
Command number:	1
Command type:	TIMER MANAGEMENT
Command qualifier:	get the current value of the Timer
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Timer identifier:</u>	
Identifier of timer:	8
<u>Timer value:</u>	
value of timer:	value < to the timer value of command 1.3.1

Coding :

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>10</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>A4</u>	<u>01</u>	<u>08</u>	<u>A5</u>	<u>03</u>	<u>xx</u>	<u>xx</u>	<u>xx</u>				

TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.4

Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>TIMER MANAGEMENT</u>
<u>Command qualifier:</u>	<u>deactivate the Timer</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Timer identifier:</u>	
<u>Identifier of timer:</u>	<u>8</u>
<u>Timer value:</u>	
<u>value of timer:</u>	<u>value < to the timer value of command 1.3.3</u>

Coding :

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>A4</u>	<u>01</u>	<u>08</u>	<u>A5</u>	<u>03</u>	<u>xx</u>	<u>xx</u>	<u>xx</u>				

Expected Sequence 1.4 (TIMER MANAGEMENT, try to get the current value of a timer which is not started: action in contradiction with the current timer state)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.4.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.4.1</u>	<u>[get current value from timer 1]</u>
<u>4</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.4.1</u>	<u>[action in contradiction with the current timer state]</u>
<u>5</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.4.2</u>	
<u>6</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>7</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.4.2</u>	<u>[get current value from timer 2]</u>
<u>8</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.4.2</u>	<u>[action in contradiction with the current timer state]</u>
<u>9</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.4.3</u>	
<u>10</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>11</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.4.3</u>	<u>[get current value from timer 3]</u>
<u>12</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.4.3</u>	<u>[action in contradiction with the current timer state]</u>
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.4.4</u>	
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.4.4</u>	<u>[get current value from timer 4]</u>
<u>16</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.4.4</u>	<u>[action in contradiction with the current timer state]</u>
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.4.5</u>	
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.4.5</u>	<u>[get current value from timer 5]</u>
<u>16</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.4.5</u>	<u>[action in contradiction with the current timer state]</u>
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.4.6</u>	
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.4.6</u>	<u>[get current value from timer 6]</u>
<u>16</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.4.6</u>	<u>[action in contradiction with the current timer state]</u>
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.4.7</u>	
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.4.7</u>	<u>[get current value from timer 7]</u>
<u>16</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.4.7</u>	<u>[action in contradiction with the current timer state]</u>
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.4.8</u>	
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.4.8</u>	<u>[get current value from timer 8]</u>
<u>16</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.4.8</u>	<u>[action in contradiction with the current timer state]</u>

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.1Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>TIMER MANAGEMENT</u>
<u>Command qualifier:</u>	<u>get the current value of the Timer</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>
<u>Timer identifier:</u>	
<u>Identifier of timer:</u>	<u>1</u>

Coding :

BER-TLV: D0 0C 81 03 01 27 10 82 02 81 82 A4
 01 01

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.1Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>TIMER MANAGEMENT</u>
<u>Command qualifier:</u>	<u>get current value from the Timer</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Action in contradiction with the current timer state</u>
<u>Timer identifier:</u>	
<u>Identifier of timer:</u>	<u>1</u>

Coding :

BER-TLV: 81 03 01 27 10 82 02 82 81 83 01 24
 A4 01 01

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.2Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier:

Identifier of timer: 2

Coding :

BER-TLV: D0 0C 81 03 01 27 10 82 02 81 82 A4
01 02

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.2Logically:Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get current value from the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier:

Identifier of timer: 2

Coding :

BER-TLV: 81 03 01 27 10 82 02 82 81 83 01 24
A4 01 02

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.3Logically:Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier:

Identifier of timer: 3

Coding :

BER-TLV: D0 0C 81 03 01 27 10 82 02 81 82 A4
01 03

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.3Logically:Command details

Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier:

Identifier of timer: 3

Coding :

BER-TLV: 81 03 01 27 10 82 02 82 81 83 01 24
 A4 01 03

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.4Logically:Command details

Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier:

Identifier of timer: 4

Coding :

BER-TLV: D0 0C 81 03 01 27 10 82 02 81 82 A4
 01 04

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.4

Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Action in contradiction with the current timer state

Timer identifier:
Identifier of timer: 4

Coding :

BER-TLV: 81 03 01 27 10 82 02 82 81 83 01 24
 A4 01 04

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.5

Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer
Device identities
Source device: SIM
Destination device: ME
Timer identifier:
Identifier of timer: 5

Coding :

BER-TLV: D0 0C 81 03 01 27 10 82 02 81 82 A4
 01 05

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.5

Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Action in contradiction with the current timer state

Timer identifier:
Identifier of timer: 5

Coding :

BER-TLV: 81 03 01 27 10 82 02 82 81 83 01 24
A4 01 05

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.6Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer
Device identities
Source device: SIM
Destination device: ME
Timer identifier:
Identifier of timer: 6

Coding :

BER-TLV: D0 0C 81 03 01 27 10 82 02 81 82 A4
01 06

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.6

Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Action in contradiction with the current timer state

Timer identifier:
Identifier of timer: 6

Coding :

BER-TLV: 81 03 01 27 10 82 02 82 81 83 01 24
A4 01 06

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.7

Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer
Device identities
Source device: SIM
Destination device: ME
Timer identifier:
Identifier of timer: 7

Coding :

BER-TLV: D0 0C 81 03 01 27 10 82 02 81 82 A4
01 07

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.7

Logically:

<u>Command details</u>	
Command number:	1
Command type:	TIMER MANAGEMENT
Command qualifier:	get current value from the Timer
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Action in contradiction with the current timer state
<u>Timer identifier:</u>	
Identifier of timer:	7

Coding :

BER-TLV:	81	03	01	27	10	82	02	82	81	83	01	24
	A4	01	07									

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.8Logically:

<u>Command details</u>	
Command number:	1
Command type:	TIMER MANAGEMENT
Command qualifier:	get the current value of the Timer
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Timer identifier:</u>	
Identifier of timer:	8

Coding :

BER-TLV:	D0	0C	81	03	01	27	10	82	02	81	82	A4
	01	08										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.8Logically:

<u>Command details</u>	
Command number:	1
Command type:	TIMER MANAGEMENT
Command qualifier:	get current value from the Timer
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Action in contradiction with the current timer state
<u>Timer identifier:</u>	
Identifier of timer:	8

Coding :

BER-TLV:	81	03	01	27	10	82	02	82	81	83	01	24
	A4	01	08									

.

|

Expected Sequence 1.5 (TIMER MANAGEMENT, try to deactivate a timer which is not started: action in contradiction with the current timer state)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.5.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.5.1</u>	<u>[deactivate timer 1]</u>
<u>4</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.5.1</u>	<u>[action in contradiction with the current timer state]</u>
<u>5</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.5.2</u>	
<u>6</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>7</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.5.2</u>	<u>[deactivate timer 2]</u>
<u>8</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.5.2</u>	<u>[action in contradiction with the current timer state]</u>
<u>9</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.5.3</u>	
<u>10</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>11</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.5.3</u>	<u>[deactivate timer 3]</u>
<u>12</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.5.3</u>	<u>[action in contradiction with the current timer state]</u>
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.5.4</u>	
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.5.4</u>	<u>[deactivate timer 4]</u>
<u>16</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.5.4</u>	<u>[action in contradiction with the current timer state]</u>
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.5.5</u>	
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.5.5</u>	<u>[deactivate timer 5]</u>
<u>16</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.5.5</u>	<u>[action in contradiction with the current timer state]</u>
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.5.6</u>	
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.5.6</u>	<u>[deactivate timer 6]</u>
<u>16</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.5.6</u>	<u>[action in contradiction with the current timer state]</u>
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.5.7</u>	
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.5.7</u>	<u>[deactivate timer 7]</u>
<u>16</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.5.7</u>	<u>[action in contradiction with the current timer state]</u>
<u>13</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 1.5.8</u>	
<u>14</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>15</u>		<u>PROACTIVE COMMAND:</u> <u>TIMER MANAGEMENT 1.5.8</u>	<u>[deactivate timer 8]</u>
<u>16</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 1.5.8</u>	<u>[action in contradiction with the current timer state]</u>

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.1Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>TIMER MANAGEMENT</u>
<u>Command qualifier:</u>	<u>deactivate the Timer</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>
<u>Timer identifier:</u>	
<u>Identifier of timer:</u>	<u>1</u>

Coding :

<u>BER-TLV:</u>	<u>D0</u>	<u>0C</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>A4</u>
	<u>01</u>	<u>01</u>										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.1Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>TIMER MANAGEMENT</u>
<u>Command qualifier:</u>	<u>Deactivate Timer</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Action in contradiction with the current timer state</u>
<u>Timer identifier:</u>	
<u>Identifier of timer:</u>	<u>1</u>

Coding :

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>24</u>
	<u>A4</u>	<u>01</u>	<u>01</u>									

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.2Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier:

Identifier of timer: 2

Coding :

BER-TLV: D0 0C 81 03 01 27 01 82 02 81 82 A4
 01 02

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.2Logically:Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier:

Identifier of timer: 2

Coding :

BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 24
 A4 01 02

PROACTIVE COMMAND3: TIMER MANAGEMENT 1.5.3Logically:Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier:

Identifier of timer: 3

Coding :

BER-TLV: D0 0C 81 03 01 27 01 82 02 81 82 A4
 01 03

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.3

Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: Deactivate Timer
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Action in contradiction with the current timer state

Timer identifier:
Identifier of timer: 3

Coding :

BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 24
 A4 01 03

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.4Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: deactivate the Timer
Device identities
Source device: SIM
Destination device: ME
Timer identifier:
Identifier of timer: 4

Coding :

BER-TLV: D0 0C 81 03 01 27 01 82 02 81 82 A4
 01 04

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.4

Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: Deactivate Timer
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Action in contradiction with the current timer state

Timer identifier:
Identifier of timer: 4

Coding :

BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 24
A4 01 04

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.5Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: deactivate the Timer
Device identities
Source device: SIM
Destination device: ME
Timer identifier:
Identifier of timer: 5

Coding :

BER-TLV: D0 0C 81 03 01 27 01 82 02 81 82 A4
01 05

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.5Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: Deactivate Timer
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Action in contradiction with the current timer state

Timer identifier:
Identifier of timer: 5

Coding :

BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 24
A4 01 05

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.6Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>TIMER MANAGEMENT</u>
<u>Command qualifier:</u>	<u>deactivate the Timer</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>
<u>Timer identifier:</u>	
<u>Identifier of timer:</u>	<u>6</u>

Coding :

BER-TLV: D0 0C 81 03 01 27 01 82 02 81 82 A4
 01 06

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.6Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>TIMER MANAGEMENT</u>
<u>Command qualifier:</u>	<u>Deactivate Timer</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Action in contradiction with the current timer state</u>
<u>Timer identifier:</u>	
<u>Identifier of timer:</u>	<u>6</u>

Coding :

BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 24
 A4 01 06

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.7Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>TIMER MANAGEMENT</u>
<u>Command qualifier:</u>	<u>deactivate the Timer</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>
<u>Timer identifier:</u>	
<u>Identifier of timer:</u>	<u>7</u>

Coding :

BER-TLV: D0 0C 81 03 01 27 01 82 02 81 82 A4
 01 07

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.7Logically:Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier:

Identifier of timer: 7

Coding :

BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 24
 A4 01 07

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.8Logically:Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier:

Identifier of timer: 8

Coding :

BER-TLV: D0 0C 81 03 01 27 01 82 02 81 82 A4
 01 08

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.8Logically:Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier:

Identifier of timer: 8

Coding :

BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 24
 A4 01 08

Expected Sequence 1.6 (TIMER MANAGEMENT, start 8 timers successfully)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.1	
2	ME → SIM	FETCH	
3		PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.1	[timer 1]
4	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.1	[command performed successfully]
5	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.2	
6	ME → SIM	FETCH	
7		PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.2	[timer 2]
8	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.2	[command performed successfully]
9	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.3	
10	ME → SIM	FETCH	
11		PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3	[timer 3]
12	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.3	[command performed successfully]
13	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.4	
14	ME → SIM	FETCH	
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4	[timer 4]
16	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4	[command performed successfully]
17	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.5	
18	ME → SIM	FETCH	
19		PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5	[timer 5]
20	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5	[command performed successfully]
21	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6	
22	ME → SIM	FETCH	
23		PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6	[timer 6]
24	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6	[command performed successfully]
25	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7	
26	ME → SIM	FETCH	
27		PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6	[timer 7]
28	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7	[command performed successfully]
29	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8	
30	ME → SIM	FETCH	
31		PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8	[timer 8]
32	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8	[command performed successfully]

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.1

Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: start the Timer
Device identities
Source device: SIM
Destination device: ME
Timer identifier:
Identifier of timer: 1
Timer value:
Value of timer: 5 sec

Coding :

BER-TLV: D0 11 81 03 01 27 00 82 02 81 82 A4
01 01 A5 03 00 00 50

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.1

Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: start the Timer
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully
Timer identifier:
Identifier of timer: 1

Coding :

BER-TLV: 81 03 01 27 00 82 02 82 81 83 01 00
A4 01 01

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.2

Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: start the Timer
Device identities
Source device: SIM
Destination device: ME
Timer identifier:
Identifier of timer: 2
Timer value:
Value of timer: 5sec

Coding :

BER-TLV: D0 11 81 03 01 27 00 82 02 81 82 A4
 01 02 A5 03 00 00 50

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.2

Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: start the Timer
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully
Timer identifier:
Identifier of timer: 2

Coding :

BER-TLV: 81 03 01 27 00 82 02 82 81 83 01 00
 A4 01 02

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3

Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier:

Identifier of timer: 3

Timer value:

Value of timer: 5sec

Coding :

BER-TLV: D0 11 81 03 01 27 00 82 02 81 82 A4
01 03 A5 03 00 00 50

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.3Logically:Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier:

Identifier of timer: 3

Coding :

BER-TLV: 81 03 01 27 00 82 02 82 81 83 01 00
A4 01 03

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier:

Identifier of timer: 4

Timer value:

Value of timer: 5sec

Coding :

BER-TLV: D0 11 81 03 01 27 00 82 02 81 82 A4
 01 04 A5 03 00 00 50

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4Logically:Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier:

Identifier of timer: 4

Coding :

BER-TLV: 81 03 01 27 00 82 02 82 81 83 01 00
 A4 01 04

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5Logically:Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier:

Identifier of timer: 5

Timer value:

Value of timer: 5sec

Coding :

BER-TLV: D0 11 81 03 01 27 00 82 02 81 82 A4
 01 05 A5 03 00 00 50

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5Logically:Command details

<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>TIMER MANAGEMENT</u>
<u>Command qualifier:</u>	<u>start the Timer</u>

Device identities

<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>

Result

<u>General Result:</u>	<u>Command performed successfully</u>
<u>Timer identifier:</u>	
<u>Identifier of timer:</u>	<u>5</u>

Coding :

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>A4</u>	<u>01</u>	<u>05</u>									

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6Logically:Command details

<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>TIMER MANAGEMENT</u>
<u>Command qualifier:</u>	<u>start the Timer</u>

Device identities

<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>

Timer identifier:

<u>Identifier of timer:</u>	<u>6</u>
-----------------------------	----------

Timer value:

<u>Value of timer:</u>	<u>5sec</u>
------------------------	-------------

Coding :

<u>BER-TLV:</u>	<u>D0</u>	<u>11</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>A4</u>
	<u>01</u>	<u>06</u>	<u>A5</u>	<u>03</u>	<u>00</u>	<u>00</u>	<u>50</u>					

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6

Logically:

<u>Command details</u>	
Command number:	1
Command type:	TIMER MANAGEMENT
Command qualifier:	start the Timer
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Timer identifier:</u>	
Identifier of timer:	6

Coding :

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	06									

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7Logically:

<u>Command details</u>	
Command number:	1
Command type:	TIMER MANAGEMENT
Command qualifier:	start the Timer
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Timer identifier:</u>	
Identifier of timer:	7
<u>Timer value:</u>	
Value of timer:	5sec

Coding :

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	07	A5	03	00	00	50					

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7

Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>TIMER MANAGEMENT</u>
<u>Command qualifier:</u>	<u>start the Timer</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Timer identifier:</u>	
<u>Identifier of timer:</u>	<u>7</u>

Coding :

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>A4</u>	<u>01</u>	<u>07</u>									

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>TIMER MANAGEMENT</u>
<u>Command qualifier:</u>	<u>start the Timer</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>
<u>Timer identifier:</u>	
<u>Identifier of timer:</u>	<u>8</u>
<u>Timer value:</u>	
<u>Value of timer:</u>	<u>5sec</u>

Coding :

<u>BER-TLV:</u>	<u>D0</u>	<u>11</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>A4</u>
	<u>01</u>	<u>08</u>	<u>A5</u>	<u>03</u>	<u>00</u>	<u>00</u>	<u>50</u>					

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8

Logically:

<u>Command details</u>	
<u>Command number:</u>	1
<u>Command type:</u>	TIMER MANAGEMENT
<u>Command qualifier:</u>	start the Timer
<u>Device identities</u>	
<u>Source device:</u>	ME
<u>Destination device:</u>	SIM
<u>Result</u>	
<u>General Result:</u>	Command performed successfully
<u>Timer identifier:</u>	
<u>Identifier of timer:</u>	8

Coding :

<u>BER-TLV:</u>	81	03	01	27	00	82	02	82	81	83	01	00
	<u>A4</u>	<u>01</u>	<u>08</u>									

27.22.4.21.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.21.2 ENVELOPE TIMER EXPIRATION (normal)27.22.4.21.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.21.2.2 Conformance requirement

The ME shall support the ENVELOPE (TIMER EXPIRATION) command as defined in the following technical specifications:

3GPP TS 11.14 clause 4.10, 10.1 and 10.2.

The ME shall support the TIMER MANAGEMENT as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.21 (Timer Management), clause 6.8 (Terminal Response), clause 12.6 (Commands details), clause 12.7 (Device Identities), clause 12.37 (Timer Identifier), clause 12.38 (Timer Value).

27.22.4.21.2.3 Test Purpose

To verify that the ME shall pass the identifier of the timer that has expired and its value using the ENVELOPE (TIMER EXPIRATION) command, when a timer previously started in a TIMER MANAGEMENT proactive command expires.

27.22.4.21.2.4 Method of test27.22.4.21.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

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

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

The timer 1 is not started.

When the SIM is busy when the envelope TIMER EXPIRATION is sent, either the ME retries periodically to send the envelope, either it waits for a TERMINAL RESPONSE processed by the SIM with status '90 00'.

If the ME waits for a TR with status '90 00', the ME manufacturer shall specify how many TERMINAL RESPONSES with status '90 00' are expected before sending the TIMER EXPIRATION envelope.

27.22.4.21.2.4.2 Procedure

Expected Sequence 2.1 (TIMER EXPIRATION, pending proactive SIM command)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 2.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3		<u>PROACTIVE COMMAND: TIMER</u> <u>MANAGEMENT 2.1.1</u>	[timer 1]
4	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 2.1.1</u>	[command performed successfully]
5	<u>ME → SIM</u>	<u>ENVELOPE: TIMER EXPIRATION</u> <u>2.1.1</u>	
6	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: MORE TIME X.1(or an</u> <u>other SAT command tested before</u> <u>to ensure it is properly supported</u> <u>by the mobile).</u>	[response to envelope is "91 xx"]
7	<u>ME → SIM</u>	<u>FETCH</u>	

PROACTIVE COMMAND: TIMER MANAGEMENT 2.1.1

Logically:

Command details
Command number: 1
Command type: TIMER MANAGEMENT
Command qualifier: start the Timer
Device identities
Source device: SIM
Destination device: ME
Timer identifier:
Identifier of timer: 1
Timer value:
Value of timer: 0h 0min 10sec

Coding:

BER-TLV: D0 11 81 03 01 27 00 82 02 81 82 A4
 01 01 A5 03 00 00 01

TERMINAL RESPONSE: TIMER MANAGEMENT 2.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	TIMER MANAGEMENT
Command qualifier:	start the Timer
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>Timer identifier:</u>	
Identifier of timer:	1

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>27</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>A4</u>	<u>01</u>	<u>01</u>									

ENVELOPE: TIMER EXPIRATION 2.1.1Logically:

<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
Timer identifier:	Timer 1
<u>Timer value</u>	
Hour:	'00'
Minute:	'00'
Second:	'10' +/- 1 sec

Coding :

<u>BER-TLV:</u>	<u>D7</u>	<u>0C</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>A4</u>	<u>01</u>	<u>01</u>	<u>A5</u>	<u>03</u>	<u>00</u>
	<u>00</u>	<u>xx</u>										

Expected Sequence 2.2A (TIMER EXPIRATION, SIM application toolkit busy)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: TIMER</u> <u>MANAGEMENT 2.2.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3		<u>PROACTIVE COMMAND: TIMER</u> <u>MANAGEMENT 2.2.1</u>	[timer 1]
4	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: TIMER</u> <u>MANAGEMENT 2.2.1</u>	[command performed successfully]
5	<u>ME → SIM</u>	<u>ENVELOPE: TIMER EXPIRATION</u> <u>2.2.1A</u>	
6	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>BUSY</u>	[SIM is busy; response to the envelope = "93 00"]
...			[SIM is busy during 10 seconds, the ME retries the sending of the envelope until it is accepted]
7	<u>ME → SIM</u>	<u>ENVELOPE: TIMER EXPIRATION</u> <u>2.2.1B</u>	
8	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>BUSY</u>	[SIM is busy, response to the envelope = "93 00"]
9	<u>ME → SIM</u>	<u>ENVELOPE: TIMER EXPIRATION</u> <u>2.2.1C</u>	
10	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	[SIM is not busy]

Or :

Expected Sequence 2.2B (TIMER EXPIRATION, SIM application toolkit busy)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 2.2.1	
2	ME → SIM	FETCH	
3		PROACTIVE COMMAND: TIMER MANAGEMENT 2.2.1	[timer 1]
4	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 2.2.1	[command performed successfully]
5	ME → SIM	ENVELOPE: TIMER EXPIRATION 2.2.1A	
6	SIM → ME	RESPONSE TO THE ENVELOPE	[SIM is busy; response to the envelope = "93 00"] [SIM is busy during 10 sec. the ME may retry to send the envelope. After one (or several) answer(s) 93 00, the ME waits for a TERMINAL RESPONSE processed by the SIM with status "90 00"]
7	ME → SIM	STATUS	[SIM is not busy]
8	SIM → ME	Response to the STATUS command	[SW1/SW2=91 xx]
9	ME → SIM	PROACTIVE COMMAND PENDING	
10	SIM → ME	FETCH	
		PROACTIVE COMMAND: e.g. MORE TIME 2.2.2	
11	ME → SIM	TERMINAL RESPONSE: e.g. TIMER MANAGEMENT 2.2.2	[command performed successfully]
12	SIM → ME		[SW1/SW2 = 90 00] Steps 7->12 shall be repeated (X-1) times if the ME manufacturers specifies that the ME waits for X TERMINAL RESPONSES with status 90 00 to send the TIMER EXPIRATION envelope.
13	ME → SIM	ENVELOPE: TIMER EXPIRATION 2.2.1B	
14		PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND: TIMER MANAGEMENT 2.2.1Logically:

Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: SIM
 Destination device: ME

Timer identifier:

Identifier of timer: 1

Timer value:

Value of timer: 0h 0min 30sec

Coding:

BER-TLV: D0 11 81 03 01 27 00 82 02 81 82 A4
 01 01 A5 03 00 00 03

TERMINAL RESPONSE: TIMER MANAGEMENT 2.2.1Logically:Command details

Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier:

Identifier of timer: 1

Coding:

BER-TLV: 81 03 01 27 00 82 02 82 81 83 01 00
 A4 01 01

ENVELOPE: TIMER EXPIRATION 2.2.1ALogically:Device identities

Source device: ME
 Destination device: SIM

Timer identifier: Timer 1

Timer value

Hour: '00'
 Minute: '00'
 Second: '30' +/- 1 sec

Coding :

BER-TLV: D7 0C 82 02 82 81 A4 01 01 A5 03 00
 00 xx

ENVELOPE: TIMER EXPIRATION 2.2.1BLogically:

<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
Timer identifier:	Timer 1
<u>Timer value</u>	
Hour:	'00'
Minute:	'00'
Second:	>= timer in 2.2.1A

Coding :

BER-TLV: D7 0C 82 02 82 81 A4 01 01 A5 03 00
00 xx

ENVELOPE: TIMER EXPIRATION 2.2.1CLogically:

<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
Timer identifier:	Timer 1
<u>Timer value</u>	
Hour:	'00'
Minute:	'00'
Second:	>= timer in 2.2.1B

Coding :

BER-TLV: D7 0C 82 02 82 81 A4 01 01 A5 03 00
00 xx

PROACTIVE COMMAND : MORE TIME 2.2.2Logically:

<u>Command details</u>	
Command number:	1
Command type:	MORE TIME
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME

Coding:

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

TERMINAL RESPONSE : MORE TIME 2.2.2Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>MORE TIME</u>
<u>Command qualifier:</u>	<u>"00"</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>

Coding:

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

27.22.4.21.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1 and 2.

27.22.4.22 SET UP IDLE MODE TEXT27.22.4.22.1 SET UP IDLE MODE TEXT (normal)27.22.4.22.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.22.1.2 Conformance requirement

3GPP TS 11.14 [15] clause 4.7, 5.2 (Terminal Profile), 6.4.22, 6.6.22, 6.4.16, 6.6.16, 11.6, 6.8 (Terminal Response), 11, 11.1, 12.25, 6.4.7, 6.6.13

Additionally the ME shall support the REFRESH proactive SIM facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2, 6.1, 6.4.7, 6.6.13, 6.11, 12.6, 12.12, 13.4 and 14.

27.22.4.22.1.3 Test Purpose

To verify that the text passed to the ME is displayed as idle mode text.

27.22.4.22.1.4 Method of test27.22.4.22.1.4.1 Initial Conditions

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

The elementary files are coded as SIM Application Toolkit default.

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

The following events shall have been set up in the ME.

Event List

Logically:

Event 1: Idle screen available

27.22.4.22.1.4.2 Procedure

Expected Sequence 1.1 (SET UP IDLE MODE TEXT, display idle mode text)

Step	Direction	Message / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	With the event Idle Screen available
2	ME → SIM	TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1	[Command performed successfully]
3	USER → ME	Wait for the mobile returns to idle mode. Select idle screen	
4	ME → SIM	ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.1	
5	SIM → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.2	[Idle Mode Text]
6	ME → SIM	FETCH	
7	SIM → ME	PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.1.2	
8	ME → USER	Display "Idle Mode Text"	
9	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.1.2	[Command performed successfully]
10	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM

Destination device: ME

Event list

Event 1: Idle screen available

Coding:

BER-TLV: D0 0C 81 03 01 05 00 82 02 81 82 99
01 05

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP EVENT LIST
Command qualifier:	'00'
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.1Logically:

<u>Event list</u>	
Event 1:	Idle screen available
<u>Device identities</u>	
Source device:	Display
Destination device:	SIM

Coding:

BER-TLV: D6 07 99 01 05 82 02 02 81

PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.1.2Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Text string</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"Idle Mode Text"

BER-TLV: D0 1A 81 03 01 28 00 82 02 81 82 8D
0F 04 49 64 6C 65 20 4D 6F 64 65 20
56 65 78 74

TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.1.2

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 00

Expected Sequence 1.2 (SET UP IDLE MODE TEXT, replace idle mode text)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	With the event Idle Screen available
2	ME → SIM	TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1	[Command performed successfully]
3	USER → ME	Wait for the mobile returns to idle mode.	
4	ME → SIM	Select idle screen ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.1	
5	SIM → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.2	
6	ME → SIM	FETCH	
7	SIM → ME	PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.1.2	[Idle Mode Text]
8	ME → USER	Display "Idle Mode Text"	
9	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.1.2	
10	SIM → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.2.1	[Idle Mode Text]
11	ME → USER	Display "Toolkit Test"	
12	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.2.1	
13	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : SETUP IDLE MODE TEXT 1.2.1

Logically:

Command details
Command number: 1
Command type: SETUP IDLE MODE TEXT
Command qualifier: RFU
Device identities
Source device: SIM
Destination device: Display
Text String
Data coding scheme: unpacked, 8 bit data
Text: "Toolkit Test"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>18</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>28</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>8D</u>
	<u>0D</u>	<u>04</u>	<u>54</u>	<u>6F</u>	<u>6F</u>	<u>6C</u>	<u>6B</u>	<u>69</u>	<u>74</u>	<u>20</u>	<u>54</u>	<u>65</u>
	<u>73</u>	<u>74</u>										

TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.2.1

Logically:

Command details
Command number: 1
Command type: SET UP IDLE MODE TEXT
Command qualifier: RFU
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>28</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Expected Sequence 1.3 (SET UP IDLE MODE TEXT, remove idle mode text)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP EVENT LIST</u> <u>1.1.1</u>	<u>With the event Idle Screen available</u>
2	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SET UP</u> <u>EVENT LIST 1.1.1</u>	<u>[Command performed successfully]</u>
3	<u>USER →</u> <u>ME</u>	<u>Wait for the user returns to idle</u> <u>mode.</u> <u>Select idle screen</u>	
4	<u>ME → SIM</u>	<u>ENVELOPE: EVENT</u> <u>DOWNLOAD IDLE SCREEN</u> <u>AVAILABLE 1.1.1</u>	
5	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP IDLE MODE</u> <u>TEXT 1.1.2</u>	
6	<u>ME → SIM</u>	<u>FETCH</u>	
7	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET</u> <u>UP IDLE MODE TEXT 1.1.2</u>	<u>["Idle Mode Text"]</u>
8	<u>ME →</u> <u>USER</u>	<u>Display "Idle Mode Text"</u>	
9	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SET UP</u> <u>IDLE MODE TEXT 1.1.2</u>	
10	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP IDLE MODE</u> <u>TEXT 1.3.1</u>	
11	<u>ME → SIM</u>	<u>FETCH</u>	
12	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET</u> <u>UP IDLE MODE TEXT 1.3.1</u>	<u>[Remove idle mode text]</u>
13	<u>ME →</u> <u>USER</u>	<u>Display idle screen / "Idle Mode</u> <u>Text" not to be displayed</u>	
14	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SET UP</u> <u>IDLE MODE TEXT 1.3.1</u>	
15	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	

PROACTIVE COMMAND: SETUP IDLE MODE TEXT 1.3.1

Logically:

Command details

Command number: 1
Command type: SETUP IDLE MODE TEXT
Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME
Text String: zero length TLV

Coding:

BER-TLV: D0 0B 81 03 01 28 00 82 02 81 82 8D
00

TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.3.1Logically:

Command details
Command number: 1
Command type: SET UP IDLE MODE TEXT
Command qualifier: RFU
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully

Coding: _____

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 00

Expected Sequence 1.4 (SET UP IDLE MODE TEXT, competing information on ME display)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	<u>With the event Idle Screen available</u>
2	ME → SIM	TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1	<u>[Command performed successfully]</u>
3	USER → ME	Wait for the mobile returns to idle mode. Select idle screen	
4	ME → SIM	ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.2	
5	SIM → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1/2	
6	ME → SIM	FETCH	
7	SIM → ME	PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.1.2	<u>["Idle Mode Text"]</u>
8	ME → USER	Display "Idle Mode Text"	
9	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.12	<u>[Command performed successfully]</u>
10	SS → ME	SMS PP 1.4.1	<u>[Display immediate SMS]</u>
11	ME → USER	Display "Short Message"	
12	USER → ME	Clear display and select idle screen	
13	ME → USER	Display "Idle Mode Text"	

SMS-PP 1.4.1

Logically:

<u>SMS TPDU</u>	
<u>TP-MTI</u>	<u>SMS-SUBMIT</u>
<u>TP-RD</u>	<u>Instruct the SC to accept an SMS-SUBMIT for a SM</u>
<u>TP-VPF</u>	<u>TP-VP field not present</u>
<u>TP-RP</u>	<u>TP-Reply-Path is not set in this SMS-SUBMIT</u>
<u>TP-UDHI</u>	<u>The TP-UD field contains only the short message</u>
<u>TP-SRR</u>	<u>A status report is not requested</u>
<u>TP-MR</u>	<u>"00"</u>
<u>TP-DA</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Address value</u>	<u>"012345678"</u>
<u>TP-PID</u>	<u>Short message type 0</u>
<u>TP-DCS</u>	
<u>Message coding</u>	<u>8-bit data</u>
<u>Message class</u>	<u>class 0</u>
<u>TP-UDL</u>	<u>12</u>
<u>TP-UD</u>	<u>"Test Message"</u>

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

Expected Sequence 1.5 (SET UP IDLE MODE TEXT, ME power cycled)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP EVENT LIST</u> <u>1.1.1</u>	<u>With the event Idle Screen available</u>
<u>2</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SET UP</u> <u>EVENT LIST 1.1.1</u>	<u>[Command performed successfully]</u>
<u>3</u>	<u>USER →</u> <u>ME</u>	<u>Wait for the mobile returns into</u> <u>idle mode.</u> <u>Select idle screen</u>	
<u>4</u>	<u>ME → SIM</u>	<u>ENVELOPE: EVENT</u> <u>DOWNLOAD IDLE SCREEN</u> <u>AVAILABLE 1.1.1</u>	
<u>5</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP IDLE MODE</u> <u>TEXT 1.1.2</u>	
<u>6</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>7</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET</u> <u>UP IDLE MODE TEXT 1.1.2</u>	<u>["Idle Mode Text"]</u>
<u>8</u>	<u>ME →</u> <u>USER</u>	<u>Display "Idle Mode Text"</u>	
<u>9</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SET UP</u> <u>IDLE MODE TEXT 1.1.2</u>	<u>[command performed successfully]</u>
<u>10</u>	<u>USER →</u> <u>ME</u>	<u>Power off ME</u>	
<u>11</u>	<u>ME ↔ SIM</u>	<u>GSM TERMINATION</u> <u>PROCEDURE</u>	
<u>12</u>	<u>USER →</u> <u>ME</u>	<u>Power on ME</u>	
<u>13</u>	<u>ME ↔ SIM</u>	<u>GSM ACTIVATION PROCEDURE</u>	
<u>14</u>	<u>ME ↔ SIM</u>	<u>SIM INITIALISATION</u>	
<u>14</u>	<u>ME →</u> <u>USER</u>	<u>Display idle screen / "Idle Mode</u> <u>Text" not to be displayed</u>	

Expected Sequence 1.6 (SET UP IDLE MODE TEXT, REFRESH with SIM Initialisation)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP EVENT LIST</u> <u>1.1.1</u>	<u>With the event Idle Screen available</u>
2	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SET UP</u> <u>EVENT LIST 1.1.1</u>	<u>[Command performed successfully]</u>
3	<u>USER →</u> <u>ME</u>	<u>Wait for the mobile returns to idle</u> <u>mode.</u> <u>Select idle screen</u>	
4	<u>ME → SIM</u>	<u>ENVELOPE: EVENT</u> <u>DOWNLOAD IDLE SCREEN</u> <u>AVAILABLE 1.1.1</u>	
5	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP IDLE MODE</u> <u>TEXT 1.1.1</u>	<u>[Idle Mode Text]</u>
6	<u>ME → SIM</u>	<u>FETCH</u>	
7	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET</u> <u>UP IDLE MODE TEXT 1.1.2</u>	
8	<u>ME →</u> <u>USER</u>	<u>Display "Idle Mode Text"</u>	
9	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SET UP</u> <u>IDLE MODE TEXT 1.1.2</u>	
10	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: REFRESH 1.6.1</u>	
11	<u>ME → SIM</u>	<u>FETCH</u>	
12	<u>SIM → ME</u>	<u>PROACTIVE COMMAND :</u> <u>REFRESH 1.6.1</u>	<u>[SIM Initialisation]</u>
13	<u>ME ↔ SIM</u>	<u>SIM INITIALISATION</u>	
14	<u>ME →</u> <u>USER</u>	<u>Display idle screen / "Idle Mode</u> <u>Text" not to be displayed</u>	
15	<u>ME → SIM</u>	<u>TERMINAL RESPONSE :</u> <u>REFRESH 1.6.1</u> <u>or</u> <u>TERMINAL RESPONSE :</u> <u>REFRESH 1.6.1</u>	<u>[Command performed successfully]</u> <u>[Command performed successfully with</u> <u>additional files read]</u>
16	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	

PROACTIVE COMMAND : REFRESH 1.6.1Logically:Command detailsCommand number: 1Command type: REFRESHCommand qualifier: SIM InitialisationDevice identitiesSource device: SIMDestination device: MECoding:BER-TLV: D0 09 81 03 01 01 03 82 02 81 82

TERMINAL RESPONSE : REFRESH 1.61ALogically:Command detailsCommand number: 1Command type: REFRESHCommand qualifier: SIM InitialisationDevice identitiesSource device: MEDestination device: SIMResultGeneral Result: Command performed successfullyCoding:BER-TLV: 81 03 01 01 03 82 02 82 81 83 01 00**TERMINAL RESPONSE : REFRESH 1.61B**Logically:Command detailsCommand number: 1Command type: REFRESHCommand qualifier: SIM InitialisationDevice identitiesSource device: MEDestination device: SIMResultGeneral Result: REFRESH performed with additional EFs readCoding:BER-TLV: 81 03 01 01 03 82 02 82 81 83 01 03

Expected Sequence 1.7 (SET UP IDLE MODE TEXT, large text string)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP EVENT LIST</u> <u>1.1.1</u>	<u>With the event Idle Screen available</u>
2	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SET UP</u> <u>EVENT LIST 1.1.1</u>	<u>[Command performed successfully]</u>
3	<u>USER →</u> <u>ME</u>	<u>Wait for the mobile returns to idle</u> <u>mode.</u> <u>Select idle screen</u>	
4	<u>ME → SIM</u>	<u>ENVELOPE: EVENT</u> <u>DOWNLOAD IDLE SCREEN</u> <u>AVAILABLE 1.1.1</u>	
5	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SET UP IDLE MODE</u> <u>TEXT 1.7.1</u>	<u>[large text string]</u>
6	<u>ME → SIM</u>	<u>FETCH</u>	
7	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SET</u> <u>UP IDLE MODE TEXT 1.7.1</u>	
8	<u>ME →</u> <u>USER</u>	<u>Display "The SIM shall supply a</u> <u>text string, which shall be</u> <u>displayed by the ME as an idle</u> <u>mode text if the ME is able to do it.</u> <u>The presentation style is left as an</u> <u>implementation decision to the ME</u> <u>manufacturer. The idle mode text</u> <u>shall be displayed in a manner</u> <u>that ensures that"</u>	
9	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SET UP</u> <u>IDLE MODE TEXT 1.7.1</u>	<u>[command performed successfully]</u>
10	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	

ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.7.1

Logically:

Event list
Event 1: Idle screen available
Device identities
Source device: Display
Destination device: SIM

Coding:

BER-TLV: D6 07 99 01 05 82 02 02 81

PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.7.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Text string</u>	
Data coding scheme:	packed, SMS default alphabet
Text:	“The SIM shall supply a text string, which shall be displayed by the ME as an idle mode text if the ME is able to do it. The presentation style is left as an implementation decision to the ME manufacturer. The idle mode text shall be displayed in a manner that ensures that”

<u>BER-TLV:</u>	D0	81	FB	81	03	01	28	00	82	02	81	82
	8D	81	EF	00	54	74	19	34	4D	36	41	73
	74	98	CD	06	CD	EB	70	38	3B	0F	0A	83
	E8	65	3C	1D	34	A7	CB	D3	EE	33	0B	74
	47	A7	C7	68	D0	1C	1D	66	B3	41	E2	32
	88	9C	9E	C3	D9	E1	7C	99	0C	12	E7	01
	74	74	19	D4	2C	82	C2	73	50	D8	0D	4A
	93	D9	65	50	FB	4D	2E	83	E8	65	3C	1D
	94	36	83	E8	E8	32	A8	59	04	A5	E7	A0
	B0	98	5D	06	D1	DF	20	F2	1B	94	A6	BB
	40	54	74	19	04	97	03	E5	79	D9	4D	0F
	D3	D3	6F	37	68	4E	CF	B3	CB	A0	F4	1C
	C4	2E	9B	E9	A0	F0	1C	14	76	83	D2	6D
	38	BB	DC	2E	BB	E9	61	7A	FA	ED	06	91
	CB	E3	F4	3C	FD	76	83	E8	6F	10	1D	5D
	06	35	8B	ED	B0	BB	6E	0E	8F	E9	75	79
	59	EE	02	51	D1	65	50	9A	CC	2E	83	DA
	6F	72	19	44	2F	E3	01	74	D0	1C	1D	66
	B3	41	E2	32	88	9C	9E	C3	D9	E1	7C	99
	0C	4A	BB	41	61	50	3B	EC	76	97	E5	74
	74	98	0E	2A	BB	E7	75	79	79	0E	A2	A3
	C3	74										

TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.7.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

<u>BER-TLV:</u>	81	03	01	28	00	82	02	82	81	83	01	00
-----------------	----	----	----	----	----	----	----	----	----	----	----	----

Expected Sequence 1.8 (SET UP IDLE MODE TEXT, display idle mode text followed by a display text)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	<u>With the event Idle Screen available</u>
2	ME → SIM	TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1	<u>[Command performed successfully]</u>
3	USER → ME	Wait for the mobile returns to idle mode. Select idle screen	
4	ME → SIM	ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.1	
5	SIM → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.2	<u>[Idle Mode Text]</u>
6	ME → SIM	FETCH	
7	SIM → ME	PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.1.2	
8	ME → USER	Display "Idle Mode Text"	
9	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.1.2	<u>[Command performed successfully]</u>
10	SIM → ME	PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.8.1	
11	ME → SIM	FETCH	
12	SIM → ME	PROACTIVE COMMAND : DISPLAY TEXT 1.8.1	<u>[Normal priority, wait for user to clear message, unpacked, 8 bit data]</u>
13	ME → USER	Display "Toolkit Test 1"	
14	USER → ME	Clear Message	
15	ME → SIM	TERMINAL RESPONSE : DISPLAY TEXT 1.8.1	<u>[Command performed successfully]</u>
16	SIM → ME	PROACTIVE SIM SESSION ENDED	
17	ME → USER	Display "Idle Mode Text"	

PROACTIVE COMMAND : DISPLAY TEXT 1.8.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, wait for user to clear message
<u>Device identities</u>	
Source device:	SIM
Destination device:	Display
<u>Text String</u>	
Data coding scheme:	unpacked, 8 bit data
Text:	"Toolkit Test 1"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>1A</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>21</u>	<u>80</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>02</u>	<u>8D</u>
	<u>0F</u>	<u>04</u>	<u>54</u>	<u>6F</u>	<u>6F</u>	<u>6C</u>	<u>6B</u>	<u>69</u>	<u>74</u>	<u>20</u>	<u>54</u>	<u>65</u>
	<u>73</u>	<u>74</u>	<u>20</u>	<u>31</u>								

TERMINAL RESPONSE : DISPLAY TEXT 1.8.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	DISPLAY TEXT
Command qualifier:	normal priority, wait for user to clear message
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

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

Expected Sequence 1.9 (SET UP IDLE MODE TEXT, display idle mode text followed by a play tone command)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	<u>With the event Idle Screen available</u>
2	ME → SIM	TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1	<u>[Command performed successfully]</u>
3	USER → ME	Wait for the mobile returns to idle mode.	
4	ME → SIM	Select idle screen ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.1	
5	SIM → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.2	<u>[Idle Mode Text]</u>
6	ME → SIM	FETCH	
7	SIM → ME	PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.1.2	
8	ME → USER	Display "Idle Mode Text"	
9	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.1.2	<u>[Command performed successfully]</u>
10	SIM → ME	PROACTIVE COMMAND PENDING: PLAY TONE 1.9.1	
11	ME → SIM	FETCH	
12	SIM → ME	PROACTIVE COMMAND : PLAY TONE 1.9.1	
13	ME → USER	Display "Dial Tone"	
		<u>Play a standard supervisory dial tone through the external ringer for a duration of 5 seconds</u>	
14	ME → SIM	TERMINAL RESPONSE : PLAY TONE 1.9.1	<u>[Command performed successfully]</u>
15	SIM → ME	PROACTIVE SIM SESSION ENDED	
16	ME → USER	Display "Idle Mode Text"	

PROACTIVE COMMAND : PLAY TONE 1.9.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	PLAY TONE
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	Earpiece
Alpha identifier:	"Dial Tone"
Tone:	Standard supervisory tones: dial tone
<u>Duration</u>	
Time unit:	Seconds
Time interval:	5

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>1B</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>20</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>03</u>	<u>85</u>
	<u>09</u>	<u>44</u>	<u>69</u>	<u>61</u>	<u>6C</u>	<u>20</u>	<u>54</u>	<u>6F</u>	<u>6E</u>	<u>65</u>	<u>8E</u>	<u>01</u>
	<u>01</u>	<u>84</u>	<u>02</u>	<u>01</u>	<u>05</u>							

TERMINAL RESPONSE : PLAY TONE 1.9.1Logically:

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

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>20</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

27.22.4.22.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1, 2, 3, 4, 5, 6 and 7.

27.22.4.22.2 SET UP IDLE MODE TEXT (Icon support)**27.22.4.22.2.1 Definition and applicability**

See Section 3.2.2.

27.22.4.22.2.2 Conformance requirement**27.22.4.22.2.3 Test Purpose**

To verify that the ME text and / or icon passed to the ME is displayed by the ME as an idle mode text.

To verify that the icon identifier provided with the text string can replace the text string or accompany it.

To verify that if both an alpha identifier or text string, and an icon are provided with a proactive command, and both are requested to be displayed, but the ME is not able to display both together on the screen, then the alpha identifier or text string takes precedence over the icon.

To verify that if the SIM provides an icon identifier with a proactive command, then the ME shall inform the SIM if the icon could not be displayed by sending the general result "Command performed successfully, but requested icon could not be displayed".

To verify that if the ME receives an icon qualifier with bit 1 set to 0, meaning "an alpha identifier or text string related to the icon may be displayed together with the icon by the ME", and no alpha identifier / text string is given by the SIM, then the ME shall reject the command with general result "Command data not understood by ME".

27.22.4.22.2.4 Method of test

27.22.4.22.2.4.1 Initial Conditions

The ME is connected to both the SIM Simulator and the System Simulator.

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

EF IMG

Logically:

Record 1
<small icon>

Record 2
<tall icon (line)>

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

The following events shall have been set up in the ME.

Event List

Logically:

Event 1: Idle screen available

27.22.4.22.2.4.2 Procedure

Expected Sequence 2.1A (SET UP IDLE MODE TEXT, Icon is self-explanatory, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	USER → ME	Select idle screen	
2	ME → SIM	ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.1.1	
3	SIM → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.1.1	[Icon is self-explanatory]
4	ME → SIM	FETCH	
5	SIM → ME	PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.1.1	
6	ME → USER	Display the icon	
7	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 2.1.1A	[command performed successfully]
8	SIM → ME	PROACTIVE SIM SESSION ENDED	

ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.1.1

Logically:

Event list
 Event 1: Idle screen available
 Device identities
 Source device: Display
 Destination device: SIM

Coding:

BER-TLV: D6 07 99 01 05 82 02 02 81

PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.1.1

Logically:

Command details
 Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU
 Device identities
 Source device: SIM
 Destination device: ME
 Text string: "Idle text"
 Icon identifier
 Icon qualifier: icon is self-explanatory
 Icon identifier: <record 1 in EF IMG>

Coding:

BER-TLV: D0 19 81 03 01 28 00 82 02 81 82 8D
0F 04 49 64 6C 65 20 56 65 78 74 9E
02 00 01

TERMINAL RESPONSE : SET UP IDLE MODE LIST 2.1.1A

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 00

Expected Sequence 2.1B (SET UP IDLE MODE TEXT, Icon is self-explanatory, requested icon could not be displayed)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	USER → ME	Select idle screen	
2	ME → SIM	ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.1.1	
3	SIM → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.1.1	[Icon is self-explanatory]
4	ME → SIM	FETCH	
5	SIM → ME	PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.1.1	
6	ME → USER	Display "Idle text" without the icon	
7	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 2.1.1B	[Command performed successfully, but requested icon could not be displayed]
8	SIM → ME	PROACTIVE SIM SESSION ENDED	

TERMINAL RESPONSE : SET UP IDLE MODE LIST 2.1.1B

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 04

Expected Sequence 2.2A (SET UP IDLE MODE TEXT, Icon is not self-explanatory, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	USER → ME	Select idle screen	
2	ME → SIM	ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.2.1	
3	SIM → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.2.1	[Icon is not self-explanatory]
4	ME → SIM	FETCH	
5	SIM → ME	PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.2.1	
6	ME → USER	Display icon #1 and "Idle text"	
7	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 2.2.1A	[command performed successfully]
8	SIM → ME	PROACTIVE SIM SESSION ENDED	

ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.2.1

Logically:

Event list
 Event 1: Idle screen available
Device identities
 Source device: Display
 Destination device: SIM

Coding:

BER-TLV: D6 07 99 01 05 82 02 02 81

PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.2.1Logically:

Command details
 Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU
Device identities
 Source device: SIM
 Destination device: ME
 Text string: "Idle text"
Icon identifier
 Icon qualifier: icon is not self-explanatory
 Icon identifier: <record 1 in EF IMG>

Coding:

BER-TLV: D0 19 81 03 01 28 00 82 02 81 82 8D
 0F 04 49 64 6C 65 20 56 65 78 74 9E
 02 01 01

TERMINAL RESPONSE : SET UP IDLE MODE LIST 2.2.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 00

Expected Sequence 2.2B (SET UP IDLE MODE TEXT, Icon is not self-explanatory, requested icon could not be displayed)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	USER → ME	Select idle screen	
2	ME → SIM	ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.2.1	
3	SIM → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.2.1	[Icon is not self-explanatory]
4	ME → SIM	FETCH	
5	SIM → ME	PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.2.1	
6	ME → USER	Display "Idle text" without the icon	
7	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 2.2.1B	[Command performed successfully, but requested icon could not be displayed]
8	SIM → ME	PROACTIVE SIM SESSION ENDED	

TERMINAL RESPONSE : SET UP IDLE MODE LIST 2.2.1B

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 04

Expected Sequence 2.3 (SET UP IDLE MODE TEXT, Icon is self-explanatory, colour icon)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	USER → ME	Select idle screen	
2	ME → SIM	ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.3.1	
3	SIM → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.3.1	[Icon is self-explanatory]
4	ME → SIM	FETCH	
5	SIM → ME	PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.3.1	
7	ME USER ME → SIM	Display "Idle text" TERMINAL RESPONSE : SET UP IDLE MODE TEXT 2.3.1	[command performed successfully]
8	SIM → ME	PROACTIVE SIM SESSION ENDED	[requested icon could not be displayed]

ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.3.1

Logically:

<u>Event list</u>	
Event 1:	Idle screen available
<u>Device identities</u>	
Source device:	Display
Destination device:	SIM

Coding:

BER-TLV: D6 07 99 01 05 82 02 02 81

PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.3.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
Text string:	"Idle text"
<u>Icon identifier</u>	
Icon qualifier:	icon is self-explanatory
Icon identifier:	<record 2 in EF IMG>

Coding:

BER-TLV: D0 19 81 03 01 28 00 82 02 81 82 8D
 0F 04 49 64 6C 65 20 56 65 78 74 9E
 02 00 02

TERMINAL RESPONSE : SET UP IDLE MODE LIST 2.3.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 00

TERMINAL RESPONSE: SET UP IDLE MODE LIST 2.3.2

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 04

Expected Sequence 2.4 (SET UP IDLE MODE TEXT, Icon is not self-explanatory, no text string)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Select idle screen	
2	ME → SIM	ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.4.1	
3	SIM → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.4.1	[Icon is not self-explanatory, no text string]
4	ME → SIM	FETCH	
5	SIM → ME	PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.4.1	
6	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 2.4.1	
7	SIM → ME	PROACTIVE SIM SESSION ENDED	

ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.4.1Logically:

<u>Event list</u>	
Event 1:	Idle screen available
<u>Device identities</u>	
Source device:	Display
Destination device:	SIM

Coding:

BER-TLV: D6 07 99 01 05 82 02 02 81

PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.4.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Icon identifier</u>	
Icon qualifier:	icon is not self-explanatory
Icon identifier:	<record 1 in EF IMG>

Coding:

BER-TLV: D0 19 81 03 01 28 00 82 02 81 82 9E
02 01 01

TERMINAL RESPONSE : SET UP IDLE MODE LIST 2.4.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command data not understood by ME

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 32

27.22.4.22.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1, 2, 3 and 4.

27.22.4.22.3 SET UP IDLE MODE TEXT (UCS2 support)27.22.4.22.3.1 Definition and applicability

See Section 3.2.2.

27.22.4.22.3.2 Conformance requirement

The ME shall support the UCS2 display facility as defined in the following technical specifications: ISO/IEC 10646 [17], “Universal Multiple Octet Coded Character Set (UCS)”

27.22.4.22.3.3 Test Purpose

To verify that the UCS2 coded text string is displayed by the ME as an idle mode text.

27.22.4.22.3.4 Method of test27.22.4.22.3.4.1 Initial Conditions

The ME is connected to both the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

The following events shall have been set up in the ME.

Event List

Logically:

Event 1: Idle screen available

27.22.4.22.3.4.2 ProcedureExpected Sequence 3.1 (SET UP IDLE MODE TEXT, UCS2 alphabet text)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Select idle screen	
2	ME → SIM	ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 3.1.1	
3	SIM → ME	PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 3.1.1	["Hello" in Russian]
4	ME → SIM	FETCH	
5	SIM → ME	PROACTIVE COMMAND : SET UP IDLE MODE TEXT 3.1.1	
6	ME → USER	Display "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]
7	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 3.1.1	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	

ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 3.1.1Logically:

<u>Event list</u>	
Event 1:	Idle screen available
<u>Device identities</u>	
Source device:	Display
Destination device:	SIM

Coding:

BER-TLV: D6 07 99 01 05 82 02 02 81

PROACTIVE COMMAND : SET UP IDLE MODE TEXT 3.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Text string</u>	
Data coding scheme:	UCS2 (16bit)
Text:	“ЗДРАВСТВУЙТЕ”

Coding:

BER-TLV: D0 24 81 03 01 28 00 82 02 81 82 8D
19 08 04 17 04 14 04 20 04 10 04 12
04 21 04 22 04 12 04 23 04 19 04 22
04 15

TERMINAL RESPONSE : SET UP IDLE MODE LIST 3.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 00

27.22.4.22.3.5 Test Requirement

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

27.22.4.23 RUN AT COMMAND27.22.4.23.1 RUN AT COMMAND (normal)27.22.4.23.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.23.1.2 Conformance requirement

The ME shall support the Proactive SIM: RUN AT COMMAND facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.4.23 (Run AT Command), clause 6.6.23 (Run AT Command), clause 5.2 (Terminal Profile), clause 6.8 (Terminal Response), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpha Identifier), clause 12.40 (AT Command), clause 12.31 (Icon Identifier), clause 12.41 (AT Response)

TS 27.007 [18]

27.22.4.23.1.3 Test Purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the SIM.

27.22.4.23.1.4 Method of test27.22.4.23.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

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

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.1.4.2 Procedure

Expected Sequence 1.1 (RUN AT COMMAND, no alpha identifier presented, request IMSI)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND: RUN AT COMMAND 1.1.1</u>	<u>[no alpha identifier, request IMSI]</u>
4	<u>ME (→ User)</u>	<u>The ME may give information to the user concerning what is happening</u>	
7	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: RUN AT COMMAND 1.1.1</u>	<u>[Command performed successfully, AT Response containing IMSI]</u>

PROACTIVE SIM COMMAND: RUN AT COMMAND 1.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	RUN AT COMMAND
Command qualifier:	“00”
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>AT Command</u>	
AT Command string:	“AT+CIMI”

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>12</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>34</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>A8</u>
	<u>07</u>	<u>41</u>	<u>54</u>	<u>2B</u>	<u>43</u>	<u>49</u>	<u>4D</u>	<u>43</u>				

TERMINAL RESPONSE: RUN AT COMMAND 1.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	RUN AT COMMAND
Command qualifier:	“00”
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
<u>AT Response</u>	
AT Response string:	IMSI

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>34</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>A9</u>	<u>08</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>98</u>		

Expected Sequence 1.2 (RUN AT COMMAND, null data alpha identifier presented, request IMSI)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: RUN AT COMMAND 1.2.1	[null data alpha identifier, request IMSI]
4	ME	The ME should not give any information to user on the fact that the ME is performing an AT command	
7	ME → SIM	TERMINAL RESPONSE: RUN AT COMMAND 1.1.1	[Command performed successfully, AT Response containing IMSI]

PROACTIVE SIM COMMAND: RUN AT COMMAND 1.2.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	RUN AT COMMAND
Command qualifier:	“00”
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
Alpha identifier	null data object
<u>AT Command</u>	
AT Command string:	“AT+CIMI”

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>14</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>34</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>85</u>
	<u>00</u>	<u>A8</u>	<u>07</u>	<u>41</u>	<u>54</u>	<u>2B</u>	<u>43</u>	<u>49</u>	<u>4D</u>	<u>49</u>		

Expected Sequence 1.3 (RUN AT COMMAND, alpha identifier presented, request IMSI)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: RUN AT COMMAND 1.3.1	[alpha identifier, request IMSI]
4	ME → USER	Display “Run AT Command”	
7	ME → SIM	TERMINAL RESPONSE: RUN AT COMMAND 1.1.1	[Command performed successfully, AT Response containing IMSI]

PROACTIVE SIM COMMAND: RUN AT COMMAND 1.3.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	RUN AT COMMAND
Command qualifier:	“00”
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Alpha identifier</u>	
Alpha identifier	“Run AT Command”
<u>AT Command</u>	
AT Command string:	“AT+CIMI”

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>22</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>34</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>85</u>
	<u>0E</u>	<u>52</u>	<u>75</u>	<u>6E</u>	<u>20</u>	<u>41</u>	<u>54</u>	<u>20</u>	<u>43</u>	<u>6F</u>	<u>6D</u>	<u>6D</u>
	<u>61</u>	<u>6E</u>	<u>64</u>	<u>A8</u>	<u>07</u>	<u>41</u>	<u>54</u>	<u>2B</u>	<u>43</u>	<u>49</u>	<u>4D</u>	<u>49</u>

27.22.4.23.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1 to 3.

27.22.4.23.2 RUN AT COMMAND (Icon support)

27.22.4.23.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.23.2.2 Conformance requirement

The ME shall support the Proactive SIM: RUN AT COMMAND facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.4.23 (Run AT Command), clause 6.6.23 (Run AT Command), clause 5.2 (Terminal Profile), clause 6.8 (Terminal Response), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpha Identifier), clause 12.40 (AT Command), clause 12.31 (Icon Identifier), clause 12.41 (AT Response)

TS 27.007 [18]

27.22.4.23.2.3 Test Purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the SIM.

In addition to verify that if an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.23.2.4 Method of test

27.22.4.23.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

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

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

Initial Conditions for Icon Management according to Annex C are valid.

27.22.4.23.2.4.2 Procedure

Expected Sequence 2.1 (RUN AT COMMAND, basic icon self explanatory, request IMSI)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: RUN AT COMMAND</u> <u>2.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND: RUN</u> <u>AT COMMAND 2.1.1</u>	<u>[BASIC-ICON, self-explanatory, request IMSI]</u>
4	<u>ME →</u> <u>USER</u>	<u>Display BASIC ICON</u> <u>Or</u> <u>May give information to user</u> <u>concerning what is happening</u>	
5	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: RUN AT</u> <u>COMMAND 2.1.1A</u> <u>Or</u> <u>TERMINAL RESPONSE: RUN AT</u> <u>COMMAND 2.1.1B</u>	<u>[Command performed successfully, AT</u> <u>response containing IMSI]</u> <u>or</u> <u>[Command performed but requested icon</u> <u>could not be displayed, AT response</u> <u>containing IMSI]</u>

PROACTIVE COMMAND: RUN AT COMMAND 2.1.1

Logically:

Command details

Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

AT Command

AT Command string: "AT+CIMI"

Icon Identifier:

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

Coding:

BER-TLV: D0 16 81 03 01 34 00 82 02 81 82 A8
07 41 54 2B 43 49 4D 43 9E 02 00 01

TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A

Logically:

Command details

Command number: 1
Command type: RUN AT COMMAND
Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

AT Response

AT Response string: IMSI

Coding:

BER-TLV: 81 03 01 34 00 82 02 82 81 83 01 00
 A9 08 08 09 10 10 32 54 76 98

TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B

Logically:

Command details

Command number: 1
 Command type: RUN AT COMMAND
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

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

AT Response

AT Response string: IMSI

Coding:

BER-TLV: 81 03 01 34 00 82 02 82 81 83 01 04
 A9 08 08 09 10 10 32 54 76 98

Expected Sequence 2.2 (RUN AT COMMAND, colour icon self explanatory, request IMSI)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.2.1	[COLOUR-ICON, self-explanatory, request IMSI]
4	ME → USER	Display COLOUR-ICON Or May give information to user concerning what is happening	
5	ME → SIM	TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A Or TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B	[Command performed successfully, AT response containing IMSI] or [Command performed but requested icon could not be displayed, AT response containing IMSI]

PROACTIVE COMMAND: RUN AT COMMAND 2.2.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	RUN AT COMMAND
Command qualifier:	“00”
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>AT Command</u>	
AT Command string:	“AT+CIMI”
<u>Icon Identifier:</u>	
Icon qualifier:	icon is self-explanatory
Icon Identifier:	record 2 in EF _(IMG)

Coding:

BER-TLV: D0 6 81 03 01 34 00 82 02 81 82 A8
 07 41 54 2B 43 49 4D 43 9E 02 00 02

Expected Sequence 2.3 (RUN AT COMAND, basic icon non self-explanatory, request IMSI)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.3.1	[BASIC-ICON, non self-explanatory, request IMSI]
4	ME → USER	Display “Basic Icon” and BASIC- ICON Or Display “Basic Icon”	
7	ME → SIM	TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A Or TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B	[Command performed successfully, AT response containing IMSI] or [Command performed but requested icon could not be displayed, AT response containing IMSI]

PROACTIVE COMMAND: RUN AT COMMAND 2.3.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	RUN AT COMMAND
Command qualifier:	“00”
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Alpha Identifier</u>	
Alpha identifier:	“Basic Icon”
<u>AT Command</u>	
AT Command string:	“AT+CIMI”
<u>Icon Identifier</u>	
Icon qualifier:	icon is non self-explanatory
Icon Identifier:	record 1 in EF _(IMG)

Coding:

BER-TLV: D0 22 81 03 01 34 00 82 02 81 82 85
 0A 42 61 73 69 63 20 49 63 6F 6D A8
 07 41 54 2B 43 49 4D 43 9E 02 01 01

Expected Sequence 2.4 (RUN AT COMMAND, colour icon non self-explanatory, request IMSI)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.4.1	[COLOUR-ICON, non self-explanatory, request IMSI]
4	ME → USER	Display "Colour Icon" and COLOUR-ICON Or Display "Colour Icon"	
5	ME → SIM	TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A Or TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B	[Command performed successfully, AT response containing IMSI] or [Command performed but requested icon could not be displayed, AT response containing IMSI]

PROACTIVE COMMAND: RUN AT COMMAND 2.4.1

Logically:

Command details

Command number: 1
 Command type: RUN AT COMMAND
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME

Alpha Identifier

Alpha identifier: "Colour Icon"

AT Command

AT Command string: "AT+CIMI"

Icon Identifier:

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

Coding:

BER-TLV: D0 23 81 03 01 34 00 82 02 81 82 85
 0B 43 6F 6C 6F 75 72 20 49 63 6F 6D
 A8 07 41 54 2B 43 49 4D 43 9E 02 01
 02

Expected Sequence 2.5 (RUN AT COMMAND, basic icon non self-explanatory, no alpha identifier presented)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND SS 2.5.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.5.1	[BASIC-ICON, non self-explanatory]
4	ME → SIM	TERMINAL RESPONSE: RUN AT COMMAND 2.5.1	[Command data not understood by ME]

PROACTIVE COMMAND: RUN AT COMMAND 2.5.1

Logically:

Logically:

Command details

Command number: 1
 Command type: RUN AT COMMAND
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME

AT Command

AT Command string: "AT+CIMI"

Icon Identifier

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

Coding:

BER-TLV: D0 16 81 03 01 34 00 82 02 81 82 A8
 07 41 54 2B 43 49 4D 43 9E 02 01 01

TERMINAL RESPONSE: RUN AT COMMAND 2.5.1

Logically:

Command details

Command number: 1
 Command type: RUN AT COMMAND
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME

Result

General Result: Command data not understood by ME

Coding:

BER-TLV: 81 03 01 34 00 82 02 82 81 83 01 32

27.22.4.23.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1 to 5.

27.22.4.24 SEND DTMF

27.22.4.24.1 SEND DTMF (Normal)

27.22.4.24.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.24.1.2 Conformance requirement

The ME shall support the Proactive SIM: Send DTMF facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.24 (Send DTMF), 6.6.24 (Send DTMF), clause 12.12.2 (Additional information for ME problem), clause 5.2 (Terminal Profile), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpa identifier), clause 12.44 (DTMF String).

27.22.4.24.1.3 Test Purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive SIM command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the SIM using TERMINAL RESPONSE '20' with the additional information "Not in speech call" .

To verify that the ME displays the text contained in the SEND DTMF proactive SIM command.

To verify that if an alpha identifier is provided by the SIM and is a null data object the ME does not give any information to the user on the fact that the ME is performing a SEND DTMF command.

27.22.4.24.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

27.22.4.24.1.4.2 Procedure

Expected Sequence 1.1 (SEND DTMF, A call has been successfully established before the beginning of the test)

Some details of the DTMF protocol have been left out for clarity.

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND DTMF 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DTMF 1.1.1	
4	ME → USER	May give information to the user concerning what is happening. Do not locally generate audible DTMF tones and play them to the user.	
5	ME → SS	Start DTMF 1.1	["1"]
6	ME		No DTMF sending for 3 seconds +/-20%
7	ME → SS	Start DTMF 1.2	["2"]
8	ME → SIM	TERMINAL RESPONSE : SEND DTMF 1.1.1	[Command performed successfully]
9	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : SEND DTMF 1.1.1

Logically:

Command details

Command number: 1
 Command type: SEND DTMF
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Network
 DTMF String: "1" pause "2"

Coding:

BER-TLV: D0 0D 81 03 01 14 00 82 02 81 83 AC
 02 C1 F2

Start DTMF 1.1

Logically:

DTMF String: "1"

Start DTMF 1.2

Logically:

DTMF String: "2"

TERMINAL RESPONSE : SEND DTMF 1.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND DTMF
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

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

Expected Sequence 1.2 (SEND DTMF, containing alpha identifier, a call has been successfully established before the beginning of the test)

Some details of the DTMF protocol have been left out for clarity.

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND DTMF 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DTMF 1.2.1	
4	ME → USER	Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user.	Alpha identifier
5	ME → SS	Start DTMF 1.1	["1"]
6	ME → SS	Start DTMF 1.2	["2"]
7	ME → SS	Start DTMF 1.3	["3"]
8	ME → SS	Start DTMF 1.4	["4"]
9	ME → SS	Start DTMF 1.5	["5"]
10	ME → SS	Start DTMF 1.6	["6"]
11	ME → SS	Start DTMF 1.7	["7"]
12	ME → SS	Start DTMF 1.8	["8"]
13	ME → SS	Start DTMF 1.9	["9"]
14	ME → SS	Start DTMF 1.10	["0"]
15	ME → SIM	TERMINAL RESPONSE : SEND DTMF 1.1.1	[Command performed successfully]
16	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : SEND DTMF 1.2.1Logically:Command details

Command number:	1
Command type:	SEND DTMF
Command qualifier:	"00"

Device identities

Source device:	SIM
Destination device:	Network
Alpha identifier:	"Send DTMF"
DTMF String:	"1234567890"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>1B</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>14</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>09</u>	<u>53</u>	<u>65</u>	<u>6E</u>	<u>64</u>	<u>20</u>	<u>44</u>	<u>54</u>	<u>4D</u>	<u>46</u>	<u>AC</u>	<u>05</u>
	<u>21</u>	<u>43</u>	<u>65</u>	<u>87</u>	<u>09</u>							

Start DTMF 1.3Logically:

DTMF String:	"3"
--------------	-----

Start DTMF 1.4Logically:

DTMF String:	"4"
--------------	-----

Start DTMF 1.5Logically:

DTMF String:	"5"
--------------	-----

Start DTMF 1.6Logically:

DTMF String:	"6"
--------------	-----

Start DTMF 1.7Logically:

DTMF String:	"7"
--------------	-----

Start DTMF 1.8Logically:

DTMF String:	"8"
--------------	-----

Start DTMF 1.9Logically:DTMF String: "9"Start DTMF 1.10Logically:DTMF String: "0"

Expected Sequence 1.3 (SEND DTMF, containing alpha identifier with null data object, a call has been successfully established before the beginning of the test)

Some details of the DTMF protocol have been left out for clarity.

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND DTMF 1.3.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>DTMF 1.3.1</u>	<u>Alpha identifier with null data object</u>
<u>4</u>	<u>ME →</u> <u>USER</u>	<u>Do not give any information to the</u> <u>user on the fact that the ME is</u> <u>performing a SEND DTMF</u> <u>command.</u> <u>Do not locally generate audible</u> <u>DTMF tones and play them to the</u> <u>user.</u>	
<u>5</u>	<u>ME → SS</u>	<u>Start DTMF 1.1</u>	<u>["1"]</u>
<u>6</u>	<u>ME</u>		<u>No DTMF sending for 30 seconds +/-20%</u>
<u>7</u>	<u>ME → SS</u>	<u>Start DTMF 1.2</u>	<u>["2"]</u>
<u>8</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>DTMF 1.1.1</u>	<u>[Command performed successfully]</u>
<u>9</u>	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	

PROACTIVE COMMAND : SEND DTMF 1.3.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND DTMF
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	Network
Alpha identifier:	"" (null data object)
DTMF String:	"1" pause pause pause pause pause pause pause pause "2"

Coding:

BER-TLV: D0 13 81 03 01 14 00 82 02 81 83 85
 00 AC 06 C1 CC CC CC CC 2C

Expected Sequence 1.4 (SEND DTMF, mobile is not in a speech call)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND DTMF 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DTMF 1.1.1	
4	ME → SIM	TERMINAL RESPONSE : SEND DTMF 1.4.1	[ME currently unable to process command, not in speech call]
5	SIM → ME	PROACTIVE SIM SESSION ENDED	

TERMINAL RESPONSE : SEND DTMF 1.4.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND DTMF
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	ME currently unable to process command
Additional information:	Not in speech call

Coding:

BER-TLV: 81 03 01 14 00 82 02 82 81 83 02 20
 07

27.22.4.24.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences.

27.22.4.24.2 SEND DTMF (Display of icons)27.22.4.24.2.1 Definition and applicabilitySee Section 3.2.2.27.22.4.24.2.2 Conformance requirementThe ME shall support the Proactive SIM: Send DTMF facility as defined in the following technical specifications:3GPP TS 11.14 [15] clause 6.1, clause 6.4.24 (Send DTMF), 6.6.24 (Send DTMF), clause 12.12.2 (Additional information for ME problem), clause 5.2 (Terminal Profile), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpa identifier), clause 12.44 (DTMF String), clause 12.31 (Icon identifier), clause 6.5.4 (Icon identifiers).27.22.4.24.2.3 Test PurposeTo verify that after a call has been successfully established the ME send the DTMF string contained in the SEND DTMF proactive SIM command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.To verify that the ME do not locally generate audible DTMF tones and play them to the user.To verify that the ME displays the text contained in the SEND DTMF proactive SIM command.To verify that the ME displays the icons which are referred to in the contents of the SEND DTMF proactive SIM command.27.22.4.24.2.4 Method of test27.22.4.24.2.4.1 Initial ConditionsThe ME is connected to the SIM Simulator.Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.See Annex C for coding of the elementary files on SIM.27.22.4.24.2.4.2 ProcedureExpected Sequence 2.1 (SEND DTMF, BASIC ICON self explanatory, successful)Some details of the DTMF protocol have been left out for clarity.

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: SEND DTMF 2.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND DTMF 2.1.1</u>	<u>[BASIC-ICON, self-explanatory]</u>
4	<u>ME → USER</u>	<u>Display the BASIC-ICON Do not locally generate audible DTMF tones and play them to the user.</u>	

5	ME → SS	Start DTMF 1.1	["1"]
6	ME		No DTMF sending for 3 seconds +/-20%
7	ME → SS	Start DTMF 1.2	["2"]
8	ME → SIM	TERMINAL RESPONSE : SEND DTMF 2.1.1A	[Command performed successfully]
9	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : SEND DTMF 2.1.1

Logically:

Command details

Command number: 1
 Command type: SEND DTMF
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier: "Basic Icon"
 DTMF String: "1" pause "2"
 Icon identifier
 Icon qualifier: icon is self-explanatory
 Icon Identifier: record 1 in EF_(IMG)

Coding:

BER-TLV: D0 1B 81 03 01 14 00 82 02 81 83 85
 0A 42 61 73 69 63 20 49 63 6F 6E AC
 02 C1 F2 9E 02 00 01

DTMF Request 2.1.1

Logically:

DTMF String: \$DTMF 2.1\$ = "C1 F2" (given as example)

TERMINAL RESPONSE : SEND DTMF 2.1.1A

Logically:

Command details

Command number: 1
 Command type: SEND DTMF
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

Expected Sequence 2.1B (SEND DTMF, BASIC ICON self explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND DTMF 2.1.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>DTMF 2.1.1</u>	<u>[BASIC-ICON, self-explanatory]</u>
<u>4</u>	<u>ME →</u> <u>USER</u>	<u>Display "Basic Icon" without the</u> <u>icon</u> <u>Do not locally generate audible</u> <u>DTMF tones and play them to the</u> <u>user.</u>	
<u>5</u>	<u>ME → SS</u>	<u>Start DTMF 1.1</u>	<u>["1"]</u>
<u>6</u>	<u>ME</u>		<u>No DTMF sending for 3 seconds +/-20%</u>
<u>7</u>	<u>ME → SS</u>	<u>Start DTMF 1.2</u>	<u>["2"]</u>
<u>8</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>DTMF 2.1.1B</u>	<u>[Command performed successfully, but</u> <u>requested icon could not be displayed]</u>
<u>9</u>	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION</u> <u>ENDED</u>	

TERMINAL RESPONSE : SEND DTMF 2.1.1B

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: SIM

Result

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

Coding:

BER-TLV: 81 03 01 14 00 82 02 82 81 83 01 04

Expected Sequence 2.2 (SEND DTMF, COLOUR-ICON self explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND DTMF 2.2.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>DTMF 2.2.1</u>	<u>[COLOUR-ICON]</u>
<u>4</u>	<u>ME →</u> <u>USER</u>	<u>Display the COLOUR-ICON</u> <u>Do not locally generate audible</u> <u>DTMF tones and play them to the</u> <u>user.</u>	

5	ME → SS	Start DTMF 1.1	["1"]
6	ME		No DTMF sending for 3 seconds +/-20%
7	ME → SS	Start DTMF 1.2	["2"]
8	ME → SIM	TERMINAL RESPONSE : SEND DTMF 2.1.1A	[Command performed successfully]
9	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : SEND DTMF 2.2.1

Logically:

Command details

Command number:	1
Command type:	SEND DTMF
Command qualifier:	"00"

Device identities

Source device:	SIM
Destination device:	Network
Alpha identifier:	"Colour Icon"
DTMF String:	"1" pause "2"
Icon Identifier:	
Icon qualifier:	icon is self-explanatory
Icon Identifier:	record 2 in EF _(IMG)

Coding:

BER-TLV:	D0	11	81	03	01	14	00	82	02	81	83	AC
	02	C1	F2	9E	02	00	02					
BER-TLV:	D0	1C	81	03	01	14	00	82	02	81	83	85
	0B	43	6F	6C	6F	75	72	20	49	63	6F	6E
	AC	02	C1	F2	9E	02	00	02				

Expected Sequence 2.2B (SEND DTMF, COLOUR-ICON self explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND DTMF 2.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DTMF 2.2.1	[COLOUR-ICON]
4	ME → USER	Display "Colour Icon" without the icon Do not locally generate audible DTMF tones and play them to the user.	
5	ME → SS	Start DTMF 1.1	["1"]
6	ME		No DTMF sending for 3 seconds +/-20%
7	ME → SS	Start DTMF 1.2	["2"]
8	ME → SIM	TERMINAL RESPONSE : SEND DTMF 2.1.1B	[Command performed successfully, but requested icon could not be displayed]
9	SIM → ME	PROACTIVE SIM SESSION ENDED	

Expected Sequence 2.3A (SEND DTMF, Alpha identifier & BASIC-ICON, not self-explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND DTMF 2.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DTMF 2.3.1	[Alpha identifier & BASIC-ICON, not self-explanatory]
4	ME → USER	Display the BASIC-ICON Do not locally generate audible DTMF tones and play them to the user.	
5	ME → SS	Start DTMF 1.1	["1"]
6	ME		No DTMF sending for 3 seconds +/-20%
7	ME → SS	Start DTMF 1.2	["2"]
8	ME → SIM	TERMINAL RESPONSE : SEND DTMF 2.1.1A	[Command performed successfully]
9	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : SEND DTMF 2.3.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "Send DTMF"

DTMF String: "1" pause "2"

Icon Identifier:

Icon qualifier: icon is not self-explanatory

Icon Identifier: record 1 in EF_(IMG)

Coding:

BER-TLV: D0 1C 81 03 01 14 00 82 02 81 83 85
 09 53 65 6E 64 20 44 54 4D 46 AC 02
 C1 F2 9E 02 01 01

Expected Sequence 2.3B (SEND DTMF, Alpha identifier & BASIC-ICON, not self-explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND DTMF 2.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DTMF 2.3.1	[Alpha identifier & BASIC-ICON, not self-explanatory]
4	ME → USER	Display "Send DTMF" without the icon Do not locally generate audible DTMF tones and play them to the user.	

