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**Digital cellular telecommunications system (Phase 2+);
Mobile Station (MS) conformance specification;
Part 4: Subscriber Interface Module (SIM)
application toolkit conformance specification
(3GPP TS 11.10-4 version 8.2.0 Release 1999)**

**GLOBAL SYSTEM FOR
MOBILE COMMUNICATIONS**

Reference
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Foreword

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

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

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Contents

Foreword

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

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

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1 Scope

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

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

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

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

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

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

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

2 References

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

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the relevant Release*.

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

   - For a GSM Phase 2+ Release 1998 MS, references to GSM documents are to version 7.x.y, when available.

   - For a GSM Phase 2+ Release 1997 MS, references to GSM documents are to version 6.x.y, when available.

   - For a GSM Phase 2+ Release 1996 MS, references to GSM documents are to version 5.x.y,. when available.

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

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

[1]   3GPP TS 21.905 R99

[2]   3GPP TS 22.001 R99

etc.

[1]   3GPP TS 01.04 (R96 to R98): "Abbreviations and acronyms".
                  3GPP TR 21.905 (R99 onwards): "Vocabulary for 3GPP Specifications".

[2]   3GPP TS 02.01 (R96 to R98): "Principles of telecommunication services supported by a GSM
                  Public Land Mobile Network (PLMN)".

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

[3]   3GPP TS 02.03 (R96 to R98): "Teleservices supported by a GSM Public Land Mobile Network
                  (PLMN)".
                  3GPP TS 22.003 (R99 onwards): "Circuit Teleservices supported by a Public Land Mobile
                  Network (PLMN)".

[4]   3GPP TS 02.04 (R96 to R98): "General on supplementary services".
                  3GPP TS 22.004 (R99 onwards): "General on supplementary services".

[5]   3GPP TS 02.06 (R96 to R98): "Types of Mobile Stations (MS)".

[6]   3GPP TS 02.07 (R96 to R98): "Mobile Station (MS) features".

[7]   3GPP TS 03.38 (R96 to R98): "Alphabets and language-specific information".
                  3GPP TS 23.038 (R99 onwards): "Alphabets and language-specific information".

[8]   3GPP TS 03.40 (R96 to R98): "Technical realization of the Short Message Service (SMS);
                  Point-to-Point (PP)".
                  3GPP TS 23.040 (R99 onwards): "Technical realization of the Short Message Service (SMS)".

[9]   3GPP TS 03.41 (R96 to R98): "Technical realization of Cell Broadcast Service (CBS)".
                  3GPP TS 23.041 (R99 onwards): "Technical realization of Cell Broadcast Service (CBS)".

[10]   3GPP TS 04.08 (R96 to 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 (R96 to R98): "Point-to-Point (PP) Short Message Service (SMS) support on
                  mobile radio interface".
                  3GPP TS 24.011 (R99 onwards): "Point-to-Point (PP) Short Message Service (SMS) Support on
                  mobile radio interface".

[12]   3GPP TS 11.10-1 (Ph2+ to R99): " Digital cellular telecommunications system - Mobile Station
                  (MS) conformance specification Part 1: Conformance specification ".

[13]   3GPP TS 11.11 (R96 to R99): "Specification of the Subscriber Identity Module - Mobile
                  Equipment (SIM-ME) interface".

[14]   3GPP TS 11.12 (R96): "Specification of the 3 Volt Subscriber Identity Module - Mobile
                  Equipment (SIM-ME) interface".

[15]   3GPP TS 11.14 (R96 to R99): "Specification of the SIM application toolkit for the Subscriber
                  Identity Module – Mobile Equipment (SIM – ME) interface".

[16]   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

The table B.1 lists the optional features for which the supplier of the implementation states the support.

3.2.3 Applicability to terminal equipment

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

See table A.1.

3.2.4 Definitions

The definitions specified in 3GPP TS 11.10-1 [12] clause 3.3 shall apply, unless otherwise specified in the present clause.

3.2.4.1 Format of the Table of Optional Features

Option

The optional feature supported or not by the implementation

Support Answer notation

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

Y or y   supported by the implementation

N or n   not supported by the implementation

N/A, n/a or -   no answer required (allowed only if the status is N/A, directly or after evaluation of a conditional status)

Mnemonic column

The Mnemonic column contains mnemonic identifiers for each item.

3.2.4.2   Format of the Applicability Table

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

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

-    In the "Item" column a local entry number for the requirement in the table is given.

-    In the "Description" column a short non-exhaustive description of the requirement is found.

-    The "Release" column gives the Release applicable and onwards, for the item in the "Description" column

-    The "Test Sequence(s)" column gives a reference to the test sequence number(s) detailed in 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 "Support" column is blank in the proforma, and shall be completed by the manufacturer in respect of each particular requirement to indicate the choices, which have been made in the implementation.

-    The "Terminal Profile" column gives a reference to the corresponding bit that needs to be present in the Terminal Profile

3.2.4.3   Status and Notations

The "Release 9x ME" columns shows the status of the entries as follows:

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

M   mandatory – the capability is required to be supported.

O   optional – the capability may be supported or not.

N/A   not applicable – in the given context, it is impossible to use the capability.

X   prohibited (excluded) – there is a requirement not to use this capability in the given context.

O.i   qualified optional – for mutually exclusive or selectable options from a set. "i" is an integer which identifies an unique group of related optional items and the logic of their selection which is defined immediately following the table.

Ci   conditional – the requirement on the capability ("M", "O", "X" or "N/A") depends on the support of other optional or conditional items. "i" is an integer identifying an unique conditional status expression which is defined immediately following the table. For nested conditional expressions, the syntax "IF ... THEN (IF ... THEN ... ELSE...) ELSE ..." shall be used to avoid ambiguities.

References to items

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

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

3.3 Table of Optional Features

Support of SIM Application Toolkit is optional for Mobile Equipment. However, if an ME states conformance with a specific GSM release, it is mandatory for the ME to support all functions of that release, as stated in 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 supplier of the implementation shall state the support of possible options in the table A.1 below.

Table A.1: Options

Item	Option	Status	support	Mnemonic
1	Capability Configuration parameter	O		O_Cap_Conf
2	Sustained text	O		O_sust_text
3	UCS2 coding scheme for Entry	O		O_Ucs2_Entry
4	Extended Text String	O		O_Ext_Str
5	Help information	O		O_Help
6	Icons	O		O_Icons
7	Class A: Dual Slot	O		O_Dual_Slot
8	Detachable reader	O		O_Detach_Rdr
9	Class B: RUN AT	O		O_Run_At
10	Class C: LAUNCH BROWSER	O		O_LB
11	Class D: Soft keys	O		O_Soft_key
12	Class E : B.I.P	O		O_BIP
13	Screen sizing parameters	O		O_Scr_Siz
14	Screen Resizing	O		O_Scr_Resiz
15	UCS2 coding scheme for Display	O		O_Ucs2_Disp
16	Mobile supporting GPRS	O		O_GPRS
17	Mobile supporting UDP	O		O_UDP
18	Mobile supporting TCP	O		O_TCP

3.4 Applicability table

Table B.1: Applicability of tests

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Support
1	**PROFILE DOWNLOAD 27.22.1**	**R96**	1	**M**	**M**	**M**	**M**	E.1/1	
2	**Contents of the TERMINAL PROFILE command 27.22.2**	R96		M	M	M	M	E.1/1	

3	**Servicing of Proactive SIM Commands 27.22.3**	R96		M	M	M	M		
4	**DISPLAY TEXT 27.22.4.1**								
	Unpacked	R96	1.1	M	M	M	M	E.1/17	
	Screen busy	R96	1.2	M	M	M	M	E.1/17	
	high priority	R96	1.3	M	M	M	M	E.1/17	
	packed	R96	1.4	M	M	M	M	E.1/17	
	clear after delay	R96	1.5	M	M	M	M	E.1/17	
	clear after user confirmation	R96	1.1	M	M	M	M	E.1/17	
	long text up to 160 bytes	R96	1.6	M	M	M	M	E.1/17	
	Backwards move in SIM session	R96	1.7	M	M	M	M	E.1/17	
	Session terminated by user	R96	1.8	M	M	M	M	E.1/17	
	Command not understood by ME	R96	1.9	M	M	M	M	E.1/17	
	no response from user	R96	2.1	M	M	M	M	E.1/17	
	Extension Text	R98	3.1			C106	C106	**E.1/17 AND E.1/16**	
	sustained text	R98	4.1, 4.2, 4.3, 4.4			C104	C104	E.1/17 AND E.1/65	
	icons	R98	5.1, 5.2, 5.3			C108	C108	E.1/17	
	UCS2 display	R97	6.1		C118	C118	C118	E.1/17 AND E.1/15	
5	**GET INKEY 27.22.4.2**								
	prompt unpacked	R96	1.1	M	M	M	M	E.1/18	
	prompt packed	R96	1.2	M	M	M	M	E.1/18	
	digits only	R96	1.1	M	M	M	M	E.1/18	
	Backwards move in SIM session	R96	1.3	M	M	M	M	E.1/18	

	Session terminated by user	R96	1.4	M	M	M	M	E.1/18	
	SMS alphabet	R96	1.5	M	M	M	M	E.1/18	
	Long text up to 160 bytes	R96	1.6	M	M	M	M	E.1/18	
	no response from user	R96	2.1	M	M	M	M	E.1/18	
	UCS2 display	R97	3.1		C118	C118	C118	E.1/18 AND E.1/15	
	UCS2 display, Long text up to 70 chars	R97	3.2		C118	C118	C118	E.1/18 AND E.1/15	
	UCS2 format of entry	R97	4.1		C105	C105	C105	E.1/18 AND E.1/14	
	"Yes/No" response	R98	5.1			M	M	E.1/18 AND E.1/60	
	Icons	R98	6.1, 6.2, 6.3, 6.4			C108	C108	E.1/18	
	Help information	R97	7.1		C107	C107	C107	E.1/18	
6	**GET INPUT** **27.22.4.3**								
	input unpacked	R96	1.1	M	M	M	M	E.1/19	
	input packed	R96	1.2	M	M	M	M	E.1/19	
	digits only	R96	1.1	M	M	M	M	E.1/19	
	SMS alphabet	R96	1.3	M	M	M	M	E.1/19	
	hidden input	R96	1.4	M	M	M	M	E.1/19	
	min / max acceptable length	R96	1.5, 1.9	M	M	M	M	E.1/19	
	Backwards move in SIM session	R96	1.6	M	M	M	M	E.1/19	
	Session terminated by user	R96	1.7	M	M	M	M	E.1/19	
	Prompt text up to 160 bytes	R96	1.8	M	M	M	M	E.1/19	
	SMS default alphabet, ME to echo text, packing not required	R96	1.9	M	M	M	M	E.1/19	
	Null length for the text string	R96	1.10	M	M	M	M	E.1/19	
	no response from	R96	2.1	M	M	M	M	E.1/19	

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	user							
	UCS2 display	R97	3.1, 3.2		C118	C118	C118	E.1/19 AND E.1/15
	UCS2 entry	R97	4.1, 4.2		C105	C105	C105	E.1/19 AND E.1/14
	default text for the input	R97	5.1, 5.2		M	M	M	E.1/19
	icons	R98	6.1, 6.2, 6.3, 6.4			C108	C108	E.1/19
	help information	R97	7.1		C107	C107	C107	E.1/19
7	**MORE TIME 27.22.4.4**	**R96**	1.1	M	M	M	M	E.1/20
8	**PLAY TONE 27.22.4.5**							
	play all tones	R96	1.1	M	M	M	M	E.1/21
	display alpha	R96	1.1	M	M	M	M	E.1/21
	user termination	R96	1.1	M	M	M	M	E.1/21
	superimpose	R96	1.1	M	M	M	M	E.1/21
	UCS2 display	R97	TBD					E.1/21 AND E.1/15
	icons	R98	TBD					E.1/21
9	**POLL INTERVAL 27.22.4.6**							
	duration	R96	1.1	M	M	M	M	E.1/22
10	**REFRESH 27.22.4.7**							
	SIM initialisation, enabling FDN mode	R96	1.1	M	M	M	M	E.1/24
	file change notification of FDN file	R96	1.2	M	M	M	M	E.1/24
	SIM initialisation and file change notification of PLMN	R96	1.3	M	M	M	M	E.1/24
	SIM initialisation and full file change notification,	R96	1.4	M	M	M	M	E.1/24

	enabling FDN mode								
	SIM reset	R96	1.5	M	M	M	M	E.1/24	
	SIM Initialisation after SMS-PP data download	R96	1.6	M	M	M	M	E.1/24	
	IMSI Changing procedure	R98	2.1			M	M	E.1/24	
11	**SET UP MENU 27.22.4.8**								
	Set up, menu selection, replace and remove menu	R96	1.1	M	M	M	M	E.1/30 AND E.1/4	
	Large menu	R96	1.2	M	M	M	M	E.1/30 AND E.1/4	
	help information	R97	2.1		C107	C107	C107	E.1/30 AND E.1/4	
	next action indicator	R97	3.1		M	M	M	E.1/30	
	icons	R98	4.1, 4.2			C108	C108	E.1/30	
	soft key access	R99	5.1				C112	E.1/30 AND E.1/74	
12	**SELECT ITEM 27.22.4.9**								
	Mandatory features	R96	1.1	M	M	M	M	E.1/25	
	Large menu	R96	1.2, 1.3, 1.5,1.6	M	M	M	M	E.1/25	
	Backwards move	R96	1.4	M	M	M	M	E.1/25	
	user termination	R96	1.5	M	M	M	M	E.1/25	
	next action indicator	R97	2.1		M	M	M	E.1/25	
	default selected item	R97	3.1		M	M	M	E.1/25	
	help information	R97	4.1		C107	C107	C107		
	icons	R98	5.1, 5.2			C108	C108	E.1/25	
	Presentation style	R98	6.1, 6.2			M	M	E.1/25	
	Soft keys	R99	7.1				C112	E.1/25 AND E.1/73	

13	**SEND SMS 27.22.4.10**								
	Packing not required	R96	1.1, 1.3 1.5	M	M	M	M	E.1/26	
	Packing required	R96	1.2, 1.4	M	M	M	M	E.1/26	
	8 bit data	R96	1.1, 1.2	M	M	M	M	E.1/26	
	SMS default alphabet	R96	1.3, 1.4, 1.5	M	M	M	M	E.1/26	
	160 bytes length	R96	1.4, 1.5	M	M	M	M	E.1/26	
	Alpha identifier	R96	1.6, 1.7, 1.8	M	M	M	M	E.1/26	
	UCS2 SMS	R97	2.1		C118	C118	C118	E.1/26 AND E.1/15	
	icons	R98	3.1, 3.2			C108	C108	E.1/26	
14	**SEND SS 27.22.4.11**								
	call forward unconditional, all bearers, successful	R96	1.1	M	M	M	M	E.1/27	
	call forward unconditional, all bearers, Return Error	R96	1.2	M	M	M	M	E.1/27	
	call forward unconditional, all bearers, Reject	R96	1.3	M	M	M	M	E.1/27	
	call forward unconditional, all bearers, successful, SS request size limit	R96	1.4	M	M	M	M	E.1/27	
	interrogate CLIR status, successful, alpha identifier limits	R96	1.5	M	M	M	M	E.1/27	
	call forward unconditional, all bearers, successful, null data alpha identifier	R96	1.6	M	M	M	M	E.1/27	
	call forward unconditional, all bearers,	R98	2.1, 2.2, 2.3,			C108	C108	E.1/27	

	successful, icon support		2.4					
	UCS2 display	R97	3.1		C118	C118	C118	E.1/27 AND E.1/15
15	**SEND USSD 27.22.4.12**							
	7-bit data, successful	R96	1.1	M	M	M	M	E.1/28
	8-bit data, successful	R96	1.2	M	M	M	M	E.1/28
	UCS2 data, successful	R96	1.3	M	M	M	M	E.1/28
	7-bit data, unsuccessful	R96	1.4	M	M	M	M	E.1/28
	7-bit data, unsuccessful	R96	1.5	M	M	M	M	E.1/28
	256 octets, 7-bit data, successful, long alpha identifier	R96	1.6	M	M	M	M	E.1/28
	7-bit data, successful, no alpha identifier	R96	1.7	M	M	M	M	E.1/28
	7-bit data, successful, null length alpha identifier	R96	1.8	M	M	M	M	E.1/28
	icons	R98	2.1, 2.2, 2.3, 2.4			C108	C108	E.1/28
	UCS2	R97	3.1		C118	C118	C118	E.1/28 AND E.1/15
16	**SET UP CALL 27.22.4.13**							
	Call confirmed by the user and connected	R96	1.1	M	M	M	M	E.1/29
	call rejected by the user	R96	1.2	M	M	M	M	E.1/29
	redial	R96	1.3	M	M	M	M	E.1/29
	putting all other calls on hold, ME busy	R96	1.4	M	M	M	M	E.1/29
	disconnecting all other calls, ME busy	R96	1.5	M	M	M	M	E.1/29

	only if not currently busy on another call, ME busy	R96	1.6	M	M	M	M	E.1/29	
	putting all other calls on hold, call hold is not allowed	R96	1.7	M	M	M	M	E.1/29	
	Capability configuration	R96	1.8	C101	C101	C101	C101	E.1/29	
	long dialing number string	R96	1.9	M	M	M	M	E.1/29	
	long first alpha identifier	R96	1.10	M	M	M	M	E.1/29	
	Called party subaddress	R96	1.11	M	M	M	M	E.1/29	
	maximum duration for the redial mechanism	R96	1.12	M	M	M	M	E.1/29	
	second alpha identifier	R98	2.1			M	M	E.1/29 AND E.1/63	
	UCS2 Display	R97	TBD					E.1/29 AND E.1/15	
	icons	R98	3.1,3.2, 3.3, 3.4			C108	C108	E.1/29	
17	**POLLING OFF 27.22.4.14**	**R96**	1.1	M	M	M	M	E.1/23	
18	**PROVIDE LOCAL INFO 27.22.4.15**								
	location information	R96	1.1	M	M	M	M	E.1/31	
	IMEI	R96	1.2	M	M	M	M	E.1/31	
	network measurement results and BCCH channel list	R98	1.3			M	M	E.1/32 AND E.1/67	
	Date, time and time zone	R98	1.4			M	M	E.1/59	
	language setting	R99	1.5				M	E.1/68	
	Timing advance	R99	1.6				M	E.1/69	
19	**SET UP EVENT LIST**								

	27.22.4.16								
	Set up call connected event	R97	1.1		M	M	M	E.1/33 AND E.1/35	
	Replace by new event list	R97	1.2	ETSI	M	M	M	E.1/33 AND E.1/35 AND E.1/36	
	Remove event	R97	1.3		M	M	M	E.1/33 AND E.1/35	
	Remove Event on ME Power Cycle	R97	1.4		M	M	M	E.1/33 AND E.1/35	
20	**PERFORM CARD APDU** **27.22.4.17**								
	Additional card inserted, Select MF and Get Response	R98	1.1			C109	C109	E.1/51	
	Additional card inserted, Select DF GSM, Select EF PLMN , Update Binary, Read Binary on EF PLMN	R98	1.2			C109	C109	E.1/51	
	Additional card inserted, card powered off	R98	1.3			C109	C109	E.1/51	
	No card inserted, card powered off	R98	1.4			C109	C109	E.1/51	
	Invalid card reader identifier	R98	1.5			C109	C109	E.1/51	
	Detachable reader	R98	2.1			C116	C116	E.1/51	
21	**POWER OFF CARD** **27.22.4.18**								
	Additional card inserted	R98	1.1			C109	C109	E.1/50	
	No card inserted	R98	1.2			C109	C109	E.1/50	
	Detachable reader	R98	2.1			C116	C116	E.1/50	
22	**POWER ON CARD**								

	27.22.4.19								
	Additional card inserted	R98	1.1			C109	C109	E.1/49	
	No ATR	R98	1.2			C109	C109	E.1/49	
	No card inserted	R98	1.3			C109	C109	E.1/49	
	Detachable reader	R98	2.1			C116	C116	E.1/49	
23	**GET READER STATUS** **27.22.4.20**								
	Additional card inserted, card powered	R98	1.1			C109	C109	E.1/52	
	Additional card inserted, card not powered	R98	1.2			C109	C109	E.1/52	
	Additional card inserted, card not present	R98	1.3			C109	C109	E.1/52	
	Detachable reader	R98	2.1			C116	C116	E.1/52	
24	**TIMER MANAGEMENT** **27.22.4.21.1**								
	Start timer 1 several times, get the current value of the timer and deactivate the timer successfully	R98	1.1			M	M	E.1/57 AND E.1/58	
	Start timer 2 several times, get the current value of the timer and deactivate the timer successfully	R98	1.2			M	M	E.1/57 AND E.1/58	
	Start timer 8 several times, get the current value of the timer and deactivate the timer successfully	R98	1.3			M	M	E.1/57 AND E.1/58	
	Try to get the current value of a timer which is not started: action in contradiction with the current timer	R98	1.4			M	M	E.1/57 AND E.1/58	

	state								
	Try to deactivate a timer which is not started: action in contradiction with the current timer state	R98	1.5			M	M	E.1/57 AND E.1/58	
	Start 8 timers successfully	R98	1.6			M	M	E.1/57 AND E.1/58	
25	**ENVELOPPE TIMER EXPIRATION** **27.22.4.21.2**								
	Pending proactive SIM command	R98	2.1			M	M	E.1/6 AND E.1/57	
	SIM application toolkit busy	R98	2.2			M	M	E.1/6 AND E.1/57 AND E.1/20	
26	**SET UP IDLE MODE TEXT** **27.22.4.22**								
	Display idle mode text	R98	1.1			M	M	E.1/61 AND E.1/33 AND E.1/39	
	Replace idle mode text	R98	1.2			M	M	E.1/61 AND E.1/33 AND E.1/39	
	Remove idle mode test	R98	1.3			M	M	E.1/61 AND E.1/33 AND E.1/39	
	Competing information on ME display	R98	1.4			M	M	E.1/61 AND E.1/33 AND E.1/39	
	ME powered cycled	R98	1.5			M	M	E.1/61 AND E.1/33 AND E.1/39	
	Refresh with SIM initialisation	R98	1.6			M	M	E.1/61 AND E.124 AND E.1/33 AND E.1/39	
	Large text string	R98	1.7			M	M	E.1/61 AND	

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							E.1/33 AND E.1/39	
	Followed by a Display Text	R98	1.8			M	M	E.1/61 AND E.1/33 AND E.1/39 AND E.1/17
	Followed by a Play Tone	R98	1.9			M	M	E.1/61 AND E.1/33 AND E.1/39 AND E.1/21
	icons	R98	2.1, 2.2, 2.3, 2.4			C108	C108	E.1/61 AND E.1/39
	UCS2 display	R98	3.1			C118	C118	E.1/61 AND E.1/15 AND E.1/39
27	**RUN AT COMMAND** **27.22.4.23**							
	No alpha Identifier	R98	1.1			C110	C110	E.1/62
	null data alpha identifier presented	R98	1.2			C110	C110	E.1/62
	alpha identifier presented	R98	1.3			C110	C110	E.1/62
	icons	R98	2.1, 2.2, 2.3, 2.4, 2.5			C114	C114	E.1/62
28	**SEND DTMF** **27.22.4.24**							
	A call has been successfully established before the beginning of the test	R98	1.1			M	M	E.1/66
	alpha identifier	R98	1.2, 1.3			M	M	E.1/66
	Mobile is not in a speech call	R98	1.4			M	M	E.1/66
	Icons	R98	2.1, 2.2,			C108	C108	E.1/66

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			2.3						
	UCS2 display	R98	3.1			C118	C118	E.1/66 AND E.1/15	
29	**LANGUAGE NOTIFICATION** **27.22.4.25**								
	Specific language notification	R99	1.1				M	E.1/70	
	Non specific language notification	R99	1.2				M	E.1/70	
30	**LAUNCH BROWSER** **27.22.4.26**								
	No session already launched : Connect to the default URL	R99	1.1				C111	E.1/71	
	connect to the specified URL, alpha identifier length=0	R99	1.2				C111	E.1/71	
	Browser identity, no alpha identifier	R99	1.3				C111	E.1/71	
	one bearer specified and gateway/proxy identity	R99	1.4				C111	E.1/71	
	several bearers specified, gateway/proxy id specified	R99	1.5				C111	E.1/71	
	Interaction with current session	R99	2.1, 2.2, 2.3				C111	E.1/71	
	UCS2 display	R99	3.1				C117	E.1/71 AND E.1/15	
	icons	R99	4.1, 4.2				C115	E.1/71	
31	**OPEN CHANNEL** **27.22.4.27**								
	Immediate link establishment, CSD, 9600 bps	R99	1.1, 1.2, 1.3, 1.4, 1.5,				C113	E.1/89 AND E.1/97	

			1.6					
	immediate link establishment, CSD, 9600 bps, performed with modification	R99	1.7				C113	E.1/89 AND E.1/97
	immediate link establishment, CSD, Network currently unable to process command	R99	1.8				C113	E.1/89 AND E.1/97
	immediate link establishment, CSD, No channel available	R99	1.9				C113	E.1/89 AND E.1/97
	ME busy	R99	1.10				M	E.1/89 AND E.1/97 AND E.1/29
32	**CLOSE CHANNEL** **27.22.4.28**							
	successful	R99	1.1				C113	E.1/89 AND E.1/90
	with an invalid channel identifier	R99	1.2				C113	E.1/89 AND E.1/90
	on an already closed channel	R99	1.3				C113	E.1/90
33	**RECEIVE DATA** **27.22.4.29**							
	already opened channel	R99	1.1				C113	E.1/89 AND E.1/91
34	**SEND DATA** **27.22.4.30**							
	immediate mode	R99	1.1				C113	E.1/89 AND E.1/92
	Store mode	R99	1.2				C113	E.1/89 AND E.1/92
	Store mode, Tx buffer fully used	R99	1.3				C113	E.1/89 AND E.1/92
	2 consecutive SEND DATA Store mode	R99	1.4				C113	E.1/89 AND E.1/92
	immediate mode with a bad	R99	1.5				C113	E.1/89 AND E.1/92

	channel identifier								
	immediate mode, Proactive SIM session terminated by the user	R99	1.6					C113	E.1/89 AND E.1/92
35	**GET CHANNEL STATUS** **27.22.4.31**								
	without any BIP channel opened	R99	1.1					C113	E.1/93
	with a BIP channel currently opened	R99	1.2					C113	E.1/89 AND E.1/93
	after a link dropped	R99	1.3					C113	E.1/89 AND E.1/93
36	**DATA DOWNLOAD TO SIM 27.22.5**								
37	**SMS-PP DATA DOWNLOAD** **27.22.5.1**								
	General data coding, SIM responds with '90 00'	R96	1.1	M	M	M	M	E.1/2	
	SIM responds with '91 XX'	R96	1.2	M	M	M	M	E.1/2	
	More time	R96	1.3	M	M	M	M	E.1/2	
	8 bit alphabet	R96	1.4	M	M	M	M	E.1/2	
	Data coding / message class	R96	1.5, 1.6	M	M	M	M	E.1/2	
38	**SMS-CB DATA DOWNLOAD** **27.22.5.2**								
	ME does not display message	R96	1.1	M	M	M	M	E.1/3	
	More time	R96	1.2	M	M	M	M	E.1/3 AND E.1/20	
	ME displays message	R96	1.3	M	M	M	M	E.1/3	

39	**CALL CONTROL BY SIM** **27.22.6**								
	Procedure for MO calls (Cell identity in envelope call control)	R97	1.1 to 1.14		M	M	M	E.1/10 AND E.1/11 AND E.1/13 AND E.1/29	
	Prodedure for SS (Cell identity in envelope call control)	R97	2.1, 2.2, 2.3, 2.4		M	M	M	E.1/10 AND E.1/11	
	Interaction with FDN (Cell identity in envelope call control)	R97	3.1, 3.2, 3.3, 3.5		M	M	M	E.1/10	
	Support of BDN service (Cell identity in envelope call control)	R97	4.1, 4.2, 4.3, 4.4		M	M	M	E.1/10	
	MO SMS control by SIM	R97	TBD					E.1/12	
40	**EVENT DOWNLOAD** **27.22.7**								
	27.22.7.1 : MT call event	R97	1.1		M	M	M	E.1/34 AND E.1/33	
	27.22.7.2.1 : call connected event	R97	1.1		M	M	M	E.1/35 AND E.1/33	
	27.22.7.2.2 : ME supporting SET UP CALL	R97	2.1		M	M	M	E.1/35 AND E.1/29 AND E.1/33	
	27.22.7.3 : call disconnected event	R97	1.1		M	M	M	E.1/36 AND E.1/33	
	27.22.7.4 : location status event	R97	1.1		M	M	M	E.1/37 AND E.1/33	
	27.22.7.5 : user activity event	R97	1.1		M	M	M	E.1/38 AND E.1/33	
	27.22.7.6 : idle screen available event	R97	1.1		M	M	M	E.1/39 AND E.1/33	
	27.22.7.7.1 : Card reader status normal	R98	1.1			C109	C109	E.1/40 AND E.1/33	

	27.22.7.7.2 : Detachable card reader	R98	2.1			C116	C116	E.1/40 AND E.1/33	
	27.22.7.8 : language selection event	R99	1.1				M	E.1/41 AND E.1/33	
	27.22.7.9 : Browser termination event	R99	1.1				C111	E.1/42 AND E.1/33	
	27.22.7.10 : Data available event	R99	1.1				C113	E.1/43 AND E.1/89	
	27.22.7.11 : Channel status event	R99	1.1				C113	E.1/44 AND E.1/89	

C101   IF A.1/1 THEN M ELSE N/A   -- O_Cap_Conf

C102, C103   void

C104   IF A.1/2 THEN M ELSE N/A   -- O_Sust_text

C105   IF A.1/3 THEN M ELSE N/A   -- O_Ucs2_Entry

C106   IF A.1/4 THEN M ELSE N/A   -- O_Ext_Str

C107   IF A.1/5 THEN M ELSE N/A   -- O_Help

C108   IF A.1/6 THEN (O.1 OR O.2) ELSE N/A   -- O_Icons

C109   IF A.1/7 THEN M ELSE N/A   -- O_Dual_Slot

C110   IF A.1/9 THEN M ELSE N/A   -- O_Run_At

C111   IF A.1/10 THEN M ELSE N/A   -- O_LB

C112   IF A.1/11 THEN M ELSE N/A   O_Soft_key

C113   IF A.1/12 THEN M ELSE N/A   O_BIP

C114   IF C110 AND C108 THEN M ELSE N/A   -- O_Run_At AND O_Icons

C115   IF C111 AND C108 THEN M ELSE N/A   -- O_LB AND O_Icons

C116   IF C105 AND A.1/8 THEN M ELSE N/A   -- O_Dual_Slot AND O_Detach_Rdr

C117   IF C111 AND C105 THEN M ELSE N/A   -- O_LB AND O_Ucs2

C118   IF A.1/14 THEN M ELSE N/A   -- O_Ucs2_Disp

O.1   IF (the ME supports icons as defined in record 1 of $EF_{(IMG)}$, tests x.1A M ELSE tests x.1B M (where x is the expected sequence number value)

O.2   IF the ME supports icons as defined in record 2 of $EF_{(IMG)}$, tests x.2A M ELSE x.2B M (where x is the expected sequence number value)

3.5   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.

3.6 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.

3.7 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 information with respect the Supported Option Table A.1.

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)

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

TERMINAL RESPONSE1.1.2

PROACTIVE COMMAND 1.1. 1

TERMINAL RESPONSE 1.1.1A

TERMINAL RESPONSE 1.1.1B

PROACTIVE COMMAND 1.1.2

TERMINAL RESPONSE 1.1.2

• Sequence 1.2

Command 1. 2.1
TERMINAL 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

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

PROACTIVE COMMAND 2.1. 1

TERMINAL RESPONSE 2.1.1A

TERMINAL RESPONSE 2.1.1B

PROACTIVE COMMAND 2.1.2

TERMINAL RESPONSE 2.1.2

- Sequence 2.2

Command 2.2.1
TERMINAL RESPONSE2.2.1
Command 2.2 .2
TERMINAL RESPONSE2.2.2 (same as TERMINAL RESPONSE2.2.1)
Command 2.2.3
TERMINAL RESPONSE2.2.3

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 11.10-1 [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 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, as defined in the spec 3GPP TS 11.11 [13].

> NOTE1: Bx represents byte x of the coding

> NOTE2: Unless otherwise defined, the coding values in binary.

EFSST (SIM Service Table)

Logically:
(Service 2)   Abbreviated Dialling Numbers allocated and activated
(Service 10)   Extension 1 allocated and activated
(Service 3)   Fixed Dialling Numbers allocated and activated
(Service 11)   Extension 2 allocated and activated
(Service 14)   Cell Broadcast Message Identifier allocated and activated
(Service 25)   Data download via SMS-CB allocated and activated
(Service 26)   Data download via SMS-PP allocated and activated
(Service 27)   Menu selection allocated and activated
(Service 28)   Call control allocated and activated
(Service 29)   Proactive SIM allocated and activated
(Service 14)   Cell Broadcast Message Identifier Ranges allocated and activated
(Service 31)   Barred Dialling Numbers allocated and activated
(Service 32)   Extension4 allocated and activated
(Service 37)   Mobile Originated Short Message control by SIM allocated and activated
(Service 39)   Image (IMG) allocated and activated
(Service 41)   USSD string data object supported in Call Control allocated and activated
(Service 42)   RUN AT COMMAND command allocated and activated
(Service 48)   Extended Capability Configuration Parameters

Coding:	B1	B2	B3	B4
	xx1111xx	xxxxxxx	xx1111xx	xx11xxxx

	B5	B6	B7	B8
	xxxxxxx	xxxxxxx	11111111	11111111

	B9	B10	B11	B12
	xxxxxxx	11xx11xx	1111xxxx	xxxxxx11

EF$_{Phase}$ (SIM Phase Identification)

Logically: Phase 2+

Coding: '03'

EF$_{IMSI}$ (International Mobile Subscriber Identity)

Logically:
Length: 8 bytes
IMSI: 001 01 0123456789

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

EF$_{CBMI}$ (Cell Broadcast Message Identifier)

Logically:
Cell Broadcast Message Identifier 1:   '0C 0C'

Coding: 0C   0C   FF   ..   FF

EF$_{CBMID}$ (Cell Broadcast Message Identifier for Data Download)

Logically:
Cell Broadcast Message Identifier 1:   '10 01'

Coding: 10   01   FF   ..   FF

EF$_{FDN}$ (Fixed Dialling Numbers)

Logically:
At least 10 records
    Record 1:
    Length of alpha identifier: 32 characters
    Alpha identifier: "ABC"
    Length of BCD number: "03"
    TON and NPI: Telephony and Unknown
    Dialled number: 123
    CCI: None
    Ext2:   None

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

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

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

EF$_{BDN}$ (Barred Dialling Numbers)

Logically:
At least 10 records
    Record 1:
    Length of alpha identifier: 32 characters
    Alpha identifier: "CBA"
    Length of BCD number: "03"
    TON and NPI: Telephony and Unknown
    Dialled number: 321
    CCI: None
    Ext4:   None
    Comparison Method Info: None

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

EF$_{ECC}$ (Emergency Call Codes)

Logically:
    Emergency Call Code 1:   '1020'

Coding:	01	02	FF

EF$_{SMSP}$ (Short message service parameters)

Logically:

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

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

B24	B25	B26	B27	B28
FF	FF	FF	FF	FF

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)

Step	Direction	Message / Action	Comments
1	USER → ME	Power on ME	
2	ME → USER	PIN entry request	
3	USER → ME	Enter "1111"	
...			
4	ME → SIM	VERIFY CHV1 1.1A	[CHV1 code: "1111"]
5	SIM → ME	VERIFY CHV ATTEMPT UNSUCCESSFUL 1.1A	
...			
6	ME → USER	PIN entry request	
7	USER → ME	Enter "1234"	
8	ME → SIM	VERIFY CHV1 1.1B	[CHV1 code: "1234"]
9	SIM → ME	NORMAL ENDING OF COMMAND 1.1A	
10	ME → SIM	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

ETSI

	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
	DATA IN:	6F	AE			

Response

	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 table E.1 in Annex E..

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'.

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

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

27.22.2.5 Test Requirement

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

2) In table E.1, Annex E, for the corresponding ME Sim Toolkit Release and Options, The TERMINAL PROFILE information "support" recorded must be in accordance with the "Status" column.

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 REPONSE command with command number "01", type of command "02" and command qualifier "00".

27.22.4 Proactive SIM Commands

27.22.4.1 DISPLAY TEXT

27.22.4.1.1 DISPLAY TEXT (Normal)

27.22.4.1.1.1 Definition and applicability

See 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 test

27.22.4.1.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

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

27.22.4.1.1.4.2 Procedure

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

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

PROACTIVE COMMAND : DISPLAY TEXT 1.1.1

Logically:

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

  Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 1.1.1

Logically:

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

  Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Set the ME screen to a display mode other than the normal stand-by display	The ME will be set to a mode so that normal priority text commands shall be rejected.
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:
    Command details
        Command number: 1
        Command type: DISPLAY TEXT
        Command qualifier: normal priority, wait for user to clear message
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: ME currently unable to process command
        Additional information: Screen is busy

  Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND 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:
  Command details
    Command number: 1
    Command type: DISPLAY TEXT
    Command qualifier: high priority, wait for user to clear message
  Device identities
    Source device: SIM
    Destination device: Display
  Text String
    Data coding scheme: unpacked, 8 bit data
    Text: "Toolkit Test 2"

  Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 1.3.1

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

  Coding:

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

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

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

PROACTIVE COMMAND : DISPLAY TEXT 1.4.1

Logically:

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

  Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 1.4.1

Logically:

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

  Coding:

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

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

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

PROACTIVE COMMAND : DISPLAY TEXT 1.5.1

Logically:

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

  Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 1.5.1

Logically:

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

  Coding:

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

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

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

PROACTIVE COMMAND : DISPLAY TEXT 1.6.1

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

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 1.6.1

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

Coding:

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

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

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

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

PROACTIVE COMMAND : DISPLAY TEXT 1.7.1

Logically:

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

  Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 1.7.1

Logically:

    Command details
        Command number: 1
        Command type: DISPLAY TEXT
        Command qualifier: normal priority, wait for user to clear message
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Backward move in the proactive SIM session requested by the user

  Coding:

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

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

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

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

PROACTIVE COMMAND : DISPLAY TEXT 1.8.1

Logically:

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

 Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 1.8.1

Logically:

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

 Coding:

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

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

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

| 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 test

27.22.4.1.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

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

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

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

27.22.4.1.2.4.1 Procedure

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

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

PROACTIVE COMMAND : DISPLAY TEXT 2.1.1

Logically:

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

  Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 2.1.1

Logically:

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

  Coding:

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

27.22.4.1.2.5   Test Requirement

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

27.22.4.1.3   DISPLAY TEXT (Display of extension text)

27.22.4.1.3.1   Definition and applicability

See Section 3.2.2.

27.22.4.1.3.2   Conformance requirement

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

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)

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

PROACTIVE COMMAND : DISPLAY TEXT 3.1.1

Logically:
  Command details
    Command number: 1
    Command type: DISPLAY TEXT
    Command qualifier: normal priority, wait for user to clear message
  Device identities
    Source device: SIM
    Destination device: Display
  Text String
    Data coding scheme: unpacked, 8 bit data
    Text: "This command instructs the ME to display a text

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

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 3.1.1

Logically:

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

Coding:

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

27.22.4.1.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 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 test

27.22.4.1.4.4.1   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)

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

PROACTIVE COMMAND : DISPLAY TEXT 4.1.1

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

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 4.1.1

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

Coding:

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

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

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

PROACTIVE COMMAND : DISPLAY TEXT 4.2.1

Logically:

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

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 4.2.1

Logically:

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

Coding:

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

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

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

PROACTIVE COMMAND : DISPLAY TEXT 4.3.1

Logically:

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

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 4.3.1

Logically:

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

Coding:

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

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

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

PROACTIVE COMMAND : DISPLAY TEXT 4.4.1

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

  Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 4.4.1

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

  Coding:

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

27.22.4.1.4.5   Test Requirement

The ME shall operate in the manner defined in expected sequences 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)

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

PROACTIVE COMMAND : DISPLAY TEXT 5.1.1

Logically:
    Command details
        Command number: 1
        Command type: DISPLAY TEXT
        Command qualifier: normal priority, wait for user to clear message
    Device identities
        Source device: SIM
        Destination device: Display
    Text String
        Data coding scheme: unpacked, 8 bit data
        Text: "Basic Icon"
    Icon Identifier:
        Icon qualifier: icon is self-explanatory
        Icon Identifier: record 1 in EF$_{(IMG)}$

    Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 5.1.1A

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

  Coding:

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

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

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

TERMINAL RESPONSE : DISPLAY TEXT 5.1.1B

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

  Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
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)

Step	Direction	MESSAGE / Action	Comments
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)

Step	Direction	MESSAGE / Action	Comments
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 Display "Basic Icon"	
17	USER → ME	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)

Step	Direction	MESSAGE / Action	Comments
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 "Basic Icon" without the icon	
17	USER → ME	Clear Message	
18	ME → SIM	TERMINAL RESPONSE : DISPLAY TEXT 5.3.1B	[Command performed successfully, but requested icon could not be displayed]
19	SIM → ME	PROACTIVE SIM SESSION ENDED	

TERMINAL RESPONSE : DISPLAY TEXT 5.3.1B

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

  Coding:

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

27.22.4.1.5.5   Test Requirement

The ME shall operate in the manner defined in expected 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)

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

PROACTIVE COMMAND : DISPLAY TEXT 6.1.1

Logically:
Command details
Command number: 1
Command type: DISPLAY TEXT
Command qualifier: normal priority, wait for user to clear message
Device identities
Source device: SIM
Destination device: Display
Text String
Data coding scheme: UCS2 (16bit)
Text: "ЗДРАВСТВУЙТЕ"

Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 6.1.1

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

Coding:

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

27.22.4.1.6.5   Test Requirement

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

27.22.4.2   GET INKEY

27.22.4.2.1   GET INKEY(normal)

27.22.4.2.1.1   Definition and applicability

See Section 3.2.2.