5	ME → SS	Start DTMF 1.1	["1"]
6	ME		No DTMF sending for 3 seconds +/-20%
7	ME → SS	Start DTMF 1.2	["2"]
8	ME → SIM	TERMINAL RESPONSE : SEND DTMF 2.1.1B	[Command performed successfully, but requested icon could not be displayed]
9	SIM → ME	PROACTIVE SIM SESSION ENDED	

[27.22.4.24.2.5](#) [Test Requirement](#)

[The ME shall operate in the manner defined in expected sequences.](#)

[27.22.4.24.3](#) [SEND DTMF \(UCS2 support\)](#)

[27.22.4.24.3.1](#) [Definition and applicability](#)

[See Section 3.2.2.](#)

[27.22.4.24.3.2](#) [Conformance requirement](#)

[The ME shall support the Proactive SIM: Send DTMF facility as defined in the following technical specifications:](#)

[3GPP TS 11.14 \[15\] clause 6.1, clause 6.4.24 \(Send DTMF\), 6.6.24 \(Send DTMF\), clause 12.12.2 \(Additional information for ME problem\), clause 5.2 \(Terminal Profile\), clause 12.6 \(Command Details\), clause 12.7 \(Device Identities\), clause 12.2 \(Alpa identifier\), clause 12.44 \(DTMF String\).](#)

[Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications:](#)

[ISO/IEC 10646. \[17\].](#)

[27.22.4.24.3.3](#) [Test Purpose](#)

[To verify that the ME displays the UCS2 text contained in the SEND DTMF proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.](#)

[27.22.4.24.3.4](#) [Method of test](#)

[27.22.4.24.3.4.1](#) [Initial Conditions](#)

[The ME is connected to the SIM Simulator.](#)

[The elementary files are coded as SIM Application Toolkit default with the following exceptions.](#)

[Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.](#)

[27.22.4.24.3.4.2](#) [Procedure](#)

[Expected Sequence 3.1 \(SEND DTMF, successful, UCS2 text\)](#)

[Some details of the DTMF protocol have been left out for clarity.](#)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND DTMF 3.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DTMF 3.1.1	
4	ME → USER	Display "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]
5	ME → SS	Start DTMF 1.1	["1"]
6	ME		No DTMF sending for 3 seconds +/-20%
7	ME → SS	Start DTMF 1.2	["2"]
8	ME → SIM	TERMINAL RESPONSE : SEND DTMF 3.1.1	[Command performed successfully]
9	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : SEND DTMF 3.1.1

Logically:

Command details

Command number: 1
 Command type: SEND DTMF
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Network

Alpha Identifier

Data coding scheme: UCS2 (16bit)
 Text: "ЗДРАВСТВУЙТЕ"
 DTMF String: "1" pause "2"

Coding:

BER-TLV: D0 28 81 03 01 14 00 82 02 81 83 8D
 19 08 04 17 04 14 04 20 04 10 04 12
 04 21 04 22 04 12 04 23 04 19 04 22
 04 15 AC 02 C1 F2

TERMINAL RESPONSE : SEND DTMF 3.1.1

Logically:

Command details

Command number: 1
 Command type: SEND DTMF
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successful

Coding:

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

27.22.4.12.2.5 Test Requirement

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

27.22.4.25 LANGUAGE NOTIFICATION27.22.4.25.1 Definition and applicability

See Section 3.2.2.

27.22.4.25.2 Conformance Requirement

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

3GPP TS 11.14 clause 6.4.25, 6.6.25.

27.22.4.25.3 Test Purpose

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

27.22.4.25.4 Method of Test27.22.4.25.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.25.4.2 ProcedureExpected Sequence 1.1 (LANGUAGE NOTIFICATION)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: LANGUAGE NOTIFICATION 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LANGUAGE NOTIFICATION 1.1.1	<u>Language specified in the command is different from the one set on the mobile.</u>
4	ME → SIM	TERMINAL RESPONSE : LANGUAGE NOTIFICATION 1.1.1	<u>[Command performed successfully]</u>
5	SIM → ME	PROACTIVE SIM SESSION ENDED	<u>Check that language of ME has been replaced by the one specified in LANGUAGE NOTIFICATION 1.1.1</u>

PROACTIVE COMMAND : LANGUAGE NOTIFICATION 1.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	LANGUAGE NOTIFICATION
Command qualifier:	"01" (specific language notification)
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Language</u>	
Language	'se'(spanish) -> 73 65 or 'de'→64 65 (german) for instance : choose a language different from the one initially set on the ME to check the proper execution of the command

Coding:

BER-TLV: D0 0D 81 03 01 35 01 82 02 81 82 AD
 02 73 65

TERMINAL RESPONSE : LANGUAGE NOTIFICATION 1.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	LANGUAGE NOTIFICATION
Command qualifier:	"01"
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV: 81 03 01 35 01 82 02 82 81 83 01 00

Expected Sequence 1.2 (LANGUAGE NOTIFICATION)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: LANGUAGE NOTIFICATION 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LANGUAGE NOTIFICATION 1.2.1	
4	ME → SIM	TERMINAL RESPONSE : LANGUAGE NOTIFICATION 1.2.1	[Command performed successfully]
5	SIM → ME	PROACTIVE SIM SESSION ENDED	Check that initial language is set again.

PROACTIVE COMMAND : LANGUAGE NOTIFICATION 1.2.1Logically:Command details

<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>LANGUAGE NOTIFICATION</u>
<u>Command qualifier:</u>	<u>"00" (non specific language notification)</u>

Device identities

<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>

Coding:

BER-TLV: D0 09 81 03 01 35 01 82 02 81 82

TERMINAL RESPONSE : LANGUAGE NOTIFICATION 1.2.1Logically:Command details

<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>LANGUAGE NOTIFICATION</u>
<u>Command qualifier:</u>	<u>"00"</u>

Device identities

<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>

Result

<u>General Result:</u>	<u>Command performed successfully</u>
------------------------	---------------------------------------

Coding:

BER-TLV: 81 03 01 35 00 82 02 82 81 83 01 00

27.22.4.25.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1 and 2.

27.22.4.26 LAUNCH BROWSER**27.22.4.26.1 LAUNCH BROWSER (No session already launched)**27.22.4.26.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.26.1.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clauses 6.4.26 and 6.6.26 (Launch browser), clause 12.6 (Commands details), clause 12.7 (device identities), clause 12.48 (URL), clause 13.2 (command tag), clause 12.2 (Alpha Identifier), clause 12.47 (Browser identity), clause 12.49 (Bearer), clause 12.50 (provisioning), clause 12.15 (Text String), clause 12.31 (icon identifier).

27.22.4.26.1.3 Test Purpose

To verify that when the ME is in idle state, it launches properly the Wap session required in LAUNCH BROWSER, and returns a successful result in the TERMINAL RESPONSE command.

27.22.4.26.1.4 Method of test

27.22.4.26.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL ...) of the tested mobile shall be properly filled to access one of the gateways (“default gateway”)

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The mobile is in idle mode.

27.22.4.26.1.4.2 Procedure

Expected Sequence 1.1 (LAUNCH BROWSER, connect to the default URL)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>0</u>	<u>ME</u>		<u>[the ME is in idle mode]</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.1.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : LAUNCH BROWSER 1.1.1</u>	<u>[connect to the default URL, “launch browser, if not already launched”, no null alpha id.]</u>
<u>4</u>	<u>ME → USER</u>	<u>ME displays the alpha identifier</u>	
<u>5</u>	<u>USER → ME</u>	<u>The user may have to confirm the launch browser.</u>	<u>[option : user confirmation]</u>
<u>6</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : LAUNCH BROWSER 1.1.1</u>	<u>[Command performed successfully]</u>
<u>7</u>	<u>ME->SS</u>	<u>The ME attempts to launch the session with the default Wap parameters and the default URL.</u>	
<u>8</u>	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION ENDED</u>	

9	USER → ME	The user verifies that the default Wap session is properly established. Then he/she ends the navigation. The ME returns in idle mode.
---	--------------	---

PROACTIVE COMMAND : LAUNCH BROWSER 1.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	launch browser, if not already used
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
URL	empty
Alpha identifier	"Default URL"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>18</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>15</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>31</u>
	<u>00</u>	<u>05</u>	<u>0B</u>	<u>44</u>	<u>65</u>	<u>66</u>	<u>61</u>	<u>76</u>	<u>6C</u>	<u>74</u>	<u>20</u>	<u>55</u>
	<u>52</u>	<u>4C</u>										

TERMINAL RESPONSE : LAUNCH BROWSER 1.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	launch browser, if not already used
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>15</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Expected Sequence 1.2 (LAUNCH BROWSER, connect to the specified URL, alpha identifier length=0)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
-------------	------------------	-------------------------	-----------------

0	ME		[the ME is in idle mode]
1	SIM → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 1.2.1	[connect to defined URL, "launch browser, if not already launched, alpha identifier length=0]
4	ME → USER	No information should be displayed.	
5	USER → ME	The user may have to confirm the launch browser.	[option : user confirmation]
6	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 1.2.1	[Command performed successfully]
7	ME->SS	The ME attempts to connect the URL specified in the LAUNCH BROWSER command.	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	The user verifies that the URL is properly connected. Then he/she ends the navigation. The ME returns in idle mode.	

PROACTIVE COMMAND : LAUNCH BROWSER 1.2.1

Logically:

Command details

Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already used

Device identities

Source device: SIM
Destination device: ME
URL http://xxx.yyy.zzz (note: this URL shall be different from the default URL,
but it can be reached from the gateway defined by default in the Wap
parameters of the mobile)
Alpha identifier empty

Coding:

BER-TLV: D0 1F 81 03 01 15 00 82 02 81 82 31
 12 68 74 74 70 3A 2F 2F 78 78 78 2E
 79 79 79 2E 7A 7A 7A 05 00

TERMINAL RESPONSE : LAUNCH BROWSER 1.2.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	launch browser, if not already used
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV: 81 03 01 15 00 82 02 82 81 83 01 00

Expected Sequence 1.3 (LAUNCH BROWSER, Browser identity, no alpha identifier)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
0	ME		[the ME is in idle mode]
1	SIM → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 1.3.1	[connect to the default URL, "launch browser, if not already launched, browser identity]
4	ME → USER	ME may display a default message of its own.	
5	USER → ME	The user may confirm the launch browser.	[option : user confirmation]
6	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 1.3.1	[Command performed successfully]
7	ME->SS	The ME attempts to connect the default URL.	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	The user verifies that the default Wap session is properly established. Then he/she ends the navigation. The ME returns in idle mode.	

PROACTIVE COMMAND : LAUNCH BROWSER 1.3.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	launch browser, if not already used
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
Browser Identity	default
URL	0

Coding:

BER-TLV: D0 1F 81 03 01 15 00 82 02 81 82 30
 01 00 31 00

TERMINAL RESPONSE : LAUNCH BROWSER 1.3.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	launch browser, if not already used
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV: 81 03 01 15 00 82 02 82 81 83 01 00

Expected Sequence 1.4 (LAUNCH BROWSER, one bearer specified and gateway/proxy identity)

Step	Direction	MESSAGE / Action	Comments
0	ME		[the ME is in idle mode]
1	SIM → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 1.4.1	[connect to the default URL, "launch browser, if not already launched, 1 bearer specified, gateway/proxy id specified]
4	ME → USER	ME may display a default message	
5	USER → ME	The user may confirm the launch browser.	[option : user confirmation]
6	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 A Or TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 B Or TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 C	[Command performed successfully] [Launch browser generic error code – bearer not available] [Command performed with partial comprehension]

7	<u>ME->SS</u>	The ME attempts to connect the default URL using the requested bearer and proxy identity
8	<u>SIM → ME</u>	PROACTIVE SIM SESSION ENDED
9	<u>USER → ME</u>	If performed successfully: the user verifies that the Wap session is properly established with the required bearer. Then he/she ends the navigation. The ME returns in idle mode.

PROACTIVE COMMAND : LAUNCH BROWSER 1.4.1

Logically:

Command details

Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	launch browser, if not already used

Device identities

Source device:	SIM
Destination device:	ME
URL	0
Bearer	GPRS

Gateway/Proxy id

DCS	unpacked, 8 bits data
Text string	abc.def.ghi (different from the default IP address)

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>1C</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>15</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>31</u>
	<u>00</u>	<u>32</u>	<u>01</u>	<u>03</u>	<u>0D</u>	<u>0C</u>	<u>04</u>	<u>61</u>	<u>62</u>	<u>63</u>	<u>2E</u>	<u>64</u>
	<u>65</u>	<u>66</u>	<u>2E</u>	<u>67</u>	<u>68</u>	<u>69</u>						

TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 A

Logically:

Command details

Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	launch browser, if not already used

Device identities

Source device:	ME
Destination device:	SIM

Result

General Result:	Command performed successfully
-----------------	--------------------------------

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>15</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 B

Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	launch browser, if not already used
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Launch browser generic error code
Additional information	Bearer not available

Coding:

BER-TLV: 81 03 01 15 00 82 02 82 81 83 02 26
01

TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 C

Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	launch browser, if not already used
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully, with partial comprehension

Coding:

BER-TLV: 81 03 01 15 00 82 02 82 81 83 01 01

Expected Sequence 1.5 (LAUNCH BROWSER, several bearers specified, gateway/proxy id specified)

Step	Direction	MESSAGE / Action	Comments
0			[ME is in idle mode]
1	SIM → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.5.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 1.5.1	[connect to the default URL, "launch browser, if not already launched, several bearers, gateway/proxy id specified]

4	<u>ME → USER</u>	<u>ME may display a default message</u>	
5	<u>USER → ME</u>	<u>The user may confirm the launch browser.</u>	<u>[option : user confirmation]</u>
6	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 A</u> <u>Or</u> <u>TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 B</u> <u>Or</u> <u>TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 C</u>	<u>[Command performed successfully]</u> <u>[Launch browser generic error code – bearer not available]</u> <u>[Command performed with partial comprehension]</u>
7	<u>ME->SS</u>	<u>The ME attempts to connect the default URL.</u>	
8	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION ENDED</u>	
9	<u>USER → ME</u>	<u>If performed successfully: the user verifies that the Wap session is properly established with one of the required bearers. Then he/she ends the navigation. The ME returns in idle mode.</u>	

PROACTIVE COMMAND : LAUNCH BROWSER 1.5.1

Logically:

Command details

<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>LAUNCH BROWSER</u>
<u>Command qualifier:</u>	<u>launch browser, if not already used</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>
<u>URL</u>	<u>0</u>
<u>Bearer</u>	<u>GPRS, USSD, SMS</u>
<u>Gateway/Proxy id</u>	
<u>DCS</u>	<u>7 bits default alphabet</u>
<u>Text string</u>	<u>abc.def.ghi (different from the default IP address)</u>

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>1D</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>15</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>31</u>
	<u>00</u>	<u>32</u>	<u>03</u>	<u>03</u>	<u>02</u>	<u>00</u>	<u>0D</u>	<u>0C</u>	<u>00</u>	<u>61</u>	<u>F1</u>	<u>D8</u>
	<u>45</u>	<u>2E</u>	<u>9B</u>	<u>5D</u>	<u>67</u>	<u>74</u>	<u>1A</u>					

TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 A

Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	launch browser, if not already used
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV: 81 03 01 15 00 82 02 82 81 83 01 00

TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 BLogically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	launch browser, if not already used
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Launch browser generic error code
Additional information	Bearer not available

Coding:

BER-TLV: 81 03 01 15 00 82 02 82 81 83 02 26
 01

TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 CLogically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	launch browser, if not already used
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully, with partial comprehension

Coding:

BER-TLV: 81 03 01 15 00 82 02 82 81 83 01 01

27.22.4.26.2 LAUNCH BROWSER (Interaction with current session)

27.22.4.26.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.26.2.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clauses 6.4.26 and 6.6.26 (Launch browser), clause 12.6 (Commands details), clause 12.7 (device identities), clause 12.48 (URL), clause 13.2 (command tag), clause 12.2 (Alpha Identifier), clause 12.47 (Browser identity), optional 12.49 (Bearer), optional 12.50 (provisioning), clause 12.15 (Text String), clause 12.31 (icon identifier).

27.22.4.26.2.3 Test Purpose

To verify that when the ME is already busy in a Wap session, it launches properly the Wap session required in LAUNCH BROWSER, and returns a successful result in the TERMINAL RESPONSE.

27.22.4.26.2.4 Method of test

27.22.4.26.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

A valid access to a Wap gateway is required. The default Wap parameters (IP address, gateway/proxy identity, called number ...) of the tested mobile shall be properly filled to access that gateway.

The mobile is busy in a Wap session, the user navigates in pages different from the URL defined by default in Wap parameters.

27.22.4.26.2.4.2 Procedure

Expected Sequence 2.1 (LAUNCH BROWSER, use the existing browser, connect to the default URL)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>0</u>	<u>ME</u>	<u>The user is navigating in a Wap session (not default URL).</u>	<u>[Browser is in use, the current session is not secured]</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: LAUNCH BROWSER 2.1.1</u>	

2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 2.1.1	[connect to the default URL, "use the existing browser", no null alpha id.]
4	ME → USER	ME displays the alpha identifier	
5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 2.1.1	[Command performed successfully]
7	ME->SS	The ME does not close the existing session and attempts to connect the default URL.	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL.	

PROACTIVE COMMAND : LAUNCH BROWSER 2.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	use the existing browser
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
URL	empty
Alpha identifier	"Default URL"

Coding:

BER-TLV:	D0	18	81	03	01	15	02	82	02	81	82	31
	00	05	0B	44	65	66	61	76	6C	74	20	55
	52	4C										

TERMINAL RESPONSE : LAUNCH BROWSER 2.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	use the existing browser
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	00
----------	----	----	----	----	----	----	----	----	----	----	----	----

Expected Sequence 2.2 (LAUNCH BROWSER, close the existing browser session and launch new browser session, connect to the default URL)

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a Wap session (not default URL)..	[Browser is in use, the current session is not secured]
1	SIM → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 2.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 2.2.1	[connect to the default URL, "close the existing browser session and launch new browser session", no null alpha id.]
4	ME → USER	ME displays the alpha identifier	
5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 2.2.1	[Command performed successfully]
7	ME->SS	The ME closes the existing session and attempts to launch the session with the default Wap parameters and the default URL.	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	The user verifies that the default URL is connected; and the previous URL cannot be retrieved (to verify the previous session has been closed). Then he/she does not end the navigation.	

PROACTIVE COMMAND : LAUNCH BROWSER 2.2.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: close the existing browser session and launch new browser session

Device identities

Source device: SIM

Destination device: ME

URL: empty

Alpha identifier: "Default URL"

Coding:

BER-TLV: D0 18 81 03 01 15 03 82 02 81 82 31
 00 05 0B 44 65 66 61 76 6C 74 20 55
 52 4C

TERMINAL RESPONSE : LAUNCH BROWSER 2.2.1

Logically:

<u>Command details</u>	
<u>Command number:</u>	1
<u>Command type:</u>	LAUNCH BROWSER
<u>Command qualifier:</u>	close the existing browser session and launch new browser session
<u>Device identities</u>	
<u>Source device:</u>	ME
<u>Destination device:</u>	SIM
<u>Result</u>	
<u>General Result:</u>	Command performed successfully

Coding:

BER-TLV: 81 03 01 15 03 82 02 82 81 83 01 00

Expected Sequence 2.3 (LAUNCH BROWSER, if not already launched)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
0	ME	The user is navigating in a Wap session (not default URL)..	[Browser is in use, the current session is not secured]
1	SIM → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 2.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 2.3.1	[connect to the default URL, "launch browser, if not already launched]
8	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 2.3.1	[ME unable to process command – browser unavailable]
9	SIM → ME	PROACTIVE SIM SESSION ENDED	
10	USER → ME	The user verifies that the default URL has not been connected. Then he/she ends the navigation. The ME returns in idle mode.	

PROACTIVE COMMAND : LAUNCH BROWSER 2.3.1

Logically:

<u>Command details</u>	
<u>Command number:</u>	1
<u>Command type:</u>	LAUNCH BROWSER
<u>Command qualifier:</u>	launch browser, if not already used
<u>Device identities</u>	
<u>Source device:</u>	SIM
<u>Destination device:</u>	ME
<u>URL</u>	empty

Coding:

BER-TLV: D0 0C 81 03 01 15 00 82 02 81 82 31 00

TERMINAL RESPONSE : LAUNCH BROWSER 2.3.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	launch browser, if not already used
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	ME unable to process command
Additional data	Browser unavailable

Coding:

BER-TLV: 81 03 01 15 00 82 02 82 81 83 02 26
 02

27.22.4.26.3 LAUNCH BROWSER (UCS2 support)27.22.4.26.3.1 Definition and applicability

See Section 3.2.2.

27.22.4.26.3.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clauses 6.4.26 and 6.6.26 (Launch browser), clause 12.6 (Commands details), clause 12.7 (device identities), clause 12.48 (URL), clause 13.2 (command tag), clause 12.2 (Alpha Identifier), clause 12.47 (Browser identity), optional 12.49 (Bearer), optional 12.50 (provisioning), clause 12.15 (Text String), clause 12.31 (icon identifier)

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

27.22.4.26.2.3 Test Purpose

To verify that the ME performs a proper user confirmation with an USC2 alpha identifier, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.26.3.4 Method of test27.22.4.26.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL ...) of the tested mobile shall be properly filled to access one of the gateways (“default gateway”)

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The mobile is busy in a Wap session, the user navigates in pages different from the URL defined by default in Wap parameters.

27.22.4.26.3.4.2 Procedure

Expected Sequence 3.1 (LAUNCH BROWSER, use the existing browser, connect to the default URL)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>0</u>	<u>ME</u>	<u>The user is navigating in a Wap session (not default URL)..</u>	<u>[Browser is in use, the current session is not secured]</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: LAUNCH BROWSER 3.1.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : LAUNCH BROWSER 3.1.1</u>	<u>[connect to the default URL, “use the existing browser”, alpha id. In UCS2]</u>
<u>4</u>	<u>ME → USER</u>	<u>ME displays the alpha identifier “ЗДРАВСТВУЙТЕ”</u>	<u>[“Hello” in Russian]</u>
<u>5</u>	<u>USER → ME</u>	<u>The user confirms the launch browser.</u>	<u>[user confirmation]</u>
<u>6</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : LAUNCH BROWSER 3.1.1</u>	<u>[Command performed successfully]</u>
<u>7</u>	<u>ME->SS</u>	<u>The ME does not close the existing session and attempts to connect the default URL.</u>	
<u>8</u>	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION ENDED</u>	
<u>9</u>	<u>USER → ME</u>	<u>The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL.</u>	

PROACTIVE COMMAND : LAUNCH BROWSER 3.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	use the existing browser
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
URL	empty
<u>Alpha Identifier</u>	
Data coding scheme:	UCS2 (16 bits)
Text:	“ЗДРАВСТВУЙТЕ”

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>26</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>15</u>	<u>02</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>31</u>
	<u>00</u>	<u>05</u>	<u>19</u>	<u>80</u>	<u>04</u>	<u>17</u>	<u>04</u>	<u>14</u>	<u>04</u>	<u>20</u>	<u>04</u>	<u>10</u>
	<u>04</u>	<u>12</u>	<u>04</u>	<u>21</u>	<u>04</u>	<u>22</u>	<u>04</u>	<u>12</u>	<u>04</u>	<u>23</u>	<u>04</u>	<u>19</u>
	<u>04</u>	<u>22</u>	<u>04</u>	<u>15</u>								

TERMINAL RESPONSE : LAUNCH BROWSER 3.1.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	use the existing browser
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>15</u>	<u>02</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

27.22.4.26.4 LAUNCH BROWSER (icons support)27.22.4.26.4.1 Definition and applicability

See Section 3.2.2.

27.22.4.26.4.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clauses 6.4.26 and 6.6.26 (Launch browser), clause 12.6 (Commands details), clause 12.7 (device identities), clause 12.48 (URL), clause 13.2 (command tag), clause 12.2 (Alpha Identifier), clause 12.47 (Browser identity), optional 12.49 (Bearer), optional 12.50 (provisioning), clause 12.15 (Text String), clause 12.31 (icon identifier).

27.22.4.26.4.3 Test Purpose

To verify that the ME performs a proper user confirmation with an icon identifier, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.26.4.4 Method of test27.22.4.26.4.4.1 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.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL ...) of the tested mobile shall be properly filled to access one of the gateways (“default gateway”)

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The mobile is busy in a Wap session, the user navigates in pages different from the URL defined by default in Wap parameters.

27.22.4.26.4.4.2 Procedure

Expected Sequence 4.1A (LAUNCH BROWSER, use the existing browser, icon not self explanatory, successful)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.1.1</u>	<u>[Browser is in use, the current session is not secured]</u>
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : LAUNCH BROWSER 4.1.1</u>	<u>[connect to the default URL, “use the existing browser”, no null alpha id.]</u>
<u>4</u>	<u>ME → USER</u>	<u>ME displays the alpha identifier and the icon</u>	<u>[“Not self explan.”]</u>
<u>5</u>	<u>USER → ME</u>	<u>The user confirms the launch browser.</u>	<u>[user confirmation]</u>
<u>6</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : LAUNCH BROWSER 4.1.1 A</u>	<u>[Command performed successfully]</u>
<u>7</u>	<u>ME->SS</u>	<u>The ME does not close the existing session and attempts to connect the default URL.</u>	
<u>8</u>	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION ENDED</u>	

9	USER → ME	The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL.
---	--------------	---

PROACTIVE COMMAND : LAUNCH BROWSER 4.1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	use the existing browser
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
URL	empty
Alpha Identifier	“Not self explan.”
<u>Icon Identifier:</u>	
Icon qualifier:	not self-explanatory
Icon Identifier:	record 1 in EF _(IMG)

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>21</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>15</u>	<u>02</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>31</u>
	<u>00</u>	<u>05</u>	<u>10</u>	<u>4E</u>	<u>6F</u>	<u>74</u>	<u>20</u>	<u>73</u>	<u>65</u>	<u>6C</u>	<u>66</u>	<u>20</u>
	<u>65</u>	<u>78</u>	<u>70</u>	<u>6C</u>	<u>61</u>	<u>6E</u>	<u>2E</u>	<u>1E</u>	<u>02</u>	<u>01</u>	<u>01</u>	

TERMINAL RESPONSE : LAUNCH BROWSER 4.1.1 A

Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	use the existing browser
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>15</u>	<u>02</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Expected Sequence 4.1B (LAUNCH BROWSER, use the existing browser, icon not self explanatory, requested icon could not be displayed)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.1.1	[Browser is in use, the current session is not secured]]
2	ME → SIM	FETCH	

3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 4.1.1	[connect to the default URL, "use the existing browser", no null alpha id.]
4	ME → USER	ME displays the alpha identifier Without the icon	["Not self explan."]
5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 4.1.1 B	[Command performed successfully but requested icon could not be displayed]
7	ME->SS	The ME does not close the existing session and attempts to connect the default URL.	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL.	

TERMINAL RESPONSE : LAUNCH BROWSER 4.1.1 B

Logically:

<u>Command details</u>	
Command number:	1
Command type:	LAUNCH BROWSER
Command qualifier:	use the existing browser
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully but requested icon could not be displayed

Coding:

BER-TLV: 81 03 01 15 02 82 02 82 81 83 01 06

Expected Sequence 4.2A (LAUNCH BROWSER, use the existing browser, icon self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.2.1	[Browser is in use, the current session is not secured]]
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 4.2.1	[connect to the default URL, "use the existing browser", alpha id. In UCS2]
4	ME → USER	ME displays only the icon	["Self explan."]
5	USER → ME	The user confirms the launch browser.	[user confirmation]

6	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : LAUNCH BROWSER 4.2.1 A</u>	<u>[Command performed successfully]</u>
7	<u>ME->SS</u>	<u>The ME does not close the existing session and attempts to connect the default URL.</u>	
8	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION ENDED</u>	
9	<u>USER → ME</u>	<u>The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL.</u>	

PROACTIVE COMMAND : LAUNCH BROWSER 4.2.1

Logically:

Command details

Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: SIM
Destination device: ME

URL empty

Alpha Identifier "Self explan."

Icon Identifier:

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

Coding:

BER-TLV: D0 1D 81 03 01 15 02 82 02 81 82 31
 00 05 0C 73 65 6C 66 20 65 78 70 6C
 61 6E 2E 1E 02 00 01

TERMINAL RESPONSE : LAUNCH BROWSER 4.2.1 A

Logically:

Command details

Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 15 02 82 02 82 81 83 01 00

Expected Sequence 4.2B (LAUNCH BROWSER, use the existing browser, icon self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.2.1	[Browser is in use, the current session is not secured]]
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 4.2.1	[connect to the default URL, "use the existing browser", alpha id. In UCS2]
4	ME → USER	ME displays only the alpha identifier	["Self explan."]
5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 4.2.1 B	[Command performed successfully]
7	ME->SS	The ME does not close the existing session and attempts to connect the default URL.	[Command performed successfully but requested icon could not be displayed]
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL.	

TERMINAL RESPONSE : LAUNCH BROWSER 4.2.1 B

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: use the existing browser

Device identities

Source device: ME

Destination device: SIM

Result

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

Coding:

BER-TLV: 81 03 01 15 02 82 02 82 81 83 01 06

27.22.4.27 OPEN CHANNEL

27.22.4.27.1 Definition and applicability

See Section 3.2.2.

27.22.4.27.2 Conformance requirements

The ME shall support the class "e" commands as defined in the following technical specifications: 3GPP TS 11.14 [15]

27.22.4.27.3 Test Purpose

To verify that the ME shall send a

- TERMINAL RESPONSE (OK) or
- TERMINAL RESPONSE (Command performed with modification) or
- TERMINAL RESPONSE (Network currently unable to process command)

to the SIM after the ME receives the OPEN CHANNEL proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

27.22.4.27.4 Method of test27.22.4.27.4.1 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.

27.22.4.27.4.2 Procedure

Expected Sequence 1.1 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.32)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.1.1</u>	
4	<u>ME → SS</u>	<u>SETUP CALL</u>	
5	<u>SS → ME</u>	<u>CONNECTED</u>	
6	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.1.1</u>	<u>[Command performed successfully]</u>

PROACTIVE COMMAND: OPEN CHANNEL 1.1.1Logically:Command details

Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Address

TON: International number
NPI: ISDN / telephone numbering plan
Dialling number string "112233445566778"

Bearer description

Bearer type: CSD
Bearer parameter
Data rate: 9600bps V.32
Bearer service: data circuit asynchronous UDI
Connection element: non-transparent
Buffer size 42

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>1E</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>40</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>86</u>
	<u>09</u>	<u>91</u>	<u>11</u>	<u>22</u>	<u>33</u>	<u>44</u>	<u>55</u>	<u>66</u>	<u>77</u>	<u>F8</u>	<u>B5</u>	<u>04</u>
	<u>01</u>	<u>07</u>	<u>00</u>	<u>01</u>	<u>B9</u>	<u>02</u>	<u>00</u>	<u>2A</u>				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1Logically:Command details

Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully
Channel status Channel identifier 1 and link established

Bearer description

Bearer type: CSD
Bearer parameter
Data rate: 9600bps V.32
Bearer service: data circuit asynchronous
Connection element: non-transparent
Buffer size 42

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>40</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>B8</u>	<u>02</u>	<u>81</u>	<u>01</u>	<u>B5</u>	<u>04</u>	<u>01</u>	<u>07</u>	<u>00</u>	<u>01</u>	<u>B9</u>	<u>02</u>
	<u>00</u>	<u>2A</u>										

Expected Sequence 1.2 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.34)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.2.1	
4	ME → SS	SETUP CALL	
5	SS → ME	CONNECTED	
6	ME → SIM	TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.2.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 1.2.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM

Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.34

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 42

Coding:

BER-TLV: D0 1E 81 03 01 40 01 82 02 81 82 86
 09 91 11 22 33 44 55 66 77 F8 B5 04
 01 07 00 01 B9 02 00 2A

TERMINAL RESPONSE: OPEN CHANNEL 1.2.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	OPEN CHANNEL
Command qualifier:	immediate link establishment
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
Channel status	Channel identifier 1 and link established
<u>Bearer description</u>	
Bearer type:	CSD
<u>Bearer parameter</u>	
Data rate:	9600bps V.32
Bearer service:	data circuit asynchronous
Connection element:	non-transparent
Buffer size	42

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>40</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>B8</u>	<u>02</u>	<u>81</u>	<u>01</u>	<u>B5</u>	<u>04</u>	<u>01</u>	<u>07</u>	<u>00</u>	<u>01</u>	<u>B9</u>	<u>02</u>
	<u>00</u>	<u>2A</u>										

Expected Sequence 1.3 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.120)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.3.1	
4	ME → SS	SETUP CALL	
5	SS → ME	CONNECTED	
6	ME → SIM	TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.3.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 1.3.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM

Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.34

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 42

Coding:

BER-TLV: D0 1E 81 03 01 40 01 82 02 81 82 86
 09 91 11 22 33 44 55 66 77 F8 B5 04
 01 07 00 01 B9 02 00 2A

TERMINAL RESPONSE: OPEN CHANNEL 1.3.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	OPEN CHANNEL
Command qualifier:	immediate link establishment
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
Channel status	Channel identifier 1 and link established
<u>Bearer description</u>	
Bearer type:	CSD
<u>Bearer parameter</u>	
Data rate:	9600bps V.32
Bearer service:	data circuit asynchronous
Connection element:	non-transparent
Buffer size	42

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>40</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>B8</u>	<u>02</u>	<u>81</u>	<u>01</u>	<u>B5</u>	<u>04</u>	<u>01</u>	<u>07</u>	<u>00</u>	<u>01</u>	<u>B9</u>	<u>02</u>
	<u>00</u>	<u>2A</u>										

Expected Sequence 1.4 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.110 or X.31 flag stuffing, bearer asynchronous UDI)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.4.1	
4	ME → SS	SETUP CALL	
5	SS → ME	CONNECTED	
6	ME → SIM	TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.4.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 1.4.1

Logically:

Command details

Command number: 1
 Command type: OPEN CHANNEL
 Command qualifier: immediate link establishment

Device identities

Source device: SIM
 Destination device: ME

Address

TON: International number
 NPI: ISDN / telephone numbering plan
 Dialling number string "112233445566778"

Bearer description

Bearer type: CSD
 Bearer parameter
 Data rate: 9600bps V.110 or X.31 flag stuffing Bearer service: data circuit

asynchronous UDI

Connection element: non-transparent
 Buffer size 42

Coding:

BER-TLV: D0 1E 81 03 01 40 01 82 02 81 82 86
 09 91 11 22 33 44 55 66 77 F8 B5 04
 01 71 00 01 B9 02 00 2A

TERMINAL RESPONSE: OPEN CHANNEL 1.4.1

Logically:

Command details

Command number: 1
 Command type: OPEN CHANNEL
 Command qualifier: immediate link establishment

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Bearer Description

Bearer Parameter

Data rate: 9600bps V.110 or X.31 flag stuffing

Bearer Service: data circuit asynchronous UDI

Connection Element: non-transparent

Coding:

BER-TLV: 81 03 01 40 01 82 02 82 81 83 01 00
B8 02 81 01 B5 04 01 71 00 01 B9 02
00 2A

Expected Sequence 1.5 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.32, bearer asynchronous RDI)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: OPEN CHANNEL</u> <u>1.5.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : OPEN</u> <u>CHANNEL (immediate) 1.5.1</u>	
<u>4</u>	<u>ME → SS</u>	<u>SETUP CALL</u>	
<u>5</u>	<u>SS → ME</u>	<u>CONNECTED</u>	
<u>6</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : OPEN</u> <u>CHANNEL (immediate) 1.5.1</u>	<u>[Command performed successfully]</u>

PROACTIVE COMMAND: OPEN CHANNEL 1.5.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: SIM
Destination device: ME
Address
TON: International number
NPI: ISDN / telephone numbering plan
Dialling number string "112233445566778"
Bearer description
Bearer type: CSD
Bearer parameter
Data rate: 9600bps V.32
Bearer service: data circuit asynchronous RDI
Connection element: non-transparent
Buffer size 42

Coding:

BER-TLV: D0 1E 81 03 01 40 01 82 02 81 82 86
09 91 11 22 33 44 55 66 77 F8 B5 04
01 07 04 01 B9 02 00 2A

TERMINAL RESPONSE: OPEN CHANNEL 1.5.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Bearer Description

Bearer Parameter

Data rate: 9600bps V.32
Bearer Service: data circuit asynchronous RDI
Connection Element: non-transparent

Coding:

BER-TLV: 81 03 01 40 01 82 02 82 81 83 01 00
 B8 02 81 01 B5 04 01 07 04 01 B9 02
 00 2A

Expected Sequence 1.6 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.32, bearer asynchronous)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.6.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.6.1	
4	ME → SS	SETUP CALL	
5	SS → ME	CONNECTED	
6	ME → SIM	TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.6.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 1.6.1

Logically:

Command details

Command number: 1
 Command type: OPEN CHANNEL
 Command qualifier: immediate link establishment

Device identities

Source device: SIM
 Destination device: ME

Address

TON: International number
 NPI: ISDN / telephone numbering plan
 Dialling number string "112233445566778"

Bearer description

Bearer type: CSD
 Bearer parameter
 Data rate: 9600bps V.32
 Bearer service: data circuit asynchronous
 Connection element: both, transparent preferred
 Buffer size 42

Coding:

BER-TLV: D0 1E 81 03 01 40 01 82 02 81 82 86
 09 91 11 22 33 44 55 66 77 F8 B5 04
 01 07 00 02 B9 02 00 2A

TERMINAL RESPONSE: OPEN CHANNEL 1.6.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Bearer Description

Bearer Parameter

Data rate: 9600bps V.32
Bearer Service: data circuit asynchronous
Connection Element: both, transparent preferred

Coding:

BER-TLV: 81 03 01 40 01 82 02 82 81 83 01 00
 B8 02 81 01 B5 04 01 07 00 02 B9 02
 00 2A

Expected Sequence 1.7(OOPEN CHANNEL, immediate link establishment, CSD, 9600 bps, performed with modification)

The system simulator shall be configured such that open channel requests will be accepted with modification

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.7.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.7.1	
4	ME → SS	SETUP CALL	
5	SS → ME	CONNECTED	
6	ME → SIM	TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.7.1	[Command performed with modification]

PROACTIVE COMMAND: OPEN CHANNEL 1.7.1

Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL

Command qualifier: immediate link establishment
Device identities
Source device: SIM
Destination device: ME
Address
TON: International number
NPI: ISDN / telephone numbering plan
Dialling number string "112233445566778"
Bearer description
Bearer type: CSD
Bearer parameter
Data rate: 64000bps X.31
Bearer service: data circuit asynchronous UDI
Connection element: non-transparent
Buffer size 42

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>1E</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>40</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>86</u>
	<u>09</u>	<u>91</u>	<u>11</u>	<u>22</u>	<u>33</u>	<u>44</u>	<u>55</u>	<u>66</u>	<u>77</u>	<u>F8</u>	<u>B5</u>	<u>04</u>
	<u>01</u>	<u>54</u>	<u>00</u>	<u>01</u>	<u>B9</u>	<u>02</u>	<u>00</u>	<u>2A</u>				

TERMINAL RESPONSE: OPEN CHANNEL 1.7.1Logically:

Command details
Command number: 1
Command type: OPEN CHANNEL
Command qualifier: immediate link establishment
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed with modification
Channel status Channel identifier 1 and link established
Bearer description
Bearer type: CSD
Bearer parameter
Data rate: 9600bps V.32
Bearer service: data circuit asynchronous
Connection element: non-transparent
Buffer size 42

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>40</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>07</u>
	<u>B8</u>	<u>02</u>	<u>81</u>	<u>01</u>	<u>B5</u>	<u>04</u>	<u>01</u>	<u>07</u>	<u>00</u>	<u>01</u>	<u>B9</u>	<u>02</u>
	<u>00</u>	<u>2A</u>										

Expected Sequence 1.8 (OPEN CHANNEL, immediate link establishment, CSD, Network currently unable to process command)

The system simulator shall be configured such that open channel requests will be rejected with "No specific cause can be given".

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.8.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.8.1	
4	ME → SIM	TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.8.1	[Network currently unable to process command]

PROACTIVE COMMAND: OPEN CHANNEL 1.8.1

Logically:

Command details

Command number: 1
 Command type: OPEN CHANNEL
 Command qualifier: immediate link establishment

Device identities

Source device: SIM
 Destination device: ME

Address

TON: International number
 NPI: ISDN / telephone numbering plan
 Dialling number string "112233445566778"

Bearer description

Bearer type: CSD
 Bearer parameter
 Data rate: 64000bps X.31
 Bearer service: data circuit asynchronous UDI
 Connection element: non-transparent
 Buffer size 42

Coding:

BER-TLV: D0 1E 81 03 01 40 01 82 02 81 82 86
 09 91 11 22 33 44 55 66 77 F8 B5 04
 01 54 00 01 B9 02 00 2A

TERMINAL RESPONSE: OPEN CHANNEL 1.8.1

Logically:

Command details

Command number: 1
 Command type: OPEN CHANNEL
 Command qualifier: immediate link establishment

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Network currently unable to process command
 Additional info: No

Coding:

BER-TLV: 81 03 01 40 01 82 02 82 81 83 02 21
 00

Expected Sequence 1.95 (OPEN CHANNEL, immediate link establishment, CSD, No channel available)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.9.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.9.1	
4	ME → SS	SETUP CALL	
5	SS → ME	CONNECTED	
6	ME → SIM	TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.9.1	[Command performed successfully]
7	SIM → ME	PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.9.2	
8	ME → SIM	TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.9.2	[Bearer independent protocol error]

PROACTIVE COMMAND: OPEN CHANNEL 1.9.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM

Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 56000bps V.120

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 42

Coding:

BER-TLV: D0 1E 81 03 01 40 01 82 02 81 82 86
 09 91 11 22 33 44 55 66 77 F8 B5 04
 01 78 00 01 B9 02 00 2A

TERMINAL RESPONSE: OPEN CHANNEL 1.9.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier:	immediate link establishment
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
Channel status	Channel identifier 1 and link established
<u>Bearer description</u>	
Bearer type:	CSD
<u>Bearer parameter</u>	
Data rate:	56000bps V.120
Bearer service:	data circuit asynchronous
Connection element:	non-transparent
Buffer size	42

Coding:

BER-TLV:	<u>81</u>	<u>03</u>	<u>01</u>	<u>40</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>B8</u>	<u>02</u>	<u>81</u>	<u>01</u>	<u>B5</u>	<u>04</u>	<u>01</u>	<u>78</u>	<u>00</u>	<u>01</u>	<u>B9</u>	<u>02</u>
	<u>00</u>	<u>2A</u>										

PROACTIVE COMMAND: OPEN CHANNEL 1.9.2Logically:

<u>Command details</u>	
Command number:	1
Command type:	OPEN CHANNEL
Command qualifier:	immediate link establishment
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME
<u>Address</u>	
TON:	International number
NPI:	ISDN / telephone numbering plan
Dialling number string	"112233445566778"
<u>Bearer description</u>	
Bearer type:	CSD
<u>Bearer parameter</u>	
Data rate:	56000bps V.120
Bearer service:	data circuit asynchronous UDI
Connection element:	non-transparent
Buffer size	42

Coding:

BER-TLV:	<u>D0</u>	<u>1E</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>40</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>82</u>	<u>86</u>
	<u>09</u>	<u>91</u>	<u>11</u>	<u>22</u>	<u>33</u>	<u>44</u>	<u>55</u>	<u>66</u>	<u>77</u>	<u>F8</u>	<u>B5</u>	<u>04</u>
	<u>01</u>	<u>78</u>	<u>00</u>	<u>01</u>	<u>B9</u>	<u>02</u>	<u>00</u>	<u>2A</u>				

TERMINAL RESPONSE: OPEN CHANNEL 1.9.2Logically:

<u>Command details</u>	
Command number:	1
Command type:	OPEN CHANNEL
Command qualifier:	immediate link establishment

Device identities
Source device: ME
Destination device: SIM
Result
General Result: Bearer Independent Protocol error
Additional info: No channel available

Coding:

BER-TLV: 81 03 01 40 01 82 02 82 81 83 02 3A
 01

Expected Sequence 1.10 (OPEN CHANNEL, ME is busy on another call related to CSD)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.10.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SET UP CALL 1.10.1	
4	ME → USER	ME displays "Not busy" and prompts the user to set up a call to "+012340123456p1p2"	
5	USER → ME	The user confirms the call set up	[user confirmation]
6	ME->SS	The ME attempts to set up a call to "+012340123456p1p2"	
7	SS → ME	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE: SET UP CALL 1.10.1	[Command performed successfully]
9	SIM → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
10	ME → SIM	FETCH	
11	SIM → ME	PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.1.1	
12	ME → SIM	TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.10.1	[ME currently unable to process command]

PROACTIVE COMMAND: SET UP CALL 1.10.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	only if not currently busy on another call
<u>Device identities</u>	
Source device:	SIM
Destination device:	Network
Alpha identifier:	"Not busy"
<u>Address</u>	
TON:	International
NPI:	ISDN / telephone numbering plan
Dialling number string	"012340123456p1p2"

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>1E</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>	<u>85</u>
	<u>08</u>	<u>4E</u>	<u>6F</u>	<u>74</u>	<u>20</u>	<u>62</u>	<u>75</u>	<u>73</u>	<u>79</u>	<u>86</u>	<u>09</u>	<u>91</u>
	<u>10</u>	<u>32</u>	<u>04</u>	<u>21</u>	<u>43</u>	<u>65</u>	<u>1C</u>	<u>2C</u>				

TERMINAL RESPONSE: SET UP CALL 1.10.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	only if not currently busy on another call
<u>Device identities</u>	
Source device:	Network
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>83</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

TERMINAL RESPONSE: OPEN CHANNEL 1.10.1Logically:

<u>Command details</u>	
Command number:	1
Command type:	OPEN CHANNEL
Command qualifier:	immediate link establishment
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	ME currently unable to process command
Additional info:	ME currently busy on call

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>40</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>83</u>	<u>02</u>	<u>20</u>
	<u>02</u>											

27.22.4.28 CLOSE CHANNEL

27.22.4.28.1 Definition and applicability

See Section 3.2.2.

27.22.4.28.2 Conformance requirements

The ME shall support the class “e” commands as defined in the following technical specifications: 3GPP TS 11.14 [15]

27.22.4.28.3 Test Purpose

To verify that the ME shall send a

- TERMINAL RESPONSE (Command Performed Successfully) or
- TERMINAL RESPONSE (Bearer Independent Protocol Error)

to the SIM after the ME receives the CLOSE CHANNEL proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

27.22.4.28.4 Method of Test

27.22.4.28.4.1 Initial Conditions

The ME is connected to the SIM Simulator. 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.

27.22.4.28.4.2 Procedure

Expected sequence 1.1 (CLOSE CHANNEL, successful)

For that test, it's mandatory to assume that an open channel proactive command has been successfully executed.

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : CLOSE CHANNEL 1.1.1	
4	ME → SIM	TERMINAL RESPONSE CLOSE CHANNEL 1.1.1	[Command performed successfully]

PROACTIVE COMMAND: CLOSE CHANNEL 1.1.1

Logically:

Command details

Command number: 1
 Command type: CLOSE CHANNEL
 Command qualifier: RFU

Device identities

Source device: SIM
 Destination device: Channel 1

Coding:

BER-TLV: D0 09 81 03 01 41 00 82 02 81 21

TERMINAL RESPONSE: CLOSE CHANNEL 1.1.1

Logically:

Command details

Command number: 1
 Command type: CLOSE CHANNEL
 Command qualifier: RFU

Device identities

Source device: Channel 1
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 41 00 82 02 21 81 83 01 00

Expected sequence 1.2 (CLOSE CHANNEL, with an invalid channel identifier)

For that test, it is assumed that an open channel proactive command has been successfully executed (channel 1).

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: CLOSE CHANNEL</u> <u>1.2.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND :</u> <u>CLOSE CHANNEL 1.2.1</u>	
<u>4</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE CLOSE</u> <u>CHANNEL 1.2.1</u>	<u>[Invalide channel number]</u>

PROACTIVE COMMAND: CLOSE CHANNEL 1.2.1

Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: SIM

Destination device: Channel 2

Coding:

BER-TLV: D0 09 81 03 01 41 00 82 02 81 22

TERMINAL RESPONSE: CLOSE CHANNEL 1.2.1

Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: Channel 1

Destination device: SIM

Result

General Result: Bearer Independent Protocol error

Additional Result: Channel identifier not valid

Coding:

BER-TLV: 81 03 01 41 00 82 02 21 81 83 02 3A
03

Expected sequence 1.3 (CLOSE CHANNEL, on an already closed channel)

For that test, it is assumed that an open channel proactive command has been successfully executed (channel 1).

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : CLOSE CHANNEL 1.1.1	
4	ME → SIM	TERMINAL RESPONSE CLOSE CHANNEL 1.1.1	[Command performed successfully]
5	SIM → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.3.1	
6	ME → SIM	FETCH	
7	SIM → ME	PROACTIVE COMMAND : CLOSE CHANNEL 1.3.1	
8	ME → SIM	TERMINAL RESPONSE CLOSE CHANNEL 1.3.1	[Channel closed]

PROACTIVE COMMAND: CLOSE CHANNEL 1.3.1

Logically:

Command details

Command number: 1
 Command type: CLOSE CHANNEL
 Command qualifier: RFU

Device identities

Source device: SIM
 Destination device: Channel 1

Coding:

BER-TLV: D0 09 81 03 01 41 00 82 02 81 21

TERMINAL RESPONSE: CLOSE CHANNEL 1.3.1

Logically:

Command details

Command number: 1
 Command type: CLOSE CHANNEL
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Bearer Independent Protocol error
 Additional Result: Channel closed

Coding:

BER-TLV: 81 03 01 41 00 82 02 82 81 83 02 3A
 02

27.22.4.29 RECEIVE DATA

27.22.4.29.1 Definition and applicability

See Section 3.2.2.

27.22.4.29.2 Conformance requirements

The ME shall support the class “e” commands as defined in the following technical specifications: 3GPP TS 11.14 [15]

27.22.4.29.3 Test Purpose

To verify that the ME shall send a

- TERMINAL RESPONSE (Command Performed Successfully) or
- TERMINAL RESPONSE (ME currently unable to process command) or
- TERMINAL RESPONSE (Bearer Independent Protocol Error)

to the SIM after the ME receives the RECEIVE DATA proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

27.22.4.29.4 Method of test

27.22.4.29.4.1 Initial Conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure. The SIM must have sent the SET UP EVENT LIST to the ME to supply a set of events (event Data available).

27.22.4.29.4.2 Procedure

Expected sequence 1.1 (RECEIVE DATA, already opened channel)

For that test, it is assumed that an open channel proactive command has been successfully executed (with a SIM buffer size of at least 1kB).

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>ME → SIM</u>	<u>ENVELOPPE (Data Available)</u>	<u>(1kB bytes of data in the ME buffer)</u>
<u>2</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.1</u>	
<u>3</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>4</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND: RECEIVE DATA 1.1.1</u>	<u>200 Bytes</u>
<u>5</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: RECEIVE DATA 1.1.1</u>	
<u>6</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.2</u>	
<u>7</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>8</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND: RECEIVE DATA 1.1.2</u>	<u>200 Bytes</u>
<u>9</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: RECEIVE DATA 1.1.2</u>	
<u>10</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.3</u>	
<u>11</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>12</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND: RECEIVE DATA 1.1.3</u>	<u>200 Bytes</u>
<u>13</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: RECEIVE DATA 1.1.3</u>	
<u>14</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.4</u>	
<u>15</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>16</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND: RECEIVE DATA 1.1.4</u>	<u>200 Bytes</u>
<u>17</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: RECEIVE DATA 1.1.4</u>	
<u>18</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.5</u>	
<u>19</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>20</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND: RECEIVE DATA 1.1.5</u>	<u>200 Bytes</u>
<u>21</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: RECEIVE DATA 1.1.5</u>	

PROACTIVE COMMAND: RECEIVE DATA 1.1.1

Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>RECEIVE DATA</u>
<u>Command qualifier:</u>	<u>RFU</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>Channel 1</u>
<u>Channel Data Length</u>	
<u>Channel Data Length:</u>	<u>200</u>

Coding:

BER-TLV: D0 0C 81 03 01 42 00 82 02 81 21 B7
 01 C8

PROACTIVE COMMAND: RECEIVE DATA 1.1.2Logically:Command details

<u>Command number:</u>	<u>2</u>
<u>Command type:</u>	<u>RECEIVE DATA</u>
<u>Command qualifier:</u>	<u>RFU</u>

Device identities

<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>Channel 1</u>

Channel Data Length

<u>Channel Data Length:</u>	<u>200</u>
-----------------------------	------------

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>0C</u>	<u>81</u>	<u>03</u>	<u>02</u>	<u>42</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>21</u>	<u>B7</u>
	<u>01</u>	<u>C8</u>										

PROACTIVE COMMAND: RECEIVE DATA 1.1.3Logically:Command details

<u>Command number:</u>	<u>3</u>
<u>Command type:</u>	<u>RECEIVE DATA</u>
<u>Command qualifier:</u>	<u>RFU</u>

Device identities

<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>Channel 1</u>

Channel Data Length

<u>Channel Data Length:</u>	<u>200</u>
-----------------------------	------------

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>0C</u>	<u>81</u>	<u>03</u>	<u>03</u>	<u>42</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>21</u>	<u>B7</u>
	<u>01</u>	<u>C8</u>										

PROACTIVE COMMAND: RECEIVE DATA 1.1.4Logically:Command details

<u>Command number:</u>	<u>4</u>		
<u>Command type:</u>	<u>RECEIVE DATA</u>	<u>Command qualifier:</u>	<u>RFU</u>

Device identities

<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>Channel 1</u>

Channel Data Length

<u>Channel Data Length:</u>	<u>200</u>
-----------------------------	------------

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>0C</u>	<u>81</u>	<u>03</u>	<u>04</u>	<u>42</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>21</u>	<u>B7</u>
	<u>01</u>	<u>C8</u>										

PROACTIVE COMMAND: RECEIVE DATA 1.1.5Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>5</u>
<u>Command type:</u>	<u>RECEIVE DATA</u>
<u>Command qualifier:</u>	<u>RFU</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>Channel 1</u>
<u>Channel Data Length</u>	
<u>Channel Data Length:</u>	<u>200</u>

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>0C</u>	<u>81</u>	<u>03</u>	<u>05</u>	<u>42</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>21</u>	<u>B7</u>
	<u>01</u>	<u>C8</u>										

TERMINAL RESPONSE: RECEIVE DATA 1.1.1Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>RECEIVE DATA</u>
<u>Command qualifier:</u>	<u>RFU</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>Channel 1</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Channel data length:</u>	<u>FF</u>

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>42</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>21</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>B6</u>	<u>C8</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>..</u>						
	<u>B7</u>	<u>01</u>	<u>FF</u>									

TERMINAL RESPONSE: RECEIVE DATA 1.1.2Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>2</u>
<u>Command type:</u>	<u>RECEIVE DATA</u>
<u>Command qualifier:</u>	<u>RFU</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>Channel 1</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Channel data length:</u>	<u>FF</u>

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>02</u>	<u>42</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>21</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>B6</u>	<u>C8</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>..</u>						
	<u>B7</u>	<u>01</u>	<u>FF</u>									

TERMINAL RESPONSE: RECEIVE DATA 1.1.3Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>3</u>
<u>Command type:</u>	<u>RECEIVE DATA</u>
<u>Command qualifier:</u>	<u>RFU</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>Channel 1</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Channel data length:</u>	<u>FF</u>

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>03</u>	<u>42</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>21</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>B6</u>	<u>C8</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>..</u>						
	<u>B7</u>	<u>01</u>	<u>FF</u>									

TERMINAL RESPONSE: RECEIVE DATA 1.1.4Logically:

<u>Command details</u>					
<u>Command number:</u>	<u>4</u>	<u>Command type:</u>	<u>RECEIVE DATA</u>	<u>Command qualifier:</u>	<u>RFU</u>
<u>Device identities</u>					
<u>Source device:</u>	<u>Channel 1</u>				
<u>Destination device:</u>	<u>SIM</u>				
<u>Result</u>					
<u>General Result:</u>	<u>Command performed successfully</u>				
<u>Channel data length:</u>	<u>C8</u>				

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>04</u>	<u>42</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>21</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>B6</u>	<u>C8</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>..</u>						
	<u>B7</u>	<u>01</u>	<u>C8</u>									

TERMINAL RESPONSE: RECEIVE DATA 1.1.5Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>5</u>
<u>Command type:</u>	<u>RECEIVE DATA</u>
<u>Command qualifier:</u>	<u>RFU Device identities</u>
<u>Source device:</u>	<u>Channel 1</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Channel data length:</u>	<u>00</u>

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>42</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>21</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>B6</u>	<u>C8</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>..</u>						
	<u>B7</u>	<u>01</u>	<u>00</u>									

27.22.4.30 SEND DATA

27.22.4.30.1 Definition and applicability

See Section 3.2.2.

27.22.4.30.2 Conformance requirements

The ME shall support the class “e” commands as defined in the following technical specifications: 3GPP TS 11.14 [15]

27.22.4.30.3 Test Purpose

To verify that the ME shall send a

- TERMINAL RESPONSE (Command Performed Successfully) or
- TERMINAL RESPONSE (ME currently unable to process command) or
- TERMINAL RESPONSE (Bearer Independent Protocol Error)

to the SIM after the ME receives the SEND DATA proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

27.22.4.30.4 Method of test

27.22.4.30.4.1 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.

27.22.4.30.4.2 Procedure

Expected sequence 1.1 (SEND DATA, immediate mode)

For that test, it is assumed that an open channel proactive command has been successfully executed (with a SIM buffer size of 1kB).

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND DATA 1.1.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>DATA (immediate) 1.1.1</u>	
<u>4</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>DATA (immediate) 1.1.1</u>	<u>[Command performed successfully]</u>

PROACTIVE COMMAND: SEND DATA 1.1.1Logically:Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data : 8 Bytes of data

Coding:

BER-TLV: D0 12 81 03 01 43 01 82 02 81 21 B6
08 xx xx xx xx ..

TERMINAL RESPONSE: SEND DATA 1.1.1Logically:Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: Channel 1
Destination device: SIM

Result

General Result: Command performed successfully
Channel data length: 8 Bytes

Coding:

BER-TLV: 81 03 01 43 01 82 02 21 81 83 01 00
B7 01 08

Expected sequence 1.2 (SEND DATA, Store mode)

For that test, it is assumed that an open channel proactive command has been successfully executed (with a SIM buffer size of 1kB).

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DATA (store mode) 1.2.1	Send 500 Bytes of data (200 + 200 + 100)
4	ME → SIM	TERMINAL RESPONSE : SEND DATA (store mode) 1.2.1	[Command performed successfully]
5	SIM → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.2.2	
6	ME → SIM	FETCH	
7	SIM → ME	PROACTIVE COMMAND : SEND DATA (store mode) 1.2.2	
8	ME → SIM	TERMINAL RESPONSE : SEND DATA (store mode) 1.2.2	[Command performed successfully]
9	SIM → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.2.3	
10	ME → SIM	FETCH	
11	SIM → ME	PROACTIVE COMMAND : SEND DATA (Immediate mode) 1.2.3	
12	ME → SIM	TERMINAL RESPONSE : SEND DATA (Immediate mode) 1.2.3	[Command performed successfully]

PROACTIVE COMMAND: SEND DATA 1.2.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: SIM

Destination device: Channel 1

Channel Data

Channel Data : 200 Bytes of data

Coding:

BER-TLV: D0 D3 81 03 01 43 00 82 02 81 21 B6
C8 xx xx xx xx ..

TERMINAL RESPONSE: SEND DATA 1.2.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: Channel 1

Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV: 81 03 01 43 00 82 02 21 81 83 01 00
B7 01 FF

PROACTIVE COMMAND: SEND DATA 1.2.2

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND DATA
Command qualifier:	Store mode
<u>Device identities</u>	
Source device:	SIM
Destination device:	Channel 1
<u>Channel Data</u>	
Channel Data :	200 Bytes of data

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>D3</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>43</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>21</u>	<u>B6</u>
	<u>C8</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>..</u>						

TERMINAL RESPONSE: SEND DATA 1.2.2

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND DATA
Command qualifier:	Store mode
<u>Device identities</u>	
Source device:	Channel 1
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
Channel data length:	More than 255 bytes of space available in the Tx buffer

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>43</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>21</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>B7</u>	<u>01</u>	<u>FF</u>									

PROACTIVE COMMAND: SEND DATA 1.2.3Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND DATA
Command qualifier:	Immediate mode
<u>Device identities</u>	
Source device:	SIM
Destination device:	Channel 1
<u>Channel Data</u>	
Channel Data :	100 Bytes of data

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>6F</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>43</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>21</u>	<u>B6</u>
	<u>64</u>	<u>xx</u>	<u>xx</u>	<u>xx</u>	<u>xx</u>	<u>::</u>						

TERMINAL RESPONSE: SEND DATA 1.2.3Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND DATA
Command qualifier:	Immediate mode
<u>Device identities</u>	
Source device:	Channel 1
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
Channel data length:	More than 255 bytes of space available in the Tx buffer

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>43</u>	<u>01</u>	<u>82</u>	<u>02</u>	<u>21</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>B7</u>	<u>01</u>	<u>FE</u>									

Expected sequence 1.3 (SEND DATA, Store mode, Tx buffer fully used)

For that test, it is assumed that an open channel proactive command has been successfully executed (with a SIM buffer size of 1kB).

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DATA (store mode) 1.3.1	Send 1kByte of data by packet of 200 Bytes
4	ME → SIM	TERMINAL RESPONSE : SEND DATA (store mode) 1.3.1	[Command performed successfully]
5	SIM → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.2	
6	ME → SIM	FETCH	
7	SIM → ME	PROACTIVE COMMAND : SEND DATA (store mode) 1.3.2	[200 Bytes]
8	ME → SIM	TERMINAL RESPONSE : SEND DATA (store mode) 1.3.2	[Command performed successfully]
9	SIM → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.3	
10	ME → SIM	FETCH	
11	SIM → ME	PROACTIVE COMMAND : SEND DATA (store mode) 1.3.3	[200 Bytes]
12	ME → SIM	TERMINAL RESPONSE : SEND DATA (store mode) 1.3.3	[Command performed successfully]
13	SIM → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.4	
14	ME → SIM	FETCH	
15	SIM → ME	PROACTIVE COMMAND : SEND DATA (store mode) 1.3.4	[200 Bytes]
16	ME → SIM	TERMINAL RESPONSE : SEND DATA (store mode) 1.3.4	[Command performed successfully]
17	SIM → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.5	
18	ME → SIM	FETCH	
19	SIM → ME	PROACTIVE COMMAND : SEND DATA (immediate) 1.3.5	[200 Bytes]
20	ME → SIM	TERMINAL RESPONSE : SEND DATA (immediate) 1.3.5	[Command performed successfully]

PROACTIVE COMMAND: SEND DATA 1.3.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: SIM

Destination device: Channel 1

Channel Data

Channel Data : 200 Bytes of data

Coding:

BER-TLV: D0 D3 81 03 01 43 00 82 02 81 21 B6
C8 xx xx xx xx ..

TERMINAL RESPONSE: SEND DATA 1.3.1Logically:Command details

Command number:	1
Command type:	SEND DATA
Command qualifier:	Store mode

Device identities

Source device:	Channel 1
Destination device:	SIM

Result

General Result:	Command performed successfully
Channel data length:	More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	21	81	83	01	00
	B7	01	FF									

PROACTIVE COMMAND: SEND DATA 1.3.2Logically:Command details

Command number:	1
Command type:	SEND DATA
Command qualifier:	Store mode

Device identities

Source device:	SIM
Destination device:	Channel 1

Channel Data

Channel Data :	200 Bytes of data
----------------	-------------------

Coding:

BER-TLV:	D0	D3	81	03	01	43	00	82	02	81	21	B6
	C8	XX	XX	XX	XX	..						

TERMINAL RESPONSE: SEND DATA 1.3.2Logically:Command details

Command number:	1
Command type:	SEND DATA
Command qualifier:	Store mode

Device identities

Source device:	Channel 1
Destination device:	SIM

Result

General Result:	Command performed successfully
Channel data length:	More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	21	81	83	01	00
	B7	01	FF									

PROACTIVE COMMAND: SEND DATA 1.3.3Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND DATA
Command qualifier:	Store mode
<u>Device identities</u>	
Source device:	SIM
Destination device:	Channel 1
<u>Channel Data</u>	
Channel Data :	200 Bytes of data

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>D3</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>43</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>21</u>	<u>B6</u>
	<u>C8</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>..</u>						

TERMINAL RESPONSE: SEND DATA 1.3.3Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND DATA
Command qualifier:	Store mode
<u>Device identities</u>	
Source device:	Channel 1
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully
Channel data length:	More than 255 bytes of space available in the Tx buffer

Coding:

<u>BER-TLV:</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>43</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>21</u>	<u>81</u>	<u>83</u>	<u>01</u>	<u>00</u>
	<u>B7</u>	<u>01</u>	<u>FF</u>									

PROACTIVE COMMAND: SEND DATA 1.3.4Logically:

<u>Command details</u>	
Command number:	1
Command type:	SEND DATA
Command qualifier:	Store mode
<u>Device identities</u>	
Source device:	SIM
Destination device:	Channel 1
<u>Channel Data</u>	
Channel Data :	200 Bytes of data

Coding:

<u>BER-TLV:</u>	<u>D0</u>	<u>D3</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>43</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>21</u>	<u>B6</u>
	<u>C8</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>..</u>						

TERMINAL RESPONSE: SEND DATA 1.3.4Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SEND DATA</u>
<u>Command qualifier:</u>	<u>Store mode</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>Channel 1</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Channel data length:</u>	<u>200 bytes of space available in the Tx buffer</u>

Coding:

BER-TLV: 81 03 01 43 00 82 02 21 81 83 01 00
 B7 01 C8

PROACTIVE COMMAND: SEND DATA 1.3.5Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SEND DATA</u>
<u>Command qualifier:</u>	<u>Send Immediatly</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>Channel 1</u>
<u>Channel Data</u>	
<u>Channel Data :</u>	<u>200 Bytes of data</u>

Coding:

BER-TLV: D0 D3 81 03 01 43 01 82 02 81 21 B6
 C8 xx xx xx xx ..

TERMINAL RESPONSE: SEND DATA 1.3.5Logically:

<u>Command details</u>	
<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SEND DATA</u>
<u>Command qualifier:</u>	<u>Send Immediatly</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>Channel 1</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Result</u>	
<u>General Result:</u>	<u>Command performed successfully</u>
<u>Channel data length:</u>	<u>No space available in the Tx buffer</u>

Coding:

BER-TLV: 81 03 01 43 01 82 02 21 81 83 01 00
B7 01 00

Expected sequence 1.4 SEND DATA, 2 consecutive SEND DATA Store mode)

For that test, it is assumed that an open channel proactive command has been successfully executed (with a SIM buffer size of 1kB).

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: SEND DATA 1.3.1</u>	
<u>2</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND DATA (store mode) 1.3.1</u>	<u>Send 1kByte of data by packet of 200 Bytes</u>
<u>4</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND DATA (store mode) 1.3.1</u>	<u>[Command performed successfully]</u>
<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>
<u>19</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND DATA (immediate) 1.3.5</u>	
<u>20</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND DATA (immediate) 1.3.5</u>	<u>[Command performed successfully]</u>
<u>21</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: SEND DATA 1.3.1</u>	
<u>22</u>	<u>ME → SIM</u>	<u>FETCH</u>	
<u>23</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND DATA (store mode) 1.3.1</u>	<u>Send 1kByte of data by packet of 200 Bytes</u>
<u>24</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND DATA (store mode) 1.3.1</u>	<u>[Command performed successfully]</u>
<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>
<u>39</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND DATA (immediate) 1.3.5</u>	
<u>40</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND DATA (immediate) 1.3.5</u>	<u>[Command performed successfully]</u>

Expected sequence 1.5 (SEND DATA, immediate mode with a bad channel identifier)

For that test, it is assumed that an open channel proactive command has been successfully executed (channel 1).

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.5.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DATA (immediate) 1.5.1	
4	ME → SIM	TERMINAL RESPONSE : SEND DATA (immediate) 1.1.1	[Invalide channel number]

PROACTIVE COMMAND: SEND DATA 1.5.1

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data : 8 Bytes of data

Coding:

BER-TLV: D0 12 81 03 01 43 01 82 02 81 22 B6
 08 xx xx xx xx ..

TERMINAL RESPONSE: SEND DATA 1.5.1

Logically:

Command details

Command number: 1
Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: Channel 1
Destination device: SIM

Result

General Result: Bearer Independent Protocol error (3A)
Additional Result: Channel identifier not valid (03)

Coding:

BER-TLV: 81 03 01 43 01 82 02 21 81 83 02 3A
 03

Expected sequence 1.6 (SEND DATA, immediate mode, Proactive SIM session terminated by the user)

For that test, it is assumed that an open channel proactive command has been successfully executed.

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	<u>SIM → ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING: SEND DATA 1.6.1</u>	
2	<u>ME → SIM</u>	<u>FETCH</u>	
3	<u>SIM → ME</u>	<u>PROACTIVE COMMAND : SEND</u> <u>DATA (immediate) 1.6.1</u>	
4	<u>ME → SIM</u>	<u>TERMINAL RESPONSE : SEND</u> <u>DATA (immediate) 1.1.1</u>	<u>[Proactive SIM session terminated by the user]</u>

PROACTIVE COMMAND: SEND DATA 1.6.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: SIM

Destination device: Channel 1

Channel Data

Channel Data : 8 Bytes of data

Coding:

BER-TLV: D0 12 81 03 01 43 01 82 02 81 22 B6
 08 xx xx xx xx ..

TERMINAL RESPONSE: SEND DATA 1.6.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: Channel 1

Destination device: SIM

Result

General Result: Proactive SIM session terminated by the user

Coding:

BER-TLV: 81 03 01 43 01 82 02 21 81 83 01 10

27.22.4.31 GET CHANNEL STATUS

27.22.4.31.1 Definition and applicability

See Section 3.2.2.

27.22.4.31.2 Conformance requirements

The ME shall support the class “e” commands as defined in the following technical specifications: 3GPP TS 11.14 [15]

27.22.4.31.3 Test Purpose

To verify that the ME shall send a TERMINAL RESPONSE (Command Performed Successfully) to the SIM after the ME receives the GET STATUS proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

27.22.4.31.4 Method of test

27.22.4.31.4.1 Initial Conditions

The ME is connected to the SIM Simulator. 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.

27.22.4.31.4.2 Procedure

Expected sequence 1.1 (GET STATUS, without any BIP channel opened)

For that test, no channel has been opened.

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: GET CHANNEL STATUS 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : GET STATUS 1.1.1	
4	ME → SIM	TERMINAL GET STATUS 1.1.1	[Command performed successfully]

PROACTIVE COMMAND: GET STATUS 1.1.1

Logically:

Command details

Command number: 1
Command type: GET STATUS
Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV: D0 09 81 03 01 44 00 82 02 81 82

TERMINAL RESPONSE: GET STATUS 1.1.1

Logically:

Command details

Command number: 1
Command type: GET STATUS
Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status

Channel status: No Channel, link not established

Coding:

BER-TLV: 81 03 01 44 00 82 02 82 81 83 01 00
 B8 02 00 00

Expected sequence 1.2 (GET STATUS, with a BIP channel currently opened)

For that test, it is assumed that an OPEN CHANNEL proactive command has been successfully executed (Channel 1).

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: GET CHANNEL STATUS 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : GET STATUS 1.2.1	
4	ME → SIM	TERMINAL GET STATUS 1.2.1	[Command performed successfully]

PROACTIVE COMMAND: GET STATUS 1.2.1

Logically:

Command details

Command number: 1
 Command type: GET STATUS
 Command qualifier: RFU

Device identities

Source device: SIM
 Destination device: ME

Coding:

BER-TLV: D0 09 81 03 01 44 00 82 02 81 82

TERMINAL RESPONSE: GET STATUS 1.2.1

Logically:

Command details

Command number: 1
 Command type: GET STATUS
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Channel status

Channel status: Channel 1 open, link established

Coding:

BER-TLV: 81 03 01 44 00 82 02 82 81 83 01 00
 B8 02 81 00

Expected sequence 1.3 (GET STATUS, after a link dropped)

For that test, it is assumed that an OPEN CHANNEL proactive command has been successfully executed (Channel 1).

Step	Direction	MESSAGE / Action	Comments
1	ME → SIM	ENVELOPE EVENT DOWNLOAD : CHANNEL STATUS 1.3.1	[Link dropped]
2	SIM → ME	PROACTIVE COMMAND PENDING: GET STATUS 1.3.1	
3	ME → SIM	FETCH	
4	SIM → ME	PROACTIVE COMMAND : GET STATUS 1.3.1	
5	ME → SIM	TERMINAL GET STATUS 1.3.1	[Command performed successfully]

ENVELOPE EVENT DOWNLOAD : CHANNEL STATUS 1.3.1

Logically:

Event list
 Event list: Channel Status
Device identities
 Source device: ME
 Destination device: SIM
Channel status
 Channel status: Channel 1, link dropped

Coding:

BER-TLV: D6 0B 99 01 0A 82 02 82 81 B8 02 01
 05

PROACTIVE COMMAND: GET STATUS 1.3.1

Logically:

Command details
 Command number: 1
 Command type: GET STATUS
 Command qualifier: RFU
Device identities
 Source device: SIM
 Destination device: ME

Coding:

BER-TLV: D0 09 81 03 01 44 00 82 02 81 82

TERMINAL RESPONSE: GET STATUS 1.3.1

Logically:

Command details
 Command number: 1
 Command type: GET STATUS
 Command qualifier: RFU
Device identities
 Source device: ME
 Destination device: SIM
Result
 General Result: Command performed successfully
Channel status
 Channel status: Channel 1, link dropped

Coding:

BER-TLV: 81 03 01 44 00 82 02 82 81 83 01 00
 B8 02 01 05

27.22.5 DATA DOWNLOAD TO SIM

27.22.5 Data Download to SIM

27.22.5.1 SMS-PP Data Download

27.22.5.1.1 Definition and applicability

See Section 3.2.2.

27.22.5.1.2 Conformance requirement

The ME shall support the Proactive SIM: SMS-PP Data Download facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.3 (Data download to SIM), 5 (Profile Download), 7.1 (SMS-PP data download), clause 12.1 (Address) clause 12.7 (Device Identities), clause 12.13 (SMS TPDU).

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 ProcedureExpected Sequence 1.1 (SMS-PP Data Download, General Data Coding, Default Alphabet)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	ME	The ME shall be in its normal idle mode	[Start a sequence to verify that the ME returns the RP-ACK message back to the system Simulator, if the SIM responds with '90 00']
2	SS → ME	SMS-PP Data Download Message 1.1.1	
3	ME → USER	The ME shall not display the message or alert the user of a short message waiting	
4	ME → SIM	ENVELOPE: SMS-PP DOWNLOAD 1.1.2	
5	SIM → ME	SW1 / SW2 of '90 00'	
6	ME → SS	RP-ACK.	