27.22.4.2.1.2   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).

27.22.4.2.1.3   Test Purpose

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

27.22.4.2.1.4   Method of Test

27.22.4.2.1.4.1   Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

27.22.4.2.1.4.2   Procedure

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

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

PROACTIVE COMMAND : GET INKEY 1.1.1

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

    Device identities
        Source device: SIM
        Destination device: ME
    Text string
        Data coding scheme: unpacked, 8 bit data
        Text: "Enter "+" "

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

Terminal Response: GET INKEY 1.1.1

Logically:

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

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)

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

PROACTIVE COMMAND : GET INKEY 1.2.1

Logically:

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

Coding:

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

TERMINAL RESPONSE : GET INKEY 1.2.1

Logically:

    Command details
        Command number: 1
        Command type: GET INKEY
        Command qualifier: digits (0-9, *, # and +) only, no help information available
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
        Text String   "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 1.3.1

Logically:

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

Coding:

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

TERMINAL RESPONSE : GET INKEY 1.3.1

Logically:

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

Coding:

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

Expected Sequence 1.4 (GET INKEY, abort)

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

PROACTIVE COMMAND : GET INKEY 1.4.1

Logically:

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

Device identities
    Source device: SIM
    Destination device: ME
Text string
    Data coding scheme: unpacked, 8 bit data
    Text: "<ABORT>"

Coding:

BER-TLV:	D0	13	81	03	01	22	00	82	02	81	82	8D
	08	04	3C	41	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)

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

PROACTIVE COMMAND : GET INKEY 1.5.1

Logically:

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

Coding:

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

TERMINAL RESPONSE : GET INKEY 1.5.1

Logically:

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

Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND 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:

    Command details
        Command number: 1
        Command type: GET INKEY
        Command qualifier: SMS default alphabet, no help information available
    Device identities
        Source device: SIM
        Destination device: ME
    Text string
        Data coding scheme: unpacked, 8 bit data
        Text: "Enter "x". This command instructs the ME to display text, and to expect the user to enter a single character. Any response entered by the user shall be passed t"

Coding:

	BER-TLV:	D0	81	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
		64	69	73	70	6C	61	79	20	74	65	78	74
		2C	20	61	6E	64	20	74	6F	20	65	78	70
		65	63	74	20	74	68	65	20	75	73	65	72
		20	74	6F	20	65	6E	74	65	72	20	61	20
		73	69	6E	67	6C	65	20	53	68	61	72	61
		63	74	65	72	2E	20	41	6E	79	20	72	65
		73	70	6F	6E	73	65	20	65	6E	74	65	72
		65	64	20	62	79	20	74	68	65	20	75	73
		65	72	20	73	68	61	6C	6C	20	62	65	20
		70	61	73	73	65	64	20	74				

TERMINAL RESPONSE : GET INKEY 1.6.1

Logically:

    Command details
        Command number: 1
        Command type: GET INKEY
        Command qualifier: SMS default alphabet, no help information available
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
        Text String   "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 RESPONSEis 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 2.1.1

Logically:

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

Coding:

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

27.22.4.2.2.5   Test Requirement

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

Additionnally, 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 Test

27.22.4.2.3.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default 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)

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

PROACTIVE COMMAND : GET INKEY 3.1.1

Logically:

    Command details
        Command number: 1
        Command type: GET INKEY
        Command qualifier: digits (0-9, *, # and +) only, no help information available
    Device identities
        Source device: SIM
        Destination device: ME
    Text string
        Data coding scheme: 16 bit data UCS2 alphabet format
        Text: " ЗДРАВСТВУЙТЕ "

Coding:

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

TERMINAL RESPONSE : GET INKEY 3.1.1

Logically:

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

Coding:

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

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

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

PROACTIVE COMMAND : GET INKEY 3.2.1

Logically:

Command details	
Command number:	1
Command type:	GET INKEY
Command qualifier:	digits (0-9, *, # and +) only, no help information available
Device identities	
Source device:	SIM
Destination device:	ME
Text string	
Data coding scheme:	16 bit data UCS2 alphabet format
Text:	"ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ ЗДРАВСТВУЙТЕЗДРАВСТВУЙ"

Coding:

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

TERMINAL RESPONSE : GET INKEY 3.2.1

Logically:

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

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).

Additionnally, 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 Test

27.22.4.2.4.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default 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)

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

PROACTIVE COMMAND : GET INKEY 4.1.1

Logically:
    Command details
        Command number: 1
        Command type: GET INKEY
        Command qualifier: characters from UCS2 alphabet, no help information available
    Device identities
        Source device: SIM
        Destination device: ME
    Text string
        Data coding scheme: unpacked, 8 bit data
        Text: "Enter"

Coding:

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

TERMINAL RESPONSE : GET INKEY 4.1.1

Logically:
    Command details
        Command number: 1
        Command type: GET INKEY
        Command qualifier: characters from UCS2 alphabet, no help information available
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
        Text String: "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)

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

PROACTIVE COMMAND : GET INKEY 5.1.1

Logically:
    Command details
        Command number: 1
        Command type: GET INKEY
        Command qualifier: "Yes/No" Response, no help information available
    Device identities
        Source device: SIM
        Destination device: ME
    Text string
        Data coding scheme: unpacked, 8 bit data
        Text: "Enter"

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

Coding:

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

PROACTIVE COMMAND : GET INKEY 5.1.2 : same as 5.1.1

TERMINAL RESPONSE : GET INKEY 5.1.2

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

Coding:

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

27.22.4.2.5.5   Test Requirement

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

27.22.4.2.6   GET INKEY (display of Icon)

27.22.4.2.6.1   Definition and applicability

See 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 Test

27.22.4.2.6.4.1   Initial Conditions

See Annex C

27.22.4.2.6.4.2   Procedure

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

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

PROACTIVE COMMAND : GET INKEY 6.1.1

Logically:
>   Command details
>   >   Command number: 1
>   >   Command type: GET INKEY
>   >   Command qualifier: digits (0-9, *, # and +) only, no help information available
>   Device identities
>   >   Source device: SIM
>   >   Destination device: ME
>   Text string
>   >   Data coding scheme: unpacked, 8 bit data
>   >   Text: "<NO-ICON>"
>   Icon Identifier
>   >   Icon qualifier: self-explanatory
>   >   Icon identifier: 1 (number of record in EF$_{Img}$)

Coding:

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

TERMINAL RESPONSE : GET INKEY 6.1.1A

Logically:

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

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

)

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

TERMINAL RESPONSE : GET INKEY 6.1.1B

Logically:

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

Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND 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:
        BER-TLV: D0   1C   81   03   01   22   00   82   02   81   82   8D
                       0D   04   3C   42   41   53   49   43   2D   49   43   4F
                       4E   3E   1E   02   01   01

TERMINAL RESPONSE : GET INKEY 6.2.1A

Logically:

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

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)

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

PROACTIVE COMMAND : GET INKEY 6.3.1

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

Coding:

BER-TLV:	D0	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)

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

TERMINAL RESPONSE : GET INKEY 6.3.1B

Logically:

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

Coding:

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

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

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

PROACTIVE COMMAND : GET INKEY 6.4.1

Logically:

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

Coding:

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

TERMINAL RESPONSE : GET INKEY 6.4.1A

Logically:

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

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 Test

27.22.4.2.7.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default 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)

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

PROACTIVE COMMAND : GET INKEY 7.1.1

Logically:

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

Coding:

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

TERMINAL RESPONSE : GET INKEY 7.1.1

Logically:

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

Coding:

BER-TLV:	81	03	01	22	80	82	02	82	81	83	01	00

PROACTIVE COMMAND : GET INKEY 7.1.2

Logically:

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

Coding:

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

TERMINAL RESPONSE : GET INKEY 7.1.2

Logically:

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

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 INPUT

27.22.4.3.1   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 Test

27.22.4.3.1.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.3.1.4.2   Procedure

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

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

PROACTIVE COMMAND : GET INPUT 1.1.1

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

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

TERMINAL RESPONSE : GET INPUT 1.1.1

Logically:

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

Coding:

    BER-TLV: 81   03   01   23   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)

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

PROACTIVE COMMAND : GET INPUT 1.2.1

Logically:

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

Coding:

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

TERMINAL RESPONSE : GET INPUT 1.2.1

Logically:

    Command details

        Command number: 1

        Command type: GET INPUT

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

    Device identities

        Source device: ME

        Destination device: SIM

    Result

        General Result: Command performed successfully

        Text string

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

Coding:

BER-TLV:	81	03	01	23	08	82	02	82	81	83	01	00
	8D	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:

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

Coding:

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

TERMINAL RESPONSE : GET INPUT 1.3.1

Logically:

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

Coding:

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

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

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

PROACTIVE COMMAND : GET INPUT 1.4.1

Logically:

    Command details
        Command number: 1
        Command type: GET INPUT
        Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to hide text, no help information available
    Device identities
        Source device: SIM
        Destination device: ME
    Text string
        Data coding scheme: unpacked, 8 bit data
        Text: "Password 1<SEND>2345678"
    Response length
        Minimum length: 4
        Maximum length: 8

Coding:

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

TERMINAL RESPONSE : GET INPUT 1.4.1

Logically:

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

Device identities
    Source device: ME
    Destination device: SIM

Result
    General Result: Command performed successfully
    Text string
        Data coding scheme: unpacked, 8 bit data
        Text: "2345678"

Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: GET INPUT 1.5.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : GET INPUT 1.5.1	[digits only, SMS default alphabet, ME to echo text, packing not required, no help information available]
4	ME → USER	Display "Enter 1..9,0..9,0(1)"	Range of expected length is 1-20 Text string coding in unpacked format
5	USER → ME	Completion without input	
6	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 details
        Command number: 1
        Command type: GET INPUT
        Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available
    Device identities
        Source device: SIM
        Destination device: ME
    Text string
        Data coding scheme: unpacked, 8 bit data
        Text: " Enter 1..9,0..9,0(1)"
    Response length
        Minimum length: 1
        Maximum length: 20

Coding:

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

TERMINAL RESPONSE : GET INPUT 1.5.1

Logically:
    Command details
        Command number: 1
        Command type: GET INPUT
        Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
        Text string
            Data coding scheme: unpacked, 8 bit data
            Text: "12345678901234567890"

Coding:

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

Expected Sequence 1.6 (GET INPUT, backwards move,)

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

PROACTIVE COMMAND : GET INPUT 1.6.1

Logically:

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

Coding:

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

TERMINAL RESPONSE : GET INPUT 1.6.1

Logically:

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

Coding:

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

Expected Sequence 1.7 (GET INPUT, abort)

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

PROACTIVE COMMAND : GET INPUT 1.7.1

Logically:

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

Coding:

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

TERMINAL RESPONSE : GET INPUT 1.7.1

Logically:

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

Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: GET INPUT 1.8.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : GET INPUT 1.8.1	[digits only, SMS default alphabet, ME to echo text, packing not required, no help information available]
4	ME → USER	Display "***1111111111###***2222222222###***3333333333###***4444444444###***5555555555###***6666666666###***7777777777###***8888888888###***9999999999###***0000000000###"	Range of length expected is 160-160 Text string coding in unpacked format
5	USER → ME	Enter the input "***1111111111###***2222222222###***3333333333###***4444444444###***5555555555###***6666666666###***7777777777###***8888888888###***9999999999###***0000000000###" and completion	
6	ME → SIM	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###***444444444 4###***5555555555###***6666666666###***7777777777###***888888 8888###***9999999999###***0000000000###"

    Response length
        Minimum length: 160
        Maximum length: 160

Coding:

BER-TLV:	D0	81	B1	81	03	01	23	00	82	02	81	82
	8D	81	A1	04	2A	2A	2A	31	31	31	31	31
	31	31	31	31	23	23	23	2A	2A	2A	32	
	32	32	32	32	32	32	32	32	23	23	23	
	2A	2A	2A	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	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	23	23	23	
	2A	2A	2A	39	39	39	39	39	39	39	39	
	39	23	23	23	2A	2A	2A	30	30	30	30	30
	30	30	30	30	30	23	23	23	91	02	A0	A0

TERMINAL RESPONSE : GET INPUT 1.8.1

Logically:

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

    Device identities
        Source device: ME
        Destination device: SIM
    Result
    General Result: Command performed successfully
     Text string
        Data coding scheme: unpacked, 8 bit data
          Text: "***1111111111###***2222222222###***
                                    3333333333###***4444444444###
                                    5555555555###6666666666###
                                    7777777777###8888888888###
                                     9999999999###0000000000###"

Coding:

    BER-TLV:

81	03	01	23	00	82	02	82	81	83	01	00
8D	81	A1	04	2A	2A	2A	31	31	31	31
31	31	31	31	23	23	23	2A	2A	2A	32
32	32	32	32	32	32	32	32	23	23	23
2A	2A	2A	33	33	33	33	33	33	33	33
33	23	23	23	2A	2A	2A	34	34	34	34
34	34	34	34	34	23	23	23	2A	2A	2A	35
35	35	35	35	35	35	35	35	23	23	23
2A	2A	2A	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	23	23	23
2A	2A	2A	39	39	39	39	39	39	39	39
39	23	23	23	2A	2A	2A	30	30	30	30
30	30	30	30	30	23	23	23

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

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

PROACTIVE COMMAND : GET INPUT 1.9.1

Logically:

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

Coding:

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

TERMINAL RESPONSE : GET INPUT 1.9.1

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: empty string

Coding:

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

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 Test

27.22.4.3.2.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default 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)

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

PROACTIVE COMMAND : GET INPUT 2.1.1

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

    Device identities
        Source device: SIM
        Destination device: ME
    Text string
        Data coding scheme: unpacked, 8 bit data
        Text: "<TIME-OUT>"
    Response length
        Minimum length: 0
        Maximum length: 10

Coding:

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

TERMINAL RESPONSE : GET INPUT 2.1.1

Logically:
    Command details
        Command number: 1
        Command type: GET INPUT
        Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available
    Device identities
        Source device: ME
        Destination device: SIM
    Result
    General Result: No response from user

Coding:

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

27.22.4.3.2.5   Test Requirement

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

27.22.4.3.3   GET INPUT (UCS2 format display)

27.22.4.3.3.1   Definition and applicability

See 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 Test

27.22.4.3.3.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default 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)

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

PROACTIVE COMMAND : GET INPUT 3.1.1

Logically:
  Command details
    Command number: 1
    Command type: GET INPUT
    Command qualifier: 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: 16 bit data UCS2 alphabet format
    Text: " ЗДРАВСТВУЙТЕ "
  Response length
    Minimum length: 5
    Maximum length: 5

Coding:

BER-TLV:	D0	28	81	03	01	23	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	91	02	05	05						

TERMINAL RESPONSE : GET INPUT 3.1.1

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

Coding:

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

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

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

PROACTIVE COMMAND : GET INPUT 3.2.1

Logically:

    Command details
        Command number: 1
        Command type: GET INPUT
        Command qualifier: 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: 16 bit data UCS2 alphabet format
        Text:

            "ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ
            ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ
            ЗДРАВСТВУЙТЕЗДРАВСТВУЙ"

    Response length
        Minimum length: 5
        Maximum length: 5

Coding:

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

TERMINAL RESPONSE : GET INPUT 3.2.1

Logically:

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

Coding:

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

27.22.4.3.3.5   Test Requirement

The ME shall operate in the manner defined in expected 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 Test

27.22.4.3.4.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default 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)

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

PROACTIVE COMMAND : GET INPUT 4.1.1

Logically:
          Command details
                    Command number: 1
                    Command type: GET INPUT
                    Command qualifier: character set, UCS2 alphabet, input in unpacked format, ME to echo text,
                                                     no help information available
          Device identities
                    Source device: SIM
                    Destination device: ME
          Text string
                    Data coding scheme: unpacked, 8 bit data
                    Text: "Enter Hello"
          Response length
                    Minimum length: 5
                    Maximum length: 5

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

TERMINAL RESPONSE : GET INPUT 4.1.1

Logically:

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

Coding:

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

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

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

PROACTIVE COMMAND : GET INPUT 4.2.1

Logically:
>   Command details
>>   Command number: 1
>>   Command type: GET INPUT
>>   Command qualifier: character set, UCS2 alphabet, input in unpacked format, ME to echo text,
>>   no help information available
>   Device identities
>>   Source device: SIM
>>   Destination device: ME
>   Text string
>>   Data coding scheme: unpacked, 8 bit data
>>   Text: "Enter Hello"
>   Response length
>>   Minimum length: 5
>>   Maximum length: 5

Coding:

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

TERMINAL RESPONSE : GET INPUT 4.2.1

Logically:
>   Command details
>>   Command number: 1
>>   Command type: GET INPUT
>>   Command qualifier: character set, UCS2 alphabet, input in unpacked format, ME to echo text,
>>   no help information available
>   Device identities
>>   Source device: ME
>>   Destination device: SIM
>   Result
>   General Result: Command performed successfully
>>   Data coding scheme: UCS2
>>   Text: "ЗДРАВСТВУЙТЕ…ЗДРАВСТВУЙ" (70 chars)

Coding:

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

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 Test

27.22.4.3.5.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default 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	SIM → ME	PROACTIVE COMMAND PENDING: GET INPUT 5.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : GET INPUT 5.1.1	[digits only, SMS default alphabet, ME to echo text, packing not required, no help information available]
4	ME → USER	Display "Enter 12345" Display "12345"	Range of expected length is 5-5 Text string coding in unpacked format Default text coding in unpacked format
5	USER → ME	Completion	
6	ME → SIM	TERMINAL RESPONSE : GET INPUT 5.1.1	[command performed successfully]

PROACTIVE COMMAND : GET INPUT 5.1.1

Logically:

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

Coding:

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

TERMINAL RESPONSE : GET INPUT 5.1.1

Logically:

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

Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: GET INPUT 5.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : GET INPUT 5.2.1	[digits only, SMS default alphabet, ME to echo text, packing not required, no help information available]
4	ME → USER	Display "Enter:" Display default text input: "***1111111111###***22222222 22###***3333333333###***4444 444444###***5555555555###*** 6666666666###***7777777777# ##***8888888888###***9999999 999###***0000000000###"	Range of expected length is 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###***444444444
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	23	23	23	2A	2A	2A	32	31
	32	32	32	32	32	32	32	32	23	23	23
	2A	2A	2A	33	33	33	33	33	33	33	33
	33	23	23	23	2A	2A	2A	34	34	34	34	34
	34	34	34	34	23	23	23	2A	2A	2A	35
	35	35	35	35	35	35	35	35	23	23	23
	2A	2A	2A	36	36	36	36	36	36	36	36
	36	23	23	23	2A	2A	2A	37	37	37	37	37
	37	37	37	37	23	23	23	2A	2A	2A	38
	38	38	38	38	38	38	38	38	23	23	23
	2A	2A	2A	39	39	39	39	39	39	39	39
	39	23	23	23	2A	2A	2A	30	30	30	30	30
	30	30	30	30	30	23	23	23

TERMINAL RESPONSE : GET INPUT 5.2.1

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

        "***1111111111###***2222222222###***3333333333###***444444444 4###***5555555555###***6666666666###***7777777777###***888888 8888###***9999999999###***0000000000###"

Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	00
	17	81	A0	04	2A	2A	2A	31	31	31	31	31
	31	31	31	31	23	23	23	2A	2A	2A	32
	32	32	32	32	32	32	32	32	23	23	23
	2A	2A	2A	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	23	23	23
	2A	2A	2A	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	23	23	23
	2A	2A	2A	39	39	39	39	39	39	39	39
	39	23	23	23	2A	2A	2A	30	30	30	30	30
	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	30	30	30	30	30
	23	23	23

27.22.4.3.5.5   Test Requirement

The ME shall operate in the manner defined in expected 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:

    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   04   82   02   82   81   83   01   00
                    8D   02   04   2B

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

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

TERMINAL RESPONSE : GET INPUT 6.1.1B

Logically:

    Command details

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

    Device identities

Source device:	ME
Destination device:	SIM

    Result

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

    Text string

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

Coding:

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

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

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

PROACTIVE COMMAND : : GET INPUT 6.2.1

Logically:

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

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

TERMINAL RESPONSE : GET INPUT 6.2.1A

Logically:

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

Coding:

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

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

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

TERMINAL RESPONSE : GET INPUT 6.2.1B

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

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

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

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

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

PROACTIVE COMMAND : GET INPUT 6.3.1

Logically:

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

Coding:

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

TERMINAL RESPONSE : GET INPUT 6.3.1A

Logically:

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

Coding:

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

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

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

TERMINAL RESPONSE : GET INPUT 6.3.1B

Logically:

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

Coding:

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

<table>
<tr><td>8D</td><td>02</td><td>04</td><td>2B</td></tr>
</table>

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

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

PROACTIVE COMMAND : GET INPUT 6.4.1

Logically:

    Command details
        Command number: 1
        Command type: GET INPUT
        Command qualifier: digits (0-9, *, # and +) only, no help information available
    Device identities
        Source device: SIM
        Destination device: ME
    Text string
        Data coding scheme: unpacked, 8 bit data
        Text: "<COLOUR-ICON>"
    Response length
        Minimum length: 0
        Maximum length: 10
    Icon Identifier
        Icon qualifier: not self-explanatory
        Icon identifier: 2 (number of record in EF_{Img})

Coding:

	BER-TLV:	D0	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:

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

Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND 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:

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

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

Coding:

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

27.22.4.3.7 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 Test

27.22.4.3.7.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default 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)

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

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

TERMINAL RESPONSE : GET INPUT 7.1.1

Logically:

Command details

    Command number: 1

    Command type: GET INPUT

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

Device identities

    Source device: ME

    Destination device: SIM

Result

    General Result: Help information required by the user

Coding:

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

27.22.4.4.1 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 Test

27.22.4.4.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.4.4.2 Procedure

Expected Sequence 1.1 (MORE TIME)

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

PROACTIVE COMMAND : MORE TIME 1.1.1

Logically:

    Command details
        Command number: 1
        Command type: MORE TIME
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: ME

  Coding:

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

TERMINAL RESPONSE : MORE TIME 1.1.1

Logically:

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

Coding:

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

27.22.4.4.5 Test Requirement

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

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	

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

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

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" Play a general beep	
61	ME → SIM	TERMINAL RESPONSE : PLAY TONE 1.1.10a or TERMINAL RESPONSE : PLAY TONE 1.1.10b	[Command performed successfully] 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 Or TERMINAL RESPONSE : PLAY TONE 1.1.11b	[Command performed successfully] 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 or TERMINAL RESPONSE : PLAY TONE 1.1.12b	[Command performed successfully] or [Command beyond ME's capabilities]
74	SIM → ME	PROACTIVE SIM SESSION ENDED	

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

PROACTIVE COMMAND : PLAY TONE 1.1.1

Logically:

    Command details

        Command number: 1

        Command type: PLAY TONE

        Command qualifier: "00"

    Device identities

        Source device: SIM

        Destination device: Earpiece

    Alpha identifier: "Dial Tone"

    Tone: Standard supervisory tones: dial tone

    Duration

        Time unit: Seconds

        Time interval: 5

  Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.2

Logically:

    Command details

        Command number: 1

        Command type: PLAY TONE

        Command qualifier: "00"

    Device identities

        Source device: SIM

        Destination device: Earpiece

    Alpha identifier: "Sub. Busy"

    Tone: Standard supervisory tones: called subscriber busy

    Duration

        Time unit: Seconds

        Time interval: 5

  Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.3

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

  Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.4

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

  Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.5

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

Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.6

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

Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.7

Logically:
    Command details
        Command number: 1
        Command type: PLAY TONE
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Earpiece
    Alpha identifier: "Call Wait"
    Tone: Standard supervisory tones: call waiting tone
    Duration
        Time unit: Seconds
        Time interval: 5

  Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.8

Logically:
    Command details
        Command number: 1
        Command type: PLAY TONE
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Earpiece
    Alpha identifier: "Ring Tone"
    Tone: Standard supervisory tones: ringing tone
    Duration
        Time unit: Seconds
        Time interval: 5

  Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.9

Logically:
<blockquote>
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:
</blockquote>

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

PROACTIVE COMMAND : PLAY TONE 1.1.10

Logically:
<blockquote>
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"
</blockquote>

Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.11

Logically:
    Command details
        Command number: 1
        Command type: PLAY TONE
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Earpiece
    Alpha identifier: "Beep"
    Tone: ME proprietary tones: general beep
    Duration
        Time unit: Seconds
        Time interval: 1

Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.12

Logically:
    Command details
        Command number: 1
        Command type: PLAY TONE
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Earpiece
    Alpha identifier: "Positive"
    Tone: ME proprietary tones: positive acknowledgement tone
    Duration
        Time unit: Seconds
        Time interval: 1

Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.13

Logically:

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

  Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.14

Logically:

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

  Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.15

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

  Coding:

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

PROACTIVE COMMAND : PLAY TONE 1.1.16

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

  Coding:

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

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

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

Coding:

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

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

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

Coding:

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

TERMINAL RESPONSE : PLAY TONE 1.1.10b ..1.1.10b

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

Coding:

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

TERMINAL RESPONSE : PLAY TONE 1.1.15

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

Coding:

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

27.22.4.5.5   Test Requirement

The ME shall operate in the manner defined in expected 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)

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

PROACTIVE COMMAND : POLL INTERVAL 1.1.1

Logically:

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

   Coding:

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

TERMINAL RESPONSE : POLL INTERVAL 1.1.1

Logically:

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

Coding:

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

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 test

27.22.4.7.1.4.1   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
    Record 1:
    Length of alpha identifier: 32 characters
    Alpha identifier: "ABC"
    Length of BCD number: "03"
    TON and NPI: Telephony and Unknown
    Dialled number: 123
    CCI: None
    Ext2:   None

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

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

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

27.22.4.7.1.4.2   Procedure

Expected Sequence 1.1 (REFRESH, SIM Initialisation)

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

PROACTIVE COMMAND : REFRESH 1.1.1

Logically:

          Command details
                    Command number: 1
                    Command type: REFRESH
                    Command qualifier: SIM 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 1.1.1A

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 03 82 02 81 82 83 01 00

TERMINAL RESPONSE : REFRESH 1.1.1B

Logically:

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

Coding:

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

Expected Sequence 1.2 (REFRESH, File Change Notification)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: REFRESH 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: REFRESH 1.2.1	
4	SIM	Invalidate EF IMSI, EF LOCI and EF ADN	[Restricted dialling feature is enabled]
5	SIM	Update EF FDN RECORD 1	[EF FDN record 1 updated to contain the dialling string "0123456789"]
6	ME → SIM	READ RECORD: EF FDN	
7	ME → SIM	TERMINAL RESPONSE: REFRESH 1.2.1A Or	[normal ending]
		TERMINAL RESPONSE: REFRESH 1.2.1B	[additional EFs read]
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	Call setup to "123"	
10	ME → USER	Call set up not allowed	
11	USER → ME	Call setup to "0123456789"	
12	ME → SS	Setup	Called party BCD number shall be "0123456789"

PROACTIVE COMMAND : REFRESH 1.2.1

Logically:

    Command details
        Command number: 1
        Command type: REFRESH
        Command qualifier: File Change Notification
    Device identities
        Source device: SIM
        Destination device: ME
    File List: EF FDN

Coding:

BER-TLV:	D0	12	81	03	01	01	01	82	02	81	82	92
	07	01	3F	00	7F	10	6F	3B				

TERMINAL RESPONSE : REFRESH 1.2.1A

Logically:

    Command details
        Command number: 1
        Command type: REFRESH
        Command qualifier: File Change Notification
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

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

TERMINAL RESPONSE : REFRESH 1.2.1B

Logically:

    Command details
        Command number: 1
        Command type: REFRESH
        Command qualifier: File Change Notification
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: REFRESH performed with additional EFs read

Coding:

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

Expected Sequence .13 (REFRESH, SIM Initialisation and File Change Notification)

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

PROACTIVE COMMAND : REFRESH 1.3.1

Logically:

Command details		
	Command number:	1
	Command type:	REFRESH
	Command qualifier:	SIM 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: REFRESH 1.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: REFRESH 1.4.1	
4	SIM	Invalidate EF IMSI, EF LOCI and EF ADN	[Restricted dialling feature is enabled]
5	SIM	Update EF FDN	[EF FDN record 1 updated to contain the dialling string "0123456789"]
6	ME → SIM	SIM Initialisation	[ME performs SIM initialisation]
7	ME → SIM	TERMINAL RESPONSE: REFRESH 1.4.1A	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	Call setup to "321"	
10	ME → USER	Call set up not allowed	
11	USER → ME	Call setup to "0123456789"	
12	ME → SS	Setup	Called party BCD number shall be "0123456789"

PROACTIVE COMMAND : REFRESH 1.4.1A

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)

Step	Direction	MESSAGE / Action	Comments
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)

Step	Direction	MESSAGE / Action	Comments
1	ME	The ME shall be in its normal idle mode	[Start a sequence to verify that the ME returns the RP-ACK message back to the system Simulator, if the SIM responds with '90 00']
2	SS → ME	SMS-PP Data Download Message 1.6.1	
3	ME → USER	The ME shall not display the message or alert the user of a short message waiting	
4	ME → SIM	ENVELOPE: SMS-PP DOWNLOAD 1.6.1	
5	SIM → ME	PROACTIVE COMMAND PENDING: REFRESH 1.1.1	
6	ME -> SS	RP-ACK	
7	ME → SIM	FETCH	
8	SIM → ME	PROACTIVE COMMAND: REFRESH 1.1.1	
9	SIM	Invalidate EF IMSI, EF LOCI and EF ADN	[Restricted dialling feature is enabled]
10	ME → SIM	SIM 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 1.6.1

Logically:

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

Coding:

BER-TLV	04	03	91	21	43	7F	12	89	10	10	00	00
	00	00	0D	53	F4	5B	4E	07	35	CB	F3	79
	F8	5C	06									

ENVELOPE: SMS-PP DOWNLOAD 1.6.1

Logically:

SMS-PP Download

    Device identities

        Source device: Network

        Destination device: SIM

    Address

        TON   International number

        NPI   "ISDN / telephone numbering plan"

        Dialling number string   "112233445566778"

    SMS TPDU

        TP-MTI   SMS-DELIVER

        TP-MMS   No more messages waiting for the MS in this SC

        TP-RP   TP-Reply-Path is not set in this SMS-DELIVER

        TP-UDHI   TP-UD field contains only the short message

        TP-SRI   A status report will not be returned to the SME

        TP-OA

            TON   International number

            NPI   "ISDN / telephone numbering plan"

            Address value   "1234"

        TP-PID   SIM Data download

        TP-DCS

            Coding Group   General Data Coding

            Compression   Text is uncompressed

            Message Class   Class 2 SIM Specific Message

            Alphabet   Default Alphabet

        TP-SCTS: 01/01/98 00:00:00 +0

        TP-UDL   13

        TP-UD   "Short Message"

  Coding:

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

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	[normal]
		TERMINAL RESPONSE: REFRESH 2.1.1B	[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 2.1.1

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

Coding:

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

TERMINAL RESPONSE : REFRESH 2.1.1A

Logically:
    Command details
      Command number: 1
      Command type: REFRESH
      Command qualifier: SIM 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 2.1.1B

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

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: REFRESH 2.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: REFRESH 2.2.1	
4	SIM	Update EF IMSI	[Update the contents of EF IMSI to "001010123456787", -]
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 2.2.1	[normal]
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	ME → SS	IMSI ATTATCH	[Send IMSI of "001010123456787" to System Simulator]

PROACTIVE COMMAND : REFRESH 2.2.1

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

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: REFRESH 2.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: REFRESH 2.3.1	
4	SIM	Update EF IMSI	[Update the contents of EF IMSI to "001010123456786
5	ME → SIM	GSM Termination Procedure	
6	ME → SIM	GSM Activation Procedure	[At same voltage]
7	ME → SIM	SIM Initialisation	[ME performs SIM initialisation; including reading EF IMSI, EF LOCI and EF KC]
8	ME → SS	IMSI ATTATCH	[Send IMSI of "001010123456786" to System Simulator]

PROACTIVE COMMAND : REFRESH 2.3.1

Logically:

    Command details
        Command number: 1
        Command type: REFRESH
        Command qualifier: SIM Reset
    Device identities
        Source device: SIM
        Destination device: ME

Coding:

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

27.22.4.7.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 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 applicability

See 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 gas indicated the need to get help information on one of the items, the ME informs properly the SIM about an HELP REQUEST, using the MENU SELECTION mechanism.

27.22.4.8.1.4   Method of Test

27.22.4.8.1.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

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

27.22.4.8.1.4.2   Procedure

Expected Sequence 1.1 (SET UP MENU and MENU SELECTION, without Help Request, Replace and Remove a Toolkit Menu)

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

27	USER → ME	Has to unsuccessfully find the Toolkit Menu	

PROACTIVE COMMAND : SET UP MENU 1.1.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP MENU
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: ME
    Alpha identifier: "Toolkit Menu"
    Item
        Identifier of item: 1
        Text string of item: "Item 1"
    Item
        Identifier of item: 2
        Text string of item: "Item 2"
    Item
        Identifier of item: 3
        Text string of item: "Item 3"
    Item
        Identifier of item: 4
        Text string of item: "Item 4"

  Coding:

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

PROACTIVE COMMAND : SET UP MENU 1.1.2

Logically:

    Command details
        Command number: 1
        Command type: SET UP MENU
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: ME
    Alpha identifier: "Toolkit Menu"
    Item
        Identifier of item: "11"
        Text string of item: "One"
    Item
        Identifier of item: "12"
        Text string of item: "Two"

    Coding:

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

PROACTIVE COMMAND : SET UP MENU 1.1.3

Logically:

    Command details
        Command number: 1
        Command type: SET UP MENU
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: ME
    Item: Empty

    Coding:

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

TERMINAL RESPONSE : SET UP MENU 1.1.1, 1.1.2 and 1.1.3

Logically:

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

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

ENVELOPE 1.1.1 : MENU SELECTION

Logically:

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

Coding:

```
BER-TLV:    D3    07    81    02    01    81    90    01    02
```

ENVELOPE 1.2 : MENU SELECTION

Logically:

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

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

19	USER → ME	Select the "5 Barring Of All Outgoing Calls" menu entry	
20	ME → SIM	Send the ENVELOPE 1.2.2 : MENU SELECTION (Identifier of item: 0xFB)	
21	SIM → ME	PROACTIVE COMMAND PENDING: SET UP MENU 1.2.3	[Third Large Menu with a Large Alpha Identifier and only one Short Item, Fetch of FF bytes]
22	ME → SIM	FETCH	
23	SIM → ME	PROACTIVE COMMAND SET UP MENU 1.2.3	
24	ME → USER	Integrate the new menu header of " The SIM shall supply a set of menu items, which shall be integrated with the menu system (or other MMI facility) in order to give the user the opportunity to choose one of these menu items at his own discretion. Each item comprises a sh" into it's menu system and have a menu item of "Y" under this header.	
25	ME → SIM	TERMINAL RESPONSE: SET UP MENU 1.2.3	[Command Performed Successfully]
26	SIM → ME	PROACTIVE SIM SESSION ENDED	
5	USER → ME	Select the Toolkit Menu "The SIM shall supply a set of menu items, which shall be integrated with the menu system (or other MMI facility) in order to give the user the opportunity to choose one of these menu items at his own discretion. Each item comprises a sh".	
6	ME → USER	Display "Y"	
7	USER → ME	Select the item "Y"	
8	ME → SIM	Send the ENVELOPE 1.1.6 : MENU SELECTION (Identifier of item: 1)	

PROACTIVE COMMAND : SET UP MENU 1.2.1

Logically:
 Command details
  Command number: 1
  Command type: SET UP MENU
  Command qualifier: "00"
 Device identities
  Source device: SIM
  Destination device: ME
 Alpha Identifier: "LargeMenu1"
 Item
  Identifier of item: "50"
  Text string of item: "Zero"
 Item
  Identifier of item: "4F"
  Text string of item: "One"
 Item
  Identifier of item: "4E"
  Text string of item: "Two"
 Item
  Identifier of item: "4D"
  Text string of item: "Three"
 Item
  Identifier of item: "4C"
  Text string of item: "Four"
 Item
  Identifier of item: "4B"
  Text string of item: "Five"
 Item
  Identifier of item: "4A"
  Text string of item: "Six"
 Item
  Identifier of item: "49"
  Text string of item: "Seven"
 Item
  Identifier of item: "48"
  Text string of item: "Eight"
 Item
  Identifier of item: "47"
  Text string of item: "Nine"

Item
    Identifier of item: "46"
    Text string of item: "Alpha"
Item
    Identifier of item: "45"
    Text string of item: "Bravo"
Item
    Identifier of item: "44"
    Text string of item: "Charlie"
Item
    Identifier of item: "43"
    Text string of item: "Delta"
Item
    Identifier of item: "42"
    Text string of item: "Echo"
Item
    Identifier of item: "41"
    Text string of item: "Fox-trot"
Item
    Identifier of item: "40"
    Text string of item: "Black"
Item
    Identifier of item: "3F"
    Text string of item: "Brown"
Item
    Identifier of item: "3E"
    Text string of item: "Red"
Item
    Identifier of item: "3D"
    Text string of item: "Orange"
Item
    Identifier of item: "3C"
    Text string of item: "Yellow"
Item
    Identifier of item: "3B"
    Text string of item: "Green"
Item
    Identifier of item: "3A"
    Text string of item: "Blue"
Item
    Identifier of item: "39"
    Text string of item: "Violet"
Item
    Identifier of item: "38"
    Text string of item: "Grey"
Item
    Identifier of item: "37"
    Text string of item: "White"
Item
    Identifier of item: "36"
    Text string of item: "milli"
Item
    Identifier of item: "35"
    Text string of item: "micro"
Item
    Identifier of item: "34"
    Text string of item: "nano"
Item
    Identifier of item: "33"
    Text string of item: "pico"

Coding:

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

PROACTIVE COMMAND : SET UP MENU 1.2.2

Logically:
Command details
    Command number: 1
    Command type: SET UP MENU
    Command qualifier: "00"
Device identities
    Source device: SIM
    Destination device: ME
Alpha Identifier: "LargeMenu2"
Item
    Identifier of item: "FF"
    Text string of item: "1 Call Forward Unconditional"
Item
    Identifier of item: "FE"
    Text string of item: "2 Call Forward On User Busy"
Item
    Identifier of item: "FD"
    Text string of item: "3 Call Forward On No Reply"
Item
    Identifier of item: "FC"
    Text string of item: "4 Call Forward On User Not Reachable"
Item
    Identifier of item: "FB"
    Text string of item: "5 Barring Of All Outgoing Calls"
Item
    Identifier of item: "FA"
    Text string of item: "6 Barring Of All Outgoing Int Calls"
Item
    Identifier of item: "F9"
    Text string of item: "7 CLI Presentation"

Coding:

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

PROACTIVE COMMAND : SET UP MENU 1.2.3

Logically:

Command details		
Command number:	1	
Command type:	SET UP MENU	
Command qualifier:	"00"	
Device identities		
Source device:	SIM	
Destination device:	ME	
Alpha Identifier:	"The SIM shall supply a set of menu items, which shall be integrated with the menu system (or other MMI facility) in order to give the user the opportunity to choose one of these menu items at his own discretion. Each item comprises a sh"	
Item		
Identifier of item:	"01"	
Text string of item:	"Y"	

Coding:

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

TERMINAL RESPONSE : SET UP MENU 1.2.1, 1.2.2 and 1.2.3

Logically:

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

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

ENVELOPE 1.2.1 : MENU SELECTION

Logically:

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

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

ENVELOPE 1.2.2 : MENU SELECTION

Logically:

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

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

ENVELOPE 1.2.3 : MENU SELECTION

Logically:

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

Coding:

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

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

	Proactive SIM Command Facilities		
Proactive SIM Command Number	Alpha Identifier Length	Number of items	Maximum length of item
1.1.1	12	4	6
1.1.2	12	2	3
1.1.3	10	0	-
1.2.1	10	30	8
1.2.2	10	7	37
1.2.3	235	1	1

27.22.4.8.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1 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 gas 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)

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

PROACTIVE COMMAND : SET UP MENU 2.1.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP MENU
        Command qualifier: "80"
    Device identities
        Source device: SIM
        Destination device: ME
    Alpha identifier: "Toolkit Menu"
    Item
        Identifier of item: 1
        Text string of item: "Item 1"
    Item
        Identifier of item: 2
        Text string of item: "Item 2"
    Item
        Identifier of item: 3
        Text string of item: "Item 3"
    Item
        Identifier of item: 4
        Text string of item: "Item 4"

Coding:

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

```
                    02    49    74    65    6D    20    32    8F    07    03    49    74
                    65    6D    20    33    8F    07    04    49    74    65    6D    20
                    34
```

TERMINAL RESPONSE : SET UP MENU 2.1.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP MENU
        Command qualifier: « help information available »
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
  Coding:

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

ENVELOPE 2.1.1 : MENU SELECTION

Logically:

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

Coding:

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

27.22.4.8.2.5   Test Requirement

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

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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP MENU 3.1.1	[First Set Up Menu]
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND SET UP MENU 3.1.1	
4	ME → USER	Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" and "Item 4" under this header.	
5	ME → SIM	TERMINAL RESPONSE: SET UP MENU 3.1.1	[Command Performed Successfully]
6	SIM → ME	PROACTIVE SIM SESSION ENDED	
7	USER → ME	Select the Toolkit Menu "Toolkit Menu"	
8	ME → USER	Display "Item 1", "Item 2", "Item 3", "Item 4"	
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:

BER-TLV:	D0	41	81	03	01	25	00	82	02	81	82	85
	0C	54	6F	6F	6C	6B	69	74	20	4D	65	6E
	75	8F	07	01	49	74	65	6D	20	31	8F	07

02	49	74	65	6D	20	32	8F	07	03	49	74
65	6D	20	33	8F	07	04	49	74	65	6D	20
34	18	04	13	10	15	26

TERMINAL RESPONSE : SET UP MENU 3.1.1

Logically:

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

Coding:

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

27.22.4.8.3.5   Test Requirement

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

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 Test

27.22.4.8.4.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

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

27.22.4.8.4.4.2   Procedure

Expected Sequence 4.1A (SET UP MENU, BASIC ICON NOT SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP MENU 4.1.1	[First Set Up Menu]
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND SET UP MENU 4.1.1	
4	ME → USER	Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header.	
5	ME → SIM	TERMINAL RESPONSE: SET UP MENU 4.1.1A	[Command Performed Successfully]
6	SIM → ME	PROACTIVE SIM SESSION ENDED	
7	USER → ME	Select the Toolkit Menu "Toolkit Menu"	Verify the icon is displayed with alpha id.
8	ME → USER	Display "Item 1", "Item 2", "Item 3".	
9	USER → ME	Navigate in the items, then select "Item 2".	Verify icons are displayed for each item.