SMS-PP (Data Download) Message 1.1.1Logically:

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

Coding:

<u>BER-TLV</u>	<u>04</u>	<u>03</u>	<u>91</u>	<u>21</u>	<u>43</u>	<u>7F</u>	<u>12</u>	<u>89</u>	<u>10</u>	<u>10</u>	<u>00</u>	<u>00</u>
	<u>00</u>	<u>00</u>	<u>0D</u>	<u>53</u>	<u>F4</u>	<u>5B</u>	<u>4E</u>	<u>07</u>	<u>35</u>	<u>CB</u>	<u>F3</u>	<u>79</u>
	<u>F8</u>	<u>5C</u>	<u>06</u>									

ENVELOPE: SMS-PP DOWNLOAD 1.1.2

Logically:

<u>SMS-PP Download</u>	
<u>Device identities</u>	
<u>Source device:</u>	<u>Network</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Address</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Dialling number string</u>	<u>"112233445566778"</u>
<u>SMS TPDU</u>	
<u>TP-MTI</u>	<u>SMS-DELIVER</u>
<u>TP-MMS</u>	<u>No more messages waiting for the MS in this SC</u>
<u>TP-RP</u>	<u>TP-Reply-Path is not set in this SMS-DELIVER</u>
<u>TP-UDHI</u>	<u>TP-UD field contains only the short message</u>
<u>TP-SRI</u>	<u>A status report will not be returned to the SME</u>
<u>TP-OA</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Address value</u>	<u>"1234"</u>
<u>TP-PID</u>	<u>SIM Data download</u>
<u>TP-DCS</u>	
<u>Coding Group</u>	<u>General Data Coding</u>
<u>Compression</u>	<u>Text is uncompressed</u>
<u>Message Class</u>	<u>Class 2 SIM Specific Message</u>
<u>Alphabet</u>	<u>Default Alphabet</u>
<u>TP-SCTS:</u>	<u>01/01/98 00:00:00 +0</u>
<u>TP-UDL</u>	<u>13</u>
<u>TP-UD</u>	<u>"Short Message"</u>

Coding:

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

Expected Sequence 1.2 (SMS-PP Data Download, General Data Coding, Default Alphabet, GET RESPONSE, Acknowledgement)

Step	Direction	MESSAGE / Action	Comments
1	<u>SS → ME</u>	<u>SMS-PP Data Download Message 1.2.1</u>	
2	<u>ME → USER</u>	<u>The ME shall not display the message or alert the user of a short message waiting.</u>	
3	<u>ME → SIM</u>	<u>ENVELOPE: SMS-PP DOWNLOAD 1.2.2</u>	
4	<u>SIM → ME</u>	<u>RESPONSE DATA AVAILABLE</u>	<u>[SW1 / SW2 of '9F 0B']</u>
5	<u>ME → SIM</u>	<u>GET RESPONSE</u>	
6	<u>SIM → ME</u>	<u>SMS-PP Data Download SIM Acknowledgement 1.2.3</u>	
7	<u>ME → SS</u>	<u>SMS-PP Data Download SIM Acknowledgement 1.2.4 in the TP-User-Data element of the RP-ACK message. The values of protocol identifier and data coding scheme in RP-ACK shall be as in the original message.</u>	

Expected Sequence 1.3 (SMS-PP Data Download, General Data Coding, Default Alphabet, FETCH, MORE TIME)

Step	Direction	MESSAGE / Action	Comments
1	<u>SS → ME</u>	<u>SMS-PP Data Download Message 1.3.1</u>	
2	<u>ME → USER</u>	<u>The ME shall not display the message or alert the user of a short message waiting</u>	
3	<u>ME → SIM</u>	<u>ENVELOPE: SMS-PP DOWNLOAD 1.3.2</u>	
4	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: MORE TIME 1.3.3</u>	<u>[SW1 / SW2 of '91 0B']</u>
5	<u>ME → SS</u>	<u>RP-ACK</u>	
6	<u>ME → SIM</u>	<u>FETCH</u>	
7	<u>SIM → ME</u>	<u>PROACTIVE COMMAND: MORE TIME 1.3.4</u>	
8	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: MORE TIME 1.3.5</u>	
9	<u>SIM → ME</u>	<u>PROACTIVE SIM SESSION ENDED</u>	

PROACTIVE COMMAND : MORE TIME 1.3.4

Logically:

Command details

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

Device identities

Source device: SIM
Destination device: ME

Coding:

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

TERMINAL RESPONSE : MORE TIME 1.3.5

Logically:

Command details

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

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

Expected Sequence 1.4 (SMS-PP Data Download, General Data Coding, 8 Bit Alphabet)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SS → ME	SMS-PP Data Download Message 1.4.1	
2	ME	The ME shall not display the message or alert the user of a short message waiting	
3	ME → SIM	ENVELOPE: SMS-PP DOWNLOAD 1.4.2	
4	SIM → ME	SW1 / SW2 of '90 00'	
5	ME → SS	RP-ACK	

SMS-PP (Data Download) Message 1.2.1 / 1.3.1 / 1.4.1

Logically:

<u>SMS TPDU</u>	
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
<u>TP-OA</u>	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"1234"
TP-PID	SIM Data download
<u>TP-DCS</u>	
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:	04	03	91	21	43	7F	16	89	10	10	00	00
	00	00	0D	53	68	6F	72	74	20	4D	65	73
	73	61	67	65								

ENVELOPE: SMS-PP DOWNLOAD 1.2.2 / 1.3.2 / 1.4.2.

Logically:

<u>SMS-PP Download</u>	
<u>Device identities</u>	
Source device:	Network
Destination device:	SIM
<u>Address</u>	
TON	International number
NPI	"ISDN / telephone numbering plan"
Dialling number string	"112233445566778"
<u>SMS TPDU</u>	
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
<u>TP-OA</u>	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"1234"
TP-PID	SIM Data download
<u>TP-DCS</u>	
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

Expected Sequence 1.5 (SMS-PP Data Download, Data Coding / Message Class, Default Alphabet)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>ME</u>	<u>The ME shall be in its normal idle mode.</u>	
<u>2</u>	<u>SS → ME</u>	<u>SMS-PP Data Download Message 1.5.1.</u>	
<u>3</u>	<u>ME</u>	<u>The ME shall not display the message or alert the user of a short message waiting</u>	
<u>4</u>	<u>ME → SIM</u>	<u>ENVELOPE: SMS-PP DOWNLOAD 1.5.2.</u>	
<u>5</u>	<u>SIM → ME</u>	<u>SW1 / SW2 of '90 00'</u>	
<u>6</u>	<u>ME → SS</u>	<u>RP-ACK</u>	

SMS-PP (Data Download) Message 1.5.1

Logically:

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

Coding:

<u>BER-TLV:</u>	<u>04</u>	<u>03</u>	<u>91</u>	<u>21</u>	<u>43</u>	<u>7F</u>	<u>F2</u>	<u>89</u>	<u>10</u>	<u>10</u>	<u>00</u>	<u>00</u>
	<u>00</u>	<u>00</u>	<u>0D</u>	<u>53</u>	<u>F4</u>	<u>5B</u>	<u>4E</u>	<u>07</u>	<u>35</u>	<u>CB</u>	<u>F3</u>	<u>79</u>
	<u>F8</u>	<u>5C</u>	<u>06</u>									

ENVELOPE: SMS-PP DOWNLOAD 1.5.2

Logically:

<u>SMS-PP Download</u>	
<u>Device identities</u>	
<u>Source device:</u>	<u>Network</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Address</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Dialling number string</u>	<u>"112233445566778"</u>
<u>SMS TPDU</u>	
<u>TP-MTI</u>	<u>SMS-DELIVER</u>
<u>TP-MMS</u>	<u>No more messages waiting for the MS in this SC</u>
<u>TP-RP</u>	<u>TP-Reply-Path is not set in this SMS-DELIVER</u>
<u>TP-UDHI</u>	<u>TP-UD field contains only the short message</u>
<u>TP-SRI</u>	<u>A status report will not be returned to the SME</u>
<u>TP-OA</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Address value</u>	<u>"1234"</u>
<u>TP-PID</u>	<u>SIM Data download</u>
<u>TP-DCS</u>	
<u>Coding Group</u>	<u>Data Coding / Message Class</u>
<u>Message Coding</u>	<u>Default Alphabet</u>
<u>Message Class</u>	<u>Class 2 SIM Specific Message</u>
<u>TP-SCTS:</u>	<u>01/01/98 00:00:00 +0</u>
<u>TP-UDL</u>	<u>13</u>
<u>TP-UD</u>	<u>"Short Message"</u>

Coding:

<u>BER-TLV:</u>	<u>D1</u>	<u>2C</u>	<u>82</u>	<u>02</u>	<u>83</u>	<u>81</u>	<u>06</u>	<u>09</u>	<u>91</u>	<u>11</u>	<u>22</u>	<u>33</u>
	<u>44</u>	<u>55</u>	<u>66</u>	<u>77</u>	<u>F8</u>	<u>8B</u>	<u>1B</u>	<u>04</u>	<u>04</u>	<u>91</u>	<u>21</u>	<u>43</u>

7F F2 89 10 10 00 00 00 00 0D 53 F4
5B 4E 07 35 CB F3 79 F8 5C 06

Expected Sequence 1.6 (SMS-PP Data Download, with Data Coding / Message Class, 8 Bit Alphabet)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SS → ME</u>	<u>SMS-PP Data Download Message</u> <u>1.6.1</u>	
<u>2</u>	<u>ME</u>	<u>The ME shall not display the</u> <u>message or alert the user of a</u> <u>short message waiting</u>	
<u>3</u>	<u>ME → SIM</u>	<u>ENVELOPE: SMS-PP</u> <u>DOWNLOAD 1.6.2</u>	
<u>4</u>	<u>SIM → ME</u>	<u>SW1 / SW2 of '90 00'</u>	
<u>5</u>	<u>ME → SS</u>	<u>RP-ACK</u>	

SMS-PP (Data Download) Message 1.6.1Logically:

<u>SMS TPDU</u>	
<u>TP-MTI</u>	<u>SMS-DELIVER</u>
<u>TP-MMS</u>	<u>No more messages waiting for the MS in this SC</u>
<u>TP-RP</u>	<u>TP-Reply-Path is not set in this SMS-DELIVER</u>
<u>TP-UDHI</u>	<u>TP-UD field contains only the short message</u>
<u>TP-SRI</u>	<u>A status report will not be returned to the SME</u>
<u>TP-OA</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Address value</u>	<u>"1234"</u>
<u>TP-PID</u>	<u>SIM Data download</u>
<u>TP-DCS</u>	
<u>Coding Group</u>	<u>Data Coding / Message Class</u>
<u>Message Coding</u>	<u>8 bit</u>
<u>Message Class</u>	<u>Class 2 SIM Specific Message</u>
<u>TP-SCTS:</u>	<u>01/01/98 00:00:00 +0</u>
<u>TP-UDL</u>	<u>13</u>
<u>TP-UD</u>	<u>"Short Message"</u>

Coding:

<u>BER-TLV:</u>	<u>04</u>	<u>03</u>	<u>91</u>	<u>21</u>	<u>43</u>	<u>7F</u>	<u>F6</u>	<u>89</u>	<u>10</u>	<u>10</u>	<u>00</u>	<u>00</u>
	<u>00</u>	<u>00</u>	<u>0D</u>	<u>53</u>	<u>68</u>	<u>6F</u>	<u>72</u>	<u>74</u>	<u>20</u>	<u>4D</u>	<u>65</u>	<u>73</u>
	<u>73</u>	<u>61</u>	<u>67</u>	<u>65</u>								

ENVELOPE: SMS-PP DOWNLOAD 1.6.2Logically:

<u>SMS-PP Download</u>	
<u>Device identities</u>	
<u>Source device:</u>	<u>Network</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Address</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Dialling number string</u>	<u>"112233445566778"</u>
<u>SMS TPDU</u>	
<u>TP-MTI</u>	<u>SMS-DELIVER</u>
<u>TP-MMS</u>	<u>No more messages waiting for the MS in this SC</u>
<u>TP-RP</u>	<u>TP-Reply-Path is not set in this SMS-DELIVER</u>
<u>TP-UDHI</u>	<u>TP-UD field contains only the short message</u>
<u>TP-SRI</u>	<u>A status report will not be returned to the SME</u>
<u>TP-OA</u>	
<u>TON</u>	<u>International number</u>
<u>NPI</u>	<u>"ISDN / telephone numbering plan"</u>
<u>Address value</u>	<u>"1234"</u>
<u>TP-PID</u>	<u>SIM Data download</u>
<u>TP-DCS</u>	
<u>Coding Group</u>	<u>Data Coding / Message Class</u>
<u>Message Coding</u>	<u>8 bit</u>
<u>Message Class</u>	<u>Class 2 SIM Specific Message</u>
<u>TP-SCTS:</u>	<u>01/01/98 00:00:00 +0</u>
<u>TP-UDL</u>	<u>13</u>
<u>TP-UD</u>	<u>"Short Message"</u>

Coding:

<u>BER-TLV:</u>	<u>D1</u>	<u>2D</u>	<u>82</u>	<u>02</u>	<u>83</u>	<u>81</u>	<u>06</u>	<u>09</u>	<u>91</u>	<u>11</u>	<u>22</u>	<u>33</u>
	<u>44</u>	<u>55</u>	<u>66</u>	<u>77</u>	<u>F8</u>	<u>8B</u>	<u>1C</u>	<u>04</u>	<u>04</u>	<u>91</u>	<u>21</u>	<u>43</u>
	<u>7F</u>	<u>F6</u>	<u>89</u>	<u>10</u>	<u>10</u>	<u>00</u>	<u>00</u>	<u>00</u>	<u>00</u>	<u>0D</u>	<u>53</u>	<u>68</u>
	<u>6F</u>	<u>72</u>	<u>74</u>	<u>20</u>	<u>4D</u>	<u>65</u>	<u>73</u>	<u>73</u>	<u>61</u>	<u>67</u>	<u>65</u>	

SMS-PP Data Download SIM Acknowledgement 1.2.4

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

27.22.5.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences.

27.22.5.2 SMS-CB Data Download27.22.5.2.1 Definition and applicability

See Section 3.2.2.

27.22.5.2.2 Conformance requirement

The ME shall support the Proactive SIM: SMS-CB Data Download facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.3 (Data download to SIM), 5 (Profile Download), clause 7.2 (Cell Broadcast data download), clause 12.5 (Cell Broadcast Page), clause 12.7 (Device Identities).

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 Test27.22.5.2.4.1 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

Expected Sequence 1 (SMS-CB (Data Download), ENVELOPE(SMS-CB DOWNLOAD), ME does not display message)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SS → ME</u>	<u>SMS-CB (DATA DOWNLOAD)</u>	<u>Message identifier '10 01'</u>
<u>2</u>	<u>ME → SIM</u>	<u>1.1 ENVELOPE (SMS-CB DOWNLOAD) 1.1</u>	
<u>3</u>	<u>SIM → ME</u>	<u>SW1, SW2 '90 00'</u>	

SMS-CB (Data Download) Message 1.1

Logically:

Message Content
Serial Number
 Geographical scope: Cell wide, normal display mode
 Message code: 1
 Update number: 1
 Message Identifier: "1001"
Data Coding Scheme
 Message coding: 8 bit data
 Message class: No message class
Page Parameter
 Total number of pages: 1
 Page number: 1
 Content of message: "Cell Broadcast ".

Coding:

```

BER-TLV:  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
    
```

ENVELOPE: SMS-CB DOWNLOAD 1.1

Logically:

<u>Cell Broadcast Download</u>	
<u>Device identities</u>	
Source device:	Network
Destination device:	SIM
<u>Cell Broadcast page</u>	
<u>Serial Number</u>	
Geographical scope:	Cell wide, normal display mode
Message code:	1
Update number:	1
Message Identifier:	"1001"
<u>Data Coding Scheme</u>	
Message coding:	8 bit data
Message class:	No message class
<u>Page Parameter</u>	
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

Expected Sequence 2 (SMS-CB(DATA DOWNLOAD), ENVELOPE(SMS-CB DATA DOWNLOAD), FETCH, MORE TIME, ME does not display message)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SS → ME	SMS-CB (DATA DOWNLOAD)	Message identifier '10 01'
2	ME → SIM	1.1 ENVELOPE (SMS-CB DOWNLOAD) 1.1	
3	SIM → ME		SW1/SW2 '91 0B'
4	ME → SIM	FETCH 1.1	
5	SIM → ME	PROACTIVE COMMAND:MORE TIME 1.1	
6	ME → SIM	TERMINAL RESPONSE	
7	SIM → ME	SW1/SW2 '90 00'	SIM session ended

PROACTIVE COMMAND : MORE TIME 1.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	MORE TIME
Command qualifier:	"00"
<u>Device identities</u>	
Source device:	SIM
Destination device:	ME

Coding:

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

TERMINAL RESPONSE : MORE TIME 1.1

Logically:

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

Coding:

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

Expected Sequence 3 (SMS-CB (DATA DOWNLOAD), ME displays message)

Step	Direction	MESSAGE / Action	Comments
1	SS → ME	SMS-CB (DATA DOWNLOAD) 1.2	Message identifier '0C 0C'

SMS-CB (Data Download) Message 1.2

Logically:

Message Content
Serial Number
Geographical scope: Cell wide, normal display mode
Message code: 1
Update number: 1
Message Identifier: "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:

BER-TLV: 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

ENVELOPE: SMS-CB DOWNLOAD 1.1

Logically:

<u>Cell Broadcast Download</u>	
<u>Device identities</u>	
Source device:	Network
Destination device:	SIM
<u>Cell Broadcast page</u>	
<u>Serial Number</u>	
Geographical scope:	Cell wide, normal display mode
Message code:	1
Update number:	1
Message Identifier:	"0C0C"
<u>Data Coding Scheme</u>	
Message coding:	8 bit data
Message class:	No message class
<u>Page Parameter</u>	
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	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	20	20	20	20

27.22.5.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences.

27.22.6 CALL CONTROL BY SIM

27.22.6.1 Procedure for Mobile Originated calls

27.22.6.1.1 Definition and applicability

See Section 3.2.2.

27.22.6.1.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 9.1.1

27.22.6.1.3 Test Purpose

To verify that for all call set-up attempts , even those resulting from a SET UP CALL proactive SIM command, the ME shall first pass the call set-up details (dialled digits and associated parameters) to the SIM, using the ENVELOPE (CALL CONTROL)

To verify that if the SIM responds with '90 00', the ME shall set up the call with the dialled digits and other parameters as sent to the SIM.

To verify that if the SIM responds with '9F XX', the ME shall use the GET RESPONSE command to get the response data. The response data from the SIM shall indicate to the ME whether to set up the call as proposed, not set up the call, set up a call using the data supplied by the SIM

To verify that, in the case where the initial call set-up request results from a proactive SET UP CALL, if the call control result is "not allowed" or "allowed with modifications", the ME shall inform the SIM using TERMINAL RESPONSE "interaction with call control by SIM or MO short message control by SIM, action not allowed".

To verify that it is possible for the SIM to request the ME to set up an emergency call by supplying the number "112" as the response data.

27.22.6.1.4 method of tests

27.22.6.1.4.1 Initial Conditions

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

The GSM parameters of the system simulator are :

Mobile country Code (MCC) = 1,

Mobile network code (MNC) = 1,

Location Area code (LAC) = 1,

Cell Identity value = 1,

The elementary files are coded as SIM Application Toolkit default.

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

The call control service is allocated and activated in the SIM Service Table.

27.22.6.1.4.2 Procedure

Expected Sequence 1.1 (CALL CONTROL BY SIM , set up call attempt by user, the SIM responds with '90 00')

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
<u>1</u>	<u>User -> ME</u>	<u>Set up a call to "+01234567890123456789"</u>	
<u>2</u>	<u>ME -> SIM</u>	<u>ENVELOPE CALL CONTROL 1.1.1</u>	
<u>3</u>	<u>SIM -> ME</u>	<u>90 00</u>	
<u>4</u>	<u>ME</u>	<u>The ME sets up the call without modification</u>	<u>[Set up call to "+01234567890123456789"</u>

ENVELOPE CALL CONTROL 1.1.1Logically:Device identities

Source device: ME
 Destination device: SIM

Address

TON: International
 NPI: “ISDN / telephone numbering plan” or “unknown”
 Dialling number string “01234567890123456789”

Location Information

MCC & MNC the mobile country and network code (F110)
 LAC the location Area Code (1)
 Cell ID Cell Identity Value (0001)

Coding

BER-TLV: D4 1A 82 02 82 81 86 0B 91 10 32 54
76 98 10 32 54 76 98 13 07 00 F1 10
00 01 00 01

Expected Sequence 1.2 (CALL CONTROL BY SIM , set up call attempt by user, allowed without modification)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
<u>1</u>	<u>User -> ME</u>	<u>Set up a call to</u> <u>“+01234567890123456789”</u>	
<u>2</u>	<u>ME -> SIM</u>	<u>ENVELOPE CALL CONTROL</u> <u>1.2.1</u>	
<u>3</u>	<u>SIM -> ME</u>	<u>9F 02</u>	
<u>4</u>	<u>ME -> SIM</u>	<u>GET RESPONSE</u>	
<u>5</u>	<u>SIM -> ME</u>	<u>CALL CONTROL RESULT 1.2.1</u>	<u>[Call control result : “Allowed, no</u> <u>modification”]</u>
<u>6</u>	<u>ME</u>	<u>The ME sets up the call without</u> <u>modification</u>	<u>[Set up call to</u> <u>“+01234567890123456789”</u>

ENVELOPE CALL CONTROL 1.2.1Logically:Device identities

Source device: ME
 Destination device: SIM

Address

TON: International
 NPI: “ISDN / telephone numbering plan” or “unknown”
 Dialling number string “01234567890123456789”

Location Information

MCC & MNC the mobile country and network code (F110)
 LAC the location Area Code (1)
 Cell ID Cell Identity Value (0001)

Coding

BER-TLV: D4 1A 82 02 82 81 86 0B 91 10 32 54
 76 98 10 32 54 76 98 13 07 00 F1 10
 00 01 00 01

CALL CONTROL RESULT 1.2.1

Logically:

Call control result : '00' = Allowed, no modification

Coding

BER-TLV: 00 00

Expected Sequence 1.3 (CALL CONTROL BY SIM , set up call attempt resulting from a set up call proactive command, allowed without modification)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	SIM -> ME	PROACTIVE COMMAND PENDING	
2	ME->SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SET UP CALL 1.3.1	[Set up call to "+012340123456"]
4	ME -> SIM	ENVELOPE CALL CONTROL 1.3.1	
5	SIM -> ME	9F 02	
6	ME -> SIM	GET RESPONSE	
7	SIM -> ME	CALL CONTROL RESULT 1.3.1	[Call control result : "Allowed, no modification"]
8	ME -> SIM	TERMINAL RESPONSE: SET UP CALL 1.3.1	[command performed successfully]
9	ME	The ME sets up the call without modification	[Set up call to "+012340123456"]

PROACTIVE COMMAND : SET UP CALL 1.3.1

Logically:

Command details

Command number: 1
 Command type: SET UP CALL
 Command qualifier: Only if not currently busy on another call

Device identities

Source device: SIM
 Destination device: Network

Alpha identifier: the initial phone number ("+012340123456")

Address

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

Coding

BER-TLV: D0 21 81 03 01 10 00 82 02 81 83
 05 0D 2B 30 31 32 33 34 30 31 32
 33 34 35 36 86 07 91 10 32 04 21
 43 65

ENVELOPE CALL CONTROL 1.3.1

Logically:

<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Address</u>	
TON:	International
NPI:	"ISDN / telephone numbering plan" or "unknown"
Dialling number string	"012340123456"
<u>Location Information</u>	
MCC & MNC	the mobile country and network code (F110)
LAC	the location Area Code (1)
Cell ID	Cell Identity Value (0001)

Coding

BER-TLV:	D4	16	02	02	82	81	06	07	91	10	32
	04	21	43	65	13	07	00	F1	10	00	01
	00	01									

CALL CONTROL RESULT 1.3.1

Logically:

Call control result : '00' = Allowed, no modification

Coding

BER-TLV:	00	00
----------	----	----

TERMINAL RESPONSE : SET UP CALL 1.3.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	Only if not currently busy on another call
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Command performed successfully

Coding:

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

Expected Sequence 1.4 (CALL CONTROL BY SIM , set up call attempt by user, not allowed)

Step	Direction	Message / Action	Comments
1	User -> ME	Set up a call to "+01234567890123456789"	
2	ME -> SIM	ENVELOPE CALL CONTROL 1.4.1	
3	SIM -> ME	9F 02	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 1.4.1	[Call control result : "not Allowed"]
6	ME	The ME does not set up the call	

ENVELOPE CALL CONTROL 1.4.1Logically:

<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Address</u>	
TON:	International
NPI:	“ISDN / telephone numbering plan” or “unknown”
Dialling number string	“+01234567890123456789”
<u>Location Information</u>	
MCC & MNC	the mobile country and network code (F110)
LAC	the location Area Code (1)
Cell ID	Cell Identity Value (0001)

Coding

<u>BER-TLV:</u>	<u>D4</u>	<u>1A</u>	<u>82</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>86</u>	<u>0B</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>54</u>
	<u>76</u>	<u>98</u>	<u>10</u>	<u>32</u>	<u>54</u>	<u>76</u>	<u>98</u>	<u>13</u>	<u>07</u>	<u>00</u>	<u>F1</u>	<u>10</u>
	<u>00</u>	<u>01</u>	<u>00</u>	<u>01</u>								

CALL CONTROL RESULT 1.4.1Logically:

Call control result : '01' = not Allowed

Coding

BER-TLV: 01 00

Expected Sequence 1.5 (CALL CONTROL BY SIM , set up call attempt resulting from a set up call proactive command, not allowed)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	SIM -> ME	PROACTIVE COMMAND PENDING	
2	ME->SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SET UP CALL 1.5.1	[Set up call to “+012340123456”]
4	ME -> SIM	ENVELOPE CALL CONTROL 1.5.1	
5	SIM -> ME	9F 02	
6	ME -> SIM	GET RESPONSE	
7	SIM -> ME	CALL CONTROL RESULT 1.5.1	[Call control result : “Not Allowed”]
8	ME -> SIM	TERMINAL RESPONSE: SET UP CALL 1.5.1	Permanent Problem – Interaction with Call Control by SIM]
9	ME	The ME does not set up the call	

PROACTIVE COMMAND : SET UP CALL 1.5.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	Only if not currently busy on another call
<u>Device identities</u>	
Source device:	SIM
Destination device:	Network
Alpha identifier:	the initial phone number (“+012340123456”)
<u>Address</u>	
TON:	International
NPI:	“ISDN / telephone numbering plan”
Dialling number string	“012340123456”

Coding

<u>BER-TLV:</u>	<u>D0</u>	<u>21</u>	<u>81</u>	<u>03</u>	<u>01</u>	<u>10</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>81</u>	<u>83</u>
	<u>05</u>	<u>0D</u>	<u>2B</u>	<u>30</u>	<u>31</u>	<u>32</u>	<u>33</u>	<u>34</u>	<u>30</u>	<u>31</u>	<u>32</u>
	<u>33</u>	<u>34</u>	<u>35</u>	<u>36</u>	<u>86</u>	<u>07</u>	<u>91</u>	<u>10</u>	<u>32</u>	<u>04</u>	<u>21</u>
	<u>43</u>	<u>65</u>									

ENVELOPE CALL CONTROL 1.5.1Logically:

<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Address</u>	
TON:	International
NPI:	“ISDN / telephone numbering plan” or “unknown”
Dialling number string	“012340123456”
<u>Location Information</u>	
MCC & MNC	the mobile country and network code (F110)
LAC	the location Area Code (1)
Cell ID	Cell Identity Value (0001)

Coding

<u>BER-TLV:</u>	<u>D4</u>	<u>16</u>	<u>02</u>	<u>02</u>	<u>82</u>	<u>81</u>	<u>06</u>	<u>07</u>	<u>91</u>	<u>10</u>	<u>32</u>
	<u>04</u>	<u>21</u>	<u>43</u>	<u>65</u>	<u>13</u>	<u>07</u>	<u>00</u>	<u>F1</u>	<u>10</u>	<u>00</u>	<u>01</u>
	<u>00</u>	<u>01</u>									

CALL CONTROL RESULT 1.5.1Logically:

Call control result :	'01' = not Allowed
-----------------------	--------------------

Coding

<u>BER-TLV:</u>	<u>01</u>	<u>00</u>
-----------------	-----------	-----------

TERMINAL RESPONSE : SET UP CALL 1.5.1

Logically:

<u>Command details</u>	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	Only if not currently busy on another call
<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Result</u>	
General Result:	Interaction with call control by SIM or MO short message control by SIM, permanent problem
Additional information :	Action not allowed

Coding:

BER-TLV: 81 03 01 10 00 82 02 82 81 83 02 39
 01

Expected Sequence 1.6 (CALL CONTROL BY SIM , set up call attempt by user, allowed with modifications)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	User -> ME	Set up a call to "+01234567890123456789"	
2	ME -> SIM	ENVELOPE CALL CONTROL 1.6.1	
3	SIM -> ME	9F 07	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 1.6.1	[Call control result : "Allowed with modifications",]
6	ME	The ME sets up the call to "+010203"	

ENVELOPE CALL CONTROL 1.6.1

Logically:

<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Address</u>	
TON:	International
NPI:	“ISDN / telephone numbering plan” or “unknown”
Dialling number string	“01234567890123456789”
<u>Location Information</u>	
MCC & MNC	the mobile country and network code (F110)
LAC	the location Area Code (1)
Cell ID	Cell Identity Value (0001)

Coding

BER-TLV:	D4	1A	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	13	07	00	F1	10
	00	01	00	01								

CALL CONTROL RESULT 1.6.1

Logically:

Call control result :	'02' = Allowed with modifications
<u>Address</u>	
TON:	International
NPI:	“ISDN / telephone numbering plan” or “unknown”
Dialling number string	“010203”

Coding

Coding:	02	06	86	04	91	10	20	30
---------	----	----	----	----	----	----	----	----

Expected Sequence 1.7 (CALL CONTROL BY SIM , set up call attempt resulting from a set up call proactive command, allowed with modifications)

Step	Direction	Message / Action	Comments
1	SIM -> ME	PROACTIVE COMMAND PENDING	
2	ME->SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SET UP CALL 1.7.1	[Set up call to “+012340123456”]
4	ME -> SIM	ENVELOPE CALL CONTROL 1.7.1	
5	SIM -> ME	9F 0B	
6	ME -> SIM	GET RESPONSE	
7	SIM -> ME	CALL CONTROL RESULT 1.7.1	[Call control result : “Allowed with modifications”.]
8	ME -> SIM	TERMINAL RESPONSE: SET UP CALL 1.7.1	[command performed successfully]
9	ME	The ME sets up the call to “+011111111111”	

PROACTIVE COMMAND : SET UP CALL 1.7.1

Logically:

<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Address</u>	
TON:	National
NPI:	"ISDN / telephone numbering plan" or "unknown"
Dialling number string	"+012340123456"
<u>Location Information</u>	
MCC & MNC	the mobile country and network code (F110)
LAC	the location Area Code (1)
Cell ID	Cell Identity Value (0001)

Coding

BER-TLV:	D4	15	02	02	82	81	06	06	80	FB	21
	43	10	32	13	07	00	F1	10	00	01	00
	01										

ENVELOPE CALL CONTROL 1.7.1Logically:

<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Address</u>	
TON:	International
NPI:	"ISDN / telephone numbering plan" or "unknown"
Dialling number string	"012340123456"
<u>Location Information</u>	
MCC & MNC	the mobile country and network code (F110)
LAC	the location Area Code (1)
Cell ID	Cell Identity Value (0001)

Coding

BER-TLV:	D4	16	02	02	82	81	06	07	91	10	32
	04	21	43	65	13	07	00	F1	10	00	01
	00	01									

CALL CONTROL RESULT 1.7.1Logically:

Call control result :	'02' = Allowed with modifications
<u>Address</u>	
TON:	National
NPI:	"ISDN / telephone numbering plan" or "unknown"
Dialling number string	"+012340123450"

Coding

BER-TLV:	02	0A	86	06	07	91	10	11	11	11	11
	11										

TERMINAL RESPONSE : SET UP CALL 1.7.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: Only if not currently busy on another call
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully

Coding:

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

Expected Sequence 1.8 (CALL CONTROL BY SIM , set up call attempt by user, allowed with modifications : emergency call)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	User -> ME	Set up a call to "+01234567890123456789"	
2	ME -> SIM	ENVELOPE CALL CONTROL 1.8.1	
3	SIM -> ME	9F.06	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 1.8.1	[Call control result : "Allowed with modifications",.]
6	ME	The ME sets up the emergency call to "112"	

ENVELOPE CALL CONTROL 1.8.1

Logically:

Device identities
Source device: ME
Destination device: SIM
Address
TON: International
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "01234567890123456789"
Location Information
MCC & MNC the mobile country and network code (F110)
LAC the location Area Code (1)
Cell ID Cell Identity Value (0001)

Coding

BER-TLV: D4 1A 82 02 82 81 86 0B 91 10 32 54
 76 98 10 32 54 76 98 13 07 00 F1 10
 00 01 00 01

CALL CONTROL RESULT 1.8.1

Logically:

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

Coding: 02 05 86 03 81 11 F2

Expected Sequence 1.9 (CALL CONTROL BY SIM , set up call attempt by user, allowed with modifications : number in EF_ECC)

Step	Direction	Message / Action	Comments
1	User -> ME	Set up a call to "+01234567890123456789"	
2	ME -> SIM	ENVELOPE CALL CONTROL 1.9.1	
3	SIM -> ME	9F 06	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 1.9.1	[Call control result : "Allowed with modifications",]
6	ME	The ME sets up call with the dialled digits "1020". The ME does not set up an emergency call	

ENVELOPE CALL CONTROL 1.9.1

Logically:

Device identities
 Source device: ME
 Destination device: SIM
 Address
 TON: International
 NPI: "ISDN / telephone numbering plan" or "unknown"
 Dialling number string "01234567890123456789"
 Location Information
 MCC & MNC the mobile country and network code (F110)
 LAC the location Area Code (1)
 Cell ID Cell Identity Value (0001)

Coding

BER-TLV: D4 1A 82 02 82 81 86 0B 91 10 32 54
 76 98 10 32 54 76 98 13 07 00 F1 10
 00 01 00 01

CALL CONTROL RESULT 1.9.1

Logically:

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

Coding: 02 05 86 03 81 01 02

[Expected Sequence 1.10 \(CALL CONTROL BY SIM , set up call attempt by user to an emergency call \)](#)

Step	Direction	Message / Action	Comments
1	User -> ME	Set up a call to "112"	
2	ME	The ME does not send any ENVELOPE CALL CONTROL 1.9.1, set up the emergency call	

[Expected Sequence 1.11 \(CALL CONTROL BY SIM , set up call through call register, the SIM responds with '90 00'\)](#)

[Pre-condition : the ME has a mean to register the last dialed number\(s\), and the ME will store dialed numbers allowed by call control in its register.](#)

Step	Direction	Message / Action	Comments
1	User -> ME	Set up a call to "+01234567890123456789"	
2	ME -> SIM	ENVELOPE CALL CONTROL 1.1.1	
3	SIM -> ME	90 00	
4	ME	The ME sets up the call without modification	[Set up call to "+01234567890123456789"
5	USER -> ME	End Call.	
6	USER -> ME	Recall the last dialed number	
7	ME -> SIM	ENVELOPE CALL CONTROL 1.1.1	
8	SIM -> ME	90 00	
9	ME	The ME sets up the call without modification	[Set up call to "+01234567890123456789"
10	USER -> ME	End Call.	

[Expected Sequence 1.12 \(CALL CONTROL BY SIM , set up call through call register, allowed without modification\)](#)

[Pre-condition : the ME has a mean to register the last dialed number\(s\), and the ME will store dialed numbers allowed by call control in its register.](#)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	User -> ME	Set up a call to "+01234567890123456789"	
2	ME -> SIM	ENVELOPE CALL CONTROL 1.2.1	
3	SIM -> ME	9F 02	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 1.2.1	[Call control result : "Allowed, no modification"]
6	ME	The ME sets up the call without modification	[Set up call to "+01234567890123456789"
7	User -> ME	End the call then call the last dialled number	
8	ME -> SIM	ENVELOPE CALL CONTROL 1.2.1	
9	SIM -> ME	9F 02	[Call control result : "Allowed, no modification"]
10	ME -> SIM	GET RESPONSE	[Set up call to "+01234567890123456789"
11	SIM -> ME	CALL CONTROL RESULT 1.2.1	

Expected Sequence 1.13 (CALL CONTROL BY SIM , set up call through call register, not allowed)

Pre-condition : the ME has a mean to register the last dialed number(s), and the ME will store dialled numbers not allowed by call control in its register.

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	User -> ME	Set up a call to "+01234567890123456789"	
2	ME -> SIM	ENVELOPE CALL CONTROL 1.4.1	
3	SIM -> ME	9F 02	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 1.4.1	[Call control result : "not Allowed"]
6	ME	The ME does not set up the call	
7	User -> ME	The user calls the last dialled number	
8	ME -> SIM	ENVELOPE CALL CONTROL 1.4.1	
9	SIM -> ME	9F 02	
10	ME -> SIM	GET RESPONSE	
11	SIM -> ME	CALL CONTROL RESULT 1.4.1	[Call control result : "not Allowed"]
12	ME	The ME does not set up the call	

Expected Sequence 1.14 (CALL CONTROL BY SIM , set up call through call register, allowed with modifications)

Pre-condition : the ME has a mean to register the last dialed number(s), and the ME will store dialled numbers allowed with modification in its register.

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	User -> ME	Set up a call to "+01234567890123456789"	
2	ME -> SIM	ENVELOPE CALL CONTROL 1.6.1	
3	SIM -> ME	9F 07	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 1.6.1	[Call control result : "Allowed with modifications",]
6	ME	The ME sets up the call to "+010203"	
7	User -> ME	Set up a call to "+01234567890123456789"	
8	ME -> SIM	ENVELOPE CALL CONTROL 1.6.1	
9	SIM -> ME	9F 07	
10	ME -> SIM	GET RESPONSE	
11	SIM -> ME	CALL CONTROL RESULT 1.6.1	[Call control result : "Allowed with modifications",]
12	ME	The ME sets up the call to "+010203"	

27.22.6.2 Procedure for Supplementary (SS) Services

27.22.6.2.1 Definition and applicability

See Section 3.2.2.

27.22.6.2.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 9.1.2

27.22.6.2.3 Test Purpose

To verify that the ME first pass the supplementary service control string corresponding to the supplementary service operation to the SIM, using the ENVELOPE (CALL CONTROL) command.

To verify that, if the SIM responds with '90 00', the ME shall send the supplementary service operation with the information as sent to the SIM.

To verify that, if the SIM responds with '9F XX', the ME shall use the GET RESPONSE command to get the response data. The response data from the SIM shall indicate to the ME whether to send the supplementary service operation as proposed, not send the SS operation, or instead send the SS operation using the data supplied by the SIM.

27.22.6.2.4 method of tests

27.22.6.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

The call control service is allocated and activated in the SIM Service Table.

27.22.6.2.4.2 Procedure

Expected Sequence 2.1 (CALL CONTROL BY SIM , send SS, the SIM responds with '90 00')

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	User -> ME	The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator).	
2	ME -> SIM	ENVELOPE CALL CONTROL 2.1.1	
3	SIM -> ME	90 00	
4	ME	The ME sends the supplementary service operation with the information as sent to the SIM	

ENVELOPE CALL CONTROL 2.1.1

Logically:

<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Address</u>	
TON:	Unknown
NPI:	“ISDN / telephone numbering plan” or “unknown”
Dialling number string	“*21*#”
<u>Location Information</u>	
MCC & MNC	the mobile country and network code (F110)
LAC	the location Area Code (1)
Cell ID	Cell Identity Value (0001)

Coding

BER-TLV: D4 13 82 02 82 81 89 04 81 2A A1 FB
 13 07 00 F1 10 00 01 00 01

Expected Sequence 2.2 (CALL CONTROL BY SIM , send SS, allowed without modifications)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	User -> ME	The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator).	
2	ME -> SIM	ENVELOPE CALL CONTROL 2.2.1	
3	SIM -> ME	9F 02	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 2.2.1	[Call control result : "Allowed without modifications"]
6	ME	The ME sends the supplementary service operation with the information as sent to the SIM	

ENVELOPE CALL CONTROL 2.2.1

Logically:

Device identities

Source device: ME

Destination device: SIM

Address

TON: Unknown

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string: "*21*#"

Location Information

MCC & MNC: the mobile country and network code (F110)

LAC: the location Area Code (1)

Cell ID: Cell Identity Value (0001)

Coding

BER-TLV: D4 13 82 02 82 81 89 04 81 2A A1 FB
 13 07 00 F1 10 00 01 00 01

CALL CONTROL RESPONSE 2.2.1

Logically:

Call control result: Allowed, no modifications

Coding: 00 00

Expected Sequence 2.3 (CALL CONTROL BY SIM , send SS, not allowed)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	User -> ME	The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator).	
2	ME -> SIM	ENVELOPE CALL CONTROL 2.3.1	
3	SIM -> ME	9F 02	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 2.3.1	[Call control result : "Not Allowed"]
6	ME	The ME does not send the supplementary service operation	

ENVELOPE CALL CONTROL 2.3.1

Logically:

Device identities
Source device: ME
Destination device: SIM
Address
TON: Unknown
NPI: "ISDN / telephone numbering plan" or "unknown"
Dialling number string "*21*#"

Location Information
MCC & MNC the mobile country and network code (F110)
LAC the location Area Code (1)
Cell ID Cell Identity Value (0001)

Coding

BER-TLV: D4 13 82 02 82 81 89 04 81 2A A1 FB
 13 07 00 F1 10 00 01 00 01

CALL CONTROL RESPONSE 2.3.1

Logically:

Call control result Not Allowed

Coding: 01 00

Expected Sequence 2.4 (CALL CONTROL BY SIM , send SS, allowed with modifications)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	User -> ME	The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator).	
2	ME -> SIM	ENVELOPE CALL CONTROL 2.4.1	
3	SIM -> ME	9F 07	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 2.4.1	[Call control result : "Allowed with modifications"]
6	ME	The ME sends the supplementary service operation with the information as sent by the SIM	

ENVELOPE CALL CONTROL 2.4.1

Logically:

Device identities

Source device: ME

Destination device: SIM

Address

TON: Unknown

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string: "*21*#"

Location Information

MCC & MNC: the mobile country and network code (F110)

LAC: the location Area Code (1)

Cell ID: Cell Identity Value (0001)

Coding

BER-TLV: D4 13 82 02 82 81 89 04 81 2A A1 FB
 13 07 00 F1 10 00 01 00 01

CALL CONTROL RESPONSE 2.4.1

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

27.22.6.3 Interaction with Fixed Dialling Number (FDN)

27.22.6.3.1 Definition and applicability

See Section 3.2.2.

27.22.6.3.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 9.1.4

27.22.6.2.3 Test Purpose

To verify that the ME checks that the number entered through the MMI is on the FDN list.

To verify that, if the MMI input does not pass the FDN check, the call shall not be set up.

To verify that, if the MMI input does pass the FDN check, the ME shall pass the dialled digits and other parameters to the SIM, using the ENVELOPE (CALL CONTROL) command.

To verify that, if the SIM responds with "allowed, no modification", the ME shall set up the call as proposed.

To verify that, if the SIM responds with "not allowed", the ME shall not set up the call.

To verify that, if the SIM responds with "allowed with modifications", the ME shall set up the call in accordance with the response from the SIM. If the modifications involve changing the dialled digits, the ME shall not re-check this modified number against the FDN list.

27.22.6.2.4 method of tests27.22.6.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

The call control service is allocated and activated in the SIM Service Table.

Fixed Dialling Number service is enabled.

27.22.6.2.4.2 Procedure

Expected Sequence 3.1 (CALL CONTROL BY SIM , set up a call not in EF_{FDN})

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
<u>1</u>	<u>User -> ME</u>	<u>The user sets up a call to "4321"</u>	
<u>2</u>	<u>ME</u>	<u>The ME does not send the ENVELOPE (CALL CONTROL) command to the SIM and does not set up the call.</u>	

Expected Sequence 3.2 (CALL CONTROL BY SIM , set up a call in EF_{FDN}, the SIM responds with '90 00')

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
<u>1</u>	<u>User -> ME</u>	The user sets up a call to "123"	
<u>2</u>	<u>ME -> SIM</u>	<u>ENVELOPE CALL CONTROL</u> <u>3.2.1</u>	
<u>3</u>	<u>SIM -> ME</u>	<u>90 00</u>	
<u>4</u>	<u>ME</u>	The ME sets up the call without <u>modification</u>	[Set up call to "123"]

ENVELOPE CALL CONTROL 3.2.1

Logically:

Device identities

Source device: ME

Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "123"

Location Information

MCC & MNC the mobile country and network code (F110)

LAC the location Aera Code (1)

Cell ID Cell Identity Value (0001)

Coding:

BER-TLV: D4 12 82 02 82 81 86 03 81 23 F1 13
 07 00 F1 10 00 01 00 01

Expected Sequence 3.3 (CALL CONTROL BY SIM , set up a call in EF_{FDN} , Allowed without modifications)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
<u>1</u>	<u>User -> ME</u>	The user sets up a call to "9876"	
<u>2</u>	<u>ME -> SIM</u>	<u>ENVELOPE CALL CONTROL</u> <u>3.3.1</u>	
<u>3</u>	<u>SIM -> ME</u>	<u>9F 02</u>	
<u>4</u>	<u>ME -> SIM</u>	<u>GET RESPONSE</u>	
<u>5</u>	<u>SIM -> ME</u>	<u>CALL CONTROL RESULT 3.3.1</u>	[Call control result : "Allowed without <u>modifications</u> "]
<u>6</u>	<u>ME</u>	The ME sets up the call without <u>modification</u>	[Set up call to "9876"]

ENVELOPE CALL CONTROL 3.3.1

Logically:

<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Address</u>	
TON	Unknown
NPI	"ISDN / telephone numbering plan"
Dialling number string	"9876"
<u>Location Information</u>	
MCC & MNC	the mobile country and network code (F110)
LAC	the location Aera Code (1)
Cell ID	Cell Identity Value (0001)

Coding:

BER-TLV: D4 12 82 02 82 81 86 03 81 89 67 13
 07 00 F1 10 00 01 00 01

CALL CONTROL RESPONSE 3.3.1

Logically:

Call control result Allowed, no modifications

Coding: 00 00

Expected Sequence 3.4 (CALL CONTROL BY SIM , set up a call in EF_{FDN} , Not Allowed)

Step	Direction	Message / Action	Comments
1	User -> ME	The user sets up a call to "9876"	
2	ME -> SIM	ENVELOPE CALL CONTROL 3.4.1	
3	SIM -> ME	9F 02	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 3.4.1	[Call control result : "Not Allowed"]
6	ME	The ME does not set up the call	

ENVELOPE CALL CONTROL 3.4.1

Logically:

<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Address</u>	
TON	Unknown
NPI	"ISDN / telephone numbering plan"
Dialling number string	"9876"
<u>Location Information</u>	
MCC & MNC	the mobile country and network code (F110)
LAC	the location Aera Code (1)
Cell ID	Cell Identity Value (0001)

Coding:

BER-TLV: D4 12 82 02 82 81 86 03 81 89 67 13
 07 00 F1 10 00 01 00 01

CALL CONTROL RESPONSE 3.4.1Logically:

Call control result	Not Allowed
---------------------	-------------

Coding:	01	00
---------	----	----

Expected Sequence 3.5 (CALL CONTROL BY SIM , set up a call in EF_FDN , Allowed with modifications)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	User -> ME	The user sets up a call to "9876"	
2	ME -> SIM	ENVELOPE CALL CONTROL 3.5.1	
3	SIM -> ME	9F 07	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 3.5.1	[Call control result : "Allowed with modifications"]
6	ME	The ME sets up the call with data sent by the SIM	[Set up call to "3333"]

ENVELOPE CALL CONTROL 3.5.1Logically:Device identities

Source device:	ME
----------------	----

Destination device:	SIM
---------------------	-----

Address

TON	Unknown
-----	---------

NPI	"ISDN / telephone numbering plan"
-----	-----------------------------------

Dialling number string	"9876"
------------------------	--------

Location Information

MCC & MNC	the mobile country and network code (F110)
-----------	--

LAC	the location Area Code (1)
-----	----------------------------

Cell ID	Cell Identity Value (0001)
---------	----------------------------

Coding:

<u>BER-TLV:</u>	D4	12	82	02	82	81	86	03	81	89	67	13
	07	00	F1	10	00	01	00	01				

CALL CONTROL RESPONSE 3.5.1Logically:

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
---------	----	----	----	----	----	----	----

27.22.6.4 Support of Barred Dialling Number (BDN) service

27.22.6.4.1 Definition and applicability

See Section 3.2.2.

27.22.6.4.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 9.1.5.

27.22.6.2.3 Test Purpose

To verify that, if Barred Dialling Number service is enabled, the ME checks the number entered through the MMI against EF_{BDN}.

To verify that, if the SIM responds with "not allowed", the ME does not set up the call.

To verify that, if the SIM responds with "allowed, no modification", the ME shall set up the call (or the supplementary service operation) as proposed.

To verify that, if the SIM responds with "allowed with modifications", the ME sets up the call in accordance with the response from the SIM. If the modifications involve changing the dialled number the ME does not re-check this modified number against the FDN list when FDN is enabled.

27.22.6.2.4 method of tests27.22.6.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

The call control service is allocated and activated in the SIM Service Table.

Barred Dialling Number service is enabled.

27.22.6.2.4.2 Procedure

Expected Sequence 4.1 (CALL CONTROL BY SIM , set up a call in EF_{BDN})

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
1	User -> ME	The user sets up a call to "321"	
2	ME -> SIM	ENVELOPE CALL CONTROL 4.1.1	
3	SIM -> ME	9F 02	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 4.1.1	[Call control result : "Not Allowed"]
6	ME	The ME does not set up the call	

ENVELOPE CALL CONTROL 4.2.1

Logically:

<u>Device identities</u>	
Source device:	ME
Destination device:	SIM
<u>Address</u>	
TON	Unknown
NPI	"ISDN / telephone numbering plan"
Dialling number string	"1234"
<u>Location Information</u>	
MCC & MNC	the mobile country and network code (F110)
LAC	the location Area Code (1)
Cell ID	Cell Identity Value (0001)

Coding:

BER-TLV: D4 12 82 02 82 81 86 03 81 21 43 13
 07 00 F1 10 00 01 00 01

CALL CONTROL RESPONSE 4.2.1

Logically:

Call control result Allowed, no modifications

Coding: 00 00

Expected Sequence 4.3 (CALL CONTROL BY SIM , set up a call not in EF_{BDN} , Allowed with modifications)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
<u>1</u>	<u>User -> ME</u>	<u>The user sets up a call to "1111"</u>	
<u>2</u>	<u>ME -> SIM</u>	<u>ENVELOPE CALL CONTROL 4.3.1</u>	
<u>3</u>	<u>SIM -> ME</u>	<u>9F 07</u>	
<u>4</u>	<u>ME -> SIM</u>	<u>GET RESPONSE</u>	
<u>5</u>	<u>SIM -> ME</u>	<u>CALL CONTROL RESULT 4.3.1</u>	<u>[Call control result : "Allowed with modifications"]</u>
<u>6</u>	<u>ME</u>	<u>The ME sets up the call with data sent by the SIM</u>	<u>[Set up call to "2222"]</u>

ENVELOPE CALL CONTROL 4.3.1

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "9876"

Location Information

MCC & MNC the mobile country and network code (F110)
LAC the location Aera Code (1)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV: D4 12 82 02 82 81 86 03 81 11 11 13
 07 00 F1 10 00 01 00 01

CALL CONTROL RESPONSE 4.3.1

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

Expected Sequence 4.4 (CALL CONTROL BY SIM , FDN and BDN enabled, set up a call in EF_{FDN}. Allowed with modifications)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Comments</u>
<u>1</u>	<u>User -> ME</u>	The user sets up a call to "123"	
<u>2</u>	<u>ME -> SIM</u>	<u>ENVELOPE CALL CONTROL 4.4.1</u>	
<u>3</u>	<u>SIM -> ME</u>	9F 0A	
<u>4</u>	<u>ME -> SIM</u>	GET RESPONSE	
<u>5</u>	<u>SIM -> ME</u>	<u>CALL CONTROL RESULT 4.4.1</u>	[Call control result : "Allowed with modifications"]
<u>6</u>	<u>ME</u>	The ME sets up the call with data sent by the SIM	[Set up call to "987654321"the ME does not re-check this modified number against the FDN list]

ENVELOPE CALL CONTROL 4.4.1Logically:Device identities

Source device:	ME
Destination device:	SIM

Address

TON	Unknown
NPI	"ISDN / telephone numbering plan"
Dialling number string	"9876"

Location Information

MCC & MNC	the mobile country and network code (F110)
LAC	the location Area Code (1)
Cell ID	Cell Identity Value (0001)

Coding:

BER-TLV:	D4	12	82	02	82	81	86	03	81	89	67	13
	07	00	F1	10	00	01	00	01				

CALL CONTROL RESPONSE 4.4.1Logically:

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
---------	----	----	----	----	----	----	----	----	----	----

27.22.7 EVENT DOWNLOAD**27.22.7.1 MT Call Event****27.22.7.1.1 MT Call Event (normal)****27.22.7.1.1.1 Definition and applicability**

See Section 3.2.2.

27.22.7.1.1.2 Conformance requirement

The ME shall support the EVENT: MT Call event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7, 5.2 (Terminal Profile), 6.4.16, 6.8 (Terminal Response), 11, 11.1, 12.25

27.22.7.1.1.3 Test Purpose

To verify that the ME informs the SIM the an Event: MT Call has occurred using the ENVELOPE (EVENT DOWNLOAD – MT Call) command.

27.22.7.1.1.4 Method of test27.22.7.1.1.4.1 Initial Conditions

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

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.1.1.4.2 ProcedureExpected Sequence 1.1 (EVENT DOWNLOAD –MT Call event)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Behaviour</u>
1	<u>SIM -> ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING</u>	
2	<u>ME -> SIM</u>	<u>FETCH</u>	
3	<u>SIM -> ME</u>	<u>PROACTIVE COMMAND: SET</u> <u>UP EVENT LIST 1.1.1</u>	
4	<u>ME -> SIM</u>	<u>TERMINAL RESPONSE: SET UP</u> <u>EVENT LIST 1.1.1</u>	
5	<u>SS -> ME</u>	<u>CALL SET UP without CLI</u>	<u>[MT Call Set Up Without CLI]</u>
6	<u>ME -> SIM</u>	<u>ENVELOPE: EVENT</u> <u>DOWNLOAD – MT Call 1.1.1</u>	
7	<u>SS -> ME</u>	<u>CALL DISCONNECT</u>	
8	<u>SS -> ME</u>	<u>CALL SET UP with CLI</u>	<u>[MT Call Set Up With CLI]</u>
9	<u>ME -> SIM</u>	<u>ENVELOPE: EVENT</u> <u>DOWNLOAD – MT Call 1.1.2</u>	
10	<u>SS -> ME</u>	<u>CALL DISCONNECT</u>	
11	<u>SS -> ME</u>	<u>CALL SET UP with CLI and sub-</u> <u>address</u>	<u>[MT Call Set Up with CLI and sub-address]</u>
12	<u>ME -> SIM</u>	<u>ENVELOPE: EVENT</u> <u>DOWNLOAD – MT Call 1.1.3</u>	
13	<u>SS -> ME</u>	<u>CALL DISCONNECT</u>	

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1Logically:Command details

Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event List

Event 1: MT call

Coding:

BER-TLV: D0 0C 81 03 01 05 00 82 02 81 82 99
01 00

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

EVENT DOWNLOAD – MT CALL 1.1.1

Logically:

Event List : MT call event
Device identities
Source device: Network
Destination device: SIM
Transaction identifier :
Ti value : 0 (bit 5-7)
Ti flag : 0 (bit 8)

Coding:

BER-TLV: D6 0A 19 01 00 82 02 83 81 1C 01 00

EVENT DOWNLOAD – MT CALL 1.1.2

Logically:

Event List : MT call event
Device identities
Source device: Network
Destination device: SIM
Transaction identifier :
Ti value : 0 (bit 5-7)
Ti flag : 0 (bit 8)
Address :
TON Unknown
NPI "ISDN / telephone numbering plan"
Dialling number string "9876"

Coding:

BER-TLV: D6 0F 19 01 00 82 02 83 81 1C 01 00
86 03 90 89 67

EVENT DOWNLOAD – MT CALL 1.1.3

Logically:

Event List :	MT call event
<u>Device identities</u>	
Source device:	Network
Destination device:	SIM
<u>Transaction identifier :</u>	
Ti value :	0 (bit 5-7)
Ti flag :	0 (bit 8)
<u>Address :</u>	
TON	Unknown
NPI	"ISDN / telephone numbering plan"
Dialling number string	"9876"
<u>Called party subaddress</u>	
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:

<u>BER-TLV:</u>	<u>D6</u>	<u>19</u>	<u>19</u>	<u>01</u>	<u>00</u>	<u>82</u>	<u>02</u>	<u>83</u>	<u>81</u>	<u>1C</u>	<u>01</u>	<u>00</u>
	<u>86</u>	<u>03</u>	<u>91</u>	<u>89</u>	<u>67</u>	<u>88</u>	<u>88</u>	<u>07</u>	<u>80</u>	<u>50</u>	<u>95</u>	<u>95</u>
	<u>95</u>	<u>95</u>	<u>95</u>									

27.22.7.1.1.5 Test Requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

27.22.7.2 Call Connected Event27.22.7.2.1 Call Connected Event (MT and MO call)27.22.7.2.1.1 Definition and applicability

See Section 3.2.2.

27.22.7.2.1.2 Conformance requirement

The ME shall support the EVENT: Call Connected event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7, 5.2 (Terminal Profile), 6.4.16, 6.8 (Terminal Response), 11, 11.2, 12.25

27.22.7.2.1.3 Test Purpose

To verify that the ME informs the SIM the an Event: Call Connected has occurred using the ENVELOPE (EVENT DOWNLOAD –Call Connected) command.

27.22.7.2.1.4 Method of test27.22.7.2.1.4.1 Initial Conditions

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

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.2.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD –CALL CONNECTED)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Behaviour</u>
1	SIM -> ME	PROACTIVE COMMAND PENDING	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[EVENT: Call Connected active]
4	ME -> SIM	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	SS -> ME	SETUP	[MT Call] Ti = 0
6	USER -> ME	Accept Call Set Up	
7	ME->SS	CONNECT	
8	ME -> SIM	ENVELOPE: EVENT DOWNLOAD - Call Connected 1.1.1	
9	SS -> ME	DISCONNECT	
10	USER -> ME	Initiate Call to "123"	
11	ME -> SS	SETUP	[MO Call] Ti = 0
12	SS -> ME	CONNECT	
13	ME -> SIM	ENVELOPE: EVENT DOWNLOAD – Call Connected 1.1.1	
14	USER -> ME	End Call	
15	ME -> SS	DISCONNECT	

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP EVENT LIST
 Command qualifier: '00'

Device identities

Source device: SIM
 Destination device: ME

Event List

Event 1: Call Connected

Coding:

BER-TLV: D0 0C 81 03 01 05 00 82 02 81 82 99
01 01

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

EVENT DOWNLOAD – CALL CONNECTED 1.1.1

Logically:

Event List : Call connected

Device identities

Source device: ME
Destination device: SIM

Transaction identifier :

Ti value : 0 (bit 5-7)
Ti flag : 1 (bit 8)

Coding:

BER-TLV: D6 0A 19 01 01 82 02 82 81 1C 01 80

EVENT DOWNLOAD – CALL CONNECTED 1.1.2

Logically:

Event List : Call connected

Device identities

Source device: Network
Destination device: SIM

Transaction identifier :

Ti value : 0 (bit 5-7)
Ti flag : 1 (bit 8)

Coding:

BER-TLV: D6 0A 19 01 01 82 02 83 81 1C 01 80

27.22.7.2.1.5 Test Requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

27.22.7.2.2 Call Connected Event (ME supporting SET UP CALL)27.22.7.2.2.1 Definition and applicability

See Section 3.2.2.

27.22.7.2.2.2 Conformance requirement

3GPP TS 11.14 [15] clause 11.2.2, 6.4.13, 6.6.12

Additionally the ME shall support the SET UP CALL Proactive SIM Command as defined in the following technical specifications

27.22.7.2.2.3 Test Purpose

To verify that the ME informs the SIM the an Event: Call Connected has occurred using the ENVELOPE (EVENT DOWNLOAD –Call Connected) command.

27.22.7.2.2.4 Method of test27.22.7.2.2.4.1 Initial Conditions

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

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.2.2.4.2 Procedure

Expected Sequence 2.1 (EVENT DOWNLOAD –CALL CONNECTED, ME supporting SET UP CALL)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Behaviour</u>
<u>1</u>	<u>SIM -> ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING</u>	
<u>2</u>	<u>ME -> SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM -> ME</u>	<u>PROACTIVE COMMAND: SET</u> <u>UP EVENT LIST 2.1.1</u>	<u>[EVENT: Call Connected active]</u>
<u>4</u>	<u>ME -> SIM</u>	<u>TERMINAL RESPONSE: SET UP</u> <u>EVENT LIST 2.1.1</u>	
<u>5</u>	<u>SIM -> ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING</u>	
<u>6</u>	<u>ME -> SIM</u>	<u>FETCH</u>	
<u>7</u>	<u>SIM -> ME</u>	<u>PROACTIVE COMMAND: SET</u> <u>UP CALL 2.1.1</u>	<u>[SAT Call]</u>
<u>8</u>	<u>ME</u>		<u>ME BEHAVIOUR: SET UP CALL</u>
<u>9</u>	<u>USER -></u> <u>ME</u>	<u>Confirm call set up</u>	
<u>10</u>	<u>ME -> SS</u>	<u>SETUP</u>	<u>Ti=0</u>
<u>11</u>	<u>SS -> ME</u>	<u>CONNECT</u>	
<u>12</u>	<u>ME -> SIM</u>	<u>TERMINAL RESPONSE: SET UP</u> <u>CALL 2.1.1</u>	
<u>13</u>	<u>ME -> SIM</u>	<u>ENVELOPE: CALL CONNECTED</u> <u>2.1.1</u>	

PROACTIVE COMMAND : SET UP EVENT LIST 2.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities
Source device: SIM
Destination device: ME

Event List
Event 1: Call Connected

Coding:

BER-TLV: D0 0C 81 03 01 05 00 82 02 81 82 99
 01 01

TERMINAL RESPONSE : SET UP EVENT LIST 2.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities
Source device: ME
Destination device: SIM

Result
General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

PROACTIVE COMMAND : SET UP CALL 2.1.1

Logically:

Command details
Command number: 1
Command type: SET UP CALL
Command qualifier: Only if not currently busy on another call

Device identities
Source device: SIM
Destination device: Network

Alpha identifier: the initial phone number (“+012340123456”)

Address
TON: International
NPI: “ISDN / telephone numbering plan”
Dialling number string “012340123456”

Coding

BER-TLV: D0 21 81 03 01 10 00 82 02 81 83
 05 0D 2B 30 31 32 33 34 30 31 32
 33 34 35 36 86 07 91 10 32 04 21
 43 65

TERMINAL RESPONSE : SET UP CALL 2.1.1

Logically:

<u>Command details</u>	
<u>Command number:</u>	1
<u>Command type:</u>	SET UP CALL
<u>Command qualifier:</u>	Only if not currently busy on another call
<u>Device identities</u>	
<u>Source device:</u>	ME
<u>Destination device:</u>	SIM
<u>Result</u>	
<u>General Result:</u>	Command performed successfully

Coding:

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

EVENT DOWNLOAD – CALL CONNECTED 2.1.1Logically:

<u>Event List :</u>	Call connected
<u>Device identities</u>	
<u>Source device:</u>	Network
<u>Destination device:</u>	SIM
<u>Transaction identifier :</u>	
<u>Ti value :</u>	0 (bit 5-7)
<u>Ti flag :</u>	1 (bit 8)

Coding:

BER-TLV: D6 0A 19 01 01 82 02 83 81 1C 01 80

27.22.7.2.2.5 Test Requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

27.22.7.3 Call Disconnected Event**27.22.7.3.1 Call Disconnected Event**27.22.7.3.1.1 Definition and applicability

See Section 3.2.2.

27.22.7.3.1.2 Conformance requirement

The ME shall support the EVENT: Call Disconnected event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7, 5.2 (Terminal Profile), 6.4.16, 6.8 (Terminal Response), 11, 11.3, 12.25

27.22.7.3.1.3 Test Purpose

To verify that the ME informs the SIM the an Event: Call Disconnected has occurred using the ENVELOPE (EVENT DOWNLOAD –Call Disconnected) command.

27.22.7.3.1.4 Method of test

27.22.7.3.1.4.1 Initial Conditions

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

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.3.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD –CALL DISCONNECTED)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Behaviour</u>
<u>1</u>	<u>SIM -> ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING</u>	
<u>2</u>	<u>ME -> SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM -> ME</u>	<u>PROACTIVE COMMAND: SET</u> <u>UP EVENT LIST 1.1.1</u>	[EVENT: Call Disconnected active]
<u>4</u>	<u>ME -> SIM</u>	<u>TERMINAL RESPONSE: SET UP</u> <u>EVENT LIST 1.1.1</u>	
<u>5</u>	<u>SS -> ME</u>	<u>SETUP</u>	[incoming call] Ti=0
<u>6</u>	<u>USER -></u> <u>ME</u>	<u>Accept Call Set Up</u>	
<u>7</u>	<u>SS -> ME</u>	<u>DISCONNECT</u>	[MT DISCONNECT]
<u>8</u>	<u>ME-> SIM</u>	<u>ENVELOPE: CALL</u> <u>DISCONNECTED 1.1.1</u>	
<u>9</u>	<u>SS -> ME</u>	<u>SETUP</u>	[incoming call] Ti=0
<u>10</u>	<u>USER -></u> <u>ME</u>	<u>Accept Call Set Up</u>	
<u>11</u>	<u>SS -> ME</u>	<u>RELEASE</u>	[MT RELEASE]
<u>12</u>	<u>ME-> SIM</u>	<u>ENVELOPE: CALL</u> <u>DISCONNECTED 1.1.1</u>	
<u>13</u>	<u>SS -> ME</u>	<u>SETUP</u>	[incoming call] Ti=0
<u>14</u>	<u>USER -></u> <u>ME</u>	<u>Accept Call Set Up</u>	
<u>15</u>	<u>SS -> ME</u>	<u>RELEASE COMPLETE</u>	[MT RELEASE COMPLETE]
<u>16</u>	<u>ME-> SIM</u>	<u>ENVELOPE: CALL</u> <u>DISCONNECTED 1.1.1</u>	
<u>17</u>	<u>SS -> ME</u>	<u>SETUP</u>	[incoming call] Ti=0
<u>18</u>	<u>USER -></u> <u>ME</u>	<u>Accept Call Set Up</u>	
<u>19</u>	<u>USER -></u> <u>ME</u>	<u>End Call</u>	
<u>20</u>	<u>ME -> SS</u>	<u>DISCONNECT</u>	[MO DISCONNECT]
<u>21</u>	<u>ME -> SIM</u>	<u>ENVELOPE: CALL</u> <u>DISCONNECTED 1.1.2</u>	
<u>22</u>	<u>SS -> ME</u>	<u>DISCONNECT ACK ???</u>	
<u>23</u>	<u>SS -> ME</u>	<u>SETUP</u>	[incoming call] Ti=0
<u>24</u>	<u>USER -></u> <u>ME</u>	<u>Accept Call Set Up</u>	
<u>25</u>	<u>SS -> ME</u>	<u>DISCONNECT</u>	[MT DISCONNECT + CAUSE : normal call clearing]
<u>26</u>	<u>ME-> SIM</u>	<u>ENVELOPE: CALL</u> <u>DISCONNECTED 1.1.3</u>	
<u>27</u>	<u>SS -> ME</u>	<u>SETUP</u>	Ti=0
<u>28</u>	<u>USER -></u> <u>ME</u>	<u>Accept Call Set Up</u>	
<u>29</u>	<u>SS</u>	<u>TX POWER to XX</u>	[RADIO LINK FAILURE]
<u>30</u>	<u>ME-> SIM</u>	<u>ENVELOPE: CALL</u> <u>DISCONNECTED 1.1.4A or</u> <u>1.1.1B</u>	

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:Command details

<u>Command number:</u>	<u>1</u>
<u>Command type:</u>	<u>SET UP EVENT LIST</u>
<u>Command qualifier:</u>	<u>'00'</u>

Device identities

<u>Source device:</u>	<u>SIM</u>
<u>Destination device:</u>	<u>ME</u>

Event List

<u>Event 1:</u>	<u>Call Disconnected</u>
-----------------	--------------------------

Coding:

BER-TLV: D0 0C 81 03 01 05 00 82 02 81 82 99
01 02

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

EVENT DOWNLOAD – CALL DISCONNECTED 1.1.1

Logically:

Event List : Call Disconnected
Device identities
Source device: Network
Destination device: SIM
Transaction identifier :
Ti value : 0 (bit 5-7)
Ti flag : 0 (bit 8)
Cause :

Coding:

BER-TLV: D6 0A 19 01 02 82 02 83 81 1C 01 00

EVENT DOWNLOAD – CALL DISCONNECTED 1.1.2

Logically:

Event List : Call Disconnected
Device identities
Source device: ME
Destination device: SIM
Transaction identifier :
Ti value : 0 (bit 5-7)
Ti flag : 1 (bit 8)

Coding:

BER-TLV: D6 0A 19 01 01 82 02 83 81 1C 01 80

EVENT DOWNLOAD – CALL DISCONNECTED 1.1.2

Logically:

Event List : Call Disconnected
Device identities
Source device: ME

Destination device: SIM
Transaction identifier :
Ti value : 0 (bit 5-7)
Ti flag : 1 (bit 8)

Coding:

BER-TLV: D6 0A 19 01 01 82 02 82 81 1C 01 80

EVENT DOWNLOAD – CALL DISCONNECTED 1.1.3

Logically:

Event List : Call Disconnected
Device identities
Source device: Network
Destination device: SIM
Transaction identifier :
Ti value : 0 (bit 5-7)
Ti flag : 0 (bit 8)
Cause : normal call clearing

Coding:

BER-TLV: D6 0E 19 01 01 82 02 82 81 1C 01 00
 9A 02 60 90

EVENT DOWNLOAD – CALL DISCONNECTED 1.1.4ALogically:

Event List :	Call Disconnected
Device identities	
Source device:	Network
Destination device:	SIM
Transaction identifier :	
Ti value :	0 (bit 5-7)
Ti flag :	1 (bit 8)
Cause :	radio link failure

Coding:

BER-TLV: D6 0E 19 01 01 82 02 82 81 1C 01 80
 9A 00

EVENT DOWNLOAD – CALL DISCONNECTED 1.1.4BLogically:

Event List :	Call Disconnected
Device identities	
Source device:	Network
Destination device:	SIM
Transaction identifier :	
Ti value :	0 (bit 5-7)
Ti flag :	0 (bit 8)
Cause :	radio link failure

Coding:

BER-TLV: D6 0E 19 01 01 82 02 82 81 1C 01 00
 9A 00

27.22.7.3.1.5 Test Requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

27.22.7.4 Location Status Event**27.22.7.4.1 Location Status Event (normal)****27.22.7.4.1.1 Definition and applicability**

See Section 3.2.2.

27.22.7.4.1.2 Conformance requirement

The ME shall support the EVENT: Location Status event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 11.4, 6.4.16

27.22.7.4.1.3 Test Purpose

To verify that the ME informs the SIM that an Event: MM_IDLE state has occurred using the ENVELOPE (EVENT DOWNLOAD – Location Status) command.

27.22.7.4.1.4 Method of test

27.22.7.4.1.4.1 Initial Conditions

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

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

Two cells are defined. Cell 1 has location area code 1 and cell 2 has location area code 2.

MS is in service on Cell 1.

27.22.7.4.4.2 Procedure

Expected Sequence 1.1(EVENT DOWNLOAD –LOCATION STATUS)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Behaviour</u>
<u>1</u>	<u>SIM -> ME</u>	<u>PROACTIVE COMMAND</u> <u>PENDING</u>	
<u>2</u>	<u>ME -> SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM -> ME</u>	<u>PROACTIVE COMMAND: SET</u> <u>UP EVENT LIST 1.1.1</u>	
<u>4</u>	<u>ME -> SIM</u>	<u>TERMINAL RESPONSE: SET UP</u> <u>EVENT LIST 1.1.1</u>	
<u>5</u>	<u>SS</u>		<u>Cell 2 is switched on and cell 1 is switched off</u>
<u>6</u>			<u>ME performs cell reselection to cell 2</u>
<u>7</u>	<u>ME -> SS</u>	<u>Location Updating Request</u>	
<u>8</u>	<u>SS -> ME</u>	<u>Location updating accept</u>	
<u>9</u>	<u>ME -> SIM</u>	<u>ENVELOPE: EVENT</u> <u>DOWNLOAD – Location Status</u> <u>1.1.1</u>	<u>[NOTE : The inclusion of the location</u> <u>information is optional : (If location status</u> <u>indicates normal status)</u>

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event List

Event 1: Location status

Coding:

BER-TLV: D0 0C 81 03 01 05 00 82 02 81 82 99
01 03

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

EVENT DOWNLOAD – LOCATION STATUS 1.1.1

Logically:

Event List : Location status
Device identities
Source device: ME
Destination device: SIM
Location status : normal service
Location Information
MCC & MNC the mobile country and network code (F110)
LAC the location Area Code (2)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV: D6 13 19 01 02 82 02 82 81 1B 01 00
13 07 00 F1 10 00 02 00 01

27.22.7.4.1.5 Test Requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

27.22.7.5 User Activity Event

27.22.7.5.1 User Activity Event (normal)

27.22.7.5.1.1 Definition and applicability

See Section 3.2.2.

27.22.7.5.1.2 Conformance Requirement

The ME shall support the EVENT DOWNLOAD -USER ACTIVITY as defined in the following technical specifications:

[3GPP TS 11.14 \[15\] clause 5.2 \(Terminal Profile\)](#), [clause 6.4.16 \(Set Up Event List\)](#), [clause 6.8 \(Terminal Response\)](#), [clause 6.6.16](#), [clause 6.11](#), [clause 11 \(Event Download\)](#), [clause 11.5 \(User Activity event\)](#), [clause 12.6 \(Commands details\)](#), [clause 12.25 \(Event List\)](#).

27.22.7.5.1.3 Test Purpose

To verify that the ME performed correctly the procedure of USER ACTIVITY EVENT.

27.22.7.5.1.4 Method of Test

27.22.7.5.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

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

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

27.22.7.5.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD -USER ACTIVITY)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SIM → ME</u>	<u>PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1</u>	<u>[set up event list : event User Activity]</u>
<u>2</u>	<u>ME → SIM</u>	<u>TERMINAL RESPONSE: SET UP EVENT LIST 1.1</u>	<u>[command performed successfully]</u>
<u>3</u>	<u>USER</u>	<u>press any key</u>	
<u>4</u>	<u>ME → SIM</u>	<u>ENVELOPE EVENT DOWNLOAD -USER ACTIVITY 1.1</u>	
<u>9</u>	<u>USER</u>	<u>press any key</u>	<u>check if no envelope Event Download-User activity sending to the SIM (this event is reported once)</u>

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier:

Device identities

Source device: SIM

Destination device: ME

Event List User Activity

Coding:

BER-TLV: D0 15 81 03 01 05 00 82 02 81 82 99
01 04

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

Command details
Command number: 1
Command type: SET UP EVENT LIST
Command qualifier:
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 80 82 02 82 81 83 01 00

EVENT DOWNLOAD -USER ACTIVITY 1.1.1

Logically:

Event List User Activity
Device identities
Source device: ME
Destination device: SIM

Coding:

BER-TLV: D6 07 19 01 04 82 02 83 81

27.22.7.5.1.5 Test Requirement

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

27.22.7.6 Idle screen available event

27.22.7.6.1 Idle Screen Available (normal)

27.22.7.6.1.1 Definition and applicability

See Section 3.2.2.

27.22.7.6.1.2 Conformance requirement

The ME shall support the EVENT: IDLE SCREEN AVAILABLE event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7, 5.2 (Terminal Profile), 6.4.16, 6.8 (Terminal Response), 11, 11.1, 12.25

27.22.7.6.1.3 Test Purpose

To verify that the ME informs the SIM the an Event: Idle Screen Available has occurred using the ENVELOPE (EVENT DOWNLOAD – IDLE SCREEN AVAILABLE) command.

27.22.7.6.1.4 Method of test27.22.7.6.1.4.1 Initial Conditions

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

The elementary files are coded as SIM Application Toolkit default.

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

27.22.7.6.1.4.2 ProcedureExpected Sequence 1.1 (EVENT DOWNLOAD - IDLE SCREEN AVAILABLE)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Select screen other than the ME idle screen	
2	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	[set up event list : idle screen available]
3	ME → SIM	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[command performed successfully]
4	USER → ME	Select ME idle screen	
5	ME → SIM	ENVELOPE: IDLE SCREEN AVAILABLE 1.1.1	
6	USER → ME	Select ME idle screen	check if no envelope Event Download- idle screen sending to the SIM (this event is reported once)

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:Command details

Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event List

Event 1: idle screen available

Coding:

BER-TLV: D0 0C 81 03 01 05 00 82 02 81 82 99
 01 05

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1Logically:Command details

Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

EVENT DOWNLOAD - IDLE SCREEN AVAILABLE 1.1.1Logically:

Event List User Activity

Device identities

Source device: ME
Destination device: SIM

Coding:

BER-TLV: D6 07 19 01 05 82 02 83 81

27.22.7.6.1.5 Test Requirement

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

27.22.7.7 Card reader status event

27.22.7.7.1 Card Reader Status (normal)

27.22.7.7.1.1 Definition and applicability

See Section 3.2.2.