PROACTIVE COMMAND : SET UP MENU 4.1.1

Logically:

Command details
  Command number: 1
  Command type: SET UP MENU
  Command qualifier: "00"
Device identities
  Source device: SIM
  Destination device: ME
Alpha identifier: "Toolkit Menu"
Item
  Identifier of item: 1
  Text string of item: "Item 1"
Item
  Identifier of item: 2
  Text string of item: "Item 2"
Item
  Identifier of item: 3
  Text string of item: "Item 3"
Icon identifier
  Icon qualifier: icon is not self explanatory
  Icon identifier: record 1 EF (IMG)
Item icon identifier list
  Icon qualifier: icon is not self explanatory
  Icon identifier list: record 5 EF (IMG), record 5 EF (IMG), record 5 EF (IMG)

Coding:

```
BER-TLV:   D0   3C   81   03   01   25   00   82   02   81   82   85
           0C   54   6F   6F   6C   6B   69   74   20   4D   65   6E
           75   8F   07   01   49   74   65   6D   20   31   8F   07
           02   49   74   65   6D   20   32   8F   07   03   49   74
           65   6D   20   33   9E   02   01   01   9F   04   01   05
           05   05
```

TERMINAL RESPONSE : SET UP MENU 4.1.1A

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

Coding:

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

Expected Sequence 4.1B (SET UP MENU, BASIC ICON NOT SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND 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 4.1.1B

Logically:
    Command details
        Command number: 1
        Command type: SET UP MENU
        Command qualifier: « no help information available »
    Device identities
        Source device: ME
        Destination device: SIM
    Result
    General Result: Command performed successfully but requested icon could not be
                               displayed

Coding:

      BER-TLV: 81   03   01   25   00   82   02   82   81   83   01   04

Expected Sequence 4.2A (SET UP MENU, BASIC ICON SELF EXPLANATORY in ALPHA ID and ITEMS DATA
    OBJECTS, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP MENU 4.2.1	[First Set Up Menu]
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND SET UP MENU 4.2.1	
4	ME → USER	Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header.	
5	ME → SIM	TERMINAL RESPONSE: SET UP MENU 4.2.1A	[Command Performed Successfully]
6	SIM → ME	PROACTIVE SIM SESSION ENDED	
7	USER → ME	Select the Toolkit Menu "Toolkit Menu"	Verify the icon is displayed in alpha id.
8	ME → USER	Display "Item 1", "Item 2", "Item 3".	
9	USER → ME	Navigate in the items, then select "Item 2".	Verify icons are displayed for each item.

PROACTIVE COMMAND : SET UP MENU 4.2.1

Logically:

    Command details
      Command number: 1
      Command type: SET UP MENU
      Command qualifier: "00"
    Device identities
      Source device: SIM
      Destination device: ME
    Alpha identifier: "Toolkit Menu"
    Item
      Identifier of item: 1
      Text string of item: "Item 1"
    Item
      Identifier of item: 2
      Text string of item: "Item 2"
    Item
      Identifier of item: 3
      Text string of item: "Item 3"
    Icon identifier
      Icon qualifier: icon is self explanatory
      Icon identifier: record 1 EF (IMG)
    Item icon identifier list
      Icon qualifier: icon is self explanatory
      Icon identifier list: record 5 EF (IMG), record 5 EF (IMG), record 5 EF (IMG)

  Coding:

        BER-TLV: D0   3C   81   03   01   25   00   82   02   81   82   85
                          0C   54   6F   6F   6C   6B   69   74   20   4D   65   6E
                          75   8F   07   01   49   74   65   6D   20   31   8F   07
                          02   49   74   65   6D   20   32   8F   07   03   49   74
                          65   6D   20   33   9E   02   00   01   9F   04   00   05
                          05   05

TERMINAL RESPONSE : SET UP MENU 4.2.1A

Logically:

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

Coding:

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

Expected Sequence 4.2B (SET UP MENU, BASIC ICON SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP MENU 4.2.1	[First Set Up Menu]
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND SET UP MENU 4.2.1	
4	ME → USER	Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header.	
5	ME → SIM	TERMINAL RESPONSE: SET UP MENU 4.2.1B	[Command Performed Successfully]
6	SIM → ME	PROACTIVE SIM SESSION ENDED	
7	USER → ME	Select the Toolkit Menu "Toolkit Menu"	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

27.22.4.8.4.5   Test Requirement

The ME shall operate in the manner defined in expected sequences 1and 2.

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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP MENU 5.1.1	[First Set Up Menu]
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND SET UP MENU 5.1.1	
4	ME → USER	Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2" under this header.	
5	ME → SIM	TERMINAL RESPONSE: SET UP MENU 5.1.1	[Command Performed Successfully]
6	SIM → ME	PROACTIVE SIM SESSION ENDED	
7	USER → ME	Select the Toolkit Menu "Toolkit Menu"	
8	ME → USER	Display "Item 1", "Item 2"	
9	USER → ME	Navigate in the items, then select "Item 2".	Verify we can select items through soft keys

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

27.22.4.8.5.5 Test Requirement

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

27.22.4.9 SELECT ITEM

27.22.4.9.1 SELECT ITEM (mandatory features for ME supporting SELECT ITEM)

27.22.4.9.1.1 Definition and applicability

See 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 1.1.1	
4	ME → USER	Display items of "Item 1", "Item 2", "Item 3" and "Item 4" under the header of "Toolkit Select".	
5	USER → ME	Select "Item 2".	
6	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 1.1.1	Command performed successfully

PROACTIVE COMMAND : SELECT ITEM 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: SELECT ITEM
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: ME
    Alpha identifier: "Toolkit Select"
    Item
        Identifier of item: 1
        Text string of item: "Item 1"
    Item
        Identifier of item: 2
        Text string of item: "Item 2"
    Item
        Identifier of item: 3
        Text string of item: "Item 3"
    Item
        Identifier of item: 4
        Text string of item: "Item 4"

    Coding:

BER-TLV:	D0	3D	81	03	01	24	00	82	02	81	82	85
	0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
	65	63	74	8F	07	01	49	74	65	6D	20	31
	8F	07	02	49	74	65	6D	20	32	8F	07	03
	49	74	65	6D	20	33	8F	07	04	49	74	65
	6D	20	34									

TERMINAL RESPONSE : SELECT ITEM 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: SELECT ITEM
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Item identifier
        Identifier of item chosen: 02

  Coding:

      BER-TLV: 81   03   01   24   00   82   02   82   81   83   01   00
                      90   01   02

Expected Sequence 1.2 (SELECT ITEM, large menu, successful)

Step	Direction	MESSAGE / Action	Comments
7	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 1.2.1	
8	ME → SIM	FETCH	
9	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 1.2.1	
10	ME → USER	Present the items of "Zero", "One", "Two", Three", "Four", "Five", "Six", "Seven", "Eight", "Nine", "Alpha", "Bravo", "Charlie", "Delta", "Echo", "Fox-trot", "Black", "Brown", "Red", "Orange", "Yellow", "Green", "Blue", "Violet", "Grey", "White", "milli", "micro", "nano" and "pico" under the header of "LargeMenu1"	
11	USER → ME	Select item "Orange".	
12	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 1.2.1	Command performed successfully

PROACTIVE COMMAND : SELECT ITEM 1.2.1

Logically:

    Command details

        Command number: 1

        Command type: SELECT ITEM

        Command qualifier: "00"

    Device identities

        Source device: SIM

        Destination device: ME

    Alpha Identifier: "LargeMenu1"

    Item

        Identifier of item: "50"

        Text string of item: "Zero"

    Item

        Identifier of item: "4F"

        Text string of item: "One"

    Item

        Identifier of item: "4E"

        Text string of item: "Two"

    Item

        Identifier of item: "4D"

        Text string of item: "Three"

    Item

        Identifier of item: "4C"

        Text string of item: "Four"

    Item

        Identifier of item: "4B"

        Text string of item: "Five"

    Item

        Identifier of item: "4A"

        Text string of item: "Six"

    Item

        Identifier of item: "49"

        Text string of item: "Seven"

    Item

        Identifier of item: "48"

        Text string of item: "Eight"

    Item

        Identifier of item: "47"

        Text string of item: "Nine"

    Item

        Identifier of item: "46"

Text string of item:	"Alpha"
Item	
Identifier of item:	"45"
Text string of item:	"Bravo"
Item	
Identifier of item:	"44"
Text string of item:	"Charlie"
Item	
Identifier of item:	"43"
Text string of item:	"Delta"
Item	
Identifier of item:	"42"
Text string of item:	"Echo"
Item	
Identifier of item:	"41"
Text string of item:	"Fox-trot"

Item
Identifier of item: "40"
Text string of item: "Black"
Item
Identifier of item: "3F"
Text string of item: "Brown"
Item
Identifier of item: "3E"
Text string of item: "Red"
Item
Identifier of item: "3D"
Text string of item: "Orange"
Item
Identifier of item: "3C"
Text string of item: "Yellow"
Item
Identifier of item: "3B"
Text string of item: "Green"
Item
Identifier of item: "3A"
Text string of item: "Blue"
Item
Identifier of item: "39"
Text string of item: "Violet"
Item
Identifier of item: "38"
Text string of item: "Grey"
Item
Identifier of item: "37"
Text string of item: "White"
Item
Identifier of item: "36"
Text string of item: "milli"
Item
Identifier of item: "35"
Text string of item: "micro"
Item
Identifier of item: "34"
Text string of item: "nano"
Item
Identifier of item: "33"
Text string of item: "pico"

Coding:

BER-TLV:	D0	81	FC	81	03	01	24	00	82	02	81	82
	85	0A	4C	61	72	67	65	4D	65	6E	75	31
	8F	05	50	5A	65	72	6F	8F	04	4F	4F	6E
	65	8F	04	4E	54	77	6F	8F	06	4D	54	68
	72	65	65	8F	05	4C	46	6F	75	72	8F	05
	4B	46	69	76	65	8F	04	4A	53	69	78	8F
	06	49	53	65	76	65	6E	8F	06	48	45	69
	67	68	74	8F	05	47	4E	69	6E	65	8F	06
	46	41	6C	70	68	61	8F	06	45	42	72	61
	76	6F	8F	08	44	43	68	61	72	6C	69	65
	8F	06	43	44	65	6C	74	61	8F	05	42	45
	63	68	6F	8F	09	41	46	6F	78	2D	74	72
	6F	74	8F	06	40	42	6C	61	63	6B	8F	06
	3F	42	72	6F	77	6E	8F	04	3E	52	65	64
	8F	07	3D	4F	72	61	6E	67	65	8F	07	3C
	59	65	6C	6C	6F	77	8F	06	3B	47	72	65
	65	6E	8F	05	3A	42	6C	75	65	8F	07	39
	56	69	6F	6C	65	74	8F	05	38	47	72	65
	79	8F	06	37	57	68	69	74	65	8F	06	36
	6D	69	6C	6C	69	8F	06	35	6D	69	63	72
	6F	8F	05	34	6E	61	6E	6F	8F	05	33	70
	69	63	6F									

TERMINAL RESPONSE : SELECT ITEM 1.2.1

Logically:

Command details		
Command number:	1	
Command type:	SELECT ITEM	
Command qualifier:	"00"	
Device identities		
Source device:	ME	
Destination device:	SIM	
Result		
General Result:	Command performed successfully	
Item identifier		
Identifier of item chosen:	3D	

Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
	90	01	3D									

Expected Sequence 1.3 (SELECT ITEM, call options, successful)

Step	Direction	MESSAGE / Action	Comments
13	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 1.3.1	
14	ME → SIM	FETCH	
15	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 1.3.1	
16	ME → USER	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	
17	USER → ME	Select item "Barring Of All Outgoing Calls".	
18	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 1.3.1	Command performed successfully
19	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : SELECT ITEM 1.3.1

Logically:

Command details		
Command number:	1	
Command type:	SELECT ITEM	
Command qualifier:	"00"	
Device identities		
Source device:	SIM	
Destination device:	ME	
Alpha Identifier:	"LargeMenu2"	
Item		
Identifier of item:	"FF"	
Text string of item:	"Call Forwarding Unconditional"	
Item		
Identifier of item:	"FE"	
Text string of item:	"Call Forwarding On User Busy"	
Item		
Identifier of item:	"FD"	
Text string of item:	"Call Forwarding On No Reply"	
Item		
Identifier of item:	"FC"	
Text string of item:	"Call Forwarding On User Not Reachable"	
Item		
Identifier of item:	"FB"	
Text string of item:	"Barring Of All Outgoing Calls"	
Item		
Identifier of item:	"FA"	
Text string of item:	"Barring Of All Outgoing International Calls"	
Item		
Identifier of item:	"F9"	
Text string of item:	"CLI Presentation"	

Coding:

BER-TLV:	D0	81	FB	81	03	01	24	00	82	02	81	82
	85	0A	4C	61	72	67	65	4D	65	6E	75	32
	8F	1E	FF	43	61	6C	6C	20	46	6F	72	77
	61	72	64	69	6E	67	20	55	6E	63	6F	6E
	64	69	74	69	6F	6E	61	6C	8F	1D	FE	43
	61	6C	6C	20	46	6F	72	77	61	72	64	69
	6E	67	20	4F	6E	20	55	73	65	72	20	42
	75	73	79	8F	1C	FD	43	61	6C	6C	20	46
	6F	72	77	61	72	64	69	6E	67	20	4F	6E
	20	4E	6F	20	52	65	70	6C	79	8F	26	FC
	43	61	6C	6C	20	46	6F	72	77	61	72	64
	69	6E	67	20	4F	6E	20	55	73	65	72	20
	4E	6F	74	20	52	65	61	63	68	61	62	6C
	65	8F	1E	FB	42	61	72	72	69	6E	67	20
	4F	66	20	41	6C	6C	20	4F	75	74	67	6F
	69	6E	67	20	43	61	6C	6C	73	8F	2C	FA
	42	61	72	72	69	6E	67	20	4F	66	20	41
	6C	6C	20	4F	75	74	67	6F	69	6E	67	20
	49	6E	74	65	72	6E	61	74	69	6F	6E	61
	6C	20	43	61	6C	6C	73	8F	11	F9	43	4C
	49	20	50	72	65	73	65	6E	74	61	74	69
	6F	6E										

TERMINAL RESPONSE : SELECT ITEM 1.3.1

Logically:

Command details		
Command number:	1	
Command type:	SELECT ITEM	
Command qualifier:	"00"	
Device identities		
Source device:	ME	
Destination device:	SIM	
Result		
General Result:	Command performed successfully	
Item identifier		
Identifier of item chosen:	FB	

Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
	90	01	FB								

Expected Sequence 1.4 (SELECT ITEM, backward move by user, successful)

Step	Direction	MESSAGE / Action	Comments
20	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 1.4.1	[
21	ME → SIM	FETCH	
22	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 1.4.1	
23	ME → USER	Present the items of "One" and "Two" under the header of "Select Item".	
24	USER → ME	Indicate to go backwards in the proactive SIM application session.	
25	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 1.4.1	Backward move in the proactive SIM application session requested by user
26	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 1.4.2	
27	ME → SIM	FETCH	
28	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 1.4.2	
29	ME → USER	Present the items of "One" and "Two" under the header of "Select Item".	
30	USER → ME	Indicate to end the proactive SIM application and return the ME to normal operation.	
31	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 1.4.2	Proactive SIM application terminated by the user
32	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : SELECT ITEM 1.4.1 and 1.4.2

Logically:

    Command details
        Command number: 1
        Command type: SELECT ITEM
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: ME
    Alpha identifier: "Select Item"
    Item
        Identifier of item: "11"
        Text string of item: "One"
    Item
        Identifier of item: "12"
        Text string of item: "Two"

  Coding:

        BER-TLV: D0   22   81   03   01   24   00   82   02   81   82   85
                    0B   53   65   6C   65   63   74   20   49   74   65   6D
                    8F   04   11   4F   6E   65   8F   04   12   54   77   6F

TERMINAL RESPONSE : SELECT ITEM 1.4.1

Logically:

    Command details
        Command number: 1
        Command type: SELECT ITEM
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: backward move in the proactive SIM session requested by the user

    Coding:

        BER-TLV: 81   03   01   24   00   82   02   82   81   83   01   11

TERMINAL RESPONSE : SELECT ITEM 1.4.2

Logically:

    Command details
        Command number: 1
        Command type: SELECT ITEM
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: proactive SIM session terminated by the user

    Coding:

        BER-TLV: 81   03   01   24   00   82   02   82   81   83   01   10

Expected Sequence 1.5 (SELECT ITEM, "Y", successful)

Step	Direction	MESSAGE / Action	Comments
33	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 1.5.1	
34	ME → SIM	FETCH	
35	SIM → ME	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:

Command details		
	Command number:	1
	Command type:	SELECT ITEM
	Command qualifier:	"00"
Device identities		
	Source device:	ME
	Destination device:	SIM
Result		
	General Result:	Command performed successfully
Item identifier		
	Identifier of item chosen:	01

Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
	90	01	01									

Expected Sequence 1.6 (SELECT ITEM, Large menu, successful)

Step	Direction	MESSAGE / Action	Comments
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 1.6.1

Logically:

Command details		
	Command number:	1
	Command type:	SELECT ITEM
	Command qualifier:	"00"
Device identities		
	Source device:	SIM
	Destination device:	ME
Alpha Identifier:		"0LargeMenu"
Item		
	Identifier of item:	"FF"
	Text string of item:	"1 Call Forward Unconditional"
Item		
	Identifier of item:	"FE"
	Text string of item:	"2 Call Forward On User Busy"
Item		
	Identifier of item:	"FD"
	Text string of item:	"3 Call Forward On No Reply"
Item		
	Identifier of item:	"FC"
	Text string of item:	"4 Call Forward On User Not Reachable"
Item		
	Identifier of item:	"FB"
	Text string of item:	"5 Barring Of All Outgoing Calls"
Item		
	Identifier of item:	"FA"
	Text string of item:	"6 Barring Of All Outgoing Int Calls"
Item		
	Identifier of item:	"F9"
	Text string of item:	"7 CLI Presentation"

Coding:

```
BER-TLV:   D0  81  F3  81  03  01  24  00  82  02  81  82
           85  0A  30  4C  61  72  67  65  4D  65  6E  75
           8F  1D  FF  31  20  43  61  6C  6C  20  46  6F
           72  77  61  72  64  20  55  6E  63  6F  6E  64
           69  74  69  6F  6E  61  6C  8F  1C  FE  32  20
           43  61  6C  6C  20  46  6F  72  77  61  72  64
           20  4F  6E  20  55  73  65  72  20  42  75  73
           79  8F  1B  FD  33  20  43  61  6C  6C  20  46
           6F  72  77  61  72  64  20  4F  6E  20  4E  6F
           20  52  65  70  6C  79  8F  25  FC  34  20  43
           61  6C  6C  20  46  6F  72  77  61  72  64  20
           4F  6E  20  55  73  65  72  20  4E  6F  74  20
           52  65  61  63  68  61  62  6C  65  8F  20  FB
           35  20  42  61  72  72  69  6E  67  20  4F  66
           20  41  6C  6C  20  4F  75  74  67  6F  69  6E
           67  20  43  61  6C  6C  73  8F  24  FA  36  20
           42  61  72  72  69  6E  67  20  4F  66  20  41
           6C  6C  20  4F  75  74  67  6F  69  6E  67  20
           49  6E  74  20  43  61  6C  6C  73  8F  13  F9
           37  20  43  4C  49  20  50  72  65  73  65  6E
           74  61  74  69  6F  6E
```

TERMINAL RESPONSE : SELECT ITEM 1.5

Logically:

Command details		
	Command number:	1
	Command type:	SELECT ITEM

Command qualifier:	"00"
Device identities	
Source device:	ME
Destination device:	SIM
Result	
General Result:	Command performed successfully
Item identifier	
Identifier of item chosen:	FB

Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
	90	01	FB									

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

	Proactive SIM Command Facilities		
Proactive SIM Command SELECT ITEM Number	Alpha Identifier Length	Number of items	Maximum length of item
1.1	14	4	6
1.2	10	30	8
1.3	10	7	43
1.4	11	2	3
1.5	236	1	1
1.6	10	7	37

27.22.4.9.1.5   Test Requirement

The ME shall operate in the manner defined in expected sequences 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 (SELECT ITEM, mandatory features).

27.22.4.9.2   SELECT ITEM (next action support)

27.22.4.9.2.1   Definition and applicability

See 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 Test

27.22.4.9.2.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.9.2.4.2   Procedure

Expected Sequence 2.1 (SELECT ITEM, next action indicator, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 2.1.1	
4	ME → USER	Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". 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:

BER-TLV:	D0	39	81	03	01	24	00	82	02	81	82	85
	0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
	65	63	74	8F	07	01	49	74	65	6D	20	31
	8F	07	02	49	74	65	6D	20	32	8F	07	03
	49	74	65	6D	20	33	18	03	13	10	26	

TERMINAL RESPONSE : SELECT ITEM 2.1.1

Logically:

    Command details
        Command number: 1
        Command type: SELECT ITEM
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Item identifier
        Identifier of item chosen: 02

  Coding:

      BER-TLV: 81   03   01   24   00   82   02   82   81   83   01   00
                 90   01   02

27.22.4.9.3 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 Test

27.22.4.9.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.9.3.4.2 Procedure

Expected Sequence 3.1 (SELECT ITEM, default item, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 3.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 3.1.1	
4	ME → USER	Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select".	Check that "Item 2" is selected by default.
5	USER → ME	Navigate in the items, then select "Item 3".	
6	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 3.1.1	Command performed successfully

PROACTIVE COMMAND : SELECT ITEM 3.1.1

Logically:

Command details		
Command number:	1	
Command type:	SELECT ITEM	
Command qualifier:	"00"	
Device identities		
Source device:	SIM	
Destination device:	ME	
Alpha identifier:	"Toolkit Select"	
Item		
Identifier of item:	01	
Text string of item:	"Item 1"	
Item		
Identifier of item:	02	
Text string of item:	"Item 2"	
Item		
Identifier of item:	03	
Text string of item:	"Item 3"	
Item identifier		
Identifier of item chosen	02	

Coding:

```
BER-TLV:   D0  37  81  03  01  24  00  82  02  81  82  85
           0E  54  6F  6F  6C  6B  69  74  20  53  65  6C
           65  63  74  8F  07  01  49  74  65  6D  20  31
           8F  07  02  49  74  65  6D  20  32  8F  07  03
           49  74  65  6D  20  33  90  01  02
```

TERMINAL RESPONSE : SELECT ITEM 3.1.1

Logically:

      Command details
           Command number: 1
           Command type: SELECT ITEM
           Command qualifier: "00"
      Device identities
           Source device: ME
           Destination device: SIM
      Result
           General Result: Command performed successfully
      Item identifier
           Identifier of item chosen: 03

Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
	90	01	03									

27.22.4.9.4   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 Test

27.22.4.9.4.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.9.4.4.2   Procedure

Expected Sequence 4.1 (SELECT ITEM, help request, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND 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:

        BER-TLV: D0   34   81   03   01   24   80   82   02   81   82   85
                       0E   54   6F   6F   6C   6B   69   74   20   53   65   6C
                       65   63   74   8F   07   01   49   74   65   6D   20   31
                       8F   07   02   49   74   65   6D   20   32   8F   07   03
                       49   74   65   6D   20   33

TERMINAL RESPONSE : SELECT ITEM 4.1.1

Logically:
    Command details
        Command number: 1
        Command type: SELECT ITEM
        Command qualifier: "80"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Help information required by the user
    Item identifier
        Identifier of item chosen: 01

Coding:

BER-TLV:	81	03	01	24	80	82	02	82	81	83	01	13
	90	01	01									

27.22.4.9.5 SELECT ITEM (icons support)

27.22.4.9.5.1 Definition and applicability

See Section 3.2.2.

27.22.4.9.5.2 Conformance Requirement

Same 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 Purpose

To verify that the mobile displays icons with the command Select Item.

27.22.4.9.5.4 Method of Test

27.22.4.9.5.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.9.5.4.2 Procedure

Expected Sequence 5.1A (SELECT ITEM, BASIC ICON NOT SELF EXPLANATORY, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 5.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 5.1.1	
4	ME → USER	Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select".	Verify icons are displayed in the alpha identifier and in the 3 items.
5	USER → ME	Navigate in the items, then select "Item 1".	
6	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 5.1.1 A	[command performed successfully]

PROACTIVE COMMAND: SELECT ITEM 5.1.1

Logically:

    Command details
        Command number: 1
        Command type: SELECT ITEM
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: ME
    Alpha identifier: "Toolkit Select"
    Item
        Identifier of item: 01
        Text string of item: "Item 1"
    Item
        Identifier of item: 02
        Text string of item: "Item 2"
    Item
        Identifier of item: 03
        Text string of item: "Item 3"
    Icon Identifier:
        Icon qualifier: "01" (icon is not self-explanatory)
        Icon Identifier: record 1 in $EF_{(IMG)}$
    Item icon identifier list:
        Icon qualifier: "01" (icon is not self-explanatory)
        Icon Identifier: record 5 in $EF_{(IMG)}$, record 5 in $EF_{(IMG)}$, record 5 in $EF_{(IMG)}$

  Coding:

        BER-TLV:

D0	3E	81	03	01	24	00	82	02	81	82	85
0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
65	63	74	8F	07	01	49	74	65	6D	20	31
8F	07	02	49	74	65	6D	20	32	8F	07	03
49	74	65	6D	20	33	9E	02	01	01	9F	04
01	05	05	05								

TERMINAL RESPONSE: SELECT ITEM 5.1.1A

Logically:

Command details		
	Command number:	1
	Command type:	SELECT ITEM
	Command qualifier:	"00"
Device identities		
	Source device:	ME
	Destination device:	SIM
Result		
	General Result:	Command performed successfully
Item identifier		
	Identifier of item chosen:	01

Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
	90	01	01									

Expected Sequence 5.1B (SELECT ITEM, BASIC ICON NOT SELF EXPLANATORY, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND 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".	no icon is displayed in the alpha identifier nor in the 3 items.
5	USER → ME	Navigate in the items, then select "Item 1".	
6	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 5.1.1 B	[Command performed successfully, but requested icon could not be displayed]

TERMINAL RESPONSE : SELECT ITEM 5.1.1B

Logically:
    Command details
        Command number: 1
        Command type: SELECT ITEM
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully but requested icon could not be
                                    displayed
    Item identifier
        Identifier of item chosen: 01

  Coding:

      BER-TLV: 81   03   01   24   00   82   02   82   81   83   01   04
                    90   01   01

Expected Sequence 5.2A (SELECT ITEM, BASIC ICON SELF EXPLANATORY, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 5.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 5.2.1	
4	ME → USER	Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select".	Verify 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 5.2.1A

Logically:

Command details		
Command number:	1	
Command type:	SELECT ITEM	
Command qualifier:	"00"	
Device identities		
Source device:	ME	
Destination device:	SIM	
Result		
General Result:	Command performed successfully	
Item identifier		
Identifier of item chosen:	01	

Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
	90	01	01									

Expected Sequence 5.2B (SELECT ITEM, BASIC ICON SELF EXPLANATORY, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 5.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 5.2.1	
4	ME → USER	Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select".	no icon is displayed with text as alpha id nor for the all 3 items.
5	USER → ME	Navigate in the items, then select "Item 1".	
6	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 5.2.1B	[command performed successfully but requested icon could not be displayed]

TERMINAL RESPONSE : SELECT ITEM 5.2.1B

Logically:

    Command details
        Command number: 1
        Command type: SELECT ITEM
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully but requested icon could not be displayed
    Item identifier
        Identifier of item chosen: 01

  Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	04
	90	01	01									

27.22.4.9.6 SELECT ITEM (presentation style)

27.22.4.9.6.1 Definition and applicability

See Section 3.2.2.

27.22.4.9.6.2 Conformance Requirement

Same as 27.22.4.9.1.2.

27.22.4.9.6.3 Test Purpose

To verify that the mobile supports the "presentation style" with the command Select Item.

27.22.4.9.6.4 Method of Test

27.22.4.9.6.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.9.6.4.2 Procedure

Expected Sequence 6.1 (SELECT ITEM, PRESENTATION AS A CHOICE OF NAVIGATION OPTIONS, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 6.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 6.1.1	
4	ME → USER	Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select".	Verify if presentation style appears.
5	USER → ME	Navigate in the items, then select "Item 1".	
6	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 6.1.1	[command performed successfully]

PROACTIVE COMMAND : SELECT ITEM 6.1.1

Logically:

    Command details
        Command number: 1
        Command type: SELECT ITEM
        Command qualifier: "03" (presentation as a choice of navigation options)
    Device identities
        Source device: SIM
        Destination device: ME
    Alpha identifier: "Toolkit Select"
    Item
        Identifier of item: 01
        Text string of item: "Item 1"
    Item
        Identifier of item: 02
        Text string of item: "Item 2"
    Item
        Identifier of item: 03
        Text string of item: "Item 3"

    Coding:

        BER-TLV: D0 34 81 03 01 24 03 82 02 81 82 85
                        0E 54 6F 6F 6C 6B 69 74 20 53 65 6C
                        65 63 74 8F 07 01 49 74 65 6D 20 31
                        8F 07 02 49 74 65 6D 20 32 8F 07 03
                        49 74 65 6D 20 33

TERMINAL RESPONSE : SELECT ITEM 6.1.1

Logically:

Command details	
Command number:	1
Command type:	SELECT ITEM
Command qualifier:	"03" (presentation as a choice of navigation options)
Device identities	
Source device:	ME
Destination device:	SIM
Result	
General Result:	Command performed successfully
Item identifier	
Identifier of item chosen:	01

Coding:

BER-TLV:	81	03	01	24	03	82	02	82	81	83	01	00
	90	01	01									

Expected Sequence 6.2 (SELECT ITEM, PRESENTATION AS A CHOICE OF DATA VALUES, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 6.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 6.2.1	
4	ME → USER	Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select".	Verify if presentation style appears
5	USER → ME	Navigate in the items, then select "Item 1".	
6	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 6.2.1	[command performed successfully]

PROACTIVE COMMAND: SELECT ITEM 6.2.1

Logically:

Command details
    Command number: 1
    Command type: SELECT ITEM
    Command qualifier: "01" (presentation as a choice of data values)
Device identities
    Source device: SIM
    Destination device: ME
Alpha identifier: "Toolkit Select"
Item
    Identifier of item: 01
    Text string of item: "Item 1"
Item
    Identifier of item: 02
    Text string of item: "Item 2"
Item
    Identifier of item: 03
    Text string of item: "Item 3"

Coding:

BER-TLV:	D0	34	81	03	01	24	01	82	02	81	82	85
	0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
	65	63	74	8F	07	01	49	74	65	6D	20	31
	8F	07	02	49	74	65	6D	20	32	8F	07	03
	49	74	65	6D	20	33						

TERMINAL RESPONSE: SELECT ITEM 6.2.1

Logically:

Command details		
Command number:	1	
Command type:	SELECT ITEM	
Command qualifier:	"01"(presentation as a choice of data values)	
Device identities		
Source device:	ME	
Destination device:	SIM	
Result		
General Result:	Command performed successfully	
Item identifier		
Identifier of item chosen:	01	

Coding:

BER-TLV:	81	03	01	24	01	82	02	82	81	83	01	00
	90	01	01								

27.22.4.9.7   SELECT ITEM (soft keys support)

27.22.4.9.7.1   Definition and applicability

See Section 3.2.2.

27.22.4.9.7.2   Conformance Requirement

Same as 27.22.4.9.1.2.

27.22.4.9.7.3   Test Purpose

To verify that the mobile supports the "soft keys" with the command Select Item.

27.22.4.9.7.4   Method of Test

27.22.4.9.7.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.9.7.4.2   Procedure

Expected Sequence 7.1 (SELECT ITEM, SELECTING USING SOFT KEYS PREFERRED, successful, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SELECT ITEM 7.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SELECT ITEM 7.1.1	
4	ME → USER	Display items of "Item 1", "Item 2" under the header of "Toolkit Select".	
5	USER → ME	Navigate in the items, then select "Item 1".	Verify that we can choose an item through soft keys
6	ME → SIM	TERMINAL RESPONSE: SELECT ITEM 7.1.1	[command performed successfully]

PROACTIVE COMMAND : SELECT ITEM 7.1.1

Logically:
 Command details
  Command number: 1
  Command type: SELECT ITEM
  Command qualifier: "04" (selection using soft keys preferred)
 Device identities
  Source device: SIM
  Destination device: ME
 Alpha identifier: "Toolkit Select"
 Item
  Identifier of item: 01
  Text string of item: "Item 1"
 Item
  Identifier of item: 02
  Text string of item: "Item 2"

 Coding:

BER-TLV:	D0	2B	81	03	01	24	04	82	02	81	82	85
	0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
	65	63	74	8F	07	01	49	74	65	6D	20	31
	8F	07	02	49	74	65	6D	20	32			

TERMINAL RESPONSE : SELECT ITEM 7.1.1

Logically:

Command details
 Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "04" (selection using soft keys preferred)
Device identities
 Source device: ME
 Destination device: SIM
Result
 General Result: Command performed successfully
Item identifier
 Identifier of item chosen: 01

Coding:

BER-TLV: 81 03 01 24 04 82 02 82 81 83 01 00
      90 01 01

27.22.4.10 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 test

27.22.4.10.1.4.1 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   Procedure

Expected Sequence 1.1(SEND SHORT MESSAGE, packing not required, 8-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 1.1.1	[packing not required, 8-bit data]
4	ME → USER	Display "Send SM"	[Alpha Identifier]
5	ME → SS	Send SMS-PP "Test Message"	
6	SS → ME	SMS RP-ACK	
7	ME → SIM	TERMINAL RESPONSE : SEND SHORT MESSAGE 1.1.1	[Command performed successfully]

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.1.1

Logically:

Command details		
	Command number:	1
	Command type:	SEND SHORT MESSAGE
	Command qualifier:	packing not required
Device identities		
	Source device:	SIM
	Destination device:	Network
Alpha identifier:		"Send SM"
Address		
	TON:	International number
	NPI:	"ISDN / telephone numbering plan"
	Dialling number string	"112233445566778"
SMS TPDU		
	TP-MTI	SMS-SUBMIT
	TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM
	TP-VPF	TP-VP field not present
	TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT
	TP-UDHI	The TP-UD field contains only the short message
	TP-SRR	A status report is not requested
	TP-MR	"00"
	TP-DA	
	TON	International number
	NPI	"ISDN / telephone numbering plan"
	Address value	"012345678"
	TP-PID	Short message type 0
	TP-DCS	
	Message coding	8-bit data
	Message class	class 0
	TP-UDL	12
	TP-UD	"Test Message"

Coding:

```
BER-TLV:   D0   37   81   03   01   13   00   82   02   81   83   85
           07   53   65   6E   64   20   53   4D   86   09   91   11
           22   33   44   55   66   77   F8   8B   18   01   00   09
           91   10   32   54   76   F8   40   F4   0C   54   65   73
           74   20   4D   65   73   73   61   67   65
```

SMS-PP (SEND SHORT MESSAGE) Message 1.1

Logically:

SMS TPDU		
	TP-MTI	SMS-SUBMIT
	TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM
	TP-VPF	TP-VP field not present
	TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT
	TP-UDHI	The TP-UD field contains only the short message
	TP-SRR	A status report is not requested
	TP-MR	"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 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: SEND SHORT MESSAGE
        Command qualifier: packing not required
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

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

Expected Sequence 1.2 (SEND SHORT MESSAGE, packing required, 8-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 1.2.1	[packing required, 8-bit data]
4	ME → USER	Display "Send SM"	[Alpha Identifier]
5	ME → SS	Send SMS-PP "Send 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:

BER-TLV:	D0	32	81	03	01	13	01	82	02	81	83	85
	07	53	65	6E	64	20	53	4D	86	09	91	11
	22	33	44	55	66	77	F8	8B	13	01	00	09
	91	10	32	54	76	F8	40	F4	07	53	65	6E
	64	20	53	4D								

SMS-PP (SEND SHORT MESSAGE) Message 1.2

Logically:

SMS TPDU
  TP-MTI   SMS-SUBMIT
  TP-RD   Instruct the SC to accept an SMS-SUBMIT for a SM
  TP-VPF   TP-VP field not present
  TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
  TP-UDHI   The TP-UD field contains only the short message
  TP-SRR   A status report is not requested
  TP-MR   "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   7
  TP-UD   "Send SM"

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:

Command details
  Command number: 1
  Command type: SEND SHORT MESSAGE
  Command qualifier: packing required
Device identities
  Source device: ME
  Destination device: SIM
Result
  General Result: Command performed successfully

 Coding:

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

Expected Sequence 1.3 (SEND SHORT MESSAGE, packing not required, SMS default alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 1.3.1	[packing not required, SMS default alphabet]
4	ME → USER	Display "Short Message"	[Alpha Identifier]
5	ME → SS	Send SMS-PP "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:

        BER-TLV: D0 3D 81 03 01 13 00 82 02 81 83 85
                        0D 53 68 6F 72 74 20 4D 65 73 73 61
                        67 65 86 09 91 11 22 33 44 55 66 77
                        F8 8B 18 01 00 09 91 10 32 54 76 F8
                        40 F0 0D 53 F4 5B 4E 07 35 CB F3 79
                        F8 5C 06

SMS-PP (SEND SHORT MESSAGE) Message 1.3

Logically:
SMS TPDU

TP-MTI	SMS-SUBMIT	
TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM	
TP-VPF	TP-VP field not present	
TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT	
TP-UDHI	The TP-UD field contains only the short message	
TP-SRR	A status report is not requested	
TP-MR	"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:	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:
Command details

Command number:	1
Command type:	SEND SHORT MESSAGE
Command qualifier:	packing not required
Device identities	
Source device:	ME
Destination device:	SIM
Result	
General Result:	Command performed successfully

Coding:

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

Expected Sequence 1.4 (SEND SHORT MESSAGE, packing required, SMS default alphabet, message of 160 bytes, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.4. 1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 1.4.1	[packing required, 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 1.4.1	[Command performed successfully]

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.4.1

Logically:

Command details		
	Command number:	1
	Command type:	SEND SHORT MESSAGE
	Command qualifier:	packing required
Device identities		
	Source device:	SIM
	Destination device:	Network
Alpha identifier:		"The address data object holds the RP_Destination_Address"
Address		
	TON:	International number
	NPI:	"ISDN / telephone numbering plan"
	Dialling number string	"112233445566778"
SMS TPDU		
	TP-MTI	SMS-SUBMIT
	TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM
	TP-VPF	TP-VP field not present
	TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT
	TP-UDHI	The TP-UD field contains only the short message
	TP-SRR	A status report is not requested
	TP-MR	"00"
	TP-DA	
	TON	International number
	NPI	"ISDN / telephone numbering plan"
	Address value	"012345678"
	TP-PID	Short message type 0
	TP-DCS	
	Message coding	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

```
73   20   64   61   74   61   20   6F   62   6A   65   63
74   20   68   6F   6C   64   73   20   74   68   65   20
52   50   11   44   65   73   74   69   6E   61   74   69
6F   6E   11   41   64   64   72   65   73   73   86   09
91   11   22   33   44   55   66   77   F8   8B   81   AC
01   00   09   91   10   32   54   76   F8   40   F4   A0
54   77   6F   20   74   79   70   65   73   20   61   72
65   20   64   65   66   69   6E   65   64   3A   20   2D
20   41   20   73   68   6F   72   74   20   6D   65   73
73   61   67   65   20   74   6F   20   62   65   20   73
65   6E   74   20   74   6F   20   74   68   65   20   6E
65   74   77   6F   72   6B   20   69   6E   20   61   6E
20   53   4D   53   2D   53   55   42   4D   49   54   20
6D   65   73   73   61   67   65   2C   20   6F   72   20
61   6E   20   53   4D   53   2D   43   4F   4D   4D   41
4E   44   20   6D   65   73   73   61   67   65   2C   20
77   68   65   72   65   20   74   68   65   20   75   73
65   72   20   64   61   74   61   20   63   61   6E   20
62   65   20   70   61   73   73   65   64   20   74   72
61   6E   73   70
```

SMS-PP (SEND SHORT MESSAGE) Message 1.4

Logically:

SMS TPDU

TP-MTI	SMS-SUBMIT
TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF	TP-VP field not present
TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI	The TP-UD field contains only the short message
TP-SRR	A status report is not requested
TP-MR	"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:  98   01   00   09   91   10   32   54   76   F8   40   F0
          A0   D4   FB   1B   44   CF   C3   CB   73   50   58   5E
          06   91   CB   E6   B4   BB   4C   D6   81   5A   A0   20
          68   8E   7E   CB   E9   A0   76   79   3E   0F   9F   CB
          20   FA   1B   24   2E   83   E6   65   37   1D   44   7F
          83   E8   E8   32   C8   5D   A6   DF   DF   F2   35   28
          ED   06   85   DD   A0   69   73   DA   9A   56   85   CD
          24   15   D4   2E   CF   E7   E1   73   99   05   7A   CB
          41   61   37   68   DA   9C   B6   86   CF   66   33   E8
          24   82   DA   E5   F9   3C   7C   2E   B3   40   77   74
          59   5E   06   D1   D1   65   50   7D   5E   96   83   C8
          61   7A   18   34   0E   BB   41   E2   32   08   1E   9E
          CF   CB   64   10   5D   1E   76   CF   E1
```

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.4.1

Logically:
Command details
Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully

Coding:

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

Expected Sequence 1.5 (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-RDInstruct the SC to accept an SMS-SUBMIT for a SM
        TP-VPF   TP-VP field not present
        TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
        TP-UDHI   The TP-UD field contains only the short message
        TP-SRR   A status report is not requested
        TP-MR   "00"
        TP-DA
            TON   International number
            NPI   "ISDN / telephone numbering plan"
            Address value   "012345678"
        TP-PID   Short message type 0
        TP-DCS
            Message coding   SMS default alphabet
            Message class   class 0
        TP-UDL   160

TP-UD

"Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transp"

Coding:

BER-TLV:

D0	81	E9	81	03	01	13	00	82	02	81	83
85	38	54	68	65	20	61	64	64	72	65	73
73	20	64	61	74	61	20	6F	62	6A	65	63
74	20	68	6F	6C	64	73	20	74	68	65	20
52	50	20	44	65	73	74	69	6E	61	74	69
6F	6E	20	41	64	64	72	65	73	73	86	09
91	11	22	33	44	55	66	77	F8	8B	81	98
01	00	09	91	10	32	54	76	F8	40	F0	A0
D4	FB	1B	44	CF	C3	CB	73	50	58	5E	06
91	CB	E6	B4	BB	4C	D6	81	5A	A0	20	68
8E	7E	CB	E9	A0	76	79	3E	0F	9F	CB	20
FA	1B	24	2E	83	E6	65	37	1D	44	7F	83
E8	E8	32	C8	5D	A6	DF	DF	F2	35	28	ED
06	85	DD	A0	69	73	DA	9A	56	85	CD	24
15	D4	2E	CF	E7	E1	73	99	05	7A	CB	41
61	37	68	DA	9C	B6	86	CF	66	33	E8	24
82	DA	E5	F9	3C	7C	2E	B3	40	77	74	59
5E	06	D1	D1	65	50	7D	5E	96	83	C8	61
7A	18	34	0E	BB	41	E2	32	08	1E	9E	CF
CB	64	10	5D	1E	76	CF	E1				

SMS-PP (SEND SHORT MESSAGE) Message 1.5

Logically:

    SMS TPDU

        TP-MTI   SMS-SUBMIT

        TP-RDInstruct the SC to accept an SMS-SUBMIT for a SM

        TP-VPF   TP-VP field not present

        TP-RP TP-Reply-Path is not set in this SMS-SUBMIT

        TP-UDHI   The TP-UD field contains only the short message

        TP-SRR   A status report is not requested

        TP-MR   "00"

        TP-DA

            TON   International number

            NPI   "ISDN / telephone numbering plan"

            Address value   "012345678"

        TP-PID   Short message type 0

        TP-DCS

            Message coding   SMS default alphabet

            Message class   class 0

        TP-UDL   160

        TP-UD   "Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transp"

Coding:	01	00	09	91	10	32	54	76	F8	40	F0	A0
	D4	FB	1B	44	CF	C3	CB	73	50	58	5E	06
	91	CB	E6	B4	BB	4C	D6	81	5A	A0	20	68
	8E	7E	CB	E9	A0	76	79	3E	0F	9F	CB	20
	FA	1B	24	2E	83	E6	65	37	1D	44	7F	83
	E8	E8	32	C8	5D	A6	DF	DF	F2	35	28	ED
	06	85	DD	A0	69	73	DA	9A	56	85	CD	24
	15	D4	2E	CF	E7	E1	73	99	05	7A	CB	41
	61	37	68	DA	9C	B6	86	CF	66	33	E8	24
	82	DA	E5	F9	3C	7C	2E	B3	40	77	74	59
	5E	06	D1	D1	65	50	7D	5E	96	83	C8	61
	7A	18	34	0E	BB	41	E2	32	08	1E	9E	CF
	CB	64	10	5D	1E	76	CF	E1				

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.5.1

Logically:

    Command details

        Command number: 1

        Command type: SEND SHORT MESSAGE

        Command qualifier: packing not required

    Device identities

        Source device: ME

        Destination device: SIM

    Result

        General Result: Command performed successfully

 Coding:

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

Expected Sequence 1.6 (SEND SHORT MESSAGE, alpha identifier 160 bytes long, SMS default alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.6.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 1.6.1	[packing not required, SMS default alphabet]
4	ME → USER	Display "Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transparently; - A short message to be sent to the network in an SMS-SUBMIT "	[Alpha Identifier of 160 bytes]
5	ME → SS	Send SMS-PP " "	[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:
```
    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:     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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.7.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 1.7.1	[packing not required, 8-bit data]
4	ME	No information to user	[Alpha identifier length '00']
5	ME → SS	Send SMS-PP "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 1.7.1

Logically:

Command details		
	Command number:	1
	Command type:	SEND SHORT MESSAGE
	Command qualifier:	packing not required
Device identities		
	Source device:	SIM
	Destination device:	Network
Alpha identifier:		
Address		
	TON:	International number
	NPI:	"ISDN / telephone numbering plan"
	Dialling number string	"112233445566778"
SMS TPDU		
	TP-MTI	SMS-SUBMIT
	TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM
	TP-VPF	TP-VP field not present
	TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT
	TP-UDHI	The TP-UD field contains only the short message
	TP-SRR	A status report is not requested
	TP-MR	"00"
	TP-DA	
	TON	International number
	NPI	"ISDN / telephone numbering plan"
	Address value	"012345678"
	TP-PID	Short message type 0
	TP-DCS	
	Message coding	8-bit data
	Message class	class 0
	TP-UDL	12
	TP-UD	"Test Message"

Coding:

```
BER-TLV:   D0  37  81  03  01  13  00  82  02  81  83  85
           00  86  09  91  11  22  33  44  55  66  77  F8
           8B  18  01  00  09  91  10  32  54  76  F8  40
           F4  0C  54  65  73  74  20  4D  65  73  73  61
           67  65
```

SMS-PP (SEND SHORT MESSAGE) Message 1.7

Logically:

SMS TPDU		
	TP-MTI	SMS-SUBMIT
	TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM
	TP-VPF	TP-VP field not present
	TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT
	TP-UDHI	The TP-UD field contains only the short message
	TP-SRR	A status report is not requested
	TP-MR	"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 1.7.1

Logically:

    Command details
        Command number: 1
        Command type: SEND SHORT MESSAGE
        Command qualifier: packing not required
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

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

Expected Sequence 1.8 (SEND SHORT MESSAGE, packing not required, 8-bit data, no alpha identifier, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.8.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 1.8.1	[packing not required, 8-bit data]
4	ME → USER	May give information to user concerning what is happening	[No Alpha Identifier]
5	ME → SS	Send SMS-PP "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 1.8.1

Logically:

Command details	
Command number:	1
Command type:	SEND SHORT MESSAGE
Command qualifier:	packing not required
Device identities	
Source device:	SIM
Destination device:	Network
Address	
TON:	International number
NPI:	"ISDN / telephone numbering plan"
Dialling number string	"112233445566778"
SMS TPDU	
TP-MTI	SMS-SUBMIT
TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF	TP-VP field not present
TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI	The TP-UD field contains only the short message
TP-SRR	A status report is not requested
TP-MR	"00"
TP-DA	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345678"
TP-PID	Short message type 0
TP-DCS	
Message coding	8-bit data
Message class	class 0
TP-UDL	12
TP-UD	"Test Message"

Coding:

BER-TLV:	D0	2E	81	03	01	13	00	82	02	81	83	86
	09	91	11	22	33	44	55	66	77	F8	8B	18
	01	00	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

SMS-PP (SEND SHORT MESSAGE) Message 1.8

Logically:

SMS TPDU	
TP-MTI	SMS-SUBMIT
TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF	TP-VP field not present
TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI	The TP-UD field contains only the short message
TP-SRR	A status report is not requested
TP-MR	"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)

Additionnally, 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-RDInstruct the SC to accept an SMS-SUBMIT for a SM
        TP-VPF   TP-VP field not present
        TP-RP   TP-Reply-Path is not set in this SMS-SUBMIT
        TP-UDHI   The TP-UD field contains only the short message
        TP-SRR   A status report is not requested
        TP-MR   "00"
        TP-DA
            TON   International number
            NPI   "ISDN / telephone numbering plan"
            Address value   "012345678"
        TP-PID   Short message type 0
        TP-DCS
            Message coding   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 2.1

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"	
TP-DA		
TON	International number	
NPI	"ISDN / telephone numbering plan"	
Address value	"012345678"	
TP-PID	Short message type 0	
TP-DCS		
Message coding	UCS2 (16-bit data)	
Message class	class 0	
TP-UDL	24	
TP-UD	" ЗДРАВСТВУЙТЕ "	

Coding:	01	00	09	91	10	32	54	76	F8	40	08	18
	04	17	04	14	04	20	04	10	04	12	04	21
	04	22	04	12	04	23	04	19	04	22	04	15

TERMINAL RESPONSE : SEND SHORT MESSAGE 2.2.1

Logically:

Command details	
Command number:	1
Command type:	SEND SHORT MESSAGE
Command qualifier:	packing not required
Device identities	
Source device:	ME
Destination device:	SIM
Result	
General Result:	Command performed successfully

Coding:

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

27.22.4.10.2.5   Test Requirement

The ME shall operate in the manner defined in expected 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 3.1.1

Logically:

Command details		
	Command number:	1
	Command type:	SEND SHORT MESSAGE
	Command qualifier:	packing not required
Device identities		
	Source device:	SIM
	Destination device:	Network
Alpha identifier:		"NO ICON"
Address		
	TON:	International number
	NPI:	"ISDN / telephone numbering plan"
	Dialling number string	"112233445566778"
SMS TPDU		
	TP-MTI	SMS-SUBMIT
	TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM
	TP-VPF	TP-VP field not present
	TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT
	TP-UDHI	The TP-UD field contains only the short message
	TP-SRR	A status report is not requested
	TP-MR	"00"
	TP-DA	
	TON	International number
	NPI	"ISDN / telephone numbering plan"
	Address value	"012345678"
	TP-PID	Short message type 0
	TP-DCS	
	Message coding	8bit-data
	Message class	class 0
	TP-UDL	12
	TP-UD	"Test Message "
Icon Identifier		
Icon Qualifier		self-explanatory
Icon Identifier		1 (number of record in EF IMG)
Coding:		

```
BER-TLV:  D0  3B  81  03  01  13  00  82  02  81  83  85
          07  4E  4F  20  49  43  4F  4E  86  09  91  11
          22  33  44  55  66  77  F8  8B  18  01  00  09
          91  10  32  54  76  F4  40  F4  0C  54  65  73
          74  20  4D  65  73  73  61  67  65  9E  02  00
          01
```

SMS-PP (SEND SHORT MESSAGE) Message 3.1

Logically:

SMS TPDU		
	TP-MTI	SMS-SUBMIT
	TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM
	TP-VPF	TP-VP field not present
	TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT
	TP-UDHI	The TP-UD field contains only the short message
	TP-SRR	A status report is not requested
	TP-MR	"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 3.1.1A

Logically:
   Command details
      Command number: 1
      Command type: SEND SHORT MESSAGE
      Command qualifier: packing not required
   Device identities
      Source device: ME
      Destination device: SIM
   Result
      General Result: Command performed successfully

   Coding:

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

Expected Sequence 3.1B (SEND SHORT MESSAGE, basic icon self-explanatory, packing not required, 8-bit data, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 3.1.1	[packing not required, 8-bit data, basic icon self-explanatory]]
4	ME → USER	Displays the alpha identifier without the icon	
5	ME → SS	Send SMS-PP "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:
   Command details
      Command number: 1
      Command type: SEND SHORT MESSAGE
      Command qualifier: packing not required
   Device identities
      Source device: ME
      Destination device: SIM
   Result
      General Result: Command performed successfully, but requested icon could not be
displayed

   Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	04

Expected Sequence 3.2A (SEND SHORT MESSAGE, basic icon non-self-explanatory, packing not required, 8-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 3.2.1	[packing not required, 8-bit data]
4	ME → USER	display the icon and "Send SM"	[basic icon non-self-explanatory]
5	ME → SS	Send SMS-PP " 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 3.2.1

Logically:

    Command details
        Command number: 1
        Command type: SEND SHORT MESSAGE
        Command qualifier: packing not required
    Device identities
        Source device: SIM
        Destination device: Network
    Alpha Identifier   "Send SM"
        Address
        TON: International number
        NPI: "ISDN / telephone numbering plan"
        Dialling number string   "112233445566778"
    SMS TPDU
        TP-MTI   SMS-SUBMIT
        TP-RD   Instruct the SC to accept an SMS-SUBMIT for a SM
        TP-VPF   TP-VP field not present
        TP-RP   TP-Reply-Path is not set in this SMS-SUBMIT
        TP-UDHI   The TP-UD field contains only the short message
        TP-SRR   A status report is not requested
        TP-MR   "00"
        TP-DA
            TON   International number
            NPI   "ISDN / telephone numbering plan"
            Address value   "012345678"
        TP-PID   Short message type 0
        TP-DCS
            Message coding   8bit-data
            Message class   class 0
        TP-UDL   12
        TP-UD   " Test Message"
    Icon Identifier
    Icon Qualifier   non-self-explanatory
    Icon Identifier   1 (number of record in EF IMG)
  Coding:

        BER-TLV: D0   3B   81   03   01   13   00   82   02   81   83   85
                                07   53   65   6E   64   20   53   4D   86   09   91   11
                                22   33   44   55   66   77   F8   8B   18   01   00   09
                                91   10   32   54   76   F8   40   F4   0C   54   65   73
                                74   20   4D   65   73   73   61   67   65   1E   02   01
                                01

SMS-PP (SEND SHORT MESSAGE) Message 3.2

Logically:

    SMS TPDU
        TP-MTI   SMS-SUBMIT
        TP-RD   Instruct the SC to accept an SMS-SUBMIT for a SM
        TP-VPF   TP-VP field not present
        TP-RP   TP-Reply-Path is not set in this SMS-SUBMIT
        TP-UDHI   The TP-UD field contains only the short message
        TP-SRR   A status report is not requested
        TP-MR   "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 3.2.1A

Logically:
    Command details
        Command number: 1
        Command type: SEND SHORT MESSAGE
        Command qualifier: packing not required
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

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

Expected Sequence 3.2B (SEND SHORT MESSAGE, basic icon non-self-explanatory, packing not required, 8-bit data, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SHORT MESSAGE 3.2.1	[packing not required, 8-bit data, basic icon non-self-explanatory]
4	ME → USER	display "Send SM" without the icon	
5	ME → SS	Send SMS-PP " Test Message "	
6	SS → ME	SMS RP-ACK	
7	ME → SIM	TERMINAL RESPONSE : SEND SHORT MESSAGE 3.2.1B	[Command performed successfully, but requested icon could not be displayed]

TERMINAL RESPONSE : SEND SHORT MESSAGE 3.2.1B

Logically:
    Command details
        Command number: 1
        Command type: SEND SHORT MESSAGE
        Command qualifier: packing not required
    Device identities
        Source device: ME
        Destination device: SIM
    Result
  General Result: Command performed successfully, but requested icon could not be displayed;

  Coding:

| BER-TLV: | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |

27.22.4.10.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

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:

BER-TLV	0A	A0	1A	04	01	21	30	15	30	13	83	01
	00	84	01	07	84	0B	91	10	32	54	76	98
	10	32	54	76	98							

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:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	1E
	00	0A	A0	1A	04	01	21	30	15	30	13
	83	01	00	84	01	07	85	0B	91	10	32
	54	76	98	10	32	54	76	98			

Expected Sequence 1.2 (SEND SS, call forward unconditional, all bearers, Return Error)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 1.1.1	
4	ME → USER	Display "Call Forward"	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN ERROR) 1.1	[Return Error]
7	ME → SIM	TERMINAL RESPONSE : SEND SS 1.2.1	

RELEASE COMPLETE (SS RETURN ERROR) 1.1

Logically (only from error code):

      Error Code: Facility not supported

Coding:

      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)

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 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*+012345678901234567890123456789012345 67*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 : 012345678901234567890123456789012345 67

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 : 012345678901234567890123456789901234567

Coding:

BER-TLV	0A	A0	23	04	01	21	30	1E	30	1C	83	01
	11	84	01	07	84	14	91	10	32	54	76	98
	10	32	54	76	98	10	32	54	76	98	10	32
	54	76										

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:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	27
	00	0A	A0	23	04	01	21	30	1E	30	1C
	83	01	11	84	01	07	84	14	91	10	32
	54	76	98	10	32	54	76	98	10	32	54
	76	98	10	32	54	76					

Expected Sequence 1.5 (SEND SS, interrogate CLIR status, successful, alpha identifier limits)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 1.5.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 1.5.1	
4	ME → USER	Display "Even if the Fixed Dialling Number service is enabled, the supplementary service control string included in the SEND SS proactive command shall not be checked against those of the FDN list. Upon receiving this command, the ME shall deci"	
5	ME → SS	REGISTER 1.3	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.3	[Successful]
7	ME → SIM	TERMINAL RESPONSE : SEND SS 1.5.1	

PROACTIVE COMMAND : SEND SS 1.5.1

Logically:

    Command details

        Command number: 1

        Command type: SEND SS

        Command qualifier: "00"

    Device identities

        Source device: SIM

        Destination device: Network

        Alpha identifier: "Even if the Fixed Dialling Number service is enabled, the supplementary service control string included in the SEND SS proactive command shall not be checked against those of the FDN list. Upon receiving this command, the ME shall deci"

    SS String

        TON: Undefined

        NPI: Undefined

        SS string: "*#31#"

  Coding:

BER-TLV:	D0	81	FD	81	03	01	11	00	82	02	81	83
	85	81	EB	45	76	65	6E	20	69	66	20	74
	68	65	20	46	69	78	65	64	20	44	69	61
	6C	6C	69	6E	67	20	4E	75	6D	62	65	72
	20	73	65	72	76	69	63	65	20	69	73	20
	65	6E	61	62	6C	65	64	2C	20	74	68	65
	20	73	75	70	70	6C	65	6D	65	6E	74	61
	72	79	20	73	65	72	76	69	63	65	20	63
	6F	6E	74	72	6F	6C	20	73	74	72	69	6E
	67	20	69	6E	63	6C	75	64	65	64	20	69
	6E	20	74	68	65	20	53	45	4E	44	20	53
	53	20	70	72	6F	61	63	74	69	76	65	20
	63	6F	6D	6D	61	6E	64	20	73	68	61	6C
	6C	20	6E	6F	74	20	62	65	20	63	68	65
	63	6B	65	64	20	61	67	61	69	6E	73	74
	20	74	68	6F	73	65	20	6F	66	20	74	68
	65	20	46	44	4E	20	6C	69	73	74	2E	20
	55	70	6F	6E	20	72	65	63	65	69	76	69
	6E	67	20	74	68	69	73	20	63	6F	6D	6D
	61	6E	64	2C	20	74	68	65	20	4D	45	20
	73	68	61	6C	6C	20	64	65	63	69	89	04
	FF	BA	13	FB								

REGISTER 1.3

Logically (only SS argument):

      INTERROGATE SS ARGUMENT

        SS-Code

          - Calling Line Id Restriction

Coding:

BER-TLV	30	03	04	01	12

RELEASE COMPLETE (SS RETURN RESULT) 1.3

Logically (only from operation code):

      INTERROGATE SS RESULT
        CliRestrictionInfo
        SS-Status
          - state ind. : operative
          - provision ind. : provisioned
          - registration ind. : registered
          - activation ind. : not active
        CliRestrictionOption
          - Temporary Def Allowed

Coding:

      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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 1.6.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 1.6.1	
4	ME	Should not give any information to the user on the fact that the ME is sending an SS request	
5	ME → SS	REGISTER 1.1	
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 1.6.1

Logically:

    Command details

        Command number: 1

        Command type: SEND SS

        Command qualifier: "00"

    Device identities

        Source device: SIM

        Destination device: Network

    Alpha identifier: null data object

    SS String

        TON: International

        NPI: "ISDN / telephone numbering plan"

        SS string: "**21*+01234567890123456789#"

  Coding:

BER-TLV:	D0	1B	81	03	01	11	00	82	02	81	83	85
	00	89	0E	91	AA	12	0A	21	43	65	87	09
	21	43	65	87	B9							

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 requirement

27.22.4.11.2.3   Test Purpose

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

In addition to verify that if an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.11.2.4   Method of test

27.22.4.11.2.4.1   Initial Conditions

The ME is connected to the 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 2.1.1	[BASIC-ICON, self-explanatory]
4	ME → USER	Display the 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:

    Command details
        Command number: 1
        Command type: SEND SS
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
        Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	1E
	00	0A	A0	1A	04	01	21	30	15	30	13
	83	01	00	84	01	07	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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 2.1.1	[BASIC-ICON, self-explanatory]
4	ME → USER	Display "Basic Icon" without the icon	
5	ME → SS	REGISTER 1.1	
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:

    Command details
        Command number: 1
        Command type: SEND SS
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully, but requested icon could not be displayed
        Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	1E
	04	0A	A0	1A	04	01	21	30	15	30	13
	83	01	00	84	01	07	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			

ETSI

Expected Sequence 2.2B (SEND SS, call forward unconditional, all bearers, successful, colour icon self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 2.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 2.2.1	[COLOUR-ICON, self-explanatory]
4	ME → USER	Display "Colour Icon" without the icon	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	[Successful]
7	ME → SIM	TERMINAL RESPONSE : SEND SS 2.1.1B	[Command performed but requested icon could not be displayed]

Expected Sequence 2.3A (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 2.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 2.3.1	[BASIC-ICON, non self-explanatory]
4	ME → USER	Display "Basic Icon" and the 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 2.3.1

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$_{(IMG)}$

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	01	01				

Expected Sequence 2.3B (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 2.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 2.3.1	[BASIC-ICON, non self-explanatory]
4	ME → USER	Display "Basic Icon" without the icon	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	[Successful]
7	ME → SIM	TERMINAL RESPONSE : SEND SS 2.1.1B	[Command performed but requested icon could not be displayed]

Expected Sequence 2.4 (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory, no alpha identifier presented)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 2.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND SS 2.4.1	[BASIC-ICON, non self-explanatory]
4	ME → SIM	TERMINAL RESPONSE : SEND SS 2.4.1	[Command data not understood by ME]

PROACTIVE COMMAND : SEND SS 2.4.1

Logically:
        Command details
            Command number: 1
            Command type: SEND SS
            Command qualifier: "00"
        Device identities
            Source device: SIM
            Destination device: Network
        SS String
            TON: International
            NPI: "ISDN / telephone numbering plan"
            SS string: "**21*+01234567890123456789#"
        Icon Identifier
            Icon qualifier: icon is non self-explanatory
            Icon Identifier: record 1 in EF$_{(IMG)}$

Coding:

BER-TLV:	D0	1D	81	03	01	11	00	82	02	81	83	89
	0E	91	AA	12	0A	21	43	65	87	09	21	43
	65	87	B9	9E	02	01	01					

TERMINAL RESPONSE : SEND SS 2.4.1

Logically:

    Command details
        Command number: 1
        Command type: SEND SS
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command data not understood by ME

  Coding:

        BER-TLV: 81   03   01   11   00   82   02   82   81   83   01   32

27.22.4.11.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences .

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 test

27.22.4.11.2.4.1 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 Procedure

Expected Sequence 3.1 (SEND SS, call forward unconditional, all bearers, successful, UCS2 text)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND SS 3.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SEND SS 3.1.1	
4	ME → USER	Display "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	[Successful]
7	ME → SIM	TERMINAL RESPONSE: SEND SS 1.1.1	[Command performed successfully]

PROACTIVE COMMAND : SEND SS 3.1.1

Logically:
    Command details
        Command number: 1
        Command type: SEND SS
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Network
    Alpha Identifier
        Data coding scheme: UCS2 (16bit)
        Text: "ЗДРАВСТВУЙТЕ"
    SS String
        TON: International
        NPI: "ISDN / telephone numbering plan"
        SS string: "**21*+01234567890123456789#"

    Coding:

BER-TLV:	D0	34	81	03	01	11	00	82	02	81	83	85
	19	80	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15	89	0E	91	AA	12	0A	21	43	65	87
	09	21	43	65	87	B9						

27.22.4.11.2.5 Test Requirement

The 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 applicability

See 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)

Additionnally 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)".

27.22.4.12.1.3 Test Purpose

To verify that the ME correctly translates and sends the unstructured supplementary service request indicated in the SEND USSD proactive SIM command to the system Simulator.

To verify that the ME returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the USSD request and including a USSD result as a text string in the TERMINAL RESPONSE.

27.22.4.12.1.4 Method of test

27.22.4.12.1.4.1 Initial Conditions

The ME is connected to the 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 1.1.1	
4	ME → USER	Display "7-bit USSD"	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	["USSD string received from SS"]
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 1.1.1	

PROACTIVE COMMAND: SEND USSD 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: SEND USSD
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Network
    Alpha identifier: "7-bit USSD"
    USSD String
        Data coding scheme: 7-bit default, no message class
        USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

    Coding:

	BER-TLV:	D0	50	81	03	01	12	00	82	02	81	83	85
		0A	37	2D	62	69	74	20	55	53	53	44	8A
		39	F0	41	E1	90	58	34	1E	91	49	E5	92
		D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
		6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	B3
		DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
		6F	C5	64	33	5A	CD	76	C3	E5	60		

REGISTER 1.1

Logically (only USSD argument)

    ProcessUnstructuredSS-Request ARGUMENT
        USSD-DataCodingScheme:
         - 7-bit default, no message class
        USSD string:
         - "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

	BER-TLV	30	3D	04	01	F0	04	38	41	E1	90	58	34
		1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
		5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB	E6
		33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F	D3
		EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD	76
		C3	E5	60									

RELEASE COMPLETE (SS RETURN RESULT) 1.1

Logically (only from USSD result):

    ProcessUnstructuredSS-Request RETURN RESULT
        USSD-DataCodingScheme:
         - 7-bit default, no message class
        USSD string:
         - "USSD string received from SS"

Coding:

	BER-TLV	30	1E	04	01	F0	04	19	D5	E9	94	08	9A
		D3	E5	69	F7	19	24	2F	8F	CB	69	7B	99
		0C	32	CB	DF	6D	D0	74	0A				

TERMINAL RESPONSE : SEND <u>U</u>SSD 1.1.1

Logically:

Command details		
	Command number:	1
	Command type:	SEND USSD
	Command qualifier:	"00"
Device identities		
	Source device:	ME
	Destination device:	SIM
Result		
	General Result:	Command performed successfully
Text string		
	Data coding scheme:	7-bit default, no message class
	String:	"USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 1.2.1	
4	ME → USER	Display "8-bit USSD"	
5	ME → SS	REGISTER 1.2	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.2	["USSD string received from SS"]
7	ME → SIM	TERMINAL RESPONSE : SEND 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: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-
1234567890"

   Coding:

        BER-TLV: D0 58 81 03 01 12 00 82 02 81 83 85
                    0A 38 2D 62 69 74 20 55 53 53 44 8A
                    41 44 41 42 43 44 45 46 47 48 49 4A
                    4B 4C 4D 4E 4F 50 51 52 53 54 55 56
                    57 58 59 5A 2D 61 62 63 64 65 66 67
                    68 69 6A 6B 6C 6D 6E 6F 70 71 72 73
                    74 75 76 77 78 79 7A 2D 31 32 33 34
                    35 36 37 38 39 30

REGISTER 1.2

Logically (only USSD argument):

    ProcessUnstructuredSS-Request ARGUMENT
      USSD-DataCodingScheme:
       - Uncompressed, no message class meaning, 8-bit data
      USSD string:
       - "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

        BER-TLV   30 45 04 01 44 04 40 41 42 43 44 45
                  46 47 48 49 4A 4B 4C 4D 4E 4F 50 51
                  52 53 54 55 56 57 58 59 5A 2D 61 62
                  63 64 65 66 67 68 69 6A 6B 6C 6D 6E
                  6F 70 71 72 73 74 75 76 77 78 79 7A
                  2D 31 32 33 34 35 36 37 38 39 30

RELEASE COMPLETE (SS RETURN RESULT) 1.2

Logically (only from USSD result):

    ProcessUnstructuredSS-Request RETURN RESULT
      USSD-DataCodingScheme:
       - Uncompressed, no message class meaning, 8-bit data
      USSD string:
       - "USSD string received from SS"

Coding:

        BER-TLV   30 21 04 01 44 04 1C 55 53 53 44 20
                  73 74 72 69 6E 67 20 72 65 63 65 69
                  76 65 64 20 66 72 6F 6D 20 53 53

TERMINAL RESPONSE : SEND USSD 1.2.1

Logically:
    Command details
        Command number: 1
        Command type: SEND USSD
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Text string
        Data coding scheme: Uncompressed, no message class meaning, 8-bit data
        String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1D	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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 1.3.1	
4	ME → USER	Display "UCS2 USSD"	
5	ME → SS	REGISTER 1.3	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.3	["USSD string received from SS"]
7	ME → SIM	TERMINAL RESPONSE : SEND SS 1.3.1	

PROACTIVE COMMAND: SEND USSD 1.3.1

Logically:

    Command details

        Command number: 1

        Command type: SEND USSD

        Command qualifier: "00"

    Device identities

        Source device: SIM

        Destination device: Network

    Alpha identifier: "UCS2 USSD"

    USSD String

        Data coding scheme: Uncompressed, no message class meaning, UCS2 (16 bit)

        USSD string: "ЗДРАВСТВУЙТЕ" ("Hello" in Russian)

  Coding:

BER-TLV:	D0	2F	81	03	01	12	00	82	02	81	83	85
	09	55	43	53	32	20	55	53	53	44	8A	19
	48	04	17	04	14	04	20	04	10	04	12	04
	21	04	22	04	12	04	23	04	19	04	22	04
	15											

REGISTER 1.3

Logically (only USSD argument):

    ProcessUnstructuredSS-Request ARGUMENT

      USSD-DataCodingScheme:

        - Uncompressed, no message class meaning, UCS2 (16 bit)

      USSD string:

        - "ЗДРАВСТВУЙТЕ" ("Hello" in Russian)

Coding:

BER-TLV	30	1D	04	01	48	04	18	04	17	04	14	04
	20	04	10	04	12	04	21	04	22	04	12	04
	23	04	19	04	22	04	15					

RELEASE COMPLETE (SS RETURN RESULT) 1.3

Logically (only from USSD result):

    ProcessUnstructuredSS-Request RETURN RESULT

      USSD-DataCodingScheme:

        - Uncompressed, no message class meaning, UCS2 (16 bit)

      USSD string:

        - "USSD string received from SS"

Coding:

BER-TLV	30	3D	04	01	48	04	38	00	55	00	53	00
	53	00	44	00	20	00	73	00	74	00	72	00
	69	00	6E	00	67	00	20	00	72	00	65	00
	63	00	65	00	69	00	76	00	65	00	64	00
	20	00	66	00	72	00	6F	00	6D	00	20	00
	53	00	53									

TERMINAL RESPONSE : SEND <u>U</u>SSD 1.3.1

Logically:

    Command details
        Command number: 1
        Command type: SEND USSD
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Text string
        Data coding scheme: Uncompressed, no message class meaning, UCS2 (16 bit)
        String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	39	48	00	55	00	53	00	53	00
	44	00	20	00	73	00	74	00	72	00	69
	00	6E	00	67	00	20	00	72	00	65	00
	63	00	65	00	69	00	76	00	65	00	64
	00	20	00	66	00	72	00	6F	00	6D	00
	20	00	53	00	53						

Expected Sequence 1.4 (SEND USSD, 7-bit data, unsuccessful (Return Error))

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 1.1.1	
4	ME → USER	Display "7-bit USSD"	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN ERROR) 1.1	Return Error
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 1.4.1	

RELEASE COMPLETE (SS RETURN ERROR) 1.1

Logically (only from Return Error code):

    ProcessUnstructuredSS-Request RETURN ERROR
        Return Error code:
            - Unknown alphabet

Coding:

    BER-TLV   02   01   47

TERMINAL RESPONSE : SEND <u>U</u>SSD 1.4.1

Logically:

Command details
  Command number: 1
  Command type: SEND USSD
  Command qualifier: "00"
Device identities
  Source device: ME
  Destination device: SIM
Result
  General Result: USSD Return Error
  Additional information: "Unknown alphabet"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	02
	37	46									

Expected Sequence 1.5 (SEND USSD, 7-bit data, unsuccessful (Reject))

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 1.1.1	
4	ME → USER	Display "7-bit USSD"	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS REJECT) 1.1	Reject
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 1.5.1	

RELEASE COMPLETE (SS REJECT) 1.1

Logically (only from Problem code):

ProcessUnstructuredSS-Request REJECT
  Invoke Problem code:
    - Mistyped parameter

Coding:

BER-TLV	81	01	02

TERMINAL RESPONSE : SEND <u>U</u>SSD 1.5.1

Logically:

    Command details
        Command number: 1
        Command type: SEND USSD
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: USSD Return Error
        Additional information: "No specific cause can be given"

Coding:

    BER-TLV: 81   03   01   12   00   82   02   82   81   83   02
                   37   00

Expected Sequence 1.6 (SEND USSD, 256 octets, 7-bit data, successful, long alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.6.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 1.6.1	
4	ME → USER	Display "once a RELEASE COMPLETE message containing the USSD Return Result message not containing an error has been received from the network, the ME shall inform the SIM that the command has"	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	["USSD string received from SS"]
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 1.1.1	

PROACTIVE COMMAND: SEND USSD 1.6.1

Logically:

Command details
Command number: 1
Command type: SEND USSD
Command qualifier: "00"
Device identities
Source device: SIM
Destination device: Network
Alpha identifier: "once a RELEASE COMPLETE message containing the USSD Return Result message not containing an error has been received from the network, the ME shall inform the SIM that the command has"

USSD String
Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV:	D0	81	FD	81	03	01	12	00	82	02	81	83
	85	81	B6	6F	6E	63	65	20	61	20	52	45
	4C	45	41	53	45	20	43	4F	4D	50	4C	45
	54	45	20	6D	65	73	73	61	67	65	20	63
	6F	6E	74	61	69	6E	69	6E	67	20	74	68
	65	20	55	53	53	44	20	52	65	74	75	72
	6E	20	52	65	73	75	6C	74	20	6D	65	73
	73	61	67	65	20	6E	6F	74	20	63	6F	6E
	74	61	69	6E	69	6E	67	20	61	6E	20	65
	72	72	6F	72	20	68	61	73	20	62	65	65
	6E	20	72	65	63	65	69	76	65	64	20	66
	72	6F	6D	20	74	68	65	20	6E	65	74	77
	6F	72	6B	2C	20	74	68	65	20	4D	45	20
	73	68	61	6C	6C	20	69	6E	66	6F	72	6D
	20	74	68	65	20	53	49	4D	20	74	68	61
	74	20	74	68	65	20	63	6F	6D	6D	61	6E
	64	20	68	61	73	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60								

Expected Sequence 1.7 (SEND USSD, 7-bit data, successful, no alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.7.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 1.7.1	
4	ME → USER	Optionally display an informative message	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	["USSD string received from SS"]
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 1.1.1	

PROACTIVE COMMAND: SEND USSD 1.7.1

Logically:

    Command details

        Command number: 1

        Command type: SEND USSD

        Command qualifier: "00"

    Device identities

        Source device: SIM

        Destination device: Network

    USSD String

        Data coding scheme: 7-bit default, no message class

        USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

  Coding:

BER-TLV:	D0	44	81	03	01	12	00	82	02	81	83	8A
	39	F0	41	E1	90	58	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	B3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E5	60		

Expected Sequence 1.8 (SEND USSD, 7-bit data, successful, null length alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 1.8.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 1.8.1	
4	ME → USER	the ME should not give any information to the user on the fact that the ME is sending a USSD request	
5	ME → SS	REGISTER 1.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 1.1	["USSD string received from SS"]
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 1.1.1	

PROACTIVE COMMAND: SEND USSD 1.8.1

Logically:

Command details		
	Command number:	1
	Command type:	SEND USSD
	Command qualifier:	"00"
Device identities		
	Source device:	SIM
	Destination device:	Network
Alpha identifier :		""
USSD String		
	Data coding scheme:	7-bit default, no message class
	USSD string:	"ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-

1234567890"

Coding:

BER-TLV:	D0	46	81	03	01	12	00	82	02	81	83	85
	00	8A	39	F0	41	E1	90	58	34	1E	91	49
	E5	92	D9	74	3E	A1	51	E9	94	5A	B5	5E
	B1	59	6D	2B	2C	1E	93	CB	E6	33	3A	AD
	5E	B3	DB	EE	37	3C	2E	9F	D3	EB	F6	3B
	3E	AF	6F	C5	64	33	5A	CD	76	C3	E5	60

27.22.4.12.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1.1 – 1.8.

27.22.4.12.2 SEND USSD (Icon support)

27.22.4.12.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.12.2.2 Conformance requirement

27.22.4.12.2.3 Test Purpose

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

In addition to verify that if an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.12.2.4 Method of test

27.22.4.12.2.4.1 Initial Conditions

The ME is connected to the 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 2.1.1	[BASIC-ICON, self-explanatory]
4	ME → USER	Display BASIC ICON	
5	ME → SS	REGISTER 2.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 2.1	["USSD string received from SS"]
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 2.1.1A	[Command performed successfully]

PROACTIVE COMMAND: SEND USSD 2.1.1

Logically:
          Command details
                    Command number: 1
                    Command type: SEND USSD
                    Command qualifier: "00"
          Device identities
                    Source device: SIM
                    Destination device: Network
          Alpha identifier: "Basic Icon"
          USSD String
                    Data coding scheme: 7-bit default, no message class
                    USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

          Icon Identifier:
                    Icon qualifier: icon is self-explanatory
                    Icon Identifier: record 1 in EF$_{(IMG)}$

   Coding:

	BER-TLV:	D0	55	81	03	01	12	00	82	02	81	83	85
		0B	04	42	61	73	69	63	20	49	63	6F	6E
		8A	39	F0	41	E1	90	58	34	1E	91	49	E5
		92	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1
		59	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E
		B3	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E
		AF	6F	C5	64	33	5A	CD	76	C3	E5	60	9E
		02	00	01									

REGISTER 2.1

Logically (only USSD argument)

> ProcessUnstructuredSS-Request ARGUMENT
> > USSD-DataCodingScheme:
> > > - 7-bit default, no message class
> > USSD string:
> > > - "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV	30	3D	04	01	F0	04	38	41	E1	90	58	34
	1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB	E6
	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F	D3
	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD	76
	C3	E5	60									

RELEASE COMPLETE (SS RETURN RESULT) 2.1

Logically (only from USSD result):

> ProcessUnstructuredSS-Request RETURN RESULT
> > USSD-DataCodingScheme:
> > > - 7-bit default, no message class
> > USSD string:
> > > - "USSD string received from SS"

Coding:

BER-TLV	30	1E	04	01	F0	04	19	D5	E9	94	08	9A
	D3	E5	69	F7	19	24	2F	8F	CB	69	7B	99
	0C	32	CB	DF	6D	D0	74	0A				

TERMINAL RESPONSE : SEND USSD 2.1.1A

Logically:

> Command details
> > Command number: 1
> > Command type: SEND USSD
> > Command qualifier: "00"
> Device identities
> > Source device: ME
> > Destination device: SIM
> Result
> > General Result: Command performed successfully
> Text string
> > Data coding scheme: 7-bit default, no message class
> > String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	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 2.1B (SEND USSD, 7-bit data, successful, basic icon self explanatory, requested icon
could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 2.1.1	[BASIC-ICON, self-explanatory]
4	ME → USER	Display "Basic Icon" without the icon	
5	ME → SS	REGISTER 2.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 2.1	["USSD string received from SS"]
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 2.1.1B	[Command performed but requested icon could not be displayed]

TERMINAL RESPONSE : SEND <u>U</u>SSD 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 2.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 2.2.1	[COLOUR-ICON, self-explanatory]
4	ME → USER	Display COLOUR-ICON or May give information to user concerning what is happening	
5	ME → SS	REGISTER 2.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 2.1	["USSD string received from SS"]
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 2.1.1A or TERMINAL RESPONSE : SEND USSD 2.1.1B	[Command performed successfully] or [Command performed but requested icon could not be displayed]

PROACTIVE COMMAND: SEND USSD 2.2.1

Logically:

    Command details
        Command number: 1
        Command type: SEND USSD
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Network
    Alpha identifier :   « Color Icon »
    USSD String
        Data coding scheme: 7-bit default, no message class
        USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"
    Icon Identifier:
        Icon qualifier: icon is self-explanatory
        Icon Identifier: record 2 in EF$_{(IMG)}$

  Coding:

BER-TLV:	D0	55	81	03	01	12	00	82	02	81	83	85
	0B	04	43	6F	6C	6F	72	20	49	63	6F	6E
	8A	39	F0	41	E1	90	58	34	1E	91	49	E5
	92	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1
	59	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E
	B3	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E
	AF	6F	C5	64	33	5A	CD	76	C3	E5	60	9E
	02	00	02									

Expected Sequence 2.3A (SEND USSD, 7-bit data, successful, basic icon non self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND 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" and BASIC-ICON	
5	ME → SS	REGISTER 2.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 2.1	["USSD string received from SS"]
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 2.1.1A	[Command performed successfully]

PROACTIVE COMMAND: SEND USSD 2.3.1

Logically:

    Command details
        Command number: 1
        Command type: SEND USSD
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Network
    Alpha Identifier: "Basic Icon"
    USSD String
        Data coding scheme: 7-bit default, no message class
        USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-
1234567890"
    Icon Identifier
        Icon qualifier: icon is non self-explanatory
        Icon Identifier: record 1 in $EF_{(IMG)}$

  Coding:

BER-TLV:	D0	55	81	03	01	12	00	82	02	81	83	85
	0B	04	42	61	73	69	63	20	49	63	6F	6E
	8A	39	F0	41	E1	90	58	34	1E	91	49	E5
	92	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1
	59	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E
	B3	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E
	AF	6F	C5	64	33	5A	CD	76	C3	E5	60	9E
	02	01	01									

Expected Sequence 2.3B (SEND USSD, 7-bit data, successful, basic icon non self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 2.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 2.3.1	[BASIC-ICON, non self-explanatory]
4	ME → USER	Display "Basic Icon" without the icon	
5	ME → SS	REGISTER 2.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 2.1	["USSD string received from SS"]
7	ME → SIM	TERMINAL RESPONSE : SEND USSD 2.1.1B	[Command performed but requested icon could not be displayed]

Expected Sequence 2.4 (SEND USSD, 7-bit data, basic icon non self-explanatory, no alpha identifier presented)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 2.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND USSD 2.4.1	[BASIC-ICON, non self-explanatory]
4	ME → SIM	TERMINAL RESPONSE : SEND USSD 2.4.1	[Command data not understood by ME]

PROACTIVE COMMAND : SEND USSD 2.4.1

Logically:

    Command details
        Command number: 1
        Command type: SEND USSD
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Network
    USSD String
        Data coding scheme: 7-bit default, no message class
        USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-
    Icon Identifier
        Icon qualifier: icon is non self-explanatory
        Icon Identifier: record 1 in EF$_{(IMG)}$

  Coding:

        BER-TLV: D0 48 81 03 01 12 00 82 02 81 83 8A
                            39 F0 41 E1 90 58 34 1E 91 49 E5 92
                            D9 74 3E A1 51 E9 94 5A B5 5E B1 59
                            6D 2B 2C 1E 93 CB E6 33 3A AD 5E B3
                            DB EE 37 3C 2E 9F D3 EB F6 3B 3E AF
                            6F C5 64 33 5A CD 76 C3 E5 60 9E 02
                            01 01

TERMINAL RESPONSE : SEND USSD 2.4.1

Logically:

    Command details

        Command number: 1

        Command type: SEND USSD

        Command qualifier: "00"

    Device identities

        Source device: ME

        Destination device: SIM

    Result

        General Result: Command data not understood by ME

  Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01	32

27.22.4.12.2.5   Test Requirement

The ME shall operate in the manner defined in expected sequences 2.1 – 2.4.

27.22.4.12.3   SEND USSD (UCS2 support)

27.22.4.12.3.1   Definition and applicability

See 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 test

27.22.4.12.3.4.1   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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND USSD 3.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SEND USSD 3.1.1	
4	ME → USER	Display "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]
5	ME → SS	REGISTER 3.1	
6	SS → ME	RELEASE COMPLETE (SS RETURN RESULT) 3.1	[Successful]
7	ME → SIM	TERMINAL RESPONSE: SEND USSD 3.1.1	[Command performed successfully]

PROACTIVE COMMAND: SEND USSD 3.1.1

Logically:

    Command details
        Command number: 1
        Command type: SEND USSD
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Network
    Alpha Identifier
        Data coding scheme: UCS2 (16bit)
        Text: "ЗДРАВСТВУЙТЕ"
    USSD String
        Data coding scheme: 7-bit default, no message class
        USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-

  Coding:

        BER-TLV: D0   5F   81   03   01   12   00   82   02   81   83   85
                      19   80   04   17   04   14   04   20   04   10   04   12
                      04   21   04   22   04   12   04   23   04   19   04   22
                      04   15   8A   39   F0   41   E1   90   58   34   1E   91
                      49   E5   92   D9   74   3E   A1   51   E9   94   5A   B5
                      5E   B1   59   6D   2B   2C   1E   93   CB   E6   33   3A
                      AD   5E   B3   DB   EE   37   3C   2E   9F   D3   EB   F6
                      3B   3E   AF   6F   C5   64   33   5A   CD   76   C3   E5
                      60

REGISTER 3.1

Logically (only USSD argument)

> ProcessUnstructuredSS-Request ARGUMENT
>> USSD-DataCodingScheme:
>>> - 7-bit default, no message class
>> USSD string:
>>> - "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

BER-TLV	30	3D	04	01	F0	04	38	41	E1	90	58	34
	1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB	E6
	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F	D3
	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD	76
	C3	E5	60									

RELEASE COMPLETE (SS RETURN RESULT) 3.1

Logically (only from USSD result):

> ProcessUnstructuredSS-Request RETURN RESULT
>> USSD-DataCodingScheme:
>>> - 7-bit default, no message class
>> USSD string:
>>> - "USSD string received from SS"

Coding:

BER-TLV	30	1E	04	01	F0	04	19	D5	E9	94	08	9A
	D3	E5	69	F7	19	24	2F	8F	CB	69	7B	99
	0C	32	CB	DF	6D	D0	74	0A				

TERMINAL RESPONSE : SEND USSD 3.1.1

Logically:

> Command details
>> Command number: 1
>> Command type: SEND USSD
>> Command qualifier: "00"
> Device identities
>> Source device: ME
>> Destination device: SIM
> Result
>> General Result: Command performed successfully
> Text string
>> Data coding scheme: 7-bit default, no message class
>> String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	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				

27.22.4.12.3.5   Test Requirement

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

27.22.4.13   SET UP CALL

27.22.4.13.1   SET UP CALL (normal)

27.22.4.13.1.1   Definition and applicability

See 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.1.1	
4	ME → USER	ME displays "Not busy" during user confirmation phase.	
5	USER → ME	The user confirms the call set up	[user confirmation]
6	ME->SS	The ME attempts to set up a call to "+012340123456p1p2"	
7	SS → ME	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE 1.1.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 5 seconds. The ME returns to idle mode.	

PROACTIVE COMMAND : SET UP CALL 1.1.1

Logically:

        Command details
            Command number: 1
            Command type: SET UP CALL
            Command qualifier: only if not currently busy on another call
        Device identities
            Source device: SIM
            Destination device: Network
        Alpha identifier: "Not busy"
        Address
            TON: International
            NPI: ISDN / telephone numbering plan
            Dialling number string   "012340123456p1p2"

  Coding:

        BER-TLV: D0   1E   81   03   01   10   00   82   02   81   83   85
                   08   4E   6F   74   20   62   75   73   79   86   09   91
                   10   32   04   21   43   65   1C   2C

TERMINAL RESPONSE : SET UP CALL 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: only if not currently busy on another call
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

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

Expected Sequence 1.2 (SET UP CALL, call rejected by the user)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.1.1	
4	ME → USER	ME displays "Not busy" durig 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 1.2.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: only if not currently busy on another call
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: User did not accept 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 PENDING: SET UP CALL 1.2.1	
2	ME → SIM	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

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.3.1	[putting all other calls on hold]
4	ME → USER	ME displays "On hold" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirms the call]
6	ME -> SS	The active call is put on hold	
7	ME->SS	The ME attempts to set up a call to "+012340123456p1p2"	
8	SS → ME	The ME receives the CONNECT message from the system simulator.	
9	ME → SIM	TERMINAL RESPONSE 1.4.1	[Command performed successfully]
10	USER → ME	The user ends the call after 5 seconds. The ME retrieves the previous call	

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 1.4.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: putting all other calls on hold
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

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

Expected Sequence 1.5 (SET UP CALL, disconnecting all other calls, ME busy)

ME is busy on a call

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.4.1	
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 1.4.1

Logically:
- Command details
  - Command number: 1
  - Command type: SET UP CALL
  - Command qualifier: disconnecting all other calls
- Device identities
  - Source device: SIM
  - Destination device: Network
- Alpha identifier: "Disconnect"
- Address
  - TON: International
  - NPI: ISDN / telephone numbering plan
  - Dialling number string "012340123456p1p2"

Coding:

BER-TLV:	D0	20	81	03	01	10	04	82	02	81	83	85
	0A	44	69	73	63	6F	6E	6E	65	63	74	86
	09	91	10	32	04	21	43	65	1C	2C		

TERMINAL RESPONSE : SET UP CALL 1.5.1

Logically:
- Command details
  - Command number: 1
  - Command type: SET UP CALL
  - Command qualifier: putting all other calls on hold
- Device identities
  - Source device: ME
  - Destination device: SIM
- Result
  - General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	04	82	02	82	81	83	01	00

Expected Sequence 1.6 (SET UP CALL, only if not currently busy on another call, ME busy)

ME is busy on a call

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.1.1	[only if not currently busy on another call]
4	ME → SIM	TERMINAL RESPONSE 1.6.1	[ME currently unable to process command]

TERMINAL RESPONSE : SET UP CALL 1.6.1

Logically:
Command details	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	only if not currently busy on another call
Device identities	
Source device:	ME
Destination device:	SIM
Result	
General Result:	ME currently unable to process command
Additional Information:	ME currently busy on call

Coding:

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

Expected Sequence 1.7 (SET UP CALL, putting all other calls on hold, call hold is not allowed)

ME is busy on a call.

The system simulator shall be configured to not allow Call Hold.

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.4.1	[putting all other calls on hold]
4	ME → USER	ME displays "On hold" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirms the call]
6	ME → SIM	TERMINAL RESPONSE 1.7.1	[Network currently unable to process command]

TERMINAL RESPONSE : SET UP CALL 1.7.1

Logically:
Command details	
Command number:	1
Command type:	SET UP CALL
Command qualifier:	putting all other calls on hold
Device identities	
Source device:	ME
Destination device:	SIM
Result	
General Result:	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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.8.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SET UP CALL 1.8.1	[Capability configuration parameters: full rate support]
4	ME → USER	ME displays "Capability config" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME->SS	The ME attempts to set up a call to "+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:
    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: if not busy on another call
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

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

Expected Sequence 1.9 (SET UP CALL, max dialing number string, no alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.9.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE 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*#*#*#*#*#01234567890123456789012345 6789*#*#*#*#*#"	
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: "01234567890123456789012345 6789*#*#*#*#*#01234567890123456789 01234567890*#*#*#*#*# "

  Coding:

BER-TLV:	D0		34	81	03	01	10	01	82	02	81	83
	86		29	91	10	32	54	76	98	10	32	54
	76	98	10	32	54	76	98	BA	BA	BA	BA	BA
	10	32	54	76	98	10	32	45	67	89	01	32
	54	76	98	BA	BA	BA	BA	BA				

TERMINAL RESPONSE : SET UP CALL 1.9.1

Logically:
    Command details
      Command number: 1
      Command type: SET UP CALL
      Command qualifier: only if not currently busy on another call with redial
    Device identities
      Source device: ME
      Destination device: SIM
    Result
      General Result: Command performed successfully

  Coding:

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

Expected Sequence 1.10 (SET UP CALL,256 octets length, long first alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.10.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SET UP CALL 1.10.1	[alpha identifier]
4	ME → USER	ME displays "Three types are defined: - set up a call, but only if not currently busy on another call; - set up a call, putting all other calls (if any) on hold; - set up a call, disconnecting all other calls (if any) first. For each of these types, " 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 "+01"	
7	SS → ME	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE 1.10.1	[Command performed successfully]
9	USER → ME	The user ends the call The ME returns in idle mode.	

PROACTIVE COMMAND : SET UP CALL 1.10.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: only if not currently busy on another call with redial
    Device identities
        Source device: SIM
        Destination device: Network
        Alpha identifier: "Three types are defined: - set up a call, but only if not currently busy on another call; - set up a call, putting all other calls (if any) on hold; - set up a call, disconnecting all other calls (if any) first. For each of these types, "
    Address
        TON: International
        NPI: ISDN / telephone numbering plan
        Dialling number string: "01"

  Coding:

BER-TLV:	D0	81	FD	81	03	01	10	01	82	02	81	83
	85	81	ED	54	68	72	65	65	20	74	79	70
	65	73	20	61	72	65	20	64	65	66	69	6E
	65	64	3A	20	2D	20	73	65	74	20	75	70
	20	61	20	63	61	6C	6C	2C	20	62	75	74
	20	6F	6E	6C	79	20	69	66	20	6E	6F	74
	20	63	75	72	72	65	6E	74	6C	79	20	62
	75	73	79	20	6F	6E	20	61	6E	6F	74	68
	65	72	20	63	61	6C	6C	3B	20	2D	20	73
	65	74	20	75	70	20	61	20	63	61	6C	6C
	2C	20	70	75	74	74	69	6E	67	20	61	6C
	6C	20	6F	74	68	65	72	20	63	61	6C	6C
	73	20	28	69	66	20	61	6E	79	29	20	6F
	6E	20	68	6F	6C	64	3B	20	2D	20	73	65
	74	20	75	70	20	61	20	63	61	6C	6C	2C
	20	64	69	73	63	6F	6E	6E	65	63	74	69
	6E	67	20	61	6C	6C	20	6F	74	68	65	72
	20	63	61	6C	6C	73	20	28	69	66	20	61
	6E	79	29	20	66	69	72	73	74	2E	20	46
	6F	72	20	65	61	63	68	20	6F	66	20	74
	68	65	73	65	20	74	79	70	65	73	2C	20
	86	02	91	10								

TERMINAL RESPONSE : SET UP CALL 1.10.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: only if not currently busy on another call with redial
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

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

ETSI

Expected Sequence 1.11A (SET UP CALL, Called party subaddress, command performed successfully)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.11.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.11.1	[set up a call with called party subaddress]
4	ME → USER	ME displays "Called party" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME->SS	The ME attempts to set up a call to "+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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.11.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.11.1	[set up a call with called party subaddress]
4	ME → SIM	TERMINAL RESPONSE 1.11.1B	[beyond ME's capabilities]

PROACTIVE COMMAND : SET UP CALL 1.11.1

Logically:

Command details		
Command number:	1	
Command type:	SET UP CALL	
Command qualifier:	if not busy on another call	
Device identities		
Source device:	SIM	
Destination device:	Network	
Alpha identifier:	"Called party"	
Address		
TON:	International	
NPI:	ISDN / telephone numbering plan	
Dialling number string:	"012340123456p1p2"	
Called party subaddress		
Type of subaddress:	NSAP (X.213 / ISO 8348 AD2)	
Odd / even indicator:	even number of address signals	
Subaddress information:	AFI, 95, 95, 95, 95	

Coding:

BER-TLV:	D0	2B	81	03	01	10	00	82	02	81	83	85
	0C	43	61	6C	6C	65	64	20	70	61	72	74
	79	86	09	91	10	32	04	21	43	65	1C	2C
	88	07	80	50	95	95	95	95	95			

TERMINAL RESPONSE : SET UP CALL 1.11.1A

Logically:

Command details		
Command number:	1	
Command type:	SET UP CALL	
Command qualifier:	if not busy on another call	
Device identities		
Source device:	ME	
Destination device:	SIM	
Result		
General Result:	Command performed successfully	

Coding:

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

TERMINAL RESPONSE : SET UP CALL 1.11.1B

Logically:

Command details
    Command number: 1
    Command type: SET UP CALL
    Command qualifier: if not busy on another call
Device identities
    Source device: ME
    Destination device: SIM
Result
    General Result: Beyond ME's capabilities

Coding:

BER-TLV:	81	03	01	10	00	82	02	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"..

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.12.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 1.12.1	[only if not currently busy on another call with redial]
4	ME → USER	ME displays "Duration" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirms the call]
6	ME -> SS	ME attempts to set up a call to "+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 1.12.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: only if not currently busy on another call with redial
    Device identities
        Source device: SIM
        Destination device: Network
    Alpha identifier: "Duration"
    Address
        TON: International
        NPI: ISDN / telephone numbering plan
        Dialling number string: "012340123456p1p2"
    Duration
        Unit: Seconds
        Interval: 10

  Coding:

BER-TLV:	D0	22	81	03	01	10	01	82	02	81	83	85
	08	44	75	72	61	74	69	6F	6E	86	09	91
	10	32	04	21	43	65	1C	2C	84	02	01	0A

TERMINAL RESPONSE : SET UP CALL 1.12.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: only if not currently busy on another call with redial
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: network currently unable to process command
        Additional Information: User Busy

  Coding:

BER-TLV:	81	03	01	10	01	82	02	82	81	83	01	21
	91											

27.22.4.13.1.5   Test Requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.12

27.22.4.13.2   SET UP CALL (second alpha identifier)

27.22.4.13.2.1   Definition and applicability

See Section 3.2.2.

27.22.4.13.2.2   Conformance requirement

Same as 27.22.4.13.2.1.

27.22.4.13.2.3   Test Purpose

To verify that the ME accepts a Proactive Command – Set Up Call , displays the alpha identifiers to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.2.4   Method of test

27.22.4.13.2.4.1   Initial Conditions

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

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and is in updated idle mode on the system simulator

27.22.4.13.1.4.2   Procedure

Expected Sequence 2.1 (SET UP CALL, two alpha identifiers)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 2.1.1	
4	ME → USER	ME displays "CONFIRMATION" during the user confirmation phase	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME->SS	The ME attempts to set up a call to "+012340123456p1p2". The ME displays "CALL" if the ME supports 2nd alpha identifier or otherwise "CONFIRMATION"	[second alpha identifier]
7	SS → ME	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE 2.1.1 The ME shall not update EF LND with the called party address.	[Command performed successfully]
9	USER → ME	The user ends the call after 5 seconds. The ME returns in idle mode.	

PROACTIVE COMMAND : SET UP CALL 2.1.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: only if not currently busy on another call
    Device identities
        Source device: SIM
        Destination device: Network
    Alpha identifier: "CONFIRMATION"
    Address
        TON: International
        NPI: ISDN / telephone numbering plan
        Dialling number string   "012340123456p1p2"
    Alpha identifier (call set up phase):"CALL"

  Coding:

BER-TLV:	D0	28	81	03	01	10	00	82	02	81	83	85
	0C	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	86	09	91	10	32	04	21	43	65	1C	2C
	85	04	43	41	4C	4C						

TERMINAL RESPONSE : SET UP CALL 2.1.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: only if not currently busy on another call
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

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

27.22.4.13.3.5   Test Requirement

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

27.22.4.13.3   SET UP CALL (display of icons)

27.22.4.13.3.1   Definition and applicability

See 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 3.1.1	Including icon identifier, icon shall be displayed in addition of the first alpha identifier
4	ME → USER	ME displays "Set up call Icon 3.1.1" 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:

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	31	2E	31	86
	09	91	10	32	04	21	43	65	1C	2C	9E	02
	01	01										

TERMINAL RESPONSE : SET UP CALL 3.1.1A

Logically:

Command details
    Command number: 1
    Command type: SET UP CALL
    Command qualifier: only if not currently busy on another call
Device identities
    Source device: ME
    Destination device: SIM
Result
    General Result: Command performed successfully

Coding:

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

Expected Sequence 3.1B (SET UP CALL, display of basic icon during confirmation phase, not self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 3.1.1	Including icon identifier, icon shall be displayed in addition of the first alpha identifier
4	ME → USER	ME displays "Set up call Icon 3.1.1" without the basic icon during a user confirmation phase.	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME->SS	The ME attempts to set up a call to "+012340123456p1p2"	
7	SS → ME	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE 3.1.1B	[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 3.1.1B

Logically:
    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: only if not currently busy on another call
    Device identities
        Source device: 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 3.2A (SET UP CALL, display of basic icon during confirmation phase, self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 3.2.1	Including icon identifier, icon shall be displayed instead of the first alpha identifier
4	ME → USER	ME displays the basic icon during a user confirmation phase.	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME->SS	The ME attempts to set up a call to "+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 3.2.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: only if not currently busy on another call
    Device identities
        Source device: SIM
        Destination device: Network
    Alpha identifier: " Set up call Icon 3.2.1"
    Address
        TON: International
        NPI: ISDN / telephone numbering plan
        Dialling number string   "012340123456p1p2"
    Icon identifier
        Icon qualifier: icon is self-explanatory
        Icon identifier: <record 1 in EF IMG>

Coding:

BER-TLV:	D0	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	32	2E	31	86
	09	91	10	32	04	21	43	65	1C	2C	9E	02
	00	01										

TERMINAL RESPONSE : SET UP CALL 3.2.1A

Logically:
    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: only if not currently busy on another call
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

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

Expected Sequence 3.2B (SET UP CALL, display of basic icon during confirmation phase, self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 3.2.1	Including icon identifier, icon shall be displayed instead of the first alpha identifier
4	ME → USER	ME display " Set up call Icon 3.2.1" without the icon	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME->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 3.2.1B	[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 3.2.1B

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 coulour icon during confirmation phase, not self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 3.3.1	Including icon identifier, icon shall be displayed in addition of the first alpha identifier
4	ME → USER	ME displays "Set up call Icon 3.3" and the colour icon during a user confirmation phase.	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME->SS	The ME attempts to set up a call to "+012340123456p1p2"	
7	SS → ME	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE 3.3.1A	[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 3.3.1

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 3.3.1A

Logically:
    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: only if not currently busy on another call
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

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

Expected Sequence 3.3B (SET UP CALL, display of coulour icon during confirmation phase, not self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 3.3.1	Including icon identifier, icon shall be displayed in addition of the first alpha identifier
4	ME → USER	ME only display alpha string : " Set up call Icon 3.3.1"	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME->SS	The ME attempts to set up a call to "+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:
    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 3.4A (SET UP CALL, display of self explanatory basic icon during set up call, successful)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 3.4.1	Including a second alpha identifier and two icons
4	ME → USER	ME displays the basic icon during a user confirmation phase.	
5	USER → ME	The user confirms the set up call	[user confirmation]
6	ME->SS	The ME attempts to set up a call to "+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:

Command details		
	Command number:	1
	Command type:	SET UP CALL
	Command qualifier:	only if not currently busy on another call
Device identities		
	Source device:	SIM
	Destination device:	Network
Alpha identifier:		" Set up call Icon 3.4.1"
Address		
	TON:	International
	NPI:	ISDN / telephone numbering plan
	Dialling number string	"012340123456p1p2"
Alpha identifier:		" Set up call Icon 3.4.2"
Icon identifier		
	Icon qualifier:	icon is self-explanatory
	Icon identifier:	<record 1 in EF IMG>

Coding:

BER-TLV:	D0	48	81	03	01	10	00	82	02	81	83	85
	16	53	65	74	20	75	70	20	63	61	6C	6C
	20	49	63	6F	6E	20	33	2E	34	2E	31	86
	09	91	10	32	04	21	43	65	1C	2C	85	16
	53	65	74	20	75	70	20	63	61	6C	6C	20
	49	63	6F	6E^E	20	33	2E	34	2E	32	9E	02
	00	01										

TERMINAL RESPONSE : SET UP CALL 3.4.1A

Logically:

Command details		
	Command number:	1
	Command type:	SET UP CALL
	Command qualifier:	only if not currently busy on another call
Device identities		
	Source device:	ME
	Destination device:	SIM
Result		
	General Result:	Command performed successfully

Coding:

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

Expected Sequence 3.4B (SET UP CALL, display of self explanatory basic icon during set up call, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 3.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP CALL 3.4.1	Including a second alpha identifier and two icons
4	ME → USER	ME 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 OFF

27.22.4.14.1 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 Test

27.22.4.14.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

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

27.22.4.14.4.2 Procedure

Expected Sequence 1.1 (POLLING OFF)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: 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 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: POLL INTERVAL
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: ME
    Duration
        Time unit: Minutes
        Time interval: 1

  Coding:

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

TERMINAL RESPONSE : POLL INTERVAL 1.1.1

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

Coding:

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

PROACTIVE COMMAND : POLLING OFF 1.1.2

Logically:
    Command details
        Command number: 1
        Command type: POLLING OFF
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	04	00	82	02	81	82

TERMINAL RESPONSE : POLLING OFF 1.1.2

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

Coding:

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

27.22.4.14.5 Test Requirement

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

27.22.4.15 PROVIDE LOCAL INFORMATION

27.22.4.15.1 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 tests

27.22.4.15.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

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

The GSM parameters of the system simulator are :

Mobile country Code (MCC) = 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)).

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.1.1	
4	ME → SIM	TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.1.1	[Command performed successfully, MCC MNC LAC and Cell Identity as system simulator]

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			

Expected Sequence 1.2 (PROVIDE LOCAL INFORMATION, IMEI of the ME)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.2.1	
4	ME → SIM	TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.2.1	[Command performed successfully, IMEI as system simulator]

PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.2.1

Logically:

    Command details
        Command number: 1
        Command type: PROVIDE LOCAL INFORMATION
        Qualifier :   « 01 » IMEI of the ME
    Device identities
        Source device: SIM
        Destination device: ME
   Coding:

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

TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.2.1

Logically:

    Command details
        Command number: 1
        Command type: PROVIDE LOCAL INFORMATION
        Qualifier :   « 01 » IMEI of the ME
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    IMEI
        IMEI of the ME: The IMEI of the ME

The result coding depends on the Mobile IMEI value

   Coding:

BER-TLV:	81	03	01	26	01	82	02	82	81	83	01	00
	94	08	XX	XX	XX	XX	XX	XX	XX	XX		

As an example, if the IMEI of the mobile is "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))

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.3.1	
2	ME → SIM	FETCH	

3	SIM → ME	PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.3.1	
4	ME → SIM	TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.3.1	[Command performed successfully, NMR as system simulator]

PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.3.1

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier :   « 02 » Network Measurement Results
Device identities
Source device: SIM
Destination device: ME

Coding:

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

TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.3.1

The actual values of the measurements are not tested.

Logically:

Command details
Command number: 1
Command type: PROVIDE LOCAL INFORMATION
Qualifier :   « 02 » Network Measurement Results
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully
Network Measurement Results RXLEV-FULL-SERVING-CELL=52, BA not used, DTX not used, as an example in the BER-TLV)
BCCH channel list   561, 565, 568, 569, 573, 575, 577, 581, 582 and 585

Coding:

BER-TLV: 81   03   01   26   02   82   02   82   81   83   01   00
           96   10   34   34   00   00   00   00   00   00   00   00
           00   00   00   00   00   00   9D   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)

Step	Direction	MESSAGE / Action	Comments
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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.5.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.5.1	
4	ME → SIM	TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.5.1	[Command performed successfully]

PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.5.1

Logically:
    Command details
      Command number: 1
      Command type: PROVIDE LOCAL INFORMATION
      Qualifier :   « 04 » Language setting
    Device identities
      Source device: SIM
      Destination device: ME
  Coding:

      BER-TLV: D0   09   81   03   01   26   04   82   02   81   82

TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.5.1

Logically:
    Command details
      Command number: 1
      Command type: PROVIDE LOCAL INFORMATION
      Qualifier :   « 04 » Language setting
    Device identities
      Source device: ME

	Destination device:	SIM

Result
    General Result: Command performed successfully
    Language   english (« en ») as an example for TLV

Coding:

BER-TLV:	81	03	01	26	04	82	02	82	81	83	01	00
	AD	02	65	6E								

Expected Sequence 1.6 (PROVIDE LOCAL INFORMATION,Timing advance)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.6.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.6.1	
4	ME → SIM	TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.6.1	[Command performed successfully]

PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.6.1

Logically:
    Command details
        Command number: 1
        Command type: PROVIDE LOCAL INFORMATION
        Qualifier :   « 05 » Timing Advance
    Device identities
        Source device: SIM
        Destination device: ME
    Coding:

BER-TLV:	D0	09	81	03	01	26	05	82	02	81	82

TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.6.1

Logically:
    Command details
        Command number: 1
        Command type: PROVIDE LOCAL INFORMATION
        Qualifier :   « 05 » Timing Advance
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Timing Advance   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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1	
4	ME → SIM	TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1	
5	SIM → ME	PROACTIVE SIM SESSION ENDED	
6	SS → ME	SETUP 1.1.1	[Incoming call alert]
7	USER → ME	User shall accept the incoming call	
8	ME → SS	CONNECT 1.1.1	
9	ME → SIM	ENVELOPE: EVENT DOWNLOAD CALL CONNECTED 1.1.1	[Call Connected Event]
10	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'
    Device identities
        Source device: SIM
        Destination device: ME
    Event list
        Event 1:   Call Connected

Coding:

    BER-TLV: D0   0C   81   03   01   05   00   82   02   81   82   99
               01   01

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

Command details		
	Command number:	1
	Command type:	SET UP EVENT LIST
	Command qualifier:	'00'
Device identities		
	Source device:	ME
	Destination device:	SIM
Result		
	General Result:	Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

SET UP 1.1.1

Logically:

Transaction identifier		
	Value:	XX XX
Address		
	Value:	XX XX
Called party subaddress		
	Value:	XX XX

CONNECT 1.1.1

Logically:

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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP EVENT LIST 1.2.1	[Call Connected and Call Disconnected Events]
	ME → SIM	TERMINAL RESPONSE : SET UP EVENT LIST 1.2.1	
4	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.2.2	
5	ME → SIM	FETCH	
6	SIM → ME	PROACTIVE COMMAND : SET UP EVENT LIST 1.2.2	[Call Disconnected Event]
7	ME → SIM	TERMINAL RESPONSE : SET UP EVENT LIST 1.2.2	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
10	SS → ME	SETUP 1.2.2	[Incoming call alert]
11	USER → ME	User shall accept the incoming call	
12	ME → SS	CONNECT 1.2.2	
13	SS → ME	DISCONNECT 1.2.2	
	ME → SIM	ENVELOPE: EVENT DOWNLOAD CALL DISCONNECT 1.2.2	[Call Disconnect Event]
14	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : SET UP EVENT LIST 1.2.1

Logically:

        Command details
            Command number: 1
            Command type: SET UP EVENT LIST
            Command qualifier: '00'
        Device identities
            Source device: SIM
            Destination device: ME
        Event list
            Event 1:   Call Connected
            Event 2:   Call Disconnected

Coding:

            BER-TLV: D0   0D   81   03   01   05   00   82   02   81   82   99
                        02   01   02

TERMINAL RESPONSE : SET UP EVENT LIST 1.2.1

Logically:

    Command details

        Command number: 1

        Command type: SET UP EVENT LIST

        Command qualifier: '00'

    Device identities

        Source device: ME

        Destination device: SIM

    Result

        General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

PROACTIVE COMMAND : SET UP EVENT LIST 1.2.2

Logically:

    Command details

        Command number: 1

        Command type: SET UP EVENT LIST

        Command qualifier: '00'

    Device identities

        Source device: SIM

        Destination device: ME

    Event list

        Event 1:   Call Disconnected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	02										

TERMINAL RESPONSE : SET UP EVENT LIST 1.2.2

Logically:

    Command details

        Command number: 1

        Command type: SET UP EVENT LIST

        Command qualifier: '00'

    Device identities

        Source device: ME

        Destination device: SIM

    Result

        General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

SET UP 1.2.2

Logically:
 Transaction identifier
  Value: XX XX
 Address
  Value: XX XX
 Called party subaddress
  Value: XX XX

CONNECT 1.2.2

Logically:
 Transaction identifier
  Value: XX XX

DISCONNECT 1.2.2

Logically:
 Transaction identifier
  Value: XX XX
 Cause
  Value: XX XX

ENVELOPE: EVENT DOWNLOAD CALL DISCONNECTED 1.2.2

Logically:
 Event list
  Event 1:   Call Disconnected
 Device identities
  Source device: Network
  Destination device: SIM
 Transaction identifier
  Value: XX XX
 Cause
  Value: XX XX

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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP EVENT LIST 1.3.1	[Call Connected Event]
	ME → SIM	TERMINAL RESPONSE : SET UP EVENT LIST 1.3.1	
4	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.3.1	
5	ME → SIM	FETCH	
6	SIM → ME	PROACTIVE COMMAND : SET UP EVENT LIST 1.3.2	[Remove Event]
7	ME → SIM	TERMINAL RESPONSE : SET UP EVENT LIST 1.3.2	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
10	SS → ME	SETUP 1.3.2	[Incoming call alert]
11	USER → ME	User shall accept the incoming call	
12	ME → SS	CONNECT 1.3.2	
13	SS → ME	DISCONNECT 1.3.2	

PROACTIVE COMMAND : SET UP EVENT LIST 1.3.1

Logically:

Command details		
	Command number:	1
	Command type:	SET UP EVENT LIST
	Command qualifier:	'00'
Device identities		
	Source device:	SIM
	Destination device:	ME
Event list		
	Event 1:	Call Connected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	01										

TERMINAL RESPONSE : SET UP EVENT LIST 1.3.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

    BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

PROACTIVE COMMAND : SET UP EVENT LIST 1.3.2

Logically:

    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'
    Device identities
        Source device: SIM
        Destination device: ME
    Event list: Empty

Coding:

    BER-TLV: D0 0B 81 03 01 05 00 82 02 81 82 99
             00

TERMINAL RESPONSE : SET UP EVENT LIST 1.3.2

Logically:

    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

    BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

SET UP 1.3.2

Logically:

    Transaction identifier
        Value: XX XX
    Address
        Value: XX XX
    Called party subaddress
        Value: XX XX

CONNECT 1.3.2

Logically:

    Transaction identifier
        Value: XX XX

DISCONNECT 1.3.2

Logically:

    Transaction identifier
        Value: XX XX
    Cause
        Value: XX XX

Expected Sequence 1.4 (SET UP EVENT LIST, Remove Event on ME Power Cycle)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SET UP EVENT LIST 1.4.1	[Call Connected Event]
	ME → SIM	TERMINAL RESPONSE : SET UP EVENT LIST 1.4.1	
4	SIM → ME	PROACTIVE SIM SESSION ENDED	
5	User → ME	Power off ME	
6	User → ME	Power on ME	
7	SS → ME	SETUP 1.4A	[Incoming call alert]
8	USER → ME	User shall accept the incoming call	
9	ME → SS	CONNECT 1.4.1	
10	SS → ME	DISCONNECT 1.4.1	

PROACTIVE COMMAND : SET UP EVENT LIST 1.4.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'
    Device identities
        Source device: SIM
        Destination device: ME
    Event list
        Event 1:   Call Connected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	01										

TERMINAL RESPONSE : SET UP EVENT LIST 1.4.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

SET UP 1.4.1

Logically:
    Transaction identifier
        Value: XX XX
    Address
        Value: XX XX
    Called party subaddress
        Value: XX XX

CONNECT 1.4.1

Logically:
    Transaction identifier
        Value: XX XX

DISCONNECT 1.4.1

Logically:
    Transaction identifier
        Value: XX XX
    Cause
        Value: XX XX

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 Procedure

Expected Sequence 1.1 (PERFORM CARD APDU, card reader 1, additional card inserted, Select MF and Get Response)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: POWER ON CARD 1.1.1	[Power on card reader 1]
4	ME → SIM2	RESET CARD	[Perform electrical initialisation]
5	SIM2 → ME	ANSWER TO RESET 1.1	[ATR]
6	ME → SIM	TERMINAL RESPONSE: POWER ON CARD 1.1.1	[ATR]
7	SIM → ME	PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.1.1	
8	ME → SIM	FETCH	
9	SIM → ME	PROACTIVE COMMAND: PERFORM CARD APDU 1.1.1	[Select Masterfile]
10	ME → SIM2	C-APDU: SELECT 1.1	[Select Masterfile]
11	SIM2 → ME	R-APDU: SELECT 1.1	[Command performed successfully – length '1B' of response data]
12	ME → SIM	TERMINAL RESPONSE: PERFORM CARD APDU 1.1.1	
13	SIM → ME	PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.1.2	
14	ME → SIM	FETCH	
15	SIM → ME	PROACTIVE COMMAND: PERFORM CARD APDU 1.1.2	[Get Response with length '1B']
16	ME → SIM2	C-APDU: GET RESPONSE 1.1	[Get Response with length '1B']
17	SIM2 → ME	R-APDU: GET RESPONSE 1.1	[Response data with length '1B']
18	ME → SIM	TERMINAL RESPONSE: PERFORM CARD APDU 1.1.2	[Response data with length '1B']

PROACTIVE COMMAND POWER ON CARD 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: POWER ON CARD
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Card reader 1

  Coding:

      BER-TLV: D0   09   81   03   01   31   00   82   02   81   11

ANSWER TO RESET 1.1

Logically:

TS (Initial character):	'3B'
T0 (Format character):	'86' (Following interface characters: TD(1), number of historical characters: 6)
TD1:	'00' (Following interface characters: none, Transfer protocol: T=0)
T1:	91
T2:	99
T3:	00
T4:	12
T5:	C1
T6:	00

Coding:

BER-TLV: 3B 86 00 91 99 00 12 C1 00

TERMINAL RESPONSE : POWER ON CARD 1.1.1

Logically:

Command details	
Command number:	1
Command type:	POWER ON CARD
Command qualifier:	"00"
Device identities	
Source device:	ME
Destination device:	SIM
Result	
General Result:	Command performed successfully
Card ATR	
TS (Initial character):	'3B'
T0 (Format character):	'86' (Following interface characters: TD(1), number of historical characters: 6)
TD1:	'00' (Following interface characters: none, Transfer protocol: T=0)
T1:	91
T2:	99
T3:	00
T4:	12
T5:	C1
T6:	00

Coding:

BER-TLV: 81 03 01 31 00 82 02 82 81 83 01 00
A1 09 3B 86 00 91 99 00 12 C1 00

PROACTIVE COMMAND PERFORM CARD APDU 1.1.1

Logically:

Command details			
	Command number:	1	
	Command type:	PERFORM CARD APDU	
	Command qualifier:	"00"	
Device identities			
	Source device:	SIM	
	Destination device:	Card Reader 1	
C-APDU			
	Class:	'A0'	
	Instruction:	SELECT	
	P1 parameter:	'00'	
	P2 parameter:	'00'	
	Lc:	'02'	
	Data:	Master File	

Coding:

BER-TLV:	D0	12	81	03	01	30	00	82	02	81	11	A2
	07	A0	A4	00	00	02	3F	00				

C-APDU: SELECT 1.1

Logically:

C-APDU			
	Class:	'A0'	
	Instruction:	SELECT	
	P1 parameter:	'00'	
	P2 parameter:	'00'	
	Lc:	'02'	
	Data:	Master File	

Coding:

BER-TLV:	A0	A4	00	00	02	3F	00

R-APDU: SELECT 1.1

Logically:

Status Words SW1 / SW2: Command performed successfully – length '1B' of response data

Coding:

       BER-TLV: 9F   1B

TERMINAL RESPONSE : PERFORM CARD APDU 1.1.1

Logically:

Command details		
Command number:	1	
Command type:	PERFORM CARD APDU	
Command qualifier:	"00"	
Device identities		
Source device:	ME	
Destination device:	SIM	
Result		
General Result:	Command performed successfully	
R-APDU		
Status Words		
SW1 / SW2:	Command performed successfully – length '1B' of response data	

Coding:

BER-TLV:	81	03	01	30	00	82	02	11	81	83	01	00
	A3	02	9F	1B							

PROACTIVE COMMAND PERFORM CARD APDU 1.1.2

Logically:

Command details	
Command number:	1
Command type:	PERFORM CARD APDU
Command qualifier:	'00'
Device identities	
Source device:	SIM
Destination device:	Card Reader 1
C-APDU	
Class:	'A0'
Instruction:	GET RESPONSE
P1 parameter:	'00'
P2 parameter:	'00'
Le:	'1B'

Coding:

BER-TLV:	D0	10	81	03	01	30	00	82	02	81	11	A2
	05	A0	C0	00	00	1B					

C-APDU: GET RESPONSE 1.1

Logically:
      C-APDU
         Class: 'A0'
         Instruction: GET RESPONSE
         P1 parameter: '00'
         P2 parameter: '00'
         Le: '1B'

  Coding:

        BER-TLV: A0   C0   00   00   1B

R-APDU: GET RESPONSE 1.1

Logically:
    R-APDU data
       RFU: '00 00'
       Not allocated memory: '653 bytes'
       File ID: Master File
       Type of file: MF
       RFU: 00 00 22 FF 01'
       Length of following data: 14 bytes'
       File characteristics:
         Clock Stop: Not allowed
         Min. frequence for GSM algorithm: 13/8 MHz
         Technology identification: 3V Technology SIM
         CHV1:   disabled
       DFs in current directory: 2
       EFs in current dircetory: 8
       Number of CHV and admin. Codes: 3
       RFU byte 18:   00
       CHV1 status:
         False represantations remaining: 3
         RFU-bits 7-5:   000
         Secret code: Initialised
       Unlock CHV1 status:
         False represantations remaining: 10
         RFU-bits 7-5:   000
         Secret code: Initialised
       CHV2 status:
         False represantations remaining: 3
         RFU-bits 7-5:   000
         Secret code: Initialised
       Unlock CHV2 status:
         False represantations 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

TERMINAL RESPONSE : PERFORM CARD APDU 1.1.2

Logically:

Command details		
	Command number:	1
	Command type:	PERFORM CARD APDU
	Command qualifier:	"00"
Device identities		
	Source device:	ME
	Destination device:	SIM
Result		
	General Result:	Command performed successfully
R-APDU data		
	RFU:	'00 00'
	Not allocated memory:	'653 bytes'
	File ID:	Master File
	Type of file:	MF
	RFU:	00 00 22 FF 01'
	Length of following data:	14 bytes'
	File characteristics:	
	Clock Stop:	Not allowed
	Min. frequence for GSM algorithm:	13/8 MHz
	Technology identification:	3V Technology SIM
	CHV1:	disabled
	DFs in current directory:	2
	EFs in current dircetory:	8
	Number of CHV and admin. Codes:	3
	RFU byte 18:	00
	CHV1 status:	
	False represantations remaining:	3
	RFU-bits 7-5:	000
	Secret code:	Initialised
	Unlock CHV1 status:	
	False represantations remaining:	10
	RFU-bits 7-5:	000
	Secret code:	Initialised
	CHV2 status:	
	False represantations remaining:	3
	RFU-bits 7-5:	000
	Secret code:	Initialised
	Unlock CHV2 status:	
	False represantations 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:	81	03	01	30	00	82	02	11	81	83	01	00
	A3	0F	00	00	02	8D	3F	00	01	00	00	22
	FF	01	0E	90	00							

Expected Sequence 1.2 (PERFORM CARD APDU, card reader 1, additional card inserted, Select DF GSM,
Select EF PLMN , Update Binary, Read Binary on EF PLMN)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: POWER ON CARD 1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: POWER ON CARD 1.1	[Power on card reader 1]
4	ME → SIM2	RESET CARD	[Perform electrical initialisation]
5	SIM2 → ME	ANSWER TO RESET 1.1	[ATR]
6	ME → SIM	TERMINAL RESPONSE: POWER ON CARD 1.1	[ATR]
7	SIM → ME	PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.2.1	
8	ME → SIM	FETCH	
9	SIM → ME	PROACTIVE COMMAND: PERFORM CARD APDU 1.2.1	[Select GSM]
10	ME → SIM2	C-APDU: SELECT 1.2a	[Select GSM]
11	SIM2 → ME	R-APDU: SELECT 1.2a	
12	ME → SIM	TERMINAL RESPONSE: PERFORM CARD APDU 1.2.1	
13	SIM → ME	PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.2.2	
14	ME → SIM	FETCH	
15	SIM → ME	PROACTIVE COMMAND: PERFORM CARD APDU 1.2.2	[Select PLMN]
16	ME → SIM2	C-APDU: SELECT 1.2b	[Select PLMN]
17	SIM2 → ME	R-APDU: SELECT 1.2b	
18	ME → SIM	TERMINAL RESPONSE: PERFORM CARD APDU 1.2.2	
19	SIM → ME	PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.2.3	
20	ME → SIM	FETCH	
21	SIM → ME	PROACTIVE COMMAND: PERFORM CARD APDU 1.2.3	[Update Binary]
22	ME → SIM2	C-APDU: UPDATE BINARY 1.2	[Update Binary]
23	SIM2 → ME	R-APDU: UPDATE BINARY 1.2	
24	ME → SIM	TERMINAL RESPONSE: PERFORM CARD APDU 1.2.3	
25	SIM → ME	PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.2.4	
26	ME → SIM	FETCH	
27	SIM → ME	PROACTIVE COMMAND: PERFORM CARD APDU 1.2.4	[Read Binary]
28	ME → SIM2	C-APDU: READ BINARY 1.2	[Read Binary]
29	SIM2 → ME	R-APDU: READ BINARY 1.2	
30	ME → SIM	TERMINAL RESPONSE: PERFORM CARD APDU 1.2.4	
31	SIM → ME	PROACTIVE COMMAND: PERFORM CARD APDU 1.2.5	[Update Binary]

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:

Command details		
Command number:	1	
Command type:	PERFORM CARD APDU	
Command qualifier:	"00"	
Device identities		
Source device:	SIM	
Destination device:	Card Reader 1	
C-APDU		
Class:	'A0'	
Instruction:	UPDATE BINARY	
P1 parameter:	'00'	
P2 parameter:	'00'	
Lc:	'18'	
Data:	'00 01 02 03 04 05 06 07 08 09 0A 0B 0C 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:

Command details		
Command number:	1	
Command type:	PERFORM CARD APDU	
Command qualifier:	"00"	
Device identities		
Source device:	SIM	
Destination device:	Card Reader 1	
C-APDU		
Class:	'A0'	
Instruction:	READ BINARY	
P1 parameter:	'00'	
P2 parameter:	'00'	
Le:	'18'	

Coding:

BER-TLV:	D0	10	81	03	01	30	00	82	02	81	11	A2
	05	A0	B0	00	00	18						

PROACTIVE COMMAND : PERFORM CARD APDU 1.2.5

Logically:
  Command details
    Command number: 1
    Command type: PERFORM CARD APDU
    Command qualifier: "00"
  Device identities
    Source device: SIM
    Destination device: Card Reader 1
  C-APDU
    Class: 'A0'
    Instruction: UPDATE BINARY
    P1 parameter: '00'
    P2 parameter: '00'
    Lc: '18'
    Data: 'FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF'
        FF FF FF FF FF FF FF FF'

 Coding:

    BER-TLV: D0 28 81 03 01 30 00 82 02 81 11 A2
           1D A0 D6 00 00 18 FF FF FF FF FF FF
           FF FF FF FF FF FF FF FF FF FF FF FF
           FF FF FF FF FF FF

C-APDU: SELECT 1.2a

Logically:
  C-APDU
    Class: 'A0'
    Instruction: SELECT
    P1 parameter: '00'
    P2 parameter: '00'
    Lc: '02'
    Data: DF GSM

 Coding:

    BER-TLV: A0 A4 00 00 02 7F 20

C-APDU: SELECT 1.2b

Logically:
  C-APDU
    Class: 'A0'
    Instruction: SELECT
    P1 parameter: '00'
    P2 parameter: '00'
    Lc: '02'
    Data: EF PLMN

 Coding:

    BER-TLV: A0 A4 00 00 02 6F 30

C-APDU: UPDATE BINARY 1.2

Logically:

    C-APDU

Class:	'A0'	
Instruction:	UPDATE BINARY	
P1 parameter:	'00'	
P2 parameter:	'00'	
Lc:	'18'	
Data:	'00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F	
	10 11 12 13 14 15 16 17	

Coding:

BER-TLV:	A0	D6	00	00	18	00	01	02	03	04	05	06
	07	08	09	0A	0B	0C	0D	0E	0F	10	11	12
	13	14	15	16	17							

C-APDU: READ BINARY 1.2

Logically:

    C-APDU

Class:	'A0'	
Instruction:	READ BINARY	
P1 parameter:	'00'	
P2 parameter:	'00'	
Le:	'18'	

Coding:

BER-TLV:	A0	B0	00	00	18

C-APDU: UPDATE BINARY 1.2a

Logically:

    C-APDU

Class:	'A0'	
Instruction:	UPDATE BINARY	
P1 parameter:	'00'	
P2 parameter:	'00'	
Lc:	'18'	
Data:	'FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF	
	FF FF FF FF FF FF FF FF'	

Coding:

BER-TLV:	A0	D6	00	00	18	FF	FF	FF	FF	FF	FF	FF
	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
	FF	FF	FF	FF	FF							

R-APDU: SELECT 1.2a

Logically:

    Status Words

SW1 / SW2:	Normal ending of command – length '1B' of response data

Coding:

BER-TLV:	9F	1B

R-APDU: SELECT 1.2b

Logically:
    Status Words
        SW1 / SW2:   Normal ending of command - length '0F' of response data
Coding:

        BER-TLV: 9F   0F

R-APDU: UPDATE BINARY 1.2

Logically:
    Status Words
        SW1 / SW2:   Normal ending of command

Coding:

        BER-TLV: 90   00

R-APDU: READ BINARY 1.2

Logically:
    R-APDU data
        Data: '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F
                              10 11 12 13 14 15 16 17 '
    Status Words
        SW1 / SW2:   Normal ending of command

Coding:

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	00										

TERMINAL RESPONSE : PERFORM CARD APDU 1.2.1

Logically:
    Command details
        Command number: 1
        Command type: PERFORM CARD APDU
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    R-APDU
        Status Words
            SW1 / SW2:   Command performed successfully – length 1B of response data

 Coding:

BER-TLV:	81	03	01	30	00	82	02	11	81	83	01	00
	A3	02	9F	1B								

TERMINAL RESPONSE : PERFORM CARD APDU 1.2.2

Logically:

    Command details
        Command number: 1
        Command type: PERFORM CARD APDU
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    R-APDU
        Status Words
            SW1 / SW2:   Command performed successfully – length 0F of response data

  Coding:

      BER-TLV: 81   03   01   30   00   82   02   11   81   83   01   00
               A3   02   9F   0F

TERMINAL RESPONSE : PERFORM CARD APDU 1.2.3

Logically:

    Command details
        Command number: 1
        Command type: PERFORM CARD APDU
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    R-APDU
        Status Words
            SW1 / SW2:   Normal ending of command

  Coding:

      BER-TLV: 81   03   01   30   00   82   02   11   81   83   01   00
               A3   02   90   00

TERMINAL RESPONSE : PERFORM CARD APDU 1.2.4

Logically:

    Command details

        Command number: 1

        Command type: PERFORM CARD APDU

        Command qualifier: "00"

    Device identities

        Source device: ME

        Destination device: SIM

    Result

        General Result: Command performed successfully

    R-APDU

        R-APDU data

        Data: '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F

                                10 11 12 13 14 15 16 17 '

        Status Words

        SW1 / SW2:   Normal ending of command

  Coding:

BER-TLV:	81	03	01	30	00	82	02	11	81	83	01	00
	A2	81	EF	A0	D6	00	00	EC	00	01	02	03
	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
	10	11	12	13	14	15	16	17	90	00		

Expected Sequence 1.3 (PERFORM CARD APDU, card reader 1, card inserted, card powered off)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: POWER OFF CARD 1.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: POWER OFF CARD 1.3.1	[Power off card reader 1]
4	ME → SIM2	POWER OFF CARD	[Power off card reader 1]
5	ME → SIM	TERMINAL RESPONSE: POWER OFF CARD 1.3.1	[Successful]
6	ME	SIM2 is powered off from ME card reader	
7	SIM → ME	PROACTIVE COMMAND PENDING: PEFORM CARD APDU 1.1.1	
8	ME → SIM	FETCH	
9	SIM → ME	PROACTIVE COMMAND: PERFORM CARD APDU 1.1.1	[Select Master File]
10	ME → SIM	TERMINAL RESPONSE: PERFORM CARD APDU 1.3.1	[Card powered off]

PROACTIVE COMMAND : POWER OFF CARD 1.3.1

Logically:
    Command details
        Command number: 1
        Command type: POWER OFF CARD
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Card reader 1

  Coding:

BER-TLV:	D0	09	81	03	01	32	00	82	02	81	11

TERMINAL RESPONSE : POWER OFF CARD 1.3.1

Logically:
    Command details
        Command number: 1
        Command type: POWER OFF CARD
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

BER-TLV:	81	03	01	32	00	82	02	82	81	01	00

TERMINAL RESPONSE : PERFORM CARD APDU 1.3.1

Logically:
    Command details
        Command number: 1
        Command type: PERFORM CARD APDU
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: MultipleCard commands error
        Additional information: Card powered off

  Coding:

BER-TLV:	81	03	01	32	00	82	02	82	81	02	38
	04										

Expected Sequence 1.4 (PERFORM CARD APDU, card reader 1, no card inserted)

Step	Direction	MESSAGE / Action	Comments
1	ME	SIM2 is removed from ME card reader	
2	SIM → ME	PROACTIVE COMMAND PENDING: PEFORM CARD APDU 1.1.1	
3	ME → SIM	FETCH	
4	SIM → ME	PROACTIVE COMMAND: PERFORM CARD APDU 1.1.1	[Select Master File]
5	ME → SIM	TERMINAL RESPONSE: PERFORM CARD APDU 1.4.1	[No card inserted]

TERMINAL RESPONSE : PERFORM CARD APDU 1.4.1

Logically:
 Command details
  Command number: 1
  Command type: PERFORM CARD APDU
  Command qualifier: "00"
 Device identities
  Source device: ME
  Destination device: SIM
 Result
  General Result: MultipleCard commands error
  Additional information: Card removed or not present

 Coding:

   BER-TLV: 81 03 01 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))

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: PEFORM CARD APDU 1.5.1	[invalid card reader ID]
3	ME → SIM	FETCH	
4	SIM → ME	PROACTIVE COMMAND: PERFORM CARD APDU 1.5.1	[Select Master File]
5	ME → SIM	TERMINAL RESPONSE: PERFORM CARD APDU 1.5.1	[Specified reader not valid]

PROACTIVE COMMAND:: PERFORM CARD APDU 1.1.1

Logically:
  Command details
   Command number: 1
   Command type: PERFORM CARD APDU
   Command qualifier: "00"
  Device identities
   Source device: SIM
   Destination device: Card Reader 7
  C-APDU
   Class: 'A0'
   Instruction: SELECT
   P1 parameter: '00'
   P2 parameter: '00'
   Lc: '02'
   Data: Master File

 Coding:

   BER-TLV: D0 12 81 03 01 30 00 82 02 81 17 A2
        07 A0 A4 00 00 02 3F 00

C-APDU: SELECT 1.1

Logically:
  C-APDU
   Class: 'A0'
   Instruction: SELECT
   P1 parameter: '00'
   P2 parameter: '00'
   Lc: '02'
   Data: Master File

 Coding:

   BER-TLV: A0 A4 00 00 02 3F 00

TERMINAL RESPONSE : PERFORM CARD APDU 1.5.1

Logically:
  Command details
   Command number: 1
   Command type: PERFORM CARD APDU
   Command qualifier: "00"
  Device identities
   Source device: ME
   Destination device: SIM
  Result
   General Result: MultipleCard commands error
   Additional information: Specified reader not valid

 Coding:

   BER-TLV: 81 03 01 32 00 82 02 82 81 02 38

       09

27.22.4.17.1.5   Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.17.2   PERFORM CARD APDU (detachable card reader)

27.22.4.17.2.1   Definition and applicability

See Section 3.2.2.

27.22.4.17.2.2   Conformance requirement

27.22.4.17.2.3   Test Purpose

To verify that the ME sends an APDU command to the additional card identified in the PERFORM CARD APDU proactive SIM command, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

27.22.4.17.2.4   Method of test

27.22.4.17.2.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

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

The card reader shall be detached from the ME.

27.22.4.17.2.4.2 Procedure

Expected Sequence 2.1 (PERFORM CARD APDU, card reader 1, card reader detached)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: PEFORM CARD APDU 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: PERFORM CARD APDU 1.1.1	[Select Master File]
4	ME → SIM	TERMINAL RESPONSE: PERFORM CARD APDU 2.1.1	[Card reader detached]

PROACTIVE COMMAND : PERFORM CARD APDU 2.1.1

Logically:
    Command details
        Command number: 1
        Command type: PERFORM CARD APDU
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Card Reader 1
    C-APDU
        Class: 'A0'
        Instruction: SELECT
        P1 parameter: '00'
        P2 parameter: '00'
        Lc: '02'
        Data: Master File

  Coding:

BER-TLV:	D0	12	81	03	01	30	00	82	02	81	11	A2
	07	A0	A4	00	00	02	3F	00				

TERMINAL RESPONSE : PERFORM CARD APDU 2.1.1

Logically:
    Command details
        Command number: 1
        Command type: PERFORM CARD APDU
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: MultipleCard commands error
        Additional information: Card reader removed or not present

  Coding:

BER-TLV:	81	03	01	30	00	82	02	82	81	83	02
	38	01									

27.22.4.17.2.5   Test 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 test

27.22.4.18.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2).

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)

Step	Direction	MESSAGE / Action	Comments
1	SIM2	SIM2 is removed from ME card reader	
2	SIM → ME	PROACTIVE COMMAND PENDING: POWER OFF CARD 1.1.1	
3	ME → SIM	FETCH	
4	SIM → ME	PROACTIVE COMMAND : POWER OFF CARD 1.1.1	[Power off card reader 1]
5	ME → SIM	TERMINAL RESPONSE : POWER OFF CARD 1.2.1	[No card inserted]

TERMINAL RESPONSE : POWER OFF CARD 1.2.1

Logically:

Command details		
	Command number:	1
	Command type:	POWER OFF CARD
	Command qualifier:	"00"
Device identities		
	Source device:	ME
	Destination device:	SIM
Result		
	General Result:	MultipleCard commands error
	Additional information:	Card removed or not present

Coding:

BER-TLV:	81	03	01	32	00	82	02	82	81	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 requirement

27.22.4.18.2.3   Test Purpose

To verify that the ME closes a session with the additional card identified in the POWER OFF CARD proactive SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.18.2.4   Method of test

27.22.4.18.2.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2).

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

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

The card reader shall be detached from the ME.

27.22.4.18.2.4.2 Procedure

Expected Sequence 2.1 (POWER OFF CARD, card reader 1, no card reader attached)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: POWER OFF CARD 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : POWER OFF CARD 2.1.1	[Power off card reader 1]
4	ME → SIM	TERMINAL RESPONSE : POWER 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 CARD

27.22.4.19.1   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 test

27.22.4.19.1.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2).

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

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

27.22.4.19.1.4.2   Procedure

Expected Sequence 1.1 (POWER ON CARD, card reader 1)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : POWER ON CARD 1.1.1	[Power on card reader 1]
4	ME → SIM2	RESET CARD	[Perform electrical initialisation]
5	SIM2 → ME	ANSWER TO RESET 1.1.1	[ATR]
6	ME → SIM	TERMINAL RESPONSE : POWER ON CARD 1.1.1	[ATR]

PROACTIVE COMMAND : POWER ON CARD 1.1.1

Logically:

    Command details

        Command number: 1

        Command type: POWER ON CARD

        Command qualifier: "00"

    Device identities

        Source device: SIM

        Destination device: Card reader 1

  Coding:

BER-TLV:	D0	09	81	03	01	31	00	82	02	81	11

ANSWER TO RESET 1.1.1

Logically:

    TS (Initial character):   '3B'

    T0 (Format character):   0F

    T1 (Historical character):   'P'

    T2 (Historical character):   'o'

    T3 (Historical character):   'w'

    T4 (Historical character):   'e'

    T5 (Historical character):   'r'

    T6 (Historical character):   'O'

    T7 (Historical character):   'n'

    T8 (Historical character):   'C'

    T9 (Historical character):   'a'

    T10 (Historical character):   'r'

    T11 (Historical character):   'd'

    T12 (Historical character):   'T'

    T13 (Historical character):   'e'

    T14 (Historical character):   's'

    T15 (Historical character):   't'

  Coding:

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:

    Command details
        Command number: 1
        Command type: POWER ON CARD
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Card ATR
        TS (Initial character):   '3B'   T0 (Format character):   0F

        T1 (Historical character):   'P'
        T2 (Historical character):   'o'
        T3 (Historical character):   'w'
        T4 (Historical character):   'e'
        T5 (Historical character):   'r'
        T6 (Historical character):   'O'
        T7 (Historical character):   'n'
        T8 (Historical character):   'C'
        T9 (Historical character):   'a'
        T10 (Historical character):   'r'
        T11 (Historical character):   'd'
        T12 (Historical character):   'T'
        T13 (Historical character):   'e'
        T14 (Historical character):   's'
        T15 (Historical character):   't'

    Coding:

        BER-TLV: 81   03   01   31   00   82   02   82   81   83   01   00
                           A1   11   3B   0F   50   6F   77   65   72   4F   6E   43
                           61   72   64   54   65   74   75

Expected Sequence 1.2 (POWER ON CARD, card reader 1, no ATR)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : POWER ON CARD 1.1.1	[Power on card reader 1]
4	ME → SIM2	RESET CARD	[Perform electrical 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM2	SIM2 is removed from ME card reader	
2	SIM → ME	PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1	
3	ME → SIM	FETCH	
4	SIM → ME	PROACTIVE COMMAND : POWER ON CARD 1.1.1	[Power on card reader 1]
5	ME → SIM	TERMINAL RESPONSE : POWER ON CARD 1.3.1	[Card removed or not present]

TERMINAL RESPONSE : POWER ON CARD 1.3.1

Logically:

    Command details
        Command number: 1
        Command type: POWER ON CARD
        Command qualifier: "00"
    Device identities
        Source device: Card reader 0
        Destination device: SIM
    Result
        General Result: MultipleCard commands error
        Additional information: Card removed or not present

  Coding:

      BER-TLV: 81 03 01 31 00 82 02 82 81 83 02 38
               02

27.22.4.19.1.5   Test Requirement

The ME shall operate in the manner defined in expected sequences

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 requirement

27.22.4.19.2.3 Test Purpose

To verify that the ME starts a session with the additional card identified in the POWER ON CARD proactive SIM command, and successfully returns the Answer To Reset within the TERMINAL RESPONSE command send to the SIM.

27.22.4.19.2.4 Method of test

27.22.4.19.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

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

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

The card reader shall be detached from the ME.

27.22.4.19.2.4.2 Procedure

Expected Sequence 2.1 (POWER ON CARD, card reader 1, no card reader attached)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: POWER ON CARD 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : POWER ON CARD 2.1.1	[Power on card reader 1]
4	ME → SIM	TERMINAL RESPONSE : POWER ON CARD 2.1.1	[Card reader removed or not present]

PROACTIVE COMMAND : POWER ON CARD 2.1.1

Logically:

    Command details

        Command number: 1

        Command type: POWER ON CARD

        Command qualifier: "00"

    Device identities

        Source device: SIM

        Destination device: Card reader 1

Coding:

BER-TLV:	D0	09	81	03	01	31	00	82	02	81	11

TERMINAL RESPONSE : POWER ON CARD 1.1.1

Logically:

    Command details

        Command number: 1

        Command type: POWER ON CARD

        Command qualifier: "00"

    Device identities

        Source device: Card reader 0

        Destination device: SIM

    Result

        General Result: MultipleCard commands error

        Additional information: Card reader removed or not present

Coding:

BER-TLV:	81	03	01	31	00	82	02	82	81	83	02	38
	01											

27.22.4.19.2.5   Test Requirement

The ME shall operate in the manner defined in expected 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1	[Power on card reader 1]
4	ME → SIM2	RESET CARD	[Perform electrical initialisation]
5	SIM2 → ME	ANSWER TO RESET 1.1.1	[ATR]
6	ME → SIM	TERMINAL RESPONSE : POWER ON CARD 1.1.1	[ATR]
7	SIM → ME	PROACTIVE COMMAND PENDING: GET CARD READER STATUS 1.1.1	
8	ME → SIM	FETCH	
9	SIM → ME	PROACTIVE COMMAND : GET CARD READER STATUS 1.1.1	[Get Card Reader Status]
10	ME → SIM	TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1a Or	[Successful]
		TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1b or	[Successful]
		TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1c or	[Successful]
		TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1d	[Successful]

PROACTIVE COMMAND : POWER ON CARD 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: POWER ON CARD
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Card reader 1

  Coding:

        BER-TLV: D0   09   81   03   01   31   00   82   02   81   11

ANSWER TO RESET 1.1.1

Logically:

    TS (Initial character):   '3B'
    T0 (Format character):   '00'

  Coding:

        BER-TLV: A1   02   3B   00

TERMINAL RESPONSE : POWER ON CARD 1.1.1

Logically:

    Command details
        Command number: 1
        Command type: POWER ON CARD
        Command qualifier: "00"
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Card ATR
        TS (Initial character):   '3B'
        T0 (Format character):   '00'

  Coding:

        BER-TLV: 81   03   01   31   00   82   02   82   81   83   01   00
                    A1   02   3B   00

PROACTIVE COMMAND : GET CARD READER STATUS 1.1.1

Logically:

    Command details
        Command number: 1
        Command type: GET CARD READER STATUS
        Command qualifier: Card reader status
    Device identities
        Source device: SIM
        Destination device: ME

  Coding:

        BER-TLV: D0   09   81   03   01   33   00   82   02   81   82

TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1a

Logically:
Command details		
	Command number:	1
	Command type:	GET CARD READER STATUS
	Command qualifier:	Card reader status
Device identities		
	Source device:	ME
	Destination device:	SIM
Result		
	General Result:	Command performed successfully
Card reader status		
	Identity of card reader:	'01'
	Card reader removable:	'No'
	Card reader present:	Yes
	Card reader ID-1 size:	'Yes'
	Card present in reader:	Yes
	Card powered:	Yes

Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	F1							

TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1b

Logically:
Command details		
	Command number:	1
	Command type:	GET CARD READER STATUS
	Command qualifier:	Card reader status
Device identities		
	Source device:	ME
	Destination device:	SIM
Result		
	General Result:	Command performed successfully
Card reader status		
	Identity of card reader:	'01'
	Card reader removable:	'No'
	Card reader present:	Yes
	Card reader ID-1 size:	'No'
	Card present in reader:	Yes
	Card powered:	Yes

Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	D1							

TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1c

Logically:
    Command details
        Command number: 1
        Command type: GET CARD READER STATUS
        Command qualifier: Card reader status
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Card reader status
        Identity of card reader: '01'
        Card reader removable: 'Yes'
        Card reader present: Yes
        Card reader ID-1 size: 'Yes'
        Card present in reader: Yes
        Card powered: Yes

  Coding:

      BER-TLV: 81   03   01   33   00   82   02   82   81   83   01

                00   A0   01   F9

TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1d

Logically:
    Command details
        Command number: 1
        Command type: GET CARD READER STATUS
        Command qualifier: Card reader status
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Card reader status
        Identity of card reader: '01'
        Card reader removable: 'Yes'
        Card reader present: Yes
        Card reader ID-1 size: 'No'
        Card present in reader: Yes
        Card powered: Yes

  Coding:

      BER-TLV: 81   03   01   33   00   82   02   82   81   83   01

                00   A0   01   D9

Expected Sequence 1.2 (GET CARD READER STATUS, card reader 1, card inserted, card not powered)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: POWER OFF CARD 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : POWER OFF CARD 1.2.1	[Power off card reader 1]
4	ME → SIM2	POWER OFF CARD	[Power off card reader 1]
5	ME → SIM	TERMINAL RESPONSE : POWER OFF CARD 1.2.1	[Successful]
6	SIM → ME	PROACTIVE COMMAND PENDING: GET CARD READER STATUS 1.1.1	
7	ME → SIM	FETCH	
8	SIM → ME	PROACTIVE COMMAND : GET CARD READER STATUS 1.1.1	[Get Card Reader Status]
9	ME → SIM	TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1a Or	[Successful]
		TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1b or	[Successful]
		TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1c Or	[Successful]
		TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1d	[Successful]

PROACTIVE COMMAND : POWER OFF CARD 1.2.1

Logically:

    Command details
        Command number: 1
        Command type: POWER OFF CARD
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Card reader 1

  Coding:

      BER-TLV: D0   09   81   03   01   32   00   82   02   81   11

TERMINAL RESPONSE : POWER OFF CARD 1.2.1

Logically:

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

Coding:

> BER-TLV: 81 03 01 32 00 82 02 82 81 01 00

TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1a

Logically:

Command details		
Command number:	1	
Command type:	GET CARD READER STATUS	
Command qualifier:	Card reader status	
Device identities		
Source device:	ME	
Destination device:	SIM	
Result		
General Result:	Command performed successfully	
Card reader status		
Identity of card reader:	'01'	
Card reader removable:	'No'	
Card reader present:	Yes	
Card reader ID-1 size:	'Yes'	
Card present in reader:	Yes	
Card powered:	No	

Coding:

> BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
>
> 00 A0 01 71

TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1b

Logically:

Command details		
Command number:	1	
Command type:	GET CARD READER STATUS	
Command qualifier:	Card reader status	
Device identities		
Source device:	ME	
Destination device:	SIM	
Result		
General Result:	Command performed successfully	
Card reader status		
Identity of card reader:	'01'	
Card reader removable:	'No'	
Card reader present:	Yes	
Card reader ID-1 size:	'No'	
Card present in reader:	Yes	
Card powered:	No	

Coding:

> BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
>
> 00 A0 01 51

TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1c

Logically:

Command details	
Command number:	1
Command type:	GET CARD READER STATUS
Command qualifier:	Card reader status
Device identities	
Source device:	ME
Destination device:	SIM
Result	
General Result:	Command performed successfully
Card reader status	
Identity of card reader:	'01'
Card reader removable:	'Yes'
Card reader present:	Yes
Card reader ID-1 size:	'Yes'
Card present in reader:	Yes
Card powered:	No

  Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	79							

TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1d

Logically:

Command details	
Command number:	1
Command type:	GET CARD READER STATUS
Command qualifier:	Card reader status
Device identities	
Source device:	ME
Destination device:	SIM
Result	
General Result:	Command performed successfully
Card reader status	
Identity of card reader:	'01'
Card reader removable:	'Yes'
Card reader present:	Yes
Card reader ID-1 size:	'No'
Card present in reader:	Yes
Card powered:	No

  Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	59							

Expected Sequence 1.3 (GET CARD READER STATUS, card reader 1, card not present)

Step	Direction	MESSAGE / Action	Comments
1	SIM2	SIM2 is removed from ME card reader	
2	SIM → ME	PROACTIVE COMMAND PENDING: GET CARD READER STATUS 1.1.1	
3	ME → SIM	FETCH	
4	SIM → ME	PROACTIVE COMMAND : GET CARD READER STATUS 1.1.1	[Get Card Reader Status]
5	ME → SIM	TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1a Or	[Successful]
		TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1b or	[Successful]
		TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1c or	[Successful]
		TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1d	[Successful]

TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1a

Logically:

    Command details
        Command number: 1
        Command type: GET CARD READER STATUS
        Command qualifier: Card reader status
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Card reader status
        Identity of card reader: '1'
        Card reader removable: 'No'
        Card reader present: Yes
        Card reader ID-1 size: 'Yes'
        Card present in reader: No
        Card powered: No

  Coding:

        BER-TLV: 81   03   01   33   00   82   02   82   81   83   01

                    00   A0   01   31

TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1b

Logically:

Command details		
Command number:	1	
Command type:	GET CARD READER STATUS	
Command qualifier:	card reader status	
Device identities		
Source device:	ME	
Destination device:	SIM	
Result		
General Result:	Command performed successfully	
Card reader status		
Identity of card reader:	'1'	
Card reader removable:	'No'	
Card reader present:	Yes	
Card reader ID-1 size:	'No'	
Card present in reader:	No	
Card powered:	No	

Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	11							

TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1c

Logically:

Command details		
Command number:	1	
Command type:	GET CARD READER STATUS	
Command qualifier:	card reader status	
Device identities		
Source device:	ME	
Destination device:	SIM	
Result		
General Result:	Command performed successfully	
Card reader status		
Identity of card reader:	'1'	
Card reader removable:	'Yes'	
Card reader present:	Yes	
Card reader ID-1 size:	'Yes'	
Card present in reader:	No	
Card powered:	No	

Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	39							

TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1d

Logically:

Command details		
	Command number:	1
	Command type:	GET CARD READER STATUS
	Command qualifier:	Card reader status
Device identities		
	Source device:	ME
	Destination device:	SIM
Result		
	General Result:	Command performed successfully
Card reader status		
	Identity of card reader:	'1'
	Card reader removable:	'Yes'
	Card reader present:	Yes
	Card reader ID-1 size:	'No'
	Card present in reader:	No
	Card powered:	No

Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	19							

27.22.4.20.1.5   Test Requirement

The ME shall operate in the manner defined in expected sequences

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 requirement

27.22.4.20.2.3   Test Purpose

To verify that the ME closes a session with the additional card identified in the GET CARD READER STATUS proactive SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.20.2.4   Method of test

27.22.4.20.2.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: GET CARD READER STATUS 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : GET CARD READER STATUS 2.1.1	[Get Card Reader Status]
4	ME → SIM	TERMINAL RESPONSE : GET CARD READER STATUS 2.1.1a or TERMINAL RESPONSE : GET CARD READER STATUS 2.1.1b	[Successful] [Successful]

PROACTIVE COMMAND : GET CARD READER STATUS 2.1.1

Logically:

    Command details
        Command number: 1
        Command type: GET CARD READER STATUS
        Command qualifier: Card Reader Status
    Device identities
        Source device: SIM
        Destination device: ME

  Coding:

      BER-TLV: D0   09   81   03   01   33   00   82   02   81   82

TERMINAL RESPONSE : GET CARD READER STATUS 2.1.1a

Logically:

    Command details
        Command number: 1
        Command type: GET CARD READER STATUS
        Command qualifier: Card reader status
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Card reader status
        Identity of card reader: 01
        Card reader removable: Yes
        Card reader present: No
        Card reader ID-1 size: Yes
        Card present in reader: No
        Card powered: No

  Coding:

      BER-TLV: 81   03   01   33   00   82   02   82   81   83   01

                       00   A0   01   29

TERMINAL RESPONSE : GET CARD READER STATUS 2.1.1b

Logically:

Command details	
Command number:	1
Command type:	GET CARD READER STATUS
Command qualifier:	Card reader status
Device identities	
Source device:	ME
Destination device:	SIM
Result	
General Result:	Command performed successfully
Card reader status	
Identity of card reader:	01
Card reader removable:	Yes
Card reader present:	No
Card reader ID-1 size:	No
Card present in reader:	No
Card powered:	No

Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	09							

27.22.4.20.2.5   Test Requirement

The ME shall operate in the manner defined in expected 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 Test

27.22.4.21.1.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default 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
1	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.1.1	
2	ME → SIM	FETCH	
3		PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.1	[start timer 1]
4	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.1	[command performed successfully]
5	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.1.2	After 1 minute following reception of Terminal Response
6	ME → SIM	FETCH	
7		PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.2	[ask value of timer 1]
8	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.2	[command performed successfully]
9	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.1.3	Before timer expires!
10	ME → SIM	FETCH	
11		PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.3	[reinitialise timer 1]
12	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.3	[command performed successfully]
13	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.1.4	After 30 seconds following reception of the Terminal Response
14	ME → SIM	FETCH	
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.4	[deactivate timer 1]
16	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.4	[command performed successfully]

PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.1

Logically:

```
        Command details
            Command number:             1
            Command type:               TIMER MANAGEMENT
            Command qualifier:          start the Timer
        Device identities
            Source device:              SIM
            Destination device:         ME
        Timer identifier:
            Identifier of timer:        1
        Timer value:
            Value of timer:              5 min
```

Coding :

```
        BER-TLV:    D0   11   81   03   01   27   00   82   02   81   82   A4
                    01   01   A5   03   00   50   00
```


PROACTIVE COMMAND : TIMER MANAGEMENT 1.1.2

Logically:

```
        Command details
            Command number:             1
            Command type:               TIMER MANAGEMENT
            Command qualifier:          get the current value of the Timer
        Device identities
            Source device:              SIM
            Destination device:         ME
        Timer identifier:
            Identifier of timer:        1
```

Coding :

```
        BER-TLV:    D0   0C   81   03   01   27   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 1.1.4

Logically:

Command details
    Command number: 1
    Command type: TIMER MANAGEMENT
    Command qualifier: deactivate the Timer
Device identities
    Source device: SIM
    Destination device: ME
Timer identifier:
    Identifier of timer: 1

Coding :

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	01										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.1 and 1.1.3

Logically:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: start the Timer
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Timer identifier:
        Identifier of timer: 1

Coding :

    BER-TLV: 81   03   01   27   00   82   02   82   81   83   01   00
                A4   01   01

TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.2

Logically:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: get the current value of the Timer
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Timer identifier:
        Identifier of timer: 1
    Timer value:
        value of timer: value < to the timer value of command 1.1.1

Coding :

    BER-TLV: 81   03   01   27   10   82   02   82   81   83   01   00
                A4   01   01   A5   03   xx   xx   xx

TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.4

Logically:
    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: deactivate the Timer
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Timer identifier:
        Identifier of timer: 1
    Timer value:
        value of timer: value < to the timer value of command 1.1.3

Coding :
        BER-TLV: 81   03   01   27   01   82   02   82   81   83   01   00
                      A4   01   01   A5   03   xx   xx   xx

Expected Sequence 1.2 (TIMER MANAGEMENT, start timer 2 several times, get the current value of the timer and deactivate the timer successfully)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.2.1	
2	ME → SIM	FETCH	
3		PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.1	[start timer 2]
4	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.1	[command performed successfully]
5	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.2.2	After 1 minute following reception of Terminal Response
6	ME → SIM	FETCH	
7		PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.2	[ask value of timer 2]
8	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.2	[command performed successfully]
9	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.2.3	Before timer expires!
10	ME → SIM	FETCH	
11		PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.3	[reinitialise timer 2]
12	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.3	[command performed successfully]
13	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.2.4	After 10 seconds following reception of Terminal Response
14	ME → SIM	FETCH	
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.4	[deactivate timer 2]
16	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.4	[command performed successfully]

PROACTIVE COMMAND:TIMER MANAGEMENT 1.2.1

Logically:

```
Command details
    Command number:            1
    Command type:              TIMER MANAGEMENT
    Command qualifier:         start the Timer
Device identities
    Source device:             SIM
    Destination device:        ME
Timer identifier:
    Identifier of timer:       2
Timer value:
    Value of timer:            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 1.2.2

Logically:

```
Command details
    Command number:            1
    Command type:              TIMER MANAGEMENT
    Command qualifier:         get the current value of the Timer
Device identities
    Source device:             SIM
    Destination device:        ME
Timer identifier:
    Identifier of timer:       2
```

Coding :

```
BER-TLV:    D0   0C   81   03   01   27   10   82   02   81   82   A4
            01   02
```

PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.3

Logically:

Command details
    Command number: 1
    Command type: TIMER MANAGEMENT
    Command qualifier: start the Timer
Device identities
    Source device: SIM
    Destination device: ME
Timer identifier:
    Identifier of timer: 2
Timer value:
    Value of timer: 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 1.2.4

Logically:

Command details
    Command number: 1
    Command type: TIMER MANAGEMENT
    Command qualifier: deactivate the Timer
Device identities
    Source device: SIM
    Destination device: ME
Timer identifier:
    Identifier of timer: 2

Coding :
    BER-TLV: D0   0C   81   03   01   27   01   82   02   81   82   A4
                  01   02

TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.1 and 1.2.3

Logically:
  Command details
    Command number: 1
    Command type: TIMER MANAGEMENT
    Command qualifier: start the Timer
  Device identities
    Source device: ME
    Destination device: SIM
  Result
    General Result: Command performed successfully
  Timer identifier:
    Identifier of timer: 2

Coding :
    BER-TLV: 81 03 01 27 00 82 02 82 81 83 01 00
          A4 01 02

TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.2

Logically:
  Command details
    Command number: 1
    Command type: TIMER MANAGEMENT
    Command qualifier: get the current value of the Timer
  Device identities
    Source device: ME
    Destination device: SIM
  Result
    General Result: Command performed successfully
  Timer identifier:
    Identifier of timer: 2
  Timer value:
    value of timer: value < to the timer value of command 1.2.1

Coding :
    BER-TLV: 81 03 01 27 10 82 02 82 81 83 01 00
          A4 01 02 A5 03 xx xx xx

TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.4

Logically:
    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: deactivate the Timer
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Timer identifier:
        Identifier of timer: 2
    Timer value:
        value of timer: value < to the timer value of command 1.2.3

Coding :

	BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	00
		A4	01	02	A5	03	xx	xx	xx				

Expected Sequence 1.3 (TIMER MANAGEMENT, start timer 8 several times, get the current value of the timer and deactivate the timer successfully)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.3.1	
2	ME → SIM	FETCH	
3		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:

Command details
    Command number: 1
    Command type: TIMER MANAGEMENT
    Command qualifier: start the Timer
Device identities
    Source device: SIM
    Destination device: ME
Timer identifier:
    Identifier of timer: 8
Timer value:
    Value of timer: 20min

Coding :

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	08	A5	03	00	02	00					

PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.2

Logically:

Command details
    Command number: 1
    Command type: TIMER MANAGEMENT
    Command qualifier: get the current value of the Timer
Device identities
    Source device: SIM
    Destination device: ME
Timer identifier:
    Identifier of timer: 8

Coding :

BER-TLV:	D0	0C	81	03	01	27	10	82	02	81	82	A4
	01	08										

PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.3

Logically:

Command details
    Command number: 1
    Command type: TIMER MANAGEMENT
    Command qualifier: start the Timer
Device identities
    Source device: SIM
    Destination device: ME
Timer identifier:
    Identifier of timer: 8
Timer value:
    Value of timer: 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:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: start the Timer
    Device identities
        Source device: ME
        Destination device: SIM
    Result
    General Result: Command performed successfully
    Timer identifier:
        Identifier of timer: 8

Coding :

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	08									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.2

Logically:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: get the current value of the Timer
    Device identities
        Source device: ME
        Destination device: SIM
    Result
    General Result: Command performed successfully
    Timer identifier:
        Identifier of timer: 8
    Timer value:
        value of timer: value < to the timer value of command 1.3.1

Coding :

BER-TLV:	81	03	01	27	10	82	02	82	81	83	01	00
	A4	01	08	A5	03	xx	xx	xx				

TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.4

Logically:

Command details		
Command number:	1	
Command type:	TIMER MANAGEMENT	
Command qualifier:	deactivate the Timer	
Device identities		
Source device:	ME	
Destination device:	SIM	
Result		
General Result:	Command performed successfully	
Timer identifier:		
Identifier of timer:	8	
Timer value:		
value of timer:	value < to the timer value of command 1.3.3	

Coding :

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	00
	A4	01	08	A5	03	xx	xx	xx				

Expected Sequence1.4 (TIMER MANAGEMENT, try to get the current value of a timer which is not started: action in contradiction with the current timer state)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.1	
2	ME → SIM	FETCH	
3		PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.1	[get current value from timer 1]
4	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.1	[action in contradiction with the current timer state]
5	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.2	
6	ME → SIM	FETCH	
7		PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.2	[get current value from timer 2]
8	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.2	[action in contradiction with the current timer state]
9	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.3	
10	ME → SIM	FETCH	
11		PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.3	[get current value from timer 3]
12	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.3	[action in contradiction with the current timer state]
13	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.4	
14	ME → SIM	FETCH	
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.4	[get current value from timer 4]
16	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.4	[action in contradiction with the current timer state]
13	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.5	
14	ME → SIM	FETCH	
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.5	[get current value from timer 5]
16	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.5	[action in contradiction with the current timer state]
13	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.6	
14	ME → SIM	FETCH	
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.6	[get current value from timer 6]
16	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.6	[action in contradiction with the current timer state]
13	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.7	
14	ME → SIM	FETCH	
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.7	[get current value from timer 7]
16	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.7	[action in contradiction with the current timer state]
13	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.8	
14	ME → SIM	FETCH	
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.8	[get current value from timer 8]
16	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.8	[action in contradiction with the current timer state]

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.1

Logically:

Command details		
Command number:	1	
Command type:	TIMER MANAGEMENT	
Command qualifier:	get the current value of the Timer	
Device identities		
Source device:	SIM	
Destination device:	ME	
Timer identifier:		
Identifier of timer:	1	

Coding :

BER-TLV:	D0	0C	81	03	01	27	10	82	02	81	82	A4
	01	01										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.1

Logically:

Command details		
Command number:	1	
Command type:	TIMER MANAGEMENT	
Command qualifier:	get current value from the Timer	
Device identities		
Source device:	ME	
Destination device:	SIM	
Result		
General Result:	Action in contradiction with the current timer state	
Timer identifier:		
Identifier of timer:	1	

Coding :

BER-TLV:	81	03	01	27	10	82	02	82	81	83	01	24
	A4	01	01									

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.2

Logically:

Command details
    Command number: 1
    Command type: TIMER MANAGEMENT
    Command qualifier: get the current value of the Timer
Device identities
    Source device: SIM
    Destination device: ME
Timer identifier:
    Identifier of timer: 2

Coding :

| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 02 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.2

Logically:

Command details
    Command number: 1
    Command type: TIMER MANAGEMENT
    Command qualifier: get current value from the Timer
Device identities
    Source device: ME
    Destination device: SIM
Result
    General Result: Action in contradiction with the current timer state

Timer identifier:
    Identifier of timer: 2

Coding :

| BER-TLV: | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 02 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.3

Logically:

Command details
    Command number: 1
    Command type: TIMER MANAGEMENT
    Command qualifier: get the current value of the Timer
Device identities
    Source device: SIM
    Destination device: ME
Timer identifier:
    Identifier of timer: 3

Coding :

| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 03 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.3

Logically:

Command details	
Command number:	1
Command type:	TIMER MANAGEMENT
Command qualifier:	get current value from the Timer
Device identities	
Source device:	ME
Destination device:	SIM
Result	
General Result:	Action in contradiction with the current timer state
Timer identifier:	
Identifier of timer:	3

Coding :

BER-TLV:	81	03	01	27	10	82	02	82	81	83	01	24
	A4	01	03									

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.4

Logically:

Command details	
Command number:	1
Command type:	TIMER MANAGEMENT
Command qualifier:	get the current value of the Timer
Device identities	
Source device:	SIM
Destination device:	ME
Timer identifier:	
Identifier of timer:	4

Coding :

BER-TLV:	D0	0C	81	03	01	27	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 1.4.6

Logically:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: get the current value of the Timer
    Device identities
        Source device: SIM
        Destination device: ME
    Timer identifier:
        Identifier of timer: 6

Coding :

BER-TLV:	D0	0C	81	03	01	27	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:
    Command details
      Command number: 1
      Command type: TIMER MANAGEMENT
      Command qualifier: get current value from the Timer
    Device identities
      Source device: ME
      Destination device: SIM
    Result
    General Result: Action in contradiction with the current timer state

    Timer identifier:
      Identifier of timer: 7

Coding :

BER-TLV:	81	03	01	27	10	82	02	82	81	83	01	24
	A4	01	07									

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.8

Logically:

    Command details
      Command number: 1
      Command type: TIMER MANAGEMENT
      Command qualifier: get the current value of the Timer
    Device identities
      Source device: SIM
      Destination device: ME
    Timer identifier:
      Identifier of timer: 8

Coding :

BER-TLV:	D0	0C	81	03	01	27	10	82	02	81	82	A4
	01	08										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.8

Logically:
    Command details
      Command number: 1
      Command type: TIMER MANAGEMENT
      Command qualifier: get current value from the Timer
    Device identities
      Source device: ME
      Destination device: SIM
    Result
    General Result: Action in contradiction with the current timer state

    Timer identifier:
      Identifier of timer: 8

Coding :

BER-TLV:	81	03	01	27	10	82	02	82	81	83	01	24
	A4	01	08									

Expected Sequence1.5 (TIMER MANAGEMENT, try to deactivate a timer which is not started: action in contradiction with the current timer state)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.1	
2	ME → SIM	FETCH	
3		PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.1	[deactivate timer 1]
4	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.1	[action in contradiction with the current timer state]
5	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.2	
6	ME → SIM	FETCH	
7		PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.2	[deactivate timer 2]
8	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.2	[action in contradiction with the current timer state]
9	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.3	
10	ME → SIM	FETCH	
11		PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.3	[deactivate timer 3]
12	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.3	[action in contradiction with the current timer state]
13	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.4	
14	ME → SIM	FETCH	
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.4	[deactivate timer 4]
16	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.4	[action in contradiction with the current timer state]
13	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.5	
14	ME → SIM	FETCH	
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.5	[deactivate timer 5]
16	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.5	[action in contradiction with the current timer state]
13	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.6	
14	ME → SIM	FETCH	
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.6	[deactivate timer 6]
16	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.6	[action in contradiction with the current timer state]
13	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.7	
14	ME → SIM	FETCH	
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.7	[deactivate timer 7]
16	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.7	[action in contradiction with the current timer state]
13	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.8	
14	ME → SIM	FETCH	
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.8	[deactivate timer 8]
16	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.8	[action in contradiction with the current timer state]

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.1

Logically:

```
Command details
    Command number:             1
    Command type:               TIMER MANAGEMENT
    Command qualifier:          deactivate the Timer
Device identities
    Source device:              SIM
    Destination device:         ME
Timer identifier:
    Identifier of timer:        1
```

Coding :

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	01										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.1

Logically:
```
Command details
    Command number:             1
    Command type:               TIMER MANAGEMENT
    Command qualifier:          Deactivate Timer
Device identities
    Source device:              ME
    Destination device:         SIM
Result
    General Result:             Action in contradiction with the current timer state
Timer identifier:
    Identifier of timer:        1
```

Coding :

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	01									

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.2

Logically:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: deactivate the Timer
    Device identities
        Source device: SIM
        Destination device: ME
    Timer identifier:
        Identifier of timer: 2

Coding :

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	02										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.2

Logically:
    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: Deactivate Timer
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Action in contradiction with the current timer state

    Timer identifier:
        Identifier of timer: 2

Coding :

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	02									

PROACTIVE COMMAND3: TIMER MANAGEMENT 1.5.3

Logically:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: deactivate the Timer
    Device identities
        Source device: SIM
        Destination device: ME
    Timer identifier:
        Identifier of timer: 3

Coding :

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	03										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.3

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 1.5.4

Logically:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: deactivate the Timer
    Device identities
        Source device: SIM
        Destination device: ME
    Timer identifier:
        Identifier of timer: 4

Coding :
    BER-TLV: D0 0C 81 03 01 27 01 82 02 81 82 A4
               01 04

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.4

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 1.5.5

Logically:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: deactivate the Timer
    Device identities
        Source device: SIM
        Destination device: ME
    Timer identifier:
        Identifier of timer: 5

Coding :

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	05										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.5

Logically:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: Deactivate Timer
    Device identities
        Source device: ME
        Destination device: SIM
    Result
    General Result: Action in contradiction with the current timer state

    Timer identifier:
        Identifier of timer: 5

Coding :

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	05									

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.6

Logically:

Command details		
Command number:	1	
Command type:	TIMER MANAGEMENT	
Command qualifier:	deactivate the Timer	
Device identities		
Source device:	SIM	
Destination device:	ME	
Timer identifier:		
Identifier of timer:	6	

Coding :

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	06										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.6

Logically:

Command details	
Command number:	1
Command type:	TIMER MANAGEMENT
Command qualifier:	Deactivate Timer
Device identities	
Source device:	ME
Destination device:	SIM
Result	
General Result:	Action in contradiction with the current timer state
Timer identifier:	
Identifier of timer:	6

Coding :

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	06									

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.7

Logically:

Command details		
Command number:	1	
Command type:	TIMER MANAGEMENT	
Command qualifier:	deactivate the Timer	
Device identities		
Source device:	SIM	
Destination device:	ME	
Timer identifier:		
Identifier of timer:	7	

Coding :

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	07										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.7

Logically:
>   Command details
>   Command number: 1
>   Command type: TIMER MANAGEMENT
>   Command qualifier: Deactivate Timer
>   Device identities
>   Source device: ME
>   Destination device: SIM
>   Result
>   General Result: Action in contradiction with the current timer state
>
>   Timer identifier:
>   Identifier of timer: 7

Coding :
>   BER-TLV: 81   03   01   27   01   82   02   82   81   83   01   24
>   A4   01   07

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.8

Logically:

>   Command details
>   Command number: 1
>   Command type: TIMER MANAGEMENT
>   Command qualifier: deactivate the Timer
>   Device identities
>   Source device: SIM
>   Destination device: ME
>   Timer identifier:
>   Identifier of timer: 8

Coding :
>   BER-TLV: D0   0C   81   03   01   27   01   82   02   81   82   A4
>   01   08

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.8

Logically:
>   Command details
>   Command number: 1
>   Command type: TIMER MANAGEMENT
>   Command qualifier: Deactivate Timer
>   Device identities
>   Source device: ME
>   Destination device: SIM
>   Result
>   General Result: Action in contradiction with the current timer state
>
>   Timer identifier:
>   Identifier of timer: 8

Coding :
>   BER-TLV: 81   03   01   27   01   82   02   82   81   83   01   24
>   A4   01   08

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 1.6.3

Logically:
    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: start the Timer
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Timer identifier:
        Identifier of timer: 3

Coding :

| | BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | | A4 | 01 | 03 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4

Logically:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: start the Timer
    Device identities
        Source device: SIM
        Destination device: ME
    Timer identifier:
        Identifier of timer: 4
    Timer value:
        Value of timer: 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 1.6.4

Logically:
    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: start the Timer
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Timer identifier:
        Identifier of timer: 4

Coding :

    BER-TLV: 81   03   01   27   00   82   02   82   81   83   01   00
                A4   01   04

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5

Logically:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: start the Timer
    Device identities
        Source device: SIM
        Destination device: ME
    Timer identifier:
        Identifier of timer: 5
    Timer value:
        Value of timer: 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 1.6.5

Logically:

Command details		
Command number:	1	
Command type:	TIMER MANAGEMENT	
Command qualifier:	start the Timer	
Device identities		
Source device:	ME	
Destination device:	SIM	
Result		
General Result:	Command performed successfully	
Timer identifier:		
Identifier of timer:	5	

Coding :

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	05									

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6

Logically:

Command details		
Command number:	1	
Command type:	TIMER MANAGEMENT	
Command qualifier:	start the Timer	
Device identities		
Source device:	SIM	
Destination device:	ME	
Timer identifier:		
Identifier of timer:	6	
Timer value:		
Value of timer:	5sec	

Coding :

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	06	A5	03	00	00	50					

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6

Logically:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: start the Timer
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Timer identifier:
        Identifier of timer: 6

Coding :

    BER-TLV: 81   03   01   27   00   82   02   82   81   83   01   00
                A4   01   06

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7

Logically:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: start the Timer
    Device identities
        Source device: SIM
        Destination device: ME
    Timer identifier:
        Identifier of timer: 7
    Timer value:
        Value of timer: 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:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: start the Timer
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Timer identifier:
        Identifier of timer: 7

Coding :

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	07									

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8

Logically:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: start the Timer
    Device identities
        Source device: SIM
        Destination device: ME
    Timer identifier:
        Identifier of timer: 8
    Timer value:
        Value of timer: 5sec

Coding :

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	08	A5	03	00	00	50					

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8

Logically:
  Command details
    Command number: 1
    Command type: TIMER MANAGEMENT
    Command qualifier: start the Timer
  Device identities
    Source device: ME
    Destination device: SIM
  Result
    General Result: Command performed successfully
  Timer identifier:
    Identifier of timer: 8
Coding :
  BER-TLV: 81 03 01 27 00 82 02 82 81 83 01 00
       A4 01 08

27.22.4.21.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

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 test

27.22.4.21.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 2.1.1	
2	ME → SIM	FETCH	
3		PROACTIVE COMMAND: TIMER MANAGEMENT 2.1.1	[timer 1]
4	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 2.1.1	[command performed successfully]
5	ME → SIM	ENVELOPE: TIMER EXPIRATION 2.1.1	
6	SIM → ME	PROACTIVE COMMAND PENDING: MORE TIME X.1(or an other SAT command tested before to ensure it is properly supported by the mobile).	[response to envelope is "91 xx"]
7	ME → SIM	FETCH	

PROACTIVE COMMAND: TIMER MANAGEMENT 2.1.1

Logically:

      Command details
         Command number: 1
         Command type: TIMER MANAGEMENT
         Command qualifier: start the Timer
      Device identities
         Source device: SIM
         Destination device: ME
      Timer identifier:
         Identifier of timer: 1
      Timer value:
         Value of timer: 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:

    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: start the Timer
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Timer identifier:
        Identifier of timer: 1

Coding:

    BER-TLV: 81   03   01   27   00   82   02   82   81   83   01   00
                  A4   01   01

ENVELOPE: TIMER EXPIRATION 2.1.1

Logically:

    Device identities
        Source device: ME
        Destination device: SIM
    Timer identifier: Timer 1
    Timer value
        Hour: '00'
        Minute: '00'
        Second: '10' +/- 1 sec

Coding :

    BER-TLV: D7   0C   82   02   82   81   A4   01   01   A5   03   00
                  00   xx

Expected Sequence 2.2A (TIMER EXPIRATION, SIM application toolkit busy)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 2.2.1	
2	ME → SIM	FETCH	
3		PROACTIVE COMMAND: TIMER MANAGEMENT 2.2.1	[timer 1]
4	ME → SIM	TERMINAL RESPONSE: TIMER MANAGEMENT 2.2.1	[command performed successfully]
5	ME → SIM	ENVELOPE: TIMER EXPIRATION 2.2.1A	
6	SIM → ME	PROACTIVE SIM SESSION BUSY	[SIM is busy; response to the envelope = "93 00"]
...			[SIM is busy during 10 seconds, the ME retries the sending of the envelope until it is accepted]
7	ME → SIM	ENVELOPE: TIMER EXPIRATION 2.2.1B	
8	SIM → ME	PROACTIVE SIM SESSION BUSY	[SIM is busy, response to the envelope = "93 00"]
9	ME → SIM	ENVELOPE: TIMER EXPIRATION 2.2.1C	
10	SIM → ME	PROACTIVE SIM SESSION ENDED	[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 2.2.1

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 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 2.2.1

Logically:
    Command details
        Command number: 1
        Command type: TIMER MANAGEMENT
        Command qualifier: start the Timer
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Timer identifier:
        Identifier of timer: 1

Coding:

| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 01 | | | | | | | | | |

ENVELOPE: TIMER EXPIRATION 2.2.1A

Logically:
    Device identities
        Source device: ME
        Destination device: SIM
    Timer identifier: Timer 1
    Timer value
        Hour: '00'
        Minute: '00'
        Second: '30' +/- 1 sec

Coding :

| BER-TLV: | D7 | 0C | 82 | 02 | 82 | 81 | A4 | 01 | 01 | A5 | 03 | 00 |
| | 00 | xx | | | | | | | | | | |

ENVELOPE: TIMER EXPIRATION 2.2.1B

Logically:

Device identities		
Source device:	ME	
Destination device:	SIM	
Timer identifier:	Timer 1	
Timer value		
Hour:	'00'	
Minute:	'00'	
Second:	>= timer in 2.2.1A	

Coding :

BER-TLV:	D7	0C	82	02	82	81	A4	01	01	A5	03	00
	00	xx										

ENVELOPE: TIMER EXPIRATION 2.2.1C

Logically:

Device identities		
Source device:	ME	
Destination device:	SIM	
Timer identifier:	Timer 1	
Timer value		
Hour:	'00'	
Minute:	'00'	
Second:	>= timer in 2.2.1B	

Coding :

BER-TLV:	D7	0C	82	02	82	81	A4	01	01	A5	03	00
	00	xx										

PROACTIVE COMMAND : MORE TIME 2.2.2

Logically:

Command details		
Command number:	1	
Command type:	MORE TIME	
Command qualifier:	"00"	
Device identities		
Source device:	SIM	
Destination device:	ME	

Coding:

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

TERMINAL RESPONSE : MORE TIME 2.2.2

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

Coding:

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

27.22.4.21.2.5   Test Requirement

The ME shall operate in the manner defined in expected sequences 1and 2.

27.22.4.22 SET UP IDLE MODE TEXT

27.22.4.22.1   SET UP IDLE MODE TEXT (normal)

27.22.4.22.1.1   Definition and applicability

See 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 test

27.22.4.22.1.4.1   Initial Conditions

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

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on 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:

    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 IDLE SCREEN AVAILABLE 1.1.1

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 1.1.2

Logically:

    Command details
        Command number: 1
        Command type: SET UP IDLE MODE TEXT
        Command qualifier: RFU
    Device identities
        Source device: SIM
        Destination device: ME
    Text string
        Data coding scheme: unpacked, 8 bit data
        Text: "Idle Mode Text"

      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:

    Command details
        Command number: 1
        Command type: SET UP IDLE MODE TEXT
        Command qualifier: RFU
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

    BER-TLV: 81   03   01   28   00   82   02   82   81   83   01   00

Expected Sequence 1.2 (SET UP IDLE MODE TEXT, replace idle mode text)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP 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	
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:

BER-TLV:	D0	18	81	03	01	28	00	82	02	81	82	8D
	0D	04	54	6F	6F	6C	6B	69	74	20	54	65
	73	74										

TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.2.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP IDLE MODE TEXT
        Command qualifier: RFU
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	00

Expected Sequence 1.3 (SET UP IDLE MODE TEXT, remove idle mode text)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP 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 user 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	
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 1.3.1	
11	ME → SIM	FETCH	
12	SIM → ME	PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.3.1	[Remove idle mode text]
13	ME → USER	Display idle screen / "Idle Mode Text" not to be displayed	
14	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.3.1	
15	SIM → ME	PROACTIVE SIM SESSION ENDED	

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)

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 1.1.2	
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	["Idle Mode Text"]
8	ME → USER	Display "Idle Mode Text"	
9	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.12	[Command performed successfully]
10	SS → ME	SMS PP 1.4.1	[Display immediate SMS]
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:

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

Expected Sequence 1.5 (SET UP IDLE MODE TEXT, ME power cycled)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP 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 into 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	
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	[command performed successfully]
10	USER → ME	Power off ME	
11	ME ⇔ SIM	GSM TERMINATION PROCEDURE	
12	USER → ME	Power on ME	
13	ME ⇔ SIM	GSM ACTIVATION PROCEDURE	
14	ME ⇔ SIM	SIM INITIALISATION	
14	ME → USER	Display idle screen / "Idle Mode Text" not to be displayed	

ETSI

Expected Sequence 1.6 (SET UP IDLE MODE TEXT, REFRESH with SIM Initialisation)

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 1.1.1	[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	
10	SIM → ME	PROACTIVE COMMAND PENDING: REFRESH 1.6.1	
11	ME → SIM	FETCH	
12	SIM → ME	PROACTIVE COMMAND : REFRESH 1.6.1	[SIM Initialisation]
13	ME ⇔ SIM	SIM INITIALISATION	
14	ME → USER	Display idle screen / "Idle Mode Text" not to be displayed	
15	ME → SIM	TERMINAL RESPONSE : REFRESH 1.6.1 or TERMINAL RESPONSE : REFRESH 1.6.1	[Command performed successfully] [Command performed successfully with additional files read]
16	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : REFRESH 1.6.1

Logically:

    Command details
        Command number: 1
        Command type: REFRESH
        Command qualifier: SIM Initialisation
    Device identities
        Source device: SIM
        Destination device: ME

Coding:

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

TERMINAL RESPONSE : REFRESH 1.61A

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   03   82   02   82   81   83   01   00

TERMINAL RESPONSE : REFRESH 1.61B

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

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

Expected Sequence 1.7 (SET UP IDLE MODE TEXT, large text string)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP 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 1.7.1	[large text string]
6	ME → SIM	FETCH	
7	SIM → ME	PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.7.1	
8	ME → USER	Display "The SIM shall supply a text string, which shall be displayed by the ME as an idle mode text if the ME is able to do it. The presentation style is left as an implementation decision to the ME manufacturer. The idle mode text shall be displayed in a manner that ensures that"	
9	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.7.1	[command performed successfully]
10	SIM → ME	PROACTIVE SIM SESSION ENDED	

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:

Command details		
	Command number:	1
	Command type:	SET UP IDLE MODE TEXT
	Command qualifier:	RFU
Device identities		
	Source device:	SIM
	Destination device:	ME
Text string		
	Data coding scheme:	packed, SMS default alphabet
	Text:	"The SIM shall supply a text string, which shall be displayed by the ME as an idle mode text if the ME is able to do it. The presentation style is left as an implementation decision to the ME manufacturer. The idle mode text shall be displayed in a manner that ensures that"

BER-TLV:	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:

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 1.8 (SET UP IDLE MODE TEXT, display idle mode text followed by a display 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 COMMAND PENDING: DISPLAY TEXT 1.8.1	
11	ME → SIM	FETCH	
12	SIM → ME	PROACTIVE COMMAND : DISPLAY TEXT 1.8.1	[Normal priority, wait for user to clear message, unpacked, 8 bit data]
13	ME → USER	Display " Toolkit Test 1"	
14	USER → ME	Clear Message	
15	ME → SIM	TERMINAL RESPONSE : DISPLAY TEXT 1.8.1	[Command performed successfully]
16	SIM → ME	PROACTIVE SIM SESSION ENDED	
17	ME → USER	Display "Idle Mode Text"	

PROACTIVE COMMAND : DISPLAY TEXT 1.8.1

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

  Coding:

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

TERMINAL RESPONSE : DISPLAY TEXT 1.8.1

Logically:

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

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 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" Play a standard supervisory dial tone through the external ringer for a duration of 5 seconds	
14	ME → SIM	TERMINAL RESPONSE : PLAY TONE 1.9.1	[Command performed successfully]
15	SIM → ME	PROACTIVE SIM SESSION ENDED	
16	ME → USER	Display "Idle Mode Text"	

PROACTIVE COMMAND : PLAY TONE 1.9.1

Logically:

    Command details
        Command number: 1
        Command type: PLAY TONE
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Earpiece
    Alpha identifier: "Dial Tone"
    Tone: Standard supervisory tones: dial tone
    Duration
        Time unit: Seconds
        Time interval: 5
    Coding:

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

TERMINAL RESPONSE : PLAY TONE 1.9.1

Logically:

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

    Coding:

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

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, than the ME shall reject the command with general result "Command data not understood by ME".

27.22.4.22.2.4   Method of test

27.22.4.22.2.4.1   Initial Conditions

The ME is connected to both the 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)

Step	Direction	MESSAGE / Action	Comments
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:

    Command details
        Command number: 1
        Command type: SET UP IDLE MODE TEXT
        Command qualifier: RFU
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

    BER-TLV: 81   03   01   28   00   82   02   82   81   83   01   00

Expected Sequence 2.1B (SET UP IDLE MODE TEXT, Icon is self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	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:

    Command details
        Command number: 1
        Command type: SET UP IDLE MODE TEXT
        Command qualifier: RFU
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully, but requested icon could not be displayed

Coding:

    BER-TLV: 81   03   01   28   00   82   02   82   81   83   01   04

Expected Sequence 2.2A (SET UP IDLE MODE TEXT, Icon is not self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	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:
    Command details
        Command number: 1
        Command type: SET UP IDLE MODE TEXT
        Command qualifier: RFU
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:
    BER-TLV: 81   03   01   28   00   82   02   82   81   83   01   00

Expected Sequence 2.2B (SET UP IDLE MODE TEXT, Icon is not self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	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:
    Command details
        Command number: 1
        Command type: SET UP IDLE MODE TEXT
        Command qualifier: RFU
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully, but requested icon could not be displayed

Coding:
    BER-TLV: 81   03   01   28   00   82   02   82   81   83   01   04

Expected Sequence 2.3 (SET UP IDLE MODE TEXT, Icon is self-explanatory, colour icon)

Step	Direction	MESSAGE / Action	Comments
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	
	ME USER	Display "Idle text"	
7	ME → SIM	TERMINAL RESPONSE : SET UP IDLE MODE TEXT 2.3.1	[command performed successfully] [requested icon could not be displayed]
8	SIM → ME	PROACTIVE SIM SESSION ENDED	

ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.3.1

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 2.3.1

Logically:

Command details	
Command number:	1
Command type:	SET UP IDLE MODE TEXT
Command qualifier:	RFU
Device identities	
Source device:	SIM
Destination device:	ME
Text string:	"Idle text"
Icon identifier	
Icon qualifier:	icon is self-explanatory
Icon identifier:	<record 2 in EF IMG>

Coding:

BER-TLV: D0 19 81 03 01 28 00 82 02 81 82 8D
              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:
    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

TERMINAL RESPONSE: SET UP IDLE MODE LIST 2.3.2

Logically:
    Command details
        Command number: 1
        Command type: SET UP IDLE MODE TEXT
        Command qualifier: RFU
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully, but requested icon could not be displayed

Coding:
    BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 04

Expected Sequence 2.4 (SET UP IDLE MODE TEXT, Icon is not self-explanatory, 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 2.4.1

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 2.4.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP IDLE MODE TEXT
        Command qualifier: RFU
    Device identities
        Source device: SIM
        Destination device: ME
    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   9E
                    02   01   01

TERMINAL RESPONSE : SET UP IDLE MODE LIST 2.4.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP IDLE MODE TEXT
        Command qualifier: RFU
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command data not understood by ME

Coding:
      BER-TLV: 81   03   01   28   00   82   02   82   81   83   01   32

27.22.4.22.2.5   Test Requirement

The ME shall operate in the manner defined in expected sequences 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 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)".

27.22.4.22.3.3 Test Purpose

To verify that the UCS2 coded text string is displayed by the ME as an idle mode text.

27.22.4.22.3.4 Method of test

27.22.4.22.3.4.1 Initial Conditions

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

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on 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 Procedure

Expected 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 3.1.1

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 3.1.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP IDLE MODE TEXT
        Command qualifier: RFU
    Device identities
        Source device: SIM
        Destination device: ME
    Text string
        Data coding scheme: UCS2 (16bit)
        Text: "ЗДРАВСТВУЙТЕ"

Coding:

BER-TLV:	D0	24	81	03	01	28	00	82	02	81	82	8D
	19	08	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15										

TERMINAL RESPONSE : SET UP IDLE MODE LIST 3.1.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP IDLE MODE TEXT
        Command qualifier: RFU
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	00

27.22.4.22.3.5   Test Requirement

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

27.22.4.23   RUN AT COMMAND

27.22.4.23.1   RUN AT COMMAND (normal)

27.22.4.23.1.1   Definition and applicability

See 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 test

27.22.4.23.1.4.1   Initial Conditions

The ME is connected to the SIM Simulator.The elementary files are coded as Toolkit default.

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

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.1.4.2   Procedure

Expected Sequence 1.1(RUN AT COMMAND, no alpha identifier presented, request IMSI)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: RUN AT COMMAND 1.1.1	[no alpha identifier, request IMSI]
4	ME (→ User)	The ME may give information to the user concerning what is happening	
7	ME → SIM	TERMINAL RESPONSE: RUN AT COMMAND 1.1.1	[Command performed successfully, AT Response containing IMSI]

PROACTIVE SIM COMMAND: RUN AT COMMAND 1.1.1

Logically:
> Command details
>> Command number: 1
>> Command type: RUN AT COMMAND
>> Command qualifier: "00"
> Device identities
>> Source device: SIM
>> Destination device: ME
> AT Command
>> AT Command string: "AT+CIMI"

Coding:

BER-TLV:	D0	12	81	03	01	34	00	82	02	81	82	A8
	07	41	54	2B	43	49	4D	43				

TERMINAL RESPONSE: RUN AT COMMAND 1.1.1

Logically:
> Command details
>> Command number: 1
>> Command type: RUN AT COMMAND
>> Command qualifier: "00"
> Device identities
>> Source device: ME
>> Destination device: SIM
> Result
>> General Result: Command performed successfully
> AT Response
>> AT Response string: IMSI

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00
	A9	08	08	09	10	10	32	54	76	98		

Expected Sequence 1.2 (RUN AT COMMAND, null data alpha identifier presented, request IMSI)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: RUN AT COMMAND 1.2.1	[null data alpha identifier, request IMSI]
4	ME	The ME should not give any information to user on the fact that the ME is performing an AT command	
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:
    Command details
        Command number: 1
        Command type: RUN AT COMMAND
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: ME
    Alpha identifier   null data object
    AT Command
        AT Command string: "AT+CIMI"

  Coding:

      BER-TLV: D0   14   81   03   01   34   00   82   02   81   82   85
                    00   A8   07   41   54   2B   43   49   4D   49

Expected Sequence 1.3 (RUN AT COMMAND, alpha identifier presented, request IMSI)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: RUN AT COMMAND 1.3.1	[alpha identifier, request IMSI]
4	ME → USER	Display "Run AT Command"	
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:
    Command details
        Command number: 1
        Command type: RUN AT COMMAND
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: ME
    Alpha identifier
        Alpha identifier   "Run AT Command"
    AT Command
        AT Command string: "AT+CIMI"

  Coding:

      BER-TLV: D0   22   81   03   01   34   00   82   02   81   82   85
                    0E   52   75   6E   20   41   54   20   43   6F   6D   6D
                    61   6E   64   A8   07   41   54   2B   43   49   4D   49

27.22.4.23.1.5   Test Requirement

The ME shall operate in the manner defined in expected sequences 1 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.1.1	[BASIC-ICON, self-explanatory, request IMSI]
4	ME → USER	Display BASIC ICON 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 2.1.1

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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.2.1	[COLOUR-ICON, self-explanatory, request IMSI]
4	ME → USER	Display COLOUR-ICON 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:

    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 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.3.1	[BASIC-ICON, non self-explanatory, request IMSI]
4	ME → USER	Display "Basic Icon" and BASIC-ICON 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:

    Command details
        Command number: 1
        Command type: RUN AT COMMAND
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: ME
    Alpha Identifier
        Alpha identifier: "Basic Icon"
    AT Command
        AT Command string: "AT+CIMI"
    Icon Identifier
        Icon qualifier: icon is non self-explanatory
        Icon Identifier: record 1 in EF$_{(IMG)}$

Coding:

BER-TLV:	D0	22	81	03	01	34	00	82	02	81	82	85
	0A	42	61	73	69	63	20	49	63	6F	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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.4.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: RUN AT COMMAND 2.4.1	[COLOUR-ICON, non self-explanatory, request IMSI]
4	ME → USER	Display "Colour Icon" and COLOUR-ICON 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)

Step	Direction	MESSAGE / Action	Comments
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.

Step	Direction	MESSAGE / Action	Comments
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 1.1.1

Logically:

    Command details

        Command number: 1

        Command type: SEND DTMF

        Command qualifier: "00"

    Device identities

        Source device: ME

        Destination device: SIM

    Result

        General Result: Command performed successfully

Coding:

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

Expected Sequence 1.2 (SEND DTMF, containing alpha identifier, a call has been successfully established before the beginning of the test)

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 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 1.2.1

Logically:
    Command details
        Command number: 1
        Command type: SEND DTMF
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: Network
    Alpha identifier: "Send DTMF"
    DTMF String: "1234567890"

Coding:

BER-TLV:	D0	1B	81	03	01	14	00	82	02	81	83	85
	09	53	65	6E	64	20	44	54	4D	46	AC	05
	21	43	65	87	09							

Start DTMF 1.3

Logically:
    DTMF String: "3"

Start DTMF 1.4

Logically:
    DTMF String: "4"

Start DTMF 1.5

Logically:
    DTMF String: "5"

Start DTMF 1.6

Logically:
    DTMF String: "6"

Start DTMF 1.7

Logically:
    DTMF String: "7"

Start DTMF 1.8

Logically:
    DTMF String: "8"

Start DTMF 1.9

Logically:
DTMF String: "9"

Start DTMF 1.10

Logically:
DTMF String: "0"

Expected Sequence 1.3 (SEND DTMF, containing alpha identifier with null data object, a call has been successfully established before the beginning of the test)

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 1.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DTMF 1.3.1	Alpha identifier with null data object
4	ME → USER	Do not give any information to the user on the fact that the ME is performing a SEND DTMF command. Do not locally generate audible DTMF tones and play them to the user.	
5	ME → SS	Start DTMF 1.1	["1"]
6	ME		No DTMF sending for 30 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 1.3.1

Logically:

Command details	
Command number:	1
Command type:	SEND DTMF
Command qualifier:	"00"
Device identities	
Source device:	SIM
Destination device:	Network
Alpha identifier:	"" (null data object)
DTMF String:	"1" pause pause pause pause pause pause pause pause pause "2"

Coding:

BER-TLV:	D0	13	81	03	01	14	00	82	02	81	83	85
	00	AC	06	C1	CC	CC	CC	CC	2C			

Expected Sequence 1.4 (SEND DTMF, mobile is not in a speech call)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND DTMF 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DTMF 1.1.1	
4	ME → SIM	TERMINAL RESPONSE : SEND DTMF 1.4.1	[ME currently unable to process command, not in speech call]
5	SIM → ME	PROACTIVE SIM SESSION ENDED	

TERMINAL RESPONSE : SEND DTMF 1.4.1

Logically:

Command details	
Command number:	1
Command type:	SEND DTMF
Command qualifier:	"00"
Device identities	
Source device:	ME
Destination device:	SIM
Result	
General Result:	ME currently unable to process command
Additional information:	Not in speech call

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	02	20
	07											

27.22.4.24.1.5   Test Requirement

The ME shall operate in the manner defined in expected sequences.

27.22.4.24.2 SEND DTMF (Display of icons)

27.22.4.24.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.24.2.2 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), clause 12.31 (Icon identifier), clause 6.5.4 (Icon identifiers).

27.22.4.24.2.3 Test Purpose

To verify that after a call has been successfully established the ME send the DTMF string contained in the SEND DTMF proactive SIM command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME do not locally generate audible DTMF tones and play them to the user.

To verify that the ME displays the text contained in the SEND DTMF proactive SIM command.

To verify that the ME displays the icons which are referred to in the contents of the SEND DTMF proactive SIM command.

27.22.4.24.2.4 Method of test

27.22.4.24.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

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 Procedure

Expected Sequence 2.1 (SEND DTMF, BASIC ICON self explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND DTMF 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DTMF 2.1.1	[BASIC-ICON, 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 2.1.1

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.

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND DTMF 2.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DTMF 2.1.1	[BASIC-ICON, self-explanatory]
4	ME → USER	Display "Basic 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	

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.

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 the COLOUR-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 2.2.1

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 NOTIFICATION

27.22.4.25.1 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 Test

27.22.4.25.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.25.4.2 Procedure

Expected Sequence 1.1 (LANGUAGE NOTIFICATION)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: LANGUAGE NOTIFICATION 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LANGUAGE NOTIFICATION 1.1.1	Language specified in the command is different from the one set on the mobile.
4	ME → SIM	TERMINAL RESPONSE : LANGUAGE NOTIFICATION 1.1.1	[Command performed successfully]
5	SIM → ME	PROACTIVE SIM SESSION ENDED	Check that language of ME has been replaced by the one specified in LANGUAGE NOTIFICATION 1.1.1

PROACTIVE COMMAND : LANGUAGE NOTIFICATION 1.1.1

Logically:
Command details
    Command number: 1
    Command type: LANGUAGE NOTIFICATION
    Command qualifier: "01" (specific language notification)
Device identities
    Source device: SIM
    Destination device: ME
Language
    Language   'se'(spanish) -> 73 65
                                       or 'de'→64 65 (german) for instance : choose a language different
                                       from the one initially set on the ME to check the proper execution
                                       of the command

Coding:

BER-TLV:	D0	0D	81	03	01	35	01	82	02	81	82	AD
	02	73	65									

TERMINAL RESPONSE : LANGUAGE NOTIFICATION 1.1.1

Logically:
Command details
    Command number: 1
    Command type: LANGUAGE NOTIFICATION
    Command qualifier: "01"
Device identities
    Source device: ME
    Destination device: SIM
Result
    General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	35	01	82	02	82	81	83	01	00

Expected Sequence 1.2 (LANGUAGE NOTIFICATION)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: LANGUAGE NOTIFICATION 1.2.1	
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 1.2.1

Logically:

    Command details
        Command number: 1
        Command type: LANGUAGE NOTIFICATION
        Command qualifier: "00" (non specific language notification)
    Device identities
        Source device: SIM
        Destination device: ME

  Coding:

BER-TLV:	D0	09	81	03	01	35	01	82	02	81	82

TERMINAL RESPONSE : LANGUAGE NOTIFICATION 1.2.1

Logically:

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

Coding:

BER-TLV:	81	03	01	35	00	82	02	82	81	83	01	00

27.22.4.25.5   Test Requirement

The ME shall operate in the manner defined in expected 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 l 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)

Step	Direction	MESSAGE / Action	Comments
0	ME		[the ME is in idle mode]
1	SIM → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 1.1.1	[connect to the default URL, "launch browser, if not already launched", no null alpha id.]
4	ME → USER	ME displays the alpha identifier	
5	USER → ME	The user may have to confirm the launch browser.	[option : user confirmation]
6	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 1.1.1	[Command performed successfully]
7	ME->SS	The ME attempts to launch the session with the default Wap parameters and 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 1.1.1

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   empty
    Alpha identifier   "Default URL"

  Coding:

BER-TLV:	D0	18	81	03	01	15	00	82	02	81	82	31
	00	05	0B	44	65	66	61	76	6C	74	20	55
	52	4C										

TERMINAL RESPONSE : LAUNCH BROWSER 1.1.1

Logically:

    Command details
        Command number: 1
        Command type: LAUNCH BROWSER
        Command qualifier: launch browser, if not already used
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

Expected Sequence 1.2 (LAUNCH BROWSER, connect to the specified URL, alpha identifier length=0)

Step	Direction	MESSAGE / Action	Comments

0	ME		[the ME is in idle mode]
1	SIM → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 1.2.1	[connect to defined URL, "launch browser, if not already launched, alpha identifier length=0]
4	ME → USER	No information should be displayed.	
5	USER → ME	The user may have to confirm the launch browser.	[option : user confirmation]
6	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 1.2.1	[Command performed successfully]
7	ME->SS	The ME attempts to connect the URL specified in the LAUNCH BROWSER command.	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	The user verifies that the URL is properly connected. Then he/she ends the navigation. The ME returns in idle mode.	

PROACTIVE COMMAND : LAUNCH BROWSER 1.2.1

Logically:

Command details
Command number: 1
Command type: LAUNCH BROWSER
Command qualifier: launch browser, if not already 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:

    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:

        BER-TLV: 81   03   01   15   00   82   02   82   81   83   01   00

Expected Sequence 1.3 (LAUNCH BROWSER, Browser identity, no alpha identifier)

Step	Direction	MESSAGE / Action	Comments
0	ME		[the ME is in idle mode]
1	SIM → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.3.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 1.3.1	[connect to the default URL, "launch browser, if not already launched, browser identity]
4	ME → USER	ME may display a default message of its own.	
5	USER → ME	The user may confirm the launch browser.	[option : user confirmation]
6	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 1.3.1	[Command performed successfully]
7	ME->SS	The ME attempts to connect the default URL.	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	The user verifies that the default 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:

    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
    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:

    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:

    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	[Command performed successfully]
		TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 B Or	[Launch browser generic error code – bearer not available]
		TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 C	[Command performed with partial comprehension]

7	ME->SS	The ME attempts to connect the default URL using the requested bearer and proxy identity	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	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:

BER-TLV:	D0	1C	81	03	01	15	00	82	02	81	82	31
	00	32	01	03	0D	0C	04	61	62	63	2E	64
	65	66	2E	67	68	69						

TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 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:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 B

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: 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:
   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, 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	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 1.5.1 A Or	[Command performed successfully]
		TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 B Or	[Launch browser generic error code – bearer not available]
		TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 C	[Command performed with partial comprehension]
7	ME->SS	The ME attempts to connect the default URL.	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	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.	

PROACTIVE COMMAND : LAUNCH BROWSER 1.5.1

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, USSD, SMS
 Gateway/Proxy id
  DCS   7 bits default alphabet
  Text string   abc.def.ghi (different from the default IP address)

 Coding:

BER-TLV:	D0	1D	81	03	01	15	00	82	02	81	82	31
	00	32	03	03	02	00	0D	0C	00	61	F1	D8
	45	2E	9B	5D	67	74	1A					

TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 A

ETSI

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:

      BER-TLV: 81   03   01   15   00   82   02   82   81   83   01   00

TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 B

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: 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 C

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, 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)

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 2.1.1	

2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 2.1.1	[connect to the default URL, "use the existing browser", no null alpha id.]
4	ME → USER	ME displays the alpha identifier	
5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 2.1.1	[Command performed successfully]
7	ME->SS	The ME does not close the existing session and attempts to connect the default URL.	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL.	

PROACTIVE COMMAND : LAUNCH BROWSER 2.1.1

Logically:

    Command details
        Command number: 1
        Command type: LAUNCH BROWSER
        Command qualifier: use the existing browser
    Device identities
        Source device: SIM
        Destination device: ME
    URL   empty
    Alpha identifier   "Default URL"

  Coding:

BER-TLV:	D0	18	81	03	01	15	02	82	02	81	82	31
	00	05	0B	44	65	66	61	76	6C	74	20	55
	52	4C										

TERMINAL RESPONSE : LAUNCH BROWSER 2.1.1

Logically:

    Command details
        Command number: 1
        Command type: LAUNCH BROWSER
        Command qualifier: use the existing browser
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	00

ETSI

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:
    Command details
        Command number: 1
        Command type: LAUNCH BROWSER
        Command qualifier: close the existing browser session and launch new browser session
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

      BER-TLV: 81   03   01   15   03   82   02   82   81   83   01   00

Expected Sequence 2.3 (LAUNCH BROWSER, if not already launched)

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a 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:
    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   empty

  Coding:

      BER-TLV: D0   0C   81   03   01   15   00   82   02   81   82   31
                 00

ETSI

TERMINAL RESPONSE : LAUNCH BROWSER 2.3.1

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: 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 test

27.22.4.26.3.4.1 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)

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 3.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 3.1.1	[connect to the default URL, "use the existing browser", alpha id. In UCS2]
4	ME → USER	ME displays the alpha identifier "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]
5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 3.1.1	[Command performed successfully]
7	ME->SS	The ME does not close the existing session and attempts to connect the default URL.	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL.	

PROACTIVE COMMAND : LAUNCH BROWSER 3.1.1

Logically:

    Command details
        Command number: 1
        Command type: LAUNCH BROWSER
        Command qualifier: use the existing browser
    Device identities
        Source device: SIM
        Destination device: ME
    URL   empty
    Alpha Identifier
        Data coding scheme: UCS2 (16 bits)
        Text: "ЗДРАВСТВУЙТЕ"

  Coding:

    BER-TLV: D0 26 81 03 01 15 02 82 02 81 82 31
                00 05 19 80 04 17 04 14 04 20 04 10
                04 12 04 21 04 22 04 12 04 23 04 19
                04 22 04 15

TERMINAL RESPONSE : LAUNCH BROWSER 3.1.1

Logically:

    Command details
        Command number: 1
        Command type: LAUNCH BROWSER
        Command qualifier: use the existing browser
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

    BER-TLV: 81 03 01 15 02 82 02 82 81 83 01 00

27.22.4.26.4   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 test

27.22.4.26.4.4.1   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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.1.1	[Browser is in use, the current session is not secured]]
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 4.1.1	[connect to the default URL, "use the existing browser", no null alpha id.]
4	ME → USER	ME displays the alpha identifier and the icon	["Not self explan."]
5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 4.1.1 A	[Command performed successfully]
7	ME->SS	The ME does not close the existing session and attempts to connect the default URL.	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	

| 9 | USER → ME | The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL. | |

PROACTIVE COMMAND : LAUNCH BROWSER 4.1.1

Logically:

    Command details
        Command number: 1
        Command type: LAUNCH BROWSER
        Command qualifier: use the existing browser
    Device identities
        Source device: SIM
        Destination device: ME
    URL   empty
    Alpha Identifier   "Not self explan."
    Icon Identifier:
        Icon qualifier: not self-explanatory
        Icon Identifier: record 1 in EF(IMG)

  Coding:

    BER-TLV: D0   21   81   03   01   15   02   82   02   81   82   31
               00   05   10   4E   6F   74   20   73   65   6C   66   20
               65   78   70   6C   61   6E   2E   1E   02   01   01

TERMINAL RESPONSE : LAUNCH BROWSER 4.1.1 A

Logically:

    Command details
        Command number: 1
        Command type: LAUNCH BROWSER
        Command qualifier: use the existing browser
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

    BER-TLV: 81   03   01   15   02   82   02   82   81   83   01   00

Expected Sequence 4.1B (LAUNCH BROWSER, use the existing browser, icon not self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.1.1	[Browser is in use, the current session is not secured]]
2	ME → SIM	FETCH	

3	SIM → ME	PROACTIVE COMMAND : LAUNCH BROWSER 4.1.1	[connect to the default URL, "use the existing browser", no null alpha id.]
4	ME → USER	ME displays the alpha identifier Without the icon	["Not self explan."]
5	USER → ME	The user confirms the launch browser.	[user confirmation]
6	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 4.1.1 B	[Command performed successfully but requested icon could not be displayed]
7	ME->SS	The ME does not close the existing session and attempts to connect the default URL.	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL.	

TERMINAL RESPONSE : LAUNCH BROWSER 4.1.1 B

Logically:
    Command details
        Command number: 1
        Command type: LAUNCH BROWSER
        Command qualifier: use the existing browser
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully but requested icon could not be displayed
  Coding:

      BER-TLV: 81   03   01   15   02   82   02   82   81   83   01   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	ME → SIM	TERMINAL RESPONSE : LAUNCH BROWSER 4.2.1 A	[Command performed successfully]
7	ME->SS	The ME does not close the existing session and attempts to connect the default URL.	
8	SIM → ME	PROACTIVE SIM SESSION ENDED	
9	USER → ME	The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL.	

PROACTIVE COMMAND : LAUNCH BROWSER 4.2.1

Logically:

    Command details
        Command number: 1
        Command type: LAUNCH BROWSER
        Command qualifier: use the existing browser
    Device identities
        Source device: SIM
        Destination device: ME
    URL   empty
    Alpha Identifier   "Self explan."
    Icon Identifier:
        Icon qualifier: self-explanatory
        Icon Identifier: record 1 in $EF_{(IMG)}$

  Coding:

BER-TLV:	D0	1D	81	03	01	15	02	82	02	81	82	31
	00	05	0C	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] [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 4.2.1 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 test

27.22.4.27.4.1 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.1.1	
4	ME → SS	SETUP CALL	
5	SS → ME	CONNECTED	
6	ME → SIM	TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.1.1	[Command performed successfully]

PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

Logically:
Command details
    Command number: 1
    Command type: OPEN CHANNEL
    Command qualifier: immediate link establishment
Device identities
    Source device: 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:

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 1.1.1

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
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:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	B8	02	81	01	B5	04	01	07	00	01	B9	02
	00	2A										

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:

    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:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	B8	02	81	01	B5	04	01	07	00	01	B9	02
	00	2A										

Expected Sequence 1.3 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.120)

Step	Direction	MESSAGE / Action	Comments
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:
    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:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	B8	02	81	01	B5	04	01	07	00	01	B9	02
	00	2A										

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										

<u>Expected Sequence 1.5</u> (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.32, bearer asynchronous RDI)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.5.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.5.1	
4	ME → SS	SETUP CALL	
5	SS → ME	CONNECTED	
6	ME → SIM	TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.5.1	[Command performed successfully]

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(OPEN 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

Step	Direction	MESSAGE / Action	Comments
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:

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 1.7.1

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 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:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	07
	B8	02	81	01	B5	04	01	07	00	01	B9	02
	00	2A										

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
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:		56000bps V.120
Bearer service:		data circuit asynchronous
Connection element:		non-transparent
Buffer size		42

Coding:

```
BER-TLV:  81  03  01  40  01  82  02  82  81  83  01  00
          B8  02  81  01  B5  04  01  78  00  01  B9  02
          00  2A
```

PROACTIVE COMMAND: OPEN CHANNEL 1.9.2

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 1.9.2

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: 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP CALL 1.10.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND: SET UP CALL 1.10.1	
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:
    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 1.10.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: only if not currently busy on another call
    Device identities
        Source device: Network
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

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

TERMINAL RESPONSE: OPEN CHANNEL 1.10.1

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: ME currently unable to process command
        Additional info: ME currently busy on call

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	02	20
	02											

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.

Step	Direction	MESSAGE / Action	Comments
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).

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.2.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : CLOSE CHANNEL 1.2.1	
4	ME → SIM	TERMINAL RESPONSE CLOSE CHANNEL 1.2.1	[Invalide channel number]

PROACTIVE COMMAND: CLOSE CHANNEL 1.2.1

Logically:
      Command details
            Command number: 1
            Command type: CLOSE CHANNEL
            Command qualifier: RFU
      Device identities
            Source device: 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).

Step	Direction	MESSAGE / Action	Comments
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 02	03	01	41	00	82	02	82	81	83	02	3A

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

<u>Expected sequence 1.1</u> (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).

Step	Direction	MESSAGE / Action	Comments
1	ME → SIM	ENVELOPPE (Data Available)	(1kB bytes of data in the ME buffer)
2	SIM → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.1	
3	ME → SIM	FETCH	
4	SIM → ME	PROACTIVE COMMAND: RECEIVE DATA 1.1.1	200 Bytes
5	ME → SIM	TERMINAL RESPONSE: RECEIVE DATA 1.1.1	
6	SIM → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.2	
7	ME → SIM	FETCH	
8	SIM → ME	PROACTIVE COMMAND: RECEIVE DATA 1.1.2	200 Bytes
9	ME → SIM	TERMINAL RESPONSE: RECEIVE DATA 1.1.2	
10	SIM → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.3	
11	ME → SIM	FETCH	
12	SIM → ME	PROACTIVE COMMAND: RECEIVE DATA 1.1.3	200 Bytes
13	ME → SIM	TERMINAL RESPONSE: RECEIVE DATA 1.1.3	
14	SIM → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.4	
15	ME → SIM	FETCH	
16	SIM → ME	PROACTIVE COMMAND: RECEIVE DATA 1.1.4	200 Bytes
17	ME → SIM	TERMINAL RESPONSE: RECEIVE DATA 1.1.4	
18	SIM → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.5	
19	ME → SIM	FETCH	
20	SIM → ME	PROACTIVE COMMAND: RECEIVE DATA 1.1.5	200 Bytes
21	ME → SIM	TERMINAL RESPONSE: RECEIVE DATA 1.1.5	

PROACTIVE COMMAND: RECEIVE DATA 1.1.1

Logically:
```
        Command details
            Command number:          1
            Command type:            RECEIVE DATA
            Command qualifier:       RFU
        Device identities
            Source device:           SIM
            Destination device:      Channel 1
        Channel Data Length
            Channel Data Length:     200
```

Coding:

BER-TLV:	D0	0C	81	03	01	42	00	82	02	81	21	B7
	01	C8									

PROACTIVE COMMAND: RECEIVE DATA 1.1.2

Logically:

    Command details
        Command number: 2
        Command type: RECEIVE DATA
        Command qualifier: RFU
    Device identities
        Source device: SIM
        Destination device: Channel 1
    Channel Data Length
        Channel Data Length: 200

    Coding:

| BER-TLV: | D0 | 0C | 81 | 03 | 02 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
| | 01 | C8 | | | | | | | | | | |

PROACTIVE COMMAND: RECEIVE DATA 1.1.3

Logically:

    Command details
        Command number: 3
        Command type: RECEIVE DATA
        Command qualifier: RFU
    Device identities
        Source device: SIM
        Destination device: Channel 1
    Channel Data Length
        Channel Data Length: 200

    Coding:

| BER-TLV: | D0 | 0C | 81 | 03 | 03 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
| | 01 | C8 | | | | | | | | | | |

PROACTIVE COMMAND: RECEIVE DATA 1.1.4

Logically:

    Command details
        Command number: 4
        Command type: RECEIVE DATA   Command qualifier: RFU
    Device identities
        Source device: SIM
        Destination device: Channel 1
    Channel Data Length
        Channel Data Length: 200

    Coding:

| BER-TLV: | D0 | 0C | 81 | 03 | 04 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
| | 01 | C8 | | | | | | | | | | |

PROACTIVE COMMAND: RECEIVE DATA 1.1.5

Logically:
    Command details
        Command number: 5
        Command type: RECEIVE DATA
        Command qualifier: RFU
    Device identities
        Source device: SIM
        Destination device: Channel 1
    Channel Data Length
        Channel Data Length: 200

    Coding:

        BER-TLV: D0 0C 81 03 05 42 00 82 02 81 21 B7
                       01 C8

TERMINAL RESPONSE: RECEIVE DATA 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: RECEIVE DATA
        Command qualifier: RFU
    Device identities
        Source device: Channel 1
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Channel data length: FF

Coding:

        BER-TLV: 81 03 01 42 00 82 02 21 81 83 01 00
                       B6 C8 xx xx xx ..
                       B7 01 FF

TERMINAL RESPONSE: RECEIVE DATA 1.1.2

Logically:
    Command details
        Command number: 2
        Command type: RECEIVE DATA
        Command qualifier: RFU
    Device identities
        Source device: Channel 1
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Channel data length: FF

Coding:

        BER-TLV: 81 03 02 42 00 82 02 21 81 83 01 00
                       B6 C8 xx xx xx ..
                       B7 01 FF

TERMINAL RESPONSE: RECEIVE DATA 1.1.3

Logically:

Command details		
Command number:	3	
Command type:	RECEIVE DATA	
Command qualifier:	RFU	
Device identities		
Source device:	Channel 1	
Destination device:	SIM	
Result		
General Result:	Command performed successfully	
Channel data length:	FF	

Coding:

BER-TLV:	81	03	03	42	00	82	02	21	81	83	01	00
	B6	C8	xx	xx	xx	..						
	B7	01	FF									

TERMINAL RESPONSE: RECEIVE DATA 1.1.4

Logically:

Command details				
Command number:	4	Command type:	RECEIVE DATA	Command qualifier: RFU
Device identities				
Source device:	Channel 1			
Destination device:	SIM			
Result				
General Result:	Command performed successfully			
Channel data length:	C8			

Coding:

BER-TLV:	81	03	04	42	00	82	02	21	81	83	01	00
	B6	C8	xx	xx	xx	..						
	B7	01	C8									

TERMINAL RESPONSE: RECEIVE DATA 1.1.5

Logically:

Command details	
Command number:	5
Command type:	RECEIVE DATA
Command qualifier:	RFU Device identities
Source device:	Channel 1
Destination device:	SIM
Result	
General Result:	Command performed successfully
Channel data length:	00

Coding:

BER-TLV:	81	03	01	42	00	82	02	21	81	83	01	00
	B6	C8	xx	xx	xx	..						
	B7	01	00									

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

<u>Expected sequence 1.1</u> (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).

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.1.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DATA (immediate) 1.1.1	
4	ME → SIM	TERMINAL RESPONSE : SEND DATA (immediate) 1.1.1	[Command performed successfully]

PROACTIVE COMMAND: SEND DATA 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: SEND DATA
        Command qualifier: Send Immediatly
    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 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: SEND DATA
        Command qualifier: Send Immediatly
    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									

<u>Expected sequence 1.2</u> (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:
    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 1.2.2

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 1.2.3

Logically:
     Command details
          Command number: 1
          Command type: SEND DATA
          Command qualifier: Immediate mode
     Device identities
          Source device: SIM
          Destination device: Channel 1
     Channel Data
          Channel Data :   100 Bytes of data

  Coding:

BER-TLV:	D0	6F	81	03	01	43	01	82	02	81	21	B6
	64	xx	xx	xx	xx	..						

TERMINAL RESPONSE: SEND DATA 1.2.3

Logically:
     Command details
          Command number: 1
          Command type: SEND DATA
          Command qualifier: Immediate mode
     Device identities
          Source device: 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	01	82	02	21	81	83	01	00
	B7	01	FF									

<u>Expected sequence 1.3</u> (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 1.3.1

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 1.3.2

Logically:
  Command details
   Command number: 1
   Command type: SEND DATA
   Command qualifier: Store mode
  Device identities
   Source device: SIM
   Destination device: Channel 1
  Channel Data
   Channel Data :   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 1.3.2

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 1.3.3

Logically:

       Command details
           Command number: 1
           Command type: SEND DATA
           Command qualifier: Store mode
       Device identities
           Source device: SIM
           Destination device: Channel 1
       Channel Data
           Channel Data :   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 1.3.3

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 1.3.4

Logically:

       Command details
           Command number: 1
           Command type: SEND DATA
           Command qualifier: Store mode
       Device identities
            Source device: SIM
           Destination device: Channel 1
       Channel Data
           Channel Data :   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 1.3.4

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: 200 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	C8									

PROACTIVE COMMAND: SEND DATA 1.3.5

Logically:

    Command details
        Command number: 1
        Command type: SEND DATA
        Command qualifier: Send Immediatly
    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	01	82	02	81	21	B6
	C8	xx	xx	xx	xx	..						

TERMINAL RESPONSE: SEND DATA 1.3.5

Logically:

    Command details
        Command number: 1
        Command type: SEND DATA
        Command qualifier: Send Immediatly
    Device identities
        Source device: Channel 1
        Destination device: SIM
    Result
        General Result: Command performed successfully
    Channel data length: No space available in the Tx buffer

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).

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]
...	...	...	...
19	SIM → ME	PROACTIVE COMMAND : SEND DATA (immediate) 1.3.5	
20	ME → SIM	TERMINAL RESPONSE : SEND DATA (immediate) 1.3.5	[Command performed successfully]
21	SIM → ME	PROACTIVE COMMAND PENDING: SEND DATA 1.3.1	
22	ME → SIM	FETCH	
23	SIM → ME	PROACTIVE COMMAND : SEND DATA (store mode) 1.3.1	Send 1kByte of data by packet of 200 Bytes
24	ME → SIM	TERMINAL RESPONSE : SEND DATA (store mode) 1.3.1	[Command performed successfully]
...	...	...	...
39	SIM → ME	PROACTIVE COMMAND : SEND DATA (immediate) 1.3.5	
40	ME → SIM	TERMINAL RESPONSE : SEND DATA (immediate) 1.3.5	[Command performed successfully]

Expected sequence 1.5 (SEND DATA, immediate mode with a bad channel identifier)

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 Immediatly
    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 Immediatly
    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.

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING; SEND DATA 1.6.1	
2	ME → SIM	FETCH	
3	SIM → ME	PROACTIVE COMMAND : SEND DATA (immediate) 1.6.1	
4	ME → SIM	TERMINAL RESPONSE : SEND DATA (immediate) 1.1.1	[Proactive SIM session terminated by the user]

PROACTIVE COMMAND: SEND DATA 1.6.1

Logically:

    Command details
        Command number: 1
        Command type: SEND DATA
        Command qualifier: Send Immediatly
    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 Immediatly
    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

<u>Expected sequence 1.1</u> (GET STATUS, without any BIP channel opened)

For that test, no channel has been opened.

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: GET CHANNEL STATUS 1.1.1	
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

<u>Expected sequence 1.2</u> (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).

Step	Direction	MESSAGE / Action	Comments
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 Procedure

Expected Sequence 1.1 (SMS-PP Data Download, General Data Coding, Default Alphabet)

Step	Direction	MESSAGE / Action	Comments
1	ME	The ME shall be in its normal idle mode	[Start a sequence to verify that the ME returns the RP-ACK message back to the system Simulator, if the SIM responds with '90 00']
2	SS → ME	SMS-PP Data Download Message 1.1.1	
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 1.1.1

Logically:

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

Coding:

BER-TLV	04	03	91	21	43	7F	12	89	10	10	00	00
	00	00	0D	53	F4	5B	4E	07	35	CB	F3	79
	F8	5C	06									

ENVELOPE: SMS-PP DOWNLOAD 1.1.2

Logically:

    SMS-PP Download
        Device identities
            Source device: Network
            Destination device: SIM
        Address
            TON   International number
            NPI   "ISDN / telephone numbering plan"
            Dialling number string   "112233445566778"
        SMS TPDU
            TP-MTI   SMS-DELIVER
            TP-MMS   No more messages waiting for the MS in this SC
            TP-RP   TP-Reply-Path is not set in this SMS-DELIVER
            TP-UDHI   TP-UD field contains only the short message
            TP-SRI   A status report will not be returned to the SME
            TP-OA
                TON   International number
                NPI   "ISDN / telephone numbering plan"
                Address value   "1234"
            TP-PID   SIM Data download
            TP-DCS
                Coding Group   General Data Coding
                Compression   Text is uncompressed
                Message Class   Class 2 SIM Specific Message
                Alphabet   Default Alphabet
            TP-SCTS: 01/01/98 00:00:00 +0
            TP-UDL   13
            TP-UD   "Short Message"

Coding:

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

Expected Sequence 1.2 (SMS-PP Data Download, General Data Coding, Default Alphabet, GET
RESPONSE, Acknowledgement)

Step	Direction	MESSAGE / Action	Comments
1	SS → ME	SMS-PP Data Download Message 1.2.1	
2	ME → USER	The ME shall not display the message or alert the user of a short message waiting.	
3	ME → SIM	ENVELOPE: SMS-PP DOWNLOAD 1.2.2	
4	SIM → ME	RESPONSE DATA AVAILABLE	[SW1 / SW2 of '9F 0B']
5	ME → SIM	GET RESPONSE	
6	SIM → ME	SMS-PP Data Download SIM Acknowledgement 1.2.3	
7	ME → SS	SMS-PP Data Download SIM Acknowledgement 1.2.4 in the TP-User-Data element of the RP-ACK message. The values of protocol identifier and data coding scheme in RP-ACK shall be as in the original message.	

Expected Sequence 1.3 (SMS-PP Data Download, General Data Coding, Default Alphabet, FETCH, MORE
TIME)

Step	Direction	MESSAGE / Action	Comments
1	SS → ME	SMS-PP Data Download Message 1.3.1	
2	ME → USER	The ME shall not display the message or alert the user of a short message waiting	
3	ME → SIM	ENVELOPE: SMS-PP DOWNLOAD 1.3.2	
4	SIM → ME	PROACTIVE COMMAND PENDING: MORE TIME 1.3.3	[SW1 / SW2 of '91 0B']
5	ME → SS	RP-ACK	
6	ME → SIM	FETCH	
7	SIM → ME	PROACTIVE COMMAND: MORE TIME 1.3.4	
8	ME → SIM	TERMINAL RESPONSE: MORE TIME 1.3.5	
9	SIM → ME	PROACTIVE SIM SESSION ENDED	

PROACTIVE COMMAND : MORE TIME 1.3.4

Logically:
    Command details
        Command number: 1
        Command type: MORE TIME
        Command qualifier: "00"
    Device identities
        Source device: SIM
        Destination device: ME

 Coding:

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

TERMINAL RESPONSE : MORE TIME 1.3.5

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

 Coding:

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

Expected Sequence 1.4 (SMS-PP Data Download, General Data Coding, 8 Bit Alphabet)

Step	Direction	MESSAGE / Action	Comments
1	SS → ME	SMS-PP Data Download Message 1.4.1	
2	ME	The ME shall not display the message or alert the user of a short message waiting	
3	ME → SIM	ENVELOPE: SMS-PP DOWNLOAD 1.4.2	
4	SIM → ME	SW1 / SW2 of '90 00'	
5	ME → SS	RP-ACK	

SMS-PP (Data Download) Message 1.2.1 / 1.3.1 / 1.4.1

Logically:

 SMS TPDU
  TP-MTI   SMS-DELIVER
  TP-MMS   No more messages waiting for the MS in this SC
  TP-RP   TP-Reply-Path is not set in this SMS-DELIVER
  TP-UDHI   TP-UD field contains only the short message
  TP-SRI   A status report will not be returned to the SME
  TP-OA
   TON   International number
   NPI   "ISDN / telephone numbering plan"
   Address value   "1234"
  TP-PID   SIM Data download
  TP-DCS
   Coding Group   General Data Coding
   Compression   Text is uncompressed
   Message Class   Class 2 SIM Specific Message
   Alphabet   8 bit
  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:

 SMS-PP Download
  Device identities
   Source device: Network
   Destination device: SIM
  Address
   TON   International number
   NPI   "ISDN / telephone numbering plan"
   Dialling number string "112233445566778"
  SMS TPDU
   TP-MTI   SMS-DELIVER
   TP-MMS   No more messages waiting for the MS in this SC
   TP-RP   TP-Reply-Path is not set in this SMS-DELIVER
   TP-UDHI   TP-UD field contains only the short message
   TP-SRI   A status report will not be returned to the SME
   TP-OA
    TON   International number
    NPI   "ISDN / telephone numbering plan"
    Address value   "1234"
   TP-PID   SIM Data download
   TP-DCS
    Coding Group   General Data Coding
    Compression   Text is uncompressed
    Message Class   Class 2 SIM Specific Message
    Alphabet   8 bit
   TP-SCTS: 01/01/98 00:00:00 +0
   TP-UDL   13
   TP-UD   "Short Message"

 Coding:

BER-TLV:	D1	2D	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1C	04	04	91	21	43
	7F	16	89	10	10	00	00	00	00	0D	53	68
	6F	72	74	20	4D	65	73	73	61	67	65	

Expected Sequence 1.5 (SMS-PP Data Download, Data Coding / Message Class, Default Alphabet)

Step	Direction	MESSAGE / Action	Comments
1	ME	The ME shall be in its normal idle mode.	
2	SS → ME	SMS-PP Data Download Message 1.5.1.	
3	ME	The ME shall not display the message or alert the user of a short message waiting	
4	ME → SIM	ENVELOPE: SMS-PP DOWNLOAD 1.5.2.	
5	SIM → ME	SW1 / SW2 of '90 00'	
6	ME → SS	RP-ACK	

SMS-PP (Data Download) Message 1.5.1

Logically:

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

Coding:

BER-TLV:	04	03	91	21	43	7F	F2	89	10	10	00	00
	00	00	0D	53	F4	5B	4E	07	35	CB	F3	79
	F8	5C	06									

ENVELOPE: SMS-PP DOWNLOAD 1.5.2

Logically:

SMS-PP Download
Device identities	
Source device:	Network
Destination device:	SIM
Address	
TON	International number
NPI	"ISDN / telephone numbering plan"
Dialling number string	"112233445566778"

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

Coding:

BER-TLV:	D1	2C	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1B	04	04	91	21	43

```
7F   F2   89   10   10   00   00   00   00   0D   53   F4
5B   4E   07   35   CB   F3   79   F8   5C   06
```

Expected Sequence 1.6 (SMS-PP Data Download, with Data Coding / Message Class, 8 Bit Alphabet)

Step	Direction	MESSAGE / Action	Comments
1	SS → ME	SMS-PP Data Download Message 1.6.1	
2	ME	The ME shall not display the message or alert the user of a short message waiting	
3	ME → SIM	ENVELOPE: SMS-PP DOWNLOAD 1.6.2	
4	SIM → ME	SW1 / SW2 of '90 00'	
5	ME → SS	RP-ACK	

SMS-PP (Data Download) Message 1.6.1

Logically:

    SMS TPDU
        TP-MTI   SMS-DELIVER
        TP-MMS   No more messages waiting for the MS in this SC
        TP-RP   TP-Reply-Path is not set in this SMS-DELIVER
        TP-UDHI   TP-UD field contains only the short message
        TP-SRI   A status report will not be returned to the SME
        TP-OA
            TON   International number
            NPI   "ISDN / telephone numbering plan"
            Address value   "1234"
        TP-PID   SIM Data download
        TP-DCS
            Coding Group   Data Coding / Message Class
            Message Coding   8 bit
            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: 04   03   91   21   43   7F   F6   89   10   10   00   00
                        00   00   0D   53   68   6F   72   74   20   4D   65   73
                        73   61   67   65

ENVELOPE: SMS-PP DOWNLOAD 1.6.2

Logically:

    SMS-PP Download
        Device identities
            Source device: Network
            Destination device: SIM
        Address
            TON   International number
            NPI   "ISDN / telephone numbering plan"
            Dialling number string "112233445566778"
        SMS TPDU
            TP-MTI   SMS-DELIVER
            TP-MMS   No more messages waiting for the MS in this SC
            TP-RP   TP-Reply-Path is not set in this SMS-DELIVER
            TP-UDHI   TP-UD field contains only the short message
            TP-SRI   A status report will not be returned to the SME
            TP-OA
               TON   International number
               NPI   "ISDN / telephone numbering plan"
               Address value   "1234"
            TP-PID   SIM Data download
            TP-DCS
               Coding Group   Data Coding / Message Class
               Message Coding   8 bit
               Message Class   Class 2 SIM Specific Message
            TP-SCTS: 01/01/98 00:00:00 +0
            TP-UDL   13
            TP-UD   "Short Message"

Coding:

BER-TLV:	D1	2D	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1C	04	04	91	21	43
	7F	F6	89	10	10	00	00	00	00	0D	53	68
	6F	72	74	20	4D	65	73	73	61	67	65	

SMS-PP Data Download SIM Acknowledgement 1.2.4

Coding:	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 Download

27.22.5.2.1 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 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

Expected Sequence 1.1 (SMS-CB (Data Download), ENVELOPE(SMS-CB DOWNLOAD), ME does not display message)

Step	Direction	MESSAGE / Action	Comments
1	SS → ME	SMS-CB (DATA DOWNLOAD) 1.1	Message identifier '10 01'
2	ME → SIM	ENVELOPE (SMS-CB DOWNLOAD) 1.1	
3	SIM → ME	SW1, SW2 '90 00'	

SMS-CB (Data Download) Message 1.1

Logically:

Message Content
    Serial Number
        Geographical scope: Cell wide, normal display mode
        Message code: 1
        Update number: 1
    Message Identifier: "1001"
    Data Coding Scheme
        Message coding: 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  20  20  20  20  20  20  20  20
          20  20  20  20
```

ENVELOPE: SMS-CB DOWNLOAD 1.1

Logically:

Cell Broadcast Download

Device identities

Source device:	Network
Destination device:	SIM

Cell Broadcast page

Serial Number

Geographical scope:	Cell wide, normal display mode
Message code:	1
Update number:	1
Message Identifier:	"1001"

Data Coding Scheme

Message coding:	8 bit data
Message class:	No message class

Page Parameter

Number of pages:	1
Page number:	1
Content of message:	"Cell Broadcast "..

Coding:

BER-TLV:	D2	5E	82	02	83	81	8C	58	C0	11	10	01
	F4	11	43	65	6C	6C	20	42	72	6F	61	64
	63	61	73	74	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20

Expected Sequence 1.2 (SMS-CB(DATA DOWNLOAD), ENVELOPE(SMS-CB DATA DOWNLOAD), FETCH, MORE TIME, ME does not display message)

Step	Direction	MESSAGE / Action	Comments
1	SS → ME	SMS-CB (DATA DOWNLOAD) 1.1	Message identifier '10 01'
2	ME → SIM	ENVELOPE (SMS-CB DOWNLOAD) 1.1	
3	SIM → ME		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:

Command details

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

Device identities

Source device:	SIM
Destination device:	ME

Coding:

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

TERMINAL RESPONSE : MORE TIME 1.1

Logically:

    Command details

        Command number: 1

        Command type: MORE TIME

        Command qualifier: "00"

    Device identities

        Source device: ME

        Destination device: SIM

    Result

        General Result: Command performed successfully

  Coding:

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

Expected Sequence 1.3 (SMS-CB (DATA DOWNLOAD), ME displays message)

Step	Direction	MESSAGE / Action	Comments
1	SS → ME	SMS-CB (DATA DOWNLOAD) 1.2	Message identifier '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 20 20 20 20 20 20 20 20
20 20 20 20

ENVELOPE: SMS-CB DOWNLOAD 1.1

Logically:
 Cell Broadcast Download
  Device identities
   Source device: Network
   Destination device: SIM
  Cell Broadcast page
   Serial Number
    Geographical scope: Cell wide, normal display mode
    Message code: 1
    Update number: 1
   Message Identifier: "0C0C"
   Data Coding Scheme
    Message coding: 8 bit data
    Message class: No message class
   Page Parameter
    Number of pages: 1
    Page number: 1
   Content of message: "Cell Broadcast "..

 Coding:

BER-TLV:	D2	5E	82	02	83	81	8C	58	C0	11	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 1 to 3.

27.22.6 CALL CONTROL BY SIM

27.22.6.1 Procedure for Mobile Originated calls

27.22.6.1.1 Definition and applicability

See 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')

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"

ENVELOPE CALL CONTROL 1.1.1

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 Aera 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)

Step	Direction	Message / Action	Comments
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"

ENVELOPE CALL CONTROL 1.2.1

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 Aera 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)

Step	Direction	Message / Action	Comments
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:
      Device identities
          Source device: ME
          Destination device: SIM
      Address
          TON: International
          NPI: "ISDN / telephone numbering plan" or "unknown"
          Dialling number string   "012340123456"
      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 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:
      Command details
          Command number: 1
          Command type: SET UP CALL
          Command qualifier: Only if not currently busy on another call
      Device identities
          Source device: ME
          Destination device: SIM
      Result
          General Result: Command performed successfully
Coding:

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

Expected Sequence 1.4 (CALL CONTROL BY SIM , set up call attempt by user, not allowed)

Step	Direction	Message / Action	Comments
1	User -> ME	Set up a call to "+01234567890123456789"	
2	ME -> SIM	ENVELOPE