27.22.7.7.1.2 Conformance requirement

The ME shall support the EVENT: Call Card Reader Status event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7 (Event Download), clause 4.9 (Multiple Card), clause 5.2 (Terminal Profile), clause 6.4.16 (Set Up Event List), clause 6.8 (Terminal Response), clause 11 (Event download), clause 11.7 (Card reader status event), clause 12.25 (Event List), clause 12.33 (Card reader status), ANNEX G (Monitoring of events), Annex H (Support of MultipleCard Operation), clause 12.25 (Event list), clause 12.7 (Device identities).

27.22.7.7.1.3 Test Purpose

To verify that the ME informs the SIM the an Event: Card Reader Status has changed using the ENVELOPE (EVENT DOWNLOAD – Card Reader Status) command.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

27.22.7.7.1.4 Method of test

27.22.7.7.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.7.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD, Card reader status, Card reader 1, card reader attached, no card inserted)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Behaviour</u>
1	<u>SIM -> ME</u>	<u>PROACTIVE COMMAND 1.1.1</u> <u>PENDING</u>	
2	<u>ME -> SIM</u>	<u>FETCH</u>	
3	<u>SIM -> ME</u>	<u>PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1</u>	<u>[EVENT: Card Reader Status]</u>
4	<u>ME -> SIM</u>	<u>TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1</u>	<u>[Successfully]</u>
5	<u>User->ME</u>	<u>Insert a card in Reader</u>	
6	<u>ME-> SIM</u>	<u>ENVELOPE: CARD READER STATUS 1.1.1a</u> <u>or</u> <u>ENVELOPE: CARD READER STATUS 1.1.1b</u> <u>Or</u> <u>ENVELOPE: CARD READER STATUS 1.1.1c</u> <u>Or</u> <u>ENVELOPE: CARD READER STATUS 1.1.1d</u>	
7	<u>User->ME</u>	<u>Remove the card from Reader</u>	
8	<u>ME-> SIM</u>	<u>ENVELOPE: CARD READER STATUS 1.1.2a</u> <u>Or</u> <u>ENVELOPE: CARD READER STATUS 1.1.2b</u> <u>Or</u> <u>ENVELOPE: CARD READER STATUS 1.1.2c</u> <u>Or</u> <u>ENVELOPE: CARD READER STATUS 1.1.2d</u>	

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1
Command type: SET UP EVENT LIST
Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Card Reader Status

Coding:

BER-TLV: D0 0D 81 03 01 05 00 82 02 81 82
99 01 06

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1Logically:Command details

Command number:	1
Command type:	SET UP EVENT LIST
Command qualifier:	'00'

Device identities

Source device:	ME
Destination device:	SIM

Result

General Result:	Command performed successfully
-----------------	--------------------------------

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1aLogically:Event list

Event 1:	Card Reader Status
----------	--------------------

Device identities

Source device:	ME
Destination device:	SIM

Card reader status

Identity of card reader:	01
Card reader removable:	Yes
Card reader present:	Yes
Card reader ID-1 size:	Yes
Card present in reader:	Yes
Card powered:	No

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 97

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1bLogically:Event list

Event 1:	Card Reader Status
----------	--------------------

Device identities

Source device:	ME
Destination device:	SIM

Card reader status

Identity of card reader:	01
Card reader removable:	Yes
Card reader present:	Yes
Card reader ID-1 size:	No
Card present in reader:	Yes
Card powered:	No

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 95

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1cLogically:

<u>Event list</u>	
<u>Event 1:</u>	<u>Card Reader Status</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Card reader status</u>	
<u>Identity of card reader:</u>	<u>01</u>
<u>Card reader removable:</u>	<u>No</u>
<u>Card reader present:</u>	<u>Yes</u>
<u>Card reader ID-1 size:</u>	<u>Yes</u>
<u>Card present in reader:</u>	<u>Yes</u>
<u>Card powered:</u>	<u>No</u>

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 17

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1dLogically:

<u>Event list</u>	
<u>Event 1:</u>	<u>Card Reader Status</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Card reader status</u>	
<u>Identity of card reader:</u>	<u>01</u>
<u>Card reader removable:</u>	<u>No</u>
<u>Card reader present:</u>	<u>Yes</u>
<u>Card reader ID-1 size:</u>	<u>No</u>
<u>Card present in reader:</u>	<u>Yes</u>
<u>Card powered:</u>	<u>No</u>

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 15

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2aLogically:

<u>Event list</u>	
<u>Event 1:</u>	<u>Card Reader Status</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Card reader status</u>	
<u>Identity of card reader:</u>	<u>01</u>
<u>Card reader removable:</u>	<u>Yes</u>
<u>Card reader present:</u>	<u>Yes</u>
<u>Card reader ID-1 size:</u>	<u>Yes</u>
<u>Card present in reader:</u>	<u>No</u>
<u>Card powered:</u>	<u>No</u>

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 93

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2bLogically:

<u>Event list</u>	
<u>Event 1:</u>	<u>Card Reader Status</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Card reader status</u>	
<u>Identity of card reader:</u>	<u>01</u>
<u>Card reader removable:</u>	<u>Yes</u>
<u>Card reader present:</u>	<u>Yes</u>
<u>Card reader ID-1 size:</u>	<u>No</u>
<u>Card present in reader:</u>	<u>No</u>
<u>Card powered:</u>	<u>No</u>

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 91

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2cLogically:

<u>Event list</u>	
<u>Event 1:</u>	<u>Card Reader Status</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Card reader status</u>	
<u>Identity of card reader:</u>	<u>01</u>
<u>Card reader removable:</u>	<u>No</u>
<u>Card reader present:</u>	<u>Yes</u>
<u>Card reader ID-1 size:</u>	<u>Yes</u>
<u>Card present in reader:</u>	<u>No</u>
<u>Card powered:</u>	<u>No</u>

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 13

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2dLogically:

<u>Event list</u>	
<u>Event 1:</u>	<u>Card Reader Status</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Card reader status</u>	
<u>Identity of card reader:</u>	<u>01</u>
<u>Card reader removable:</u>	<u>No</u>
<u>Card reader present:</u>	<u>Yes</u>
<u>Card reader ID-1 size:</u>	<u>No</u>
<u>Card present in reader:</u>	<u>No</u>
<u>Card powered:</u>	<u>No</u>

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 91

27.22.7.7.1.5 Test Requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

27.22.7.7.2 Card Reader Status(detachable card reader)27.22.7.7.2.1 Definition and applicability

See Section 3.2.2.

27.22.7.7.2.2 Conformance requirement

The ME shall support the EVENT: Call Card Reader Status event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7 (Event Download), clause 4.9 (Multiple Card), clause 5.2 (Terminal Profile), clause 6.4.16 (Set Up Event List), clause 6.8 (Terminal Response), clause 11 (Event download), clause 11.7 (Card reader status event), clause 12.25 (Event List), clause 12.33 (Card reader status), ANNEX G (Monitoring of events), Annex H (Support of MultipleCard Operation), clause 12.25 (Event list), clause 12.7 (Device identities).

27.22.7.7.2.3 Test Purpose

To verify that the ME informs the SIM the an Event: Card Reader Status has changed using the ENVELOPE (EVENT DOWNLOAD – Card Reader Status) command.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen as an example

27.22.7.7.2.4 Method of test27.22.7.7.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.7.2.4.2 Procedure

Expected Sequence 2.1 (EVENT DOWNLOAD, Detachable reader, Card reader 1, detachable card reader not attached, no card inserted)

Step	Direction	Message / Action	Behaviour
1	SIM -> ME	PROACTIVE COMMAND 1.1.1PENDING	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[SET UP EVENT: Card Reader Status]
4	ME -> SIM	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[Successfully]
5	User->ME	Attach the Card Reader to ME	
6	ME-> SIM	ENVELOPE: CARD READER STATUS 2.1.1a Or ENVELOPE: CARD READER STATUS 2.1.1b	
7	User->ME	Detach the Card Reader from ME	
8	ME-> SIM	ENVELOPE: CARD READER STATUS 2.1.2a Or ENVELOPE: CARD READER STATUS 2.1.2b	

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1a

Logically:

Event list
Event 1: Card Reader Status

Device identities
Source device: ME
Destination device: SIM

Card reader status
Identity of card reader: 01
Card reader removable: Yes
Card reader present: Yes
Card reader ID-1 size: Yes
Card present in reader: No
Card powered: No

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 93

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.1bLogically:

<u>Event list</u>	
<u>Event 1:</u>	<u>Card Reader Status</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Card reader status</u>	
<u>Identity of card reader:</u>	<u>01</u>
<u>Card reader removable:</u>	<u>Yes</u>
<u>Card reader present:</u>	<u>Yes</u>
<u>Card reader ID-1 size:</u>	<u>No</u>
<u>Card present in reader:</u>	<u>No</u>
<u>Card powered:</u>	<u>No</u>

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 91

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.2aLogically:

<u>Event list</u>	
<u>Event 1:</u>	<u>Card Reader Status</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Card reader status</u>	
<u>Identity of card reader:</u>	<u>01</u>
<u>Card reader removable:</u>	<u>Yes</u>
<u>Card reader present:</u>	<u>No</u>
<u>Card reader ID-1 size:</u>	<u>Yes</u>
<u>Card present in reader:</u>	<u>No</u>
<u>Card powered:</u>	<u>No</u>

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 92

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.2bLogically:

<u>Event list</u>	
<u>Event 1:</u>	<u>Card Reader Status</u>
<u>Device identities</u>	
<u>Source device:</u>	<u>ME</u>
<u>Destination device:</u>	<u>SIM</u>
<u>Card reader status</u>	
<u>Identity of card reader:</u>	<u>01</u>
<u>Card reader removable:</u>	<u>Yes</u>
<u>Card reader present:</u>	<u>No</u>
<u>Card reader ID-1 size:</u>	<u>No</u>
<u>Card present in reader:</u>	<u>No</u>
<u>Card powered:</u>	<u>No</u>

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 90

27.22.7.7.1.5 Test Requirement

The behaviour of the test is as defined in 'Expected Sequence 2.1'.

27.22.7.8 Language selection event27.22.7.8.1 Language selection event (normal)27.22.7.8.1.1 Definition and applicability

See Section 3.2.2.

27.22.7.8.1.2 Conformance requirement

The ME shall support the EVENT: LANGUAGE SELECTION event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7, 5.2 (Terminal Profile), 6.4.16, 6.8 (Terminal Response), 11, 11.8, 12.25

27.22.7.8.1.3 Test Purpose

To verify that the ME informs the SIM the an Event: Language selection has occurred using the ENVELOPE (EVENT DOWNLOAD – LANGUAGE SELECTION) command.

27.22.7.8.1.4 Method of test27.22.7.8.1.4.1 Initial Conditions

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

The elementary files are coded as SIM Application Toolkit default.

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

The current language shall have been set to english. Another language has to be supported, german is an example.

27.22.7.8.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD - LANGUAGE SELECTION)

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	[set up event list : language selection]
2	ME → SIM	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[command performed successfully]
3	USER → ME	Change the language to german.	
4	ME → SIM	ENVELOPE: LANGUAGE SELECTION 1.1.1	
5	USER → ME	Change the language to english	
6	ME → SIM	ENVELOPE: LANGUAGE SELECTION 1.1.2	check if an envelope Event Download- language selection is sending again to the SIM (this event is continuously reported)

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP EVENT LIST
 Command qualifier: '00'

Device identities

Source device: SIM
 Destination device: ME

Event List

Event 1: language selection

Coding:

BER-TLV: D0 0C 81 03 01 05 00 82 02 81 82 99
 01 07

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP EVENT LIST
 Command qualifier: '00'

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

EVENT DOWNLOAD – LANGUAGE SELECTION 1.1.1

Logically:

Event List	Language selection
Device identities	
Source device:	ME
Destination device:	SIM
Language	
Language	'de' → 64 65 (german)

Coding:

BER-TLV: D6 0B 19 01 07 82 02 83 81 2D 02 64
65

EVENT DOWNLOAD – LANGUAGE SELECTION 1.1.2Logically:

Event List	Language selection
Device identities	
Source device:	ME
Destination device:	SIM
Language	
Language	'en' → 64 65 (german)

Coding:

BER-TLV: D6 0B 19 01 07 82 02 83 81 2D 02 65
6E

27.22.7.8.1.5 Test Requirement

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

27.22.7.9 Browser termination event27.22.7.9.1 Browser termination (normal)27.22.7.9.1.1 Definition and applicability

This test is only applicable to ME's that support the EVENT: browser termination event driven information.

27.22.7.9.1.2 Conformance requirement

The ME shall support the EVENT: Browser termination event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7 (Event Download), clause 5.2 (Terminal Profile), clause 6.4.16 (Set Up Event List), clause 6.8 (Terminal Response), clause 11 (Event download), clause 11.9 (Browser termination event), clause 12.25 (Event List), clause 12.51 (Browser termination cause), ANNEX G (Monitoring of events), clause 12.7 (Device identities).

27.22.7.9.1.3 Test Purpose

To verify that the ME informs the SIM of an Event: Browser termination using the ENVELOPE (EVENT DOWNLOAD – Card Reader Status) command.

This test applies for MEs which have a browser.

27.22.7.9.1.4 Method of test

27.22.7.9.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.9.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD - Browser termination)

<u>Step</u>	<u>Direction</u>	<u>Message / Action</u>	<u>Behaviour</u>
<u>1</u>	<u>SIM -> ME</u>	<u>PROACTIVE COMMAND 1.1.1</u> <u>PENDING</u>	
<u>2</u>	<u>ME -> SIM</u>	<u>FETCH</u>	
<u>3</u>	<u>SIM -> ME</u>	<u>PROACTIVE COMMAND: SET</u> <u>UP EVENT LIST 1.1.1</u>	<u>[EVENT: Browser termination Status]</u>
<u>4</u>	<u>ME -> SIM</u>	<u>TERMINAL RESPONSE: SET UP</u> <u>EVENT LIST 1.1.1</u>	<u>[Successfully]</u>
<u>5</u>	<u>User->ME</u>	<u>Launch the browser , go to an</u> <u>URL, then stop the session and</u> <u>the browser.</u>	
<u>6</u>	<u>ME-> SIM</u>	<u>ENVELOPE: BROWSER</u> <u>TERMINATION 1.1.1</u>	

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM

Destination device: ME

Event list

Event 1: Browser termination

Coding:

BER-TLV: D0 0D 81 03 01 05 00 82 02 81 82
99 01 08

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1Logically:Command details

Command number:	1
Command type:	SET UP EVENT LIST
Command qualifier:	'00'

Device identities

Source device:	ME
Destination device:	SIM

Result

General Result:	Command performed successfully
-----------------	--------------------------------

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

ENVELOPE: EVENT DOWNLOAD BROWSER TERMINATION 1.1.1Logically:Event list

Event 1:	Browser termination
----------	---------------------

Device identities

Source device:	ME
Destination device:	SIM

Browser termination cause:	User termination
----------------------------	------------------

Coding:

BER-TLV: D6 0A 99 01 08 82 02 82 81 B4 01 00

27.22.7.10 Data available event**27.22.7.10.1 Definition and applicability**

See Section 3.2.2.

27.22.7.10.2 Conformance requirements

The ME shall support the class “e” commands as defined in the following technical specifications: 3GPP TS 11.14 [15]

Additionally the ME shall support ENVELOPE (EVENT DOWNLOAD – Data available)

27.22.7.10.3 Test Purpose

To verify that the ME shall send an ENVELOPE (EVENT DOWNLOAD – Data available) to the SIM after the ME receives a packet of data from the server by the BIP channel previously opened.

27.22.7.10.4 Method of test**27.22.7.10.4.1 Initial Conditions**

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure. The SIM must have sent the SET UP EVENT LIST to the ME to supply a set of events (event Data available).

27.22.7.10.4.2 ProcedureExpected sequence 1.1 (EVENT DOWNLOAD – Data available)

For that test, it is assumed that an OPEN CHANNEL proactive command has been successfully executed (with a consistent SIM buffer size).

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>SERVER → ME</u>	<u>Data sent through the BIP channel</u>	
<u>2</u>	<u>ME → SIM</u>	<u>ENVELOPE 1.1.1 (Event-Data Available)</u>	

ENVELOPE: EVENT DOWNLOAD – Data available 1.1.1Logically:

Event List
Event: Data available
Device identities
Source device: ME
Destination device: SIM
Channel status
Channel status: Channel 1 open, link established
Channel Data Length
Channel Data Length: 8 Bytes available in Rx buffer

Coding:

BER-TLV: D6 0E 99 01 09 82 02 82 81 B8 02 81
00 B7 01 08

27.22.7.11 Channel Status event27.22.7.11.1 Definition and applicability

See Section 3.2.2.

27.22.7.11.2 Conformance requirements

The ME shall support the class “e” commands as defined in the following technical specifications: 3GPP TS 11.14 [15]

Additionally the ME shall support ENVELOPE (EVENT DOWNLOAD – Channel Status)

27.22.7.11.3 Test Purpose

To verify that the ME shall send an ENVELOPE (EVENT DOWNLOAD – Channel Status) to the SIM after the link dropped between the NETWORK and the ME.

27.22.7.11.4 Method of test27.22.7.11.4.1 Initial Conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure. The SIM must have sent the SET UP EVENT LIST to the ME to supply a set of events (event Channel Status).

27.22.7.11.4.2 Procedure

Expected sequence 1.1 (EVENT DOWNLOAD – Channel Status on a link dropped)

For that test, it is assumed that an OPEN CHANNEL proactive command has been successfully executed.

<u>Step</u>	<u>Direction</u>	<u>MESSAGE / Action</u>	<u>Comments</u>
<u>1</u>	<u>NETWORK → ME</u>	<u>Link dropped</u>	
<u>2</u>	<u>ME → SIM</u>	<u>ENVELOPE 1.1.1 (Event-Channel Status)</u>	

ENVELOPE: EVENT DOWNLOAD – Channel Status 1.1.1

Logically:

Event List
Event: Channel Status
Device identities
Source device: ME
Destination device: SIM
Channel status
Channel status: Channel 1, link dropped

Coding:

BER-TLV: D6 0E 99 01 09 82 02 82 81 B8 02 01
05

Annex A (normative): The Requirement Table

A.1 Introduction to the Requirement Table

The Requirement Table is the Table 1 defined in section 3.2.2, Applicability of tests.

This Requirement Table (RT)1, in section 3.2.2 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 3GPP TS 11.10-2 [16] are used and new requirements are defined. Static requirements from 3GPP TS 11.10-2 [16] are also marked with the original number.

A.2 Format of the tables

The applicability of each individual test is identified in the Table 1 section 3.2.2.

The applicability of every test is formally expressed by the use of Boolean expression that are based on parameters (ICS) included in annex A of the present document.

The columns in Table 1 section 3.2.2 have the following meaning:

The entries of the static requirement tables in section 3.2.2 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 "Release" column gives the Release applicable and onwards, for the item in the "Description" column
- The "Test Sequence(s)" column gives a reference to the test sequence number(s) detailed in this document and required to validate the implementation of the corresponding item in the "Description" column.
- For a given Release, the corresponding "Rel 9x ME" column lists the tests required for a Mobile Station to be declared compliant to this Release. The notations used in these columns are detailed in section A4.
- 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.

A.3 References to EN

Not used.

A.4 Notations used in the RT

A.4.1 Status Notations

The "Release 9x ME" columns shows the status of the entries as follows:

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

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

A.4.2 Support Answer Notations

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

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

A.5 The Requirement Tables

See section 3.2.2

[Annex B \(informative\):](#)
[Proactive Command Validation Tables](#)

Annex C (normative): Initial Conditions for Icon Management

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

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

For the display of icon:

- Under the DF Telecom: creation of DF Grafics (5F50),

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

EF_{img} (Image, 4F20)

Record 1:

Logically:

Number of Actual Images Instances: 01

Image Instance Width: 08

Image Instance Height: 08

Image Coding Scheme: 11 (basic image)

Image Instance File Identifier: 4F 04 (EF_{Instance})

Offset into Image Instance File: 00 00

Length of Image Instance Data: 00 0A

Coding:

<u>BER-TLV:</u>	<u>01</u>	<u>08</u>	<u>08</u>	<u>11</u>	<u>4F</u>	<u>04</u>	<u>00</u>	<u>00</u>	<u>00</u>	<u>0A</u>	<u>FF</u>	<u>FF</u>
	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>				

Record 2:

Logically:

Number of Actual Images Instances: 01

Image Instance Width: 08

Image Instance Height: 08

Image Coding Scheme: 21 (colour image)

Image Instance File Identifier: 4F 02 (EF_{Instance})

Offset into Image Instance File: 00 00

Length of Image Instance Data: 00 1F

Coding:

BER-TLV: 01 2E 28 21 4F 02 00 00 00 1F FF FF
 FF FF FF FF FF FF FF FF

Record 3:Logically:

Number of Actual Images Instances: 01

Image Instance Width: 18

Image Instance Height: 10

Image Coding Scheme: 11 (basic image)

Image Instance File Identifier: 4F 03 (EF_{Instance})

Offset into Image Instance File: 00 00

Length of Image Instance Data: 00 32

Coding:

BER-TLV: 01 18 10 11 4F 03 00 00 00 32 FF FF
 FF FF FF FF FF FF FF FF

Record 4:Logically:

Number of Actual Images Instances: 01

Image Instance Width: 2E

Image Instance Height: 28

Image Coding Scheme: 11 (basic image)

Image Instance File Identifier: 4F 01 (EF_{Instance})

Offset into Image Instance File: 00 00

Length of Image Instance Data: 00 E8

Coding:

BER-TLV: 01 2E 28 11 4F 01 00 00 00 E8 FF FF
 FF FF FF FF FF FF FF FF

Record 5:

Logically:

Number of Actual Images Instances: 01

Image Instance Width: 05

Image Instance Height: 05

Image Coding Scheme: 11 (basic image)

Image Instance File Identifier: 4F 05 (EF_{Instance})

Offset into Image Instance File: 00 00

Length of Image Instance Data: 00 08

Coding:

BER-TLV: 01 05 05 11 4F 05 00 00 00 08 FF FF
FF FF FF FF FF FF

EF_{Instance} (4F01)

Logically:

Image Instance Data: see below

Coding:

BER-TLV: 2E 28 00 00 00 00 00 00 00 00 01 FF 80
00 00 00 0F FF 00 00 00 00 77 FE 00
00 00 01 BF F8 00 00 00 06 FF E0 00
00 00 1A 03 80 00 00 00 6B F6 BC 00
00 01 AF D8 38 00 00 06 BF 60 20 00
00 1A FD 80 40 00 00 6B F6 00 80 00
01 A0 1F 02 00 00 06 FF E4 04 00 00
1B FF 90 10 00 00 6D EE 40 40 00 01
BF F9 01 00 00 6F FF E4 04 00 00 1B
FF 90 10 00 00 6F FE 40 40 00 01 BF
F9 01 00 00 06 FF E6 04 00 00 1B FF
88 10 00 00 6F FE 20 40 00 01 BF F8
66 00 00 06 FF E0 F0 00 00 1B FF 80
80 00 00 7F FE 00 00 00 03 00 0C 00
00 00 1F FF F8 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00
1C 21 08 44 EE 00 48 C4 31 92 20 01
25 11 45 50 80 07 14 45 15 43 80 12
71 1C 4D 08 00 4A 24 89 32 20 01 C8
9E 24 4E E0

EF_{Instance} (4F02)

Logically:

Image Instance Data:

Image width: 08

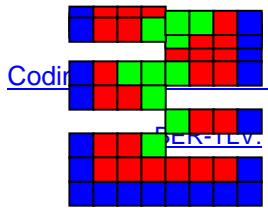
Image length: 08

Bits per raster image point: 02

Number of CLUT entries: 03

Location of CLUT: 00 16

Image body: see below



<u>BER-TLV:</u>	<u>08</u>	<u>08</u>	<u>02</u>	<u>03</u>	<u>00</u>	<u>16</u>	<u>AA</u>	<u>AA</u>	<u>80</u>	<u>02</u>	<u>85</u>	<u>42</u>
	<u>81</u>	<u>42</u>	<u>81</u>	<u>42</u>	<u>81</u>	<u>52</u>	<u>80</u>	<u>02</u>	<u>AA</u>	<u>AA</u>	<u>FF</u>	<u>00</u>
	<u>00</u>	<u>00</u>	<u>FF</u>	<u>00</u>	<u>00</u>	<u>00</u>	<u>FF</u>					

EF_{Instance} (4F03)

Logically:

Image Instance Data: see below

Coding:

<u>BER-TLV:</u>	<u>18</u>	<u>10</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>	<u>80</u>	<u>00</u>	<u>01</u>	<u>80</u>	<u>00</u>	<u>01</u>	<u>80</u>
	<u>00</u>	<u>01</u>	<u>8F</u>	<u>3C</u>	<u>F1</u>	<u>89</u>	<u>20</u>	<u>81</u>	<u>89</u>	<u>20</u>	<u>81</u>	<u>89</u>
	<u>20</u>	<u>F1</u>	<u>89</u>	<u>20</u>	<u>11</u>	<u>89</u>	<u>20</u>	<u>11</u>	<u>89</u>	<u>20</u>	<u>11</u>	<u>8F</u>
	<u>3C</u>	<u>F1</u>	<u>80</u>	<u>00</u>	<u>01</u>	<u>80</u>	<u>00</u>	<u>01</u>	<u>80</u>	<u>00</u>	<u>01</u>	<u>FF</u>
	<u>FF</u>	<u>FF</u>										

EF_{Instance} (4F04)

Logically:

Image Instance Data: see below

Coding:

<u>BER-TLV:</u>	<u>08</u>	<u>08</u>	<u>FF</u>	<u>03</u>	<u>A5</u>	<u>99</u>	<u>99</u>	<u>A5</u>	<u>C3</u>	<u>FF</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

EF_{Instance} (4F05)

Logically:

Image Instance Data: see below

Coding:

<u>BER-TLV:</u>	<u>05</u>	<u>05</u>	<u>FE</u>	<u>EB</u>	<u>BF</u>	<u>FF</u>	<u>FF</u>	<u>FF</u>
-----------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Annex ,D' (normative): Details of Test-SIM (TestSIM)

The TestSIM shall be able to present the following data:

1. ANSWER TO RESET

Logically:

<u>TS (Initial character):</u>	<u>'3B'</u>
<u>T0 (Format character):</u>	<u>'86' (Following interface characters: TD(1), number of historical characters: 6)</u>
<u>TD1:</u>	<u>'00' (Following interface characters: none, Transfer protocol: T=0)</u>
<u>T1:</u>	<u>91</u>
<u>T2:</u>	<u>99</u>
<u>T3:</u>	<u>00</u>
<u>T4:</u>	<u>12</u>
<u>T5:</u>	<u>C1</u>
<u>T6:</u>	<u>00</u>

Coding:

BER-TLV: 3B 86 00 91 99 00 12 C1 00

2. For a successful outcome of the command „Select MasterFile“ the TestSIM shall send SW1/SW2 „9F 1B“

3. For a successful outcome of the command „Get Response with Length 1B“ on the MasterFile the TestSIM shall respond:

RFU:	'00 00'
Not allocated memory:	'653 bytes'
File ID:	Master File
Type of file:	MF
RFU:	00 00 22 FF 01'
Length of following data:	14 bytes'
File characteristics:	
Clock Stop:	Not allowed
Min. frequency for GSM algorithm:	13/8 MHz
Technology identification:	3V Technology SIM
CHV1:	disabled
DFs in current directory:	2
EFs in current directory:	8
Number of CHV and admin. Codes:	3
RFU byte 18:	00
CHV1 status:	
False representations remaining:	3
RFU-bits 7-5:	000
Secret code:	Initialised
Unlock CHV1 status:	
False representations remaining:	10
RFU-bits 7-5:	000
Secret code:	Initialised
CHV2 status:	
False representations remaining:	3
RFU-bits 7-5:	000
Secret code:	Initialised
Unlock CHV2 status:	
False representations remaining:	10
RFU-bits 7-5:	000
Secret code:	Initialised
RFU bytes 23:	00
Reserved for admin. management:	00 83 00 FF
Status Words	
SW1 / SW2:	Normal ending of command

Coding:

BER-TLV:	00	00	02	8D	3F	00	01	00	00	22	FF	01
	0E	9B	02	08	03	00	83	8A	83	8A	00	00
	83	00	FF	90	00							

4. For a successful outcome of the command „Select GSM“ the TestSIM shall send SW1/SW2 „9F 1B“

5. For a successful outcome of the command „Select PLMN“ the TestSIM shall send SW1/SW2 „9F 0F“

6. EF_{PLMN} Information:

RFU-Bytes 1-2:	00 00
File size:	102 bytes
File ID:	6F30
Type of File:	Elementary file

<u>Byte 8</u>	
<u>RFU:</u>	<u>00</u>
<u>Access Condition:</u>	
<u>UPDATE:</u>	<u>CHV1</u>
<u>READ/SEEK:</u>	<u>CHV1</u>
<u>RFU-bits 4-1:</u>	<u>1111</u>
<u>INCREASE:</u>	<u>NEVER</u>
<u>INVALIDATE:</u>	<u>NEVER</u>
<u>REHABILITATE:</u>	<u>NEVER</u>
<u>File Status:</u>	
<u>Invalidation status:</u>	<u>File not invalidated</u>
<u>Readable/updateable:</u>	<u>Not readable/updaable when invalidated</u>
<u>RFU-bits 8-4, 2:</u>	<u>0000 0</u>
<u>Length of following data:</u>	<u>2 bytes</u>
<u>Structure:</u>	<u>Transparent</u>
<u>Length of record:</u>	<u>00</u>

The initial coding of the EF_{PLMN} shall be FF FF ... FF (logically: Empty).

Contents

Foreword	8
1 — Scope	9
2 — References	9
3.1 — Mobile station definition and configurations	10
3.2 — Applicability	10
3.2.1 — Applicability of this specification	10
3.2.2 — Applicability of the individual tests	10
3.2.3 — Applicability to terminal equipment	11
3.3 — Definitions	11
3.4 — Conventions for mathematical notations	12
3.5 — Conventions on electrical terms	12
3.6 — Terms on test conditions	12
4 — Test Equipment	12
5 — Testing methodology in general	12
5.1 — Testing of optional functions and procedures	12
5.2 — Test interfaces and facilities	12
5.3 — Different protocol layers	12
5.4 — Information to be provided by the apparatus supplier	12
5.5 — Definitions of transmit and receive times	13
6 — Reference test methods	13
7 — Implicit testing	13
8 — Measurement uncertainty	13
9 — Format of tests	13
10 — Generic call set up procedures	14
11 — 26 — Not used	14
27 — Testing of the SIM/ME interface	15
27.1 — 27.21 — Not used	15
27.22 — SIM Application Toolkit	15
27.22.1 — Initialisation of SIM Application Toolkit Enabled SIM by SIM Application Toolkit Enabled ME (Profile Download)	80
27.22.1.1 — Definition and applicability	80
27.22.1.2 — Conformance requirement	80
27.22.1.3 — Test Purpose	80
27.22.1.4 — Method of test	80
27.22.1.5 — Test Requirement	80
27.22.2 — Contents of the TERMINAL PROFILE command	81
27.22.2.1 — Definition and applicability	81
27.22.2.2 — Conformance requirement	81
27.22.2.3 — Test Purpose	81
27.22.2.4 — Method of Test	81
27.22.2.5 — Test Requirement	81
27.22.3 — Servicing of Proactive SIM Commands	81
27.22.3.1 — Definition and applicability	81
27.22.3.2 — Conformance requirement	81
27.22.3.3 — Test Purpose	82
27.22.3.4 — Method of test	82
27.22.3.5 — Test Requirement	82
27.22.4 — Proactive SIM Commands	82

27.22.4.1	DISPLAY TEXT	82
27.22.4.1.1	Definition and applicability	82
27.22.4.1.2	Conformance requirement	82
27.22.4.1.3	Test Purpose	83
27.22.4.1.4	Method of test	83
27.22.4.1.5	Test Requirement	84
27.22.4.2	GET INKEY	85
27.22.4.2.1	Definition and applicability	85
27.22.4.2.2	Conformance Requirement	85
27.22.4.2.3	Test Purpose	86
27.22.4.2.4	Method of Test	86
27.22.4.2.5	Test Requirement	87
27.22.4.3	GET INPUT	88
27.22.4.3.1	Definition and applicability	88
27.22.4.3.2	Conformance Requirement	88
27.22.4.3.3	Test Purpose	88
27.22.4.3.4	Method of Test	88
27.22.4.3.5	Test Requirement	90
27.22.4.4	MORE TIME	91
27.22.4.4.1	Definition and applicability	91
27.22.4.4.2	Conformance Requirement	91
27.22.4.4.3	Test Purpose	91
27.22.4.4.4	Method of Test	91
27.22.4.4.5	Test Requirement	92
27.22.4.5	PLAY TONE	92
27.22.4.5.1	Definition and applicability	92
27.22.4.5.2	Conformance Requirement	92
27.22.4.5.3	Test Purpose	92
27.22.4.5.4	Method of Test	92
27.22.4.5.5	Test Requirement	94
27.22.4.6	POLL INTERVAL	95
27.22.4.6.1	Definition and applicability	95
27.22.4.6.2	Conformance Requirement	95
27.22.4.6.3	Test Purpose	96
27.22.4.6.4	Method of Test	96
27.22.4.6.5	Test Requirement	96
27.22.4.7	REFRESH	97
27.22.4.7.1	Definition and applicability	97
27.22.4.7.2	Conformance Requirement	97
27.22.4.7.3	Test Purpose	97
27.22.4.7.4	Method of Test	98
27.22.4.7.5	Test Requirement	99
27.22.4.8	SET UP MENU	99
27.22.4.8.1	Definition and applicability	99
27.22.4.8.2	Conformance Requirement	100
27.22.4.8.3	Test Purpose	100
27.22.4.8.4	Method of Test	100
27.22.4.9	SELECT ITEM	102
27.22.4.9.1	Definition and applicability	102
27.22.4.9.2	Conformance Requirement	102
27.22.4.9.3	Test Purpose	102
27.22.4.9.4	Method of Test	103
27.22.4.9.5	Test Requirement	104
27.22.4.10	SEND SHORT MESSAGE	105
27.22.4.10.1	Definition and applicability	105
27.22.4.10.2	Conformance Requirement	105
27.22.4.10.3	Test Purpose	105
27.22.4.10.4	Method of Test	105
27.22.4.10.5	Test Requirement	106
27.22.4.11	SEND SS	107
27.22.4.11.1	Definition and applicability	107
27.22.4.11.2	Conformance Requirement	107

27.22.4.11.3	Test Purpose	107
27.22.4.11.4	Method of Test	107
27.22.4.11.5	Test Requirement	109
27.22.4.12	SEND USSD	109
27.22.4.13	SET UP CALL	109
27.22.4.13.1	Definition and applicability	109
27.22.4.13.2	Conformance Requirement	109
27.22.4.13.3	Test Purpose	110
27.22.4.13.4	Method of Test	110
27.22.4.13.5	Test Requirement	113
27.22.4.14	POLLING OFF	115
27.22.4.14.1	Definition and applicability	115
27.22.4.14.2	Conformance Requirement	115
27.22.4.14.3	Test Purpose	115
27.22.4.14.4	Method of Test	115
27.22.4.14.4.1	Initial Conditions	115
27.22.4.14.4.2	Procedure	115
27.22.4.14.5	Test Requirement	115
27.22.4.15	PROVIDE LOCAL INFORMATION	115
27.22.4.15.1	Definition and applicability	115
27.22.4.15.2	Conformance Requirement	116
27.22.4.15.3	Test Purpose	116
27.22.4.15.4	Method of Test	116
27.22.4.15.4.1	Initial Conditions	116
27.22.4.15.4.2	Procedure	116
27.22.4.15.5	Test Requirement	116
27.22.5	Data Download to SIM	117
27.22.5.1	SMS PP Data Download	117
27.22.5.1.1	Definition and applicability	117
27.22.5.1.2	Conformance requirement	117
27.22.5.1.3	Test Purpose	117
27.22.5.1.4	Method of Test	117
27.22.5.1.5	Test Requirement	118
27.22.5.2	SMS CB Data Download	118
27.22.5.2.1	Definition and applicability	118
27.22.5.2.2	Conformance requirement	118
27.22.5.2.3	Test Purpose	119
27.22.5.2.4	Method of Test	119
27.22.5.2.5	Test Requirement	119
27.22.5.3	Menu Selection	120
27.22.5.3.1	Definition and applicability	120
27.22.5.3.2	Conformance requirement	120
27.22.5.3.3	Test Purpose	120
27.22.5.3.4	Method of Test	120
27.22.6	Call control	122
27.22.6.1	Procedure for mobile originated calls	122
27.22.6.1.1	Definition and applicability	122
27.22.6.1.2	Conformance Requirement	122
27.22.6.1.3	Test Purpose	122
27.22.6.1.4	Method of Test	122
27.22.6.1.5	Test Requirement	123
27.22.6.2	Procedure for Supplementary Services	124
27.22.6.2.1	Definition and applicability	124
27.22.6.2.2	Conformance Requirement	124
27.22.6.2.3	Test Purpose	124
27.22.6.2.4	Method of Test	124
27.22.6.2.5	Test Requirement	125
27.22.6.3	Interaction with Fixed Dialling Number	126
27.22.6.3.1	Definition and applicability	126
27.22.6.3.2	Conformance Requirement	126
27.22.6.3.3	Test Purpose	126
27.22.6.3.4	Method of Test	126

27.22.6.3.5	Test Requirement	127
27.22.6.4	Support of Barred Dialling number (BDN) service	128
27.22.6.4.1	Definition and applicability	128
27.22.6.4.2	Conformance Requirement	128
27.22.6.4.3	Test Purpose	128
27.22.6.4.4	Method of Test	128
27.22.6.4.5	Test Requirement	129
Annex A (normative):	The Requirement Table	130
A.1	Introduction to the Requirement Table	130
A.2	Format of the tables	130
A.3	References to EN	131
A.4	Notations used in the RT	131
A.4.1	Status Notations	131
A.4.2	Support Answer Notations	131
A.4.3	Value Allowed Notations	131
A.4.4	Value Supported Notations	131
A.5	The Requirement Tables	132
A.5.1	Static Requirements, RT	132
A.5.1.1	General Mobile Station Features	132
A.5.1.2	SIM Application Toolkit mechanism	133
A.5.1.2.1	Terminal Profile	133
A.5.1.2.2	Proactive commands	135
A.5.1.2.2.1	Display Text	135
A.5.1.2.2.2	Get Inkey	136
A.5.1.2.2.3	Get Input	136
A.5.1.2.2.4	More Time	137
A.5.1.2.2.5	Play Tone	137
A.5.1.2.2.6	Poll Interval	137
A.5.1.2.2.7	Refresh	138
A.5.1.2.2.8	Set Up Menu	138
A.5.1.2.2.9	Select Item	138
A.5.1.2.2.10	Send Short Message	139
A.5.1.2.2.11	Send SS	139
A.5.1.2.2.12	Not used	140
A.5.1.2.2.13	Set Up Call	140
A.5.1.2.2.14	Polling Offl	140
A.5.1.2.2.15	Provide Local Information	140
A.5.1.2.3	Data Download	140
A.5.1.2.4	Menu Selection	140
A.5.1.2.5	Call Control	141

Annex B (informative): Proactive Command Validation Tables142

B.1 Display Text142

B.2 Get Inkey142

B.3 Get Input143

B.4 More Time143

B.5 Play Tone144

B.6 Poll Interval144

B.7 Refresh145

B.8 Set Up Menu145

B.9 Select Item145

B.10 Send Short Message146

B.11 Send SS146

B.12 Set Up Call147

B.13 Polling Off147

B.14 Provide Local Information148

Annex C (informative): Change History149

Foreword

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

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

~~Version x.y.z~~

where:

~~x—the first digit:~~

~~1—presented to TSG for information;~~

~~2—presented to TSG for approval;~~

~~3—or greater indicates TSG approved document under change control.~~

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

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

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 services 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.~~

EF_{SST} (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 xx1111xx	B2 xxxxxxx	B3 xx1111xx	B4 xxxx11xx (binary)
	B5 xxxxxxx	B6 xxxxxxx	B7 11111111	B8 11111111 (binary)
	B9 xxxxxxx (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
 Dialed number: 123
 CCI: None
 Ext2: None

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

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

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

EF_{BDN} (Barred-Dialling Numbers)

Logically:

At least 10 records

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

Coding:	B1	B2	B3	B4	...	B32	B33	B34	B35	B36	B37	...	B46
Record 1:	43	42	44	FF	...	FF	03	81	23	F1		...	FF

EF_{ECC} (Emergency Call Codes)

Logically:

Emergency Call Code 1: '1020'

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

~~EF_{SMS}P (Short message service parameters)~~

~~Logically:~~

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

Coding:	B1	B2	B3	...	B13	B14	B15	B16	B17	B18	B19	B20	B21	B22	B23
Record 1:	FD	FF	FF	...	FF	09	94	44	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	84	03	04	04	04	82	02	84	82	92
	07	04	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	84	03	04	04	02	82	02	84	82	92
	07	04	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	84	03	04	04	03	82	02	84	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 84 03 04 04 04 82 02 84 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 84 03 04 02 00 82 02 84 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 84 03 04 03 00 82 02 84 82 84
 02 02 04~~

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	84	03	04	03	00	82	02	84	82	84
	02	04	44									

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	84	03	04	04	00	82	02	84	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	4E	84	03	04	40	00	82	02	84	83	85
	08	4E	6F	74	20	62	75	73	79	86	09	94
	40	32	04	24	43	65	4C	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	04	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	4C	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	04	10	02	82	02	81	83	85
	07	4F	6E	20	68	6F	6C	64	86	09	94	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	04	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	04	10	00	82	02	81	83	85
	11	43	64	70	64	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	84	03	04	10	00	82	02	84	83	85
	0C	43	64	6C	6C	65	64	20	70	64	72	74
	79	86	09	94	10	32	04	24	43	65	4C	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	84	03	04	10	04	82	02	84	83	85
	08	44	75	72	64	74	69	6F	6E	86	09	94
	10	32	04	24	43	65	4C	2C	84	02	04	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: "012345678901234567890123456789*#####
 012345678901234567890123456789*#####
 012345678901234567890123456789*#####
 012345678901234567890123456789*#####p*
 012345678901234567890123456789*#####pp
 012345678901234567890123456789*#####ppp#
 012345678901234567890123456789*#####pppp
 012345678901234567890123456789*#####ppppp*
 012345678901234567890123456789*#####pppppp
 012345678901234567890123456789*#####ppppppp#
 012345678901234567890123456789*#####ppppppp01"

Coding:

BER-TLV:	D0	81	FD	81	03	01	40	01	82	02	81	83
	86	81	F1	91	40	32	54	76	98	40	32	54
	76	98	40	32	54	76	98	BA	BA	BA	BA	BA
	40	32	54	76	98	40	32	54	76	98	40	32
	54	76	98	BA	BA	BA	BA	BA	40	32	54	76
	98	40	32	54	76	98	40	32	54	76	98	BA
	BA	BA	BA	BA	40	32	54	76	98	40	32	54
	76	98	40	32	54	76	98	BA	BA	BA	BA	BA
	AC	40	32	54	76	98	40	32	54	76	98	40
	32	54	76	98	BA	BA	BA	BA	BA	CC	40	32
	54	76	98	40	32	54	76	98	40	32	54	76
	98	BA	BA	BA	BA	BA	CC	BC	40	32	54	76
	98	40	32	54	76	98	40	32	54	76	98	BA
	BA	BA	BA	BA	CC	CC	40	32	54	76	98	40
	32	54	76	98	40	32	54	76	98	BA	BA	BA
	BA	BA	CC	CC	AG	40	32	54	76	98	40	32
	54	76	98	40	32	54	76	98	BA	BA	BA	BA
	BA	CC	CC	CC	40	32	54	76	98	40	32	54
	76	98	40	32	54	76	98	BA	BA	BA	BA	BA
	CC	CC	CC	BC	40	32	54	76	98	40	32	54
	76	98	40	32	54	76	98	BA	BA	BA	BA	BA
	CC	CC	CC	40								

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	04	82	02	81	83
	85	81	ED	54	68	72	65	65	20	74	79	70
	65	73	20	64	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	64	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	84	03	04	11	00	82	02	84	83	85
	0C	43	64	6C	6C	20	46	6F	72	77	64	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*0123456789012345678901234567*11#"
    
```

Coding:

BER-TLV:	D0	32	84	03	04	11	00	82	02	84	83	85
	0C	43	64	6C	6C	20	46	6F	72	77	64	72
	64	89	19	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	64
	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	64	62	6C	65	64	2C	20	74	68	65
	20	73	75	70	70	6C	65	6D	65	6E	74	64
	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	64	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	64	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 RD Instruct the SC to accept an SMS SUBMIT for a SM
TP VPF TP VP field not present
TP RP TP Reply Path is not set in this SMS SUBMIT
TP UDHI The TP UD field contains only the short message
TP SRR A status report is not requested
TP MR "00"
TP DA
TON International number
NPI ISDN / telephone numbering plan
Address value "012345678"
TP PID Short message type 0
TP DCS
Message coding 8 bit data
Message class class 0
TP UDL 12
TP UD "Test Message"
    
```

Coding:

BER-TLV:	D0	37	84	03	04	13	00	82	02	84	83	85
	07	53	65	6E	64	20	53	4D	86	09	94	44
	22	33	44	55	66	77	F8	8B	18	04	00	09
	94	10	32	54	76	F8	40	F4	0C	54	65	73
	74	20	4D	65	73	73	64	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 RD Instruct the SC to accept an SMS SUBMIT for a SM~~
~~TP VPF TP VP field not present~~
~~TP RP TP Reply Path is not set in this SMS SUBMIT~~
~~TP UDHI The TP UD field contains only the short message~~
~~TP SRR A status report is not requested~~
~~TP MR "00"~~
~~TP DA~~
~~TON International number~~
~~NPI ISDN / telephone numbering plan~~
~~Address value "012345678"~~
~~TP PID Short message type 0~~
~~TP DCS~~
~~Message coding 8 bit data~~
~~Message class class 0~~
~~TP UDL 7~~
~~TP UD "Send SM"~~

Coding:

BER-TLV:	D0	32	84	03	04	13	04	82	02	84	83	85
	07	53	65	6E	64	20	53	4D	86	09	94	44
	22	33	44	55	66	77	F8	8B	13	04	00	09
	94	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 RD Instruct the SC to accept an SMS SUBMIT for a SM~~
~~TP VPF TP VP field not present~~
~~TP RP TP Reply Path is not set in this SMS SUBMIT~~
~~TP UDHI The TP UD field contains only the short message~~
~~TP SRR A status report is not requested~~
~~TP MR "00"~~
~~TP DA~~
~~TON International number~~
~~NPI ISDN / telephone numbering plan~~
~~Address value "012345678"~~
~~TP PID Short message type 0~~
~~TP DCS~~
~~Message coding SMS default alphabet~~
~~Message class class 0~~
~~TP UDL 13~~
~~TP UD "Short Message"~~

Coding:

BER-TLV:	D0	3D	84	03	04	13	00	82	02	84	83	85
	0D	53	68	6F	72	74	20	4D	65	73	73	64
	67	65	86	09	94	11	22	33	44	55	66	77
	F8	8B	18	04	00	09	94	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 RD Instruct the SC to accept an SMS-SUBMIT for a SM~~
~~TP VPF TP-VP field not present~~
~~TP RP TP Reply Path is not set in this SMS-SUBMIT~~
~~TP UDHI The TP-UD field contains only the short message~~
~~TP SRR A status report is not requested~~
~~TP MR "00"~~
~~TP DA~~
~~TON International number~~
~~NPI ISDN / telephone numbering plan~~
~~Address value "012345678"~~
~~TP PID Short message type 0~~
~~TP DCS~~
~~Message coding 8 bit data~~
~~Message class class 0~~
~~TP UDL 160~~
~~TP UD "Two types are defined: A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transp"~~

Coding:

BER-TLV:	D0	81	FD	81	03	04	43	04	82	02	81	83
	85	38	54	68	65	20	64	64	64	72	65	73
	73	20	64	64	74	64	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	64	74	69
	6F	6E	5F	44	64	64	72	65	73	73	86	09
	94	44	22	33	44	55	66	77	F8	8B	84	AC
	04	00	09	94	40	32	54	76	F8	40	F4	A0
	54	77	6F	20	74	79	70	65	73	20	64	72
	65	20	64	65	66	69	6E	65	64	3A	20	2D
	20	44	20	73	68	6F	72	74	20	6D	65	73
	73	64	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	64	6E
	20	53	4D	53	2D	53	55	42	4D	49	54	20
	6D	65	73	73	64	67	65	2C	20	6F	72	20
	64	6E	20	53	4D	53	2D	43	4F	4D	4D	44
	4E	44	20	6D	65	73	73	64	67	65	2C	20
	77	68	65	72	65	20	74	68	65	20	75	73
	65	72	20	64	64	74	64	20	63	64	6E	20
	62	65	20	70	64	73	73	65	64	20	74	72
	64	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 RD Instruct the SC to accept an SMS SUBMIT for a SM~~
~~TP VPF TP VP field not present~~
~~TP RP TP Reply Path is not set in this SMS SUBMIT~~
~~TP UDHI The TP UD field contains only the short message~~
~~TP SRR A status report is not requested~~
~~TP MR "00"~~
~~TP DA~~
~~TON International number~~
~~NPI ISDN / telephone numbering plan~~
~~Address value "012345678"~~
~~TP PID Short message type 0~~
~~TP DCS~~
~~Message coding SMS default alphabet~~
~~Message class class 0~~
~~TP UDL 160~~
~~TP UD "Two types are defined: A short message to be sent to the network in an SMS SUBMIT message, or an SMS COMMAND message, where the user data can be passed transp"~~

Coding:

BER-TLV:	D0	81	E9	81	03	04	43	00	82	02	81	83
	85	38	54	68	65	20	64	64	64	72	65	73
	73	20	64	64	74	64	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	64	74	69
	6F	6E	20	44	64	64	72	65	73	73	86	09
	94	44	22	33	44	55	66	77	F8	8B	84	98
	04	00	09	94	40	32	54	76	F8	40	F0	A0
	D4	FB	4B	44	CF	C3	CB	73	50	58	5E	06
	94	CB	E6	B4	BB	4C	D6	84	5A	A0	20	68
	8E	7E	CB	E9	A0	76	79	3E	0F	9F	CB	20
	FA	4B	24	2E	83	E6	65	37	4D	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
	45	D4	2E	CF	E7	E1	73	99	05	7A	CB	44
	64	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	D4	D4	65	50	7D	5E	96	83	C8	64
	7A	48	34	0E	BB	44	E2	32	08	4E	9E	CF
	CB	64	40	5D	4E	76	CF	E4				

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-RD: Instruct the SC to accept an SMS-SUBMIT for a SM~~
~~TP-VPF: TP-VP field not present~~
~~TP-RP: TP Reply Path is not set in this SMS-SUBMIT~~
~~TP-UDHI: The TP-UD field contains only the short message~~
~~TP-SRR: A status report is not requested~~
~~TP-MR: "00"~~
~~TP-DA~~
~~TON: International number~~
~~NPI: ISDN / telephone numbering plan~~
~~Address value: "01"~~
~~TP-PID: Short message type 0~~
~~TP-DCS~~
~~Message coding: SMS default alphabet~~
~~Message class: class 0~~
~~TP-UDL: 1~~
~~TP-UD: ""~~

Coding:

BER-TLV:	D0	81	FD	81	03	01	43	00	82	02	81	83
	85	81	E6	54	77	6F	20	74	79	70	65	73
	20	64	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	64	6E	20	53	4D	53	2D	53	55	42	4D
	49	54	20	6D	65	73	73	64	67	65	2C	20
	6F	72	20	64	6E	20	53	4D	53	2D	43	4F
	4D	4D	44	4E	44	20	6D	65	73	73	64	67
	65	2C	20	77	68	65	72	65	20	74	68	65
	20	75	73	65	72	20	64	64	74	64	20	63
	64	6E	20	62	65	20	70	64	73	73	65	64
	20	74	72	64	6E	73	70	64	72	65	6E	74
	6C	79	3B	20	2D	20	44	20	73	68	6F	72
	74	20	6D	65	73	73	64	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	64	6E	20	53	4D	53	2D	53	55
	42	4D	49	54	20	8B	09	04	00	02	94	40
	40	F0	04	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	84	03	04	20	00	82	02	84	03	85
	09	44	69	64	6C	20	54	6F	6E	65	8E	04
	04	84	02	04	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	84	03	04	20	00	82	02	84	03	85
	09	53	75	62	2E	20	42	75	73	79	8E	04
	02	84	02	04	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	84	03	04	20	00	82	02	84	03	85
	0A	43	6F	6E	67	65	73	74	69	6F	6E	8E
	04	03	84	02	04	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	84	03	04	20	00	82	02	84	03	85
	06	52	50	20	44	63	6B	8E	04	04	84	02
	04	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	84	03	01	20	00	82	02	84	03	85
	05	4E	6F	20	52	50	8E	04	05	84	02	04
	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	84	03	04	20	00	82	02	84	03	85
	09	53	70	65	63	20	49	6E	66	6F	8E	04
	06	84	02	04	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	64	6C	6C
	07	84	02	04	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	04	20	00	82	02	84	03	85
	09	52	69	6E	67	20	54	6F	6E	65	8E	04
	08	84	02	04	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	84	03	01	20	00	82	02	81	03	85
	04	42	65	65	70	8E	04	10	84	02	04	04

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	84	03	01	20	00	82	02	81	03	85
	08	50	6F	73	69	74	69	76	65	8E	04	44
	84	02	04	04								

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	84	03	04	20	00	82	02	84	03	85
	08	4E	65	67	64	74	69	76	65	8E	04	12
	84	02	04	04								

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	84	03	04	20	00	82	02	84	03	85
	05	54	75	69	63	6B	8E	04	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	04	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	04	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	04	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	04	21	80	82	02	81	02	8D
	0E	00	D4	F7	9B	BD	4E	D3	41	D4	F2	9C
	0E	9A	04									

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	04	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	64	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	64	79	20	64	20	74
	65	78	74	20	6D	65	73	73	64	67	65	2E
	20	49	74	20	64	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	64
	74	20	6D	65	73	73	64	67	65	2C	20	64
	6E	64	20	74	68	65	20	74	65	78	74	20
	73	74	72	69	6E	67	20	66	6F	72	6D	64
	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	4A	81	03	01	21	80	82	02	81	02	8D
	0F	04	3C	47	4F	2D	42	44	43	4B	57	44
	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	04	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	04	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	04	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	04	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	AD	81	03	04	22	04	82	02	81	82
	8D	81	A1	04	45	6E	74	65	72	20	22	78
	22	2E	20	54	68	69	73	20	63	6F	6D	6D
	61	6E	64	20	69	6E	73	74	72	75	63	74
	73	20	74	68	65	20	4D	45	20	74	6F	20
	64	69	73	70	6C	61	79	20	74	65	78	74
	2C	20	61	6E	64	20	74	6F	20	65	78	70
	65	63	74	20	74	68	65	20	75	73	65	72
	20	74	6F	20	65	6E	74	65	72	20	64	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	4B	84	03	04	23	00	82	02	84	82	8D
	0C	04	45	6E	74	65	72	20	34	32	33	34
	35	94	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	4A	84	03	04	23	08	82	02	84	82	8D
	0B	00	45	37	BD	2C	07	D9	6E	AA	D4	0A
	94	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	04	23	04	82	02	81	82	8D
	0C	04	45	6E	74	65	72	20	41	62	43	64
	45	94	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	04	23	04	82	02	81	82	8D
	18	04	50	61	73	73	77	6F	72	64	20	34
	3C	53	45	4E	44	3E	32	33	34	35	36	37
	38	94	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	04	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
	04	44										

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	04	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	04	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: -

***111111111###**222222222###**333333333###**444444444
 4###**555555555###**666666666###**777777777###**888888
 8888###**999999999###**000000000###"

Response length
 Minimum length: 160
 Maximum length: 160

Coding:

BER-TLV:	D0	81	B1	81	03	04	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	04	23	00	82	02	81	82	8D
	07	04	3C	53	45	4E	44	3E	91	02	00	04

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	04	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	84	03	04	24	00	82	02	84	82	85
	0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
	65	63	74	8F	07	04	49	74	65	6D	20	34
	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	84	03	04	24	00	82	02	84	82	85
	0B	53	65	6C	65	63	74	20	49	74	65	6D
	8F	04	44	4F	6E	65	8F	04	42	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	64	72	67	65	4D	65	6E	75	32
	8F	4E	FF	43	64	6C	6C	20	46	6F	72	77
	64	72	64	69	6E	67	20	55	6E	63	6F	6E
	64	69	74	69	6F	6E	64	6C	8F	4D	FE	43
	64	6C	6C	20	46	6F	72	77	64	72	64	69
	6E	67	20	4F	6E	20	55	73	65	72	20	42
	75	73	79	8F	4C	FD	43	64	6C	6C	20	46
	6F	72	77	64	72	64	69	6E	67	20	4F	6E
	20	4E	6F	20	52	65	70	6C	79	8F	26	FC
	43	64	6C	6C	20	46	6F	72	77	64	72	64
	69	6E	67	20	4F	6E	20	55	73	65	72	20
	4E	6F	74	20	52	65	64	63	68	64	62	6C
	65	8F	4E	FB	42	64	72	72	69	6E	67	20
	4F	66	20	41	6C	6C	20	4F	75	74	67	6F
	69	6E	67	20	43	64	6C	6C	73	8F	2C	FA
	42	64	72	72	69	6E	67	20	4F	66	20	44
	6C	6C	20	4F	75	74	67	6F	69	6E	67	20
	49	6E	74	65	72	6E	64	74	69	6F	6E	64
	6C	20	43	64	6C	6C	73	8F	11	F9	43	4C
	49	20	50	72	65	73	65	6E	74	64	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	4D	FF	34	20	43	64	6C	6C	20	46	6F
	72	77	64	72	64	20	55	6E	63	6F	6E	64
	69	74	69	6F	6E	64	6C	8F	1C	FE	32	20
	43	64	6C	6C	20	46	6F	72	77	64	72	64
	20	4F	6E	20	55	73	65	72	20	42	75	73
	79	8F	4B	FD	33	20	43	64	6C	6C	20	46
	6F	72	77	64	72	64	20	4F	6E	20	4E	6F
	20	52	65	70	6C	79	8F	25	FC	34	20	43
	64	6C	6C	20	46	6F	72	77	64	72	64	20
	4F	6E	20	55	73	65	72	20	4E	6F	74	20
	52	65	64	63	68	64	62	6C	65	8F	20	FB
	35	20	42	64	72	72	69	6E	67	20	4F	66
	20	41	6C	6C	20	4F	75	74	67	6F	69	6E
	67	20	43	64	6C	6C	73	8F	24	FA	36	20
	42	64	72	72	69	6E	67	20	4F	66	20	44
	6C	6C	20	4F	75	74	67	6F	69	6E	67	20
	49	6E	74	20	43	64	6C	6C	73	8F	43	F9
	37	20	43	4C	49	20	50	72	65	73	65	6E
	74	64	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	64	6C	6C	20	73	75	70	70	6C	79	20
	64	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
	64	79	20	63	68	6F	6F	73	65	20	6F	6E
	65	2E	20	45	64	63	68	20	69	74	65	6D
	20	63	6F	6D	70	72	69	73	65	73	20	64
	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	64	74	65	20
	74	68	65	20	73	65	6C	65	63	74	69	6F
	6E	29	20	64	6E	64	20	64	20	74	65	78
	74	20	73	74	72	69	6E	67	2E	20	4F	70
	74	69	6F	6E	64	6C	6C	79	20	74	68	65
	20	53	49	4D	20	6D	64	79	20	69	6E	63
	6C	75	64	65	20	64	6E	20	64	6C	70	68
	64	20	69	64	65	6E	74	69	66	69	65	72
	2E	20	54	68	65	20	64	6C	70	68	64	20
	69	64	65	6E	74	69	66	69	65	72	20	
	69	8F	02	04	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  84  03  04  25  00  82  02  84  82  85
           0C  54  6F  6F  6C  6B  69  74  20  4D  65  6E
           75  8F  07  04  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  84  03  04  25  00  82  02  84  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 84 03 04 25 00 82 02 84 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	04	25	00	82	02	81	82
	85	0A	4C	64	72	67	65	4D	65	6E	75	32
	8F	4D	FF	34	20	43	64	6C	6C	20	46	6F
	72	77	64	72	64	20	55	6E	63	6F	6E	64
	69	74	69	6F	6E	64	6C	8F	1C	FE	32	20
	43	64	6C	6C	20	46	6F	72	77	64	72	64
	20	4F	6E	20	55	73	65	72	20	42	75	73
	79	8F	4B	FD	33	20	43	64	6C	6C	20	46
	6F	72	77	64	72	64	20	4F	6E	20	4E	6F
	20	52	65	70	6C	79	8F	25	FC	34	20	43
	64	6C	6C	20	46	6F	72	77	64	72	64	20
	4F	6E	20	55	73	65	72	20	4E	6F	74	20
	52	65	64	63	68	64	62	6C	65	8F	20	FB
	35	20	42	64	72	72	69	6E	67	20	4F	66
	20	44	6C	6C	20	4F	75	74	67	6F	69	6E
	67	20	43	64	6C	6C	73	8F	24	FA	36	20
	42	64	72	72	69	6E	67	20	4F	66	20	44
	6C	6C	20	4F	75	74	67	6F	69	6E	67	20
	49	6E	74	20	43	64	6C	6C	73	8F	43	F9
	37	20	43	4C	49	20	50	72	65	73	65	6E
	74	64	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	64	6C	6C	20	73	75	70	70	6C	79	20
	64	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	64	6C	6C	20	62	65	20
	69	6E	74	65	67	72	64	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	64
	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
	64	74	20	68	69	73	20	6F	77	6E	20	64
	69	73	63	72	65	74	69	6F	6E	2E	20	45
	64	63	68	20	69	74	65	6D	20	63	6F	6D
	70	72	69	73	65	73	20	64	20	73	68	8F
	02	04	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	84	03	04	26	00	82	02	84	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 84 03 04 26 04 82 02 84 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: 8 bit~~
~~TP-SCTS: 01/01/98 00:00:00 +0~~
~~TP-UDL: 13~~
~~TP-UD: "Short Message"~~

Coding:

BER-TLV: D4 2D 82 02 83 84 06 09 91 11 22 33
44 55 66 77 F8 8B 1C 04 04 91 24 43
7F 16 89 10 10 00 00 00 00 0D 53 68
6F 72 74 20 4D 65 73 73 64 67 65

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 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:	D4	2D	82	02	83	84	06	09	94	44	22	33
	44	55	66	77	F8	8B	4C	04	04	94	24	43
	7F	F6	89	40	40	00	00	00	00	0D	53	68
	6F	72	74	20	4D	65	73	73	64	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: 0~~
~~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	40	40	04
	F4	44	43	65	6C	6C	20	42	72	6F	64	64
	63	64	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

ENVELOPE 2.2: 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	84	8C	58	C0	41	40	04
	F4	44	43	65	6C	6C	20	42	72	6F	64	64
	63	64	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

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	04	84	90	04	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	04	84	90	04	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 04 84 90 04 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 04 84 90 04 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 84 86 0B 94 40 32 54
76 98 40 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 84 86 03 84 24 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 84 86 03 84 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 84 86 03 84 23 F4

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 84 86 03 84 24 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 84 86 03 84 44 44

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 40 04 01 21 84 0B 91 40 32 54 76
 98 40 32 54 76 98

SMS-PP (SEND SHORT MESSAGE) Message 1

Logically:

~~SMS TPDU~~
~~TP MTI SMS SUBMIT~~
~~TP RD Instruct the SC to accept an SMS SUBMIT for a SM~~
~~TP VPF TP VP field not present~~
~~TP RP TP Reply Path is not set in this SMS SUBMIT~~
~~TP UDHI The TP UD field contains only the short message~~
~~TP SRR A status report is not requested~~
~~TP MR "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:	04	00	09	94	40	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 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 7~~
~~TP UD "Send SM"~~

Coding:	04	00	09	94	40	32	54	76	F8	40	F0	07
	D3	B2	9B	0C	9A	36	04					

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:	04	00	09	94	40	32	54	76	F8	40	F0	A0
	D4	FB	4B	44	CF	C3	CB	73	50	58	5E	06
	94	CB	E6	B4	BB	4C	D6	84	5A	A0	20	68
	8E	7E	CB	E9	A0	76	79	3E	0F	9F	CB	20
	FA	4B	24	2E	83	E6	65	37	4D	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
	45	D4	2E	CF	E7	E4	73	99	05	7A	CB	44
	64	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	D4	D4	65	50	7D	5E	96	83	C8	64
	7A	48	34	0E	BB	41	E2	32	08	4E	9E	CF
	CB	64	40	5D	4E	76	CF	E4				

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:	04	00	09	94	40	32	54	76	F8	40	F0	A0
	D4	FB	4B	44	CF	C3	CB	73	50	58	5E	06
	94	CB	E6	B4	BB	4C	D6	84	5A	A0	20	68
	8E	7E	CB	E9	A0	76	79	3E	0F	9F	CB	20
	FA	4B	24	2E	83	E6	65	37	4D	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
	45	D4	2E	CF	E7	E4	73	99	05	7A	CB	44
	64	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	D4	D4	65	50	7D	5E	96	83	C8	64
	7A	48	34	0E	BB	41	E2	32	08	4E	9E	CF
	CB	64	40	5D	4E	76	CF	E4				

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: 04 00 02 94 10 40 F0 04 20

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 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 94 21 43 7F 46 89 10 10 00 00
 00 00 0D 53 68 6F 72 74 20 4D 65 73
 73 64 67 66

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~~ ~~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	94	24	43	7F	F6	89	10	10	00	00
	00	00	0D	53	68	6F	72	74	20	4D	65	73
	73	64	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:~~ ~~0~~
~~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	10	10	04	F4	11	43	65	6C	6C	20	42
	72	6F	64	64	63	64	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								

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: "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	64	64	63	64	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	20	20	20	20	20	20	20	20

SMS-CB (Data-Download) Message 3

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	64	64	63	64	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	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: 04 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 94 40 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 84 44 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 84 04 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: 04 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 42 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: 04 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: 04 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 84 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 84 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 RESPONSE 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 its normal standby display.~~

~~The ME shall accept and display normal priority text commands when the screen is only being used for its 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 '914C'.~~
- ~~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 '9000' 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 '914C'.~~
- ~~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 '9000' 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 '914C'.~~
- ~~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 1E'.~~
- ~~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
 "***111111111###***222222222###***333333333###***444444444###***555555555###***666666666666###***777777777###***888888888###***999999999###***000000000###".
- 15) After step y) the ME shall return a result of "command performed successfully" with the returned text string of "***111111111###***222222222###***333333333###***444444444###***555555555###***666666666###***777777777###***888888888###***999999999###***000000000###" 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.

- 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.~~

~~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'.~~

- ~~e) 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 RESPONSE 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 is", 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 its 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 its 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.~~
- ~~e) The SIM Simulator sets EF_{IMSI} to "001-01-0011223344" for GSM900, GSM1800 and GSM900/1800 ME.
The SIM Simulator sets EF_{IMSI} to "001-011-001122334" for GSM1900 ME.~~
- ~~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_{LOC1} 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" for GSM900, GSM1800 and GSM900/1800 ME. The SIM Simulator sets EF_{IMSI} to "001 011 987654321" for GSM1900 ME.~~
- 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: "001 01 0123456789" for GSM900, GSM1800 and GSM900/1800 ME and "001 011 012345678" for GSM1900 ME.~~
- 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: "001 01 0011223344" for GSM900, GSM1800 and GSM900/1800 ME and "001 011 001122334" for GSM1900 ME.~~
- 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: "001 01 9876543210" for GSM900, GSM1800 and GSM900/1800 ME and "001 011 987654321" for GSM1900 ME.~~

~~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 it 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 to 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 Dialed 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 it 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*+01234567890123456789#" 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*+01234567890123456789#" 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*+01234567890123456789#" 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*+0123456789012345678901234567*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 then 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 Dialed 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 4F'.~~
- ~~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'.~~

- 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—
 "+012345678901234567890123456789*#####*012345678901234567890123456789*#####*012345678901234567890123456789*#####*01234567890123456789*#####*p*012345678901234567890123456789*#####*pp012345678901234567890123456789*#####*ppp012345678901234567890123456789*#####*pppp012345678901234567890123456789*#####*ppppp012345678901234567890123456789*#####*pppppp012345678901234567890123456789*#####*ppppppp012345678901234567890123456789*#####*ppppppp01".
- 17) After step t) the ME shall attempt to set up a call to address
 "+012345678901234567890123456789*#####*012345678901234567890123456789*#####*012345678901234567890123456789*#####*p*012345678901234567890123456789*#####*pp012345678901234567890123456789*#####*ppp012345678901234567890123456789*#####*pppp012345678901234567890123456789*#####*ppppp012345678901234567890123456789*#####*pppppp012345678901234567890123456789*#####*ppppppp012345678901234567890123456789*#####*ppppppp01". 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 ecc) 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) Message 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 (Data Download) Message 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 (Data Download) Message 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) Message 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'.~~

~~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.~~

~~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 2 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 3 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 2.2: SMS-CB-DOWNLOAD command.~~
- ~~3) After step j) 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).~~
- ~~e) 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 e) 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 its 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 its 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 its 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.~~

~~The 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	⊖		Feat_Subaddress
2 (A.2/20)	Abbreviated-Dialling	GSM-02.07-B.3.1	⊖		Feat_AD
3 (A.2/21)	Fixed-Number-Dialling	GSM-02.07-B.3.2	⊖		Feat_FND
4 (A.2/22)	Barring-of-Outgoing-Calls	GSM-02.07-B.3.3	⊖		Feat_BO
5 (A.2/25)	Last-Numbers-Dialled	GSM-02.07-B.3.6	⊖		Feat_LND
6 (A.2/26)	At least one autocalling feature.	GSM-02.07, 2	⊖		Feat_Autocall
7 (A.3/1)	Telephony.	GSM-02.03, A.1.4	⊖		Serv_TS14
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.2.4	⊖		Serv_SS_CFU
10 (A.3/4)	Short-Message-MO/PP.	GSM-02.03, A.1.3.4	⊖		Serv_TS22
11 (A.5/9)	Call-Waiting.	GSM-02.04, 3.1	⊖		Serv_SS_CW
12 (A.25/2)	full-rate-speech-mode.	GSM-02.06, 3.2.2; GSM-02.01, A.1.4	C2501		TSPC_FullRateSpeech
13 (A.25/3)	half-rate-speech-mode.	GSM-02.06, 3.2.2; GSM-02.01, A.1.4	⊖		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	⊖		Feat_SIM_ATK
C301	IF A.1/7 (A.3/1) THEN M ELSE O		-- Serv_TS14		
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	Ø		SAT_FEA_Proactive
6	Data download to SIM	GSM 11.14, 7	Ø		SAT_FEA_DDSIM
7	Menu selection	GSM 11.14, 8	Ø		SAT_FEA_Menu_Sel
8	Call Control by SIM	GSM 11.14, 9	Ø		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 PROFILEPrerequisite: ~~A.2/1~~ SAT_FEA_Term_Profile.

Item	Terminal Profile	Ref.	Status	Support	Mnemonic
1	Profile Download	GSM 11.14, 5	M		PD_Pro_Dvnt
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 TextPrerequisite: ~~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_Char_Set	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 InputPrerequisite: ~~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_Length	1..160	
2	Input of digits 0-9, +, *, #	GSM-02.07, 2	M		Get_Input_Char_Set	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 TonePrerequisite: ~~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 IntervalPrerequisite: ~~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: RefreshPrerequisite: ~~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	⊖		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 MenuPrerequisite: ~~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 = 256-1-2-5-4-3-3Item 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 ItemPrerequisite: ~~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 = 256-1-2-5-4-3-3Item 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.8/1X = 256-1-2-5-4-3-length(SMS TPDU simple TLV)
(Minimum length of length(SMS TPDU simple TLV) is 9 octets, i.e. maximum 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.8/1X = 256-1-2-5-4-3-length(SS/USSD string simple TLV)
(Minimum 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 Call 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	⊙		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 Off!~~

~~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
4	The SIMPLE-TLV Address used in BER-TLV-ENVELOPE for SMS-PP-Download.	GSM-11.14, 7.1.2	⊙		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 Subaddress" 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	Ø		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 Number	Test Requirement	Proactive SIM Command Facilities						
		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	*		*		*		14
21.2	5, 6		*	*		*		14
21.3	7, 8	*		*			*	14
21.4	9	*			*	*		14
21.5	10, 11	*			*	*		160
21.6	12, 13	*		*		*		14
21.7	14, 15	*		*		*		7

~~B.2 — Get Inkey~~

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

Proactive SIM Command Number	Test Requirement	Proactive SIM Command Facilities				
		Digits (0-9, *, # and +) only	SMS default alphabet	Unpacked text string	Packed text string	Text String Length
22.1	1, 2	*		*		9
22.2	9, 10		*	*		9
22.3	3, 4	*			*	9
22.4	5, 6	*		*		14
22.5	7, 8	*		*		7
22.6	11, 12		*	*		160

B.3 — Get Input

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

Proactive SIM Command Number	Test Requirement	Proactive SIM Command Facilities										
		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	*		*		*			*	14	5	5
23.2	3, 4	*		*			*		*	14	5	5
23.3	18, 19		*	*		*			*	14	5	5
23.4	5, 6, 7	*			*	*			*	23	4	8
23.5	8, 9	*		*		*			*	20	4	8
23.6	10, 11	*		*		*			*	14	0	20
23.7	12, 13	*		*		*			*	7	0	8
23.8	14, 15	*		*		*			*	160	160	160
23.9	16, 17		*	*		*			*	6	0	4
23.10	-	*		*		*			*	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	4

B.5 ~~Play Tone~~

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

Proactive SIM Command Number	Test Requirement	Proactive SIM Command Facilities			
		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	4
20.10	12	Positive acknowledgment	8	Seconds	4
20.11	13	Negative acknowledgment	8	Seconds	4
20.12	14	Congestion	5	Tenths of seconds	2
20.13	20	-	-	-	244

B.6 ~~Poll Interval~~

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

Proactive SIM Command Number	Test Requirement	Proactive SIM Command Facilities	
		Time-unit	Time interval
3.1	1,2	Tenths of seconds	4
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 Number	Test Requirement	Proactive SIM Command Facilities				
		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 Number	Test Requirement	Proactive SIM Command Facilities		
		Alpha Identifier Length	Number of items	Maximum length of item
25.1	4	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 Number	Test Requirement	Proactive SIM Command Facilities		
		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 Number	Test Requirement	Proactive SIM Command Facilities				
		Packing not required	Packing required	Alpha identifier length	Data Coding Scheme	User Data Length
13.1	1	*		7	8-bit data	12
13.2	2		*	7	8-bit data	7
13.3	3	*		13	SMS default alphabet	13
13.4	4		*	56	8-bit data	160
13.5	5	*		56	SMS default alphabet	160
13.6	6	*		230	SMS default alphabet	4

~~B.11 Send SS~~

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

Proactive SIM Command Number	Test Requirement	Proactive SIM Command Facilities	
		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 Number	Test Requirement	Proactive SIM Command Facilities								Alpha Identifier Length
		if not busy on another call	putting all other calls on hold	disconnecting all other calls	Redial	Capability configuration parameters	Called party subaddresses	Time Unit	Time Interval	
10.1	1, 2, 3, 4, 11, 12	*								8
10.2	5, 6	*			*					20
10.3	7, 8		*							7
10.5	9, 10			*						10
10.7	14, 15	*				*				17
10.8	20, 21	*					*			12
10.9	22, 23	*			*			Seconds	10	8
10.10	16, 17	*			*					-
10.11	18, 19	*			*					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 Number	Test Requirement	Proactive SIM Command Facilities	
		Location Information	IMEI
26.1	4	*	
26.2	2		*

Annex ~~E~~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
11.10-4	A003	96	2+	5.2.0	Correction of wrong coding for SIM Application Toolkit test 27.22.4.2	F	5.3.0
11.10-4	A004	96	2+	5.2.0	Corrections for Test Case 27.22.5.1 (SMS-PP Data Download)	F	5.3.0
11.10-4	A005	96	2+	5.3.0	Correction of wrong coding for SIM Application Toolkit 27.22	F	5.4.0
11.10-4	A006	96	2+	5.4.0	Corrections for Test Case 27.22.4.7 (REFRESH)	F	5.5.0
11.10-4	A007	96	2+	5.4.0	Corrections for Test Case 27.22.5.2 (SMS-CB Data Download)	F	5.5.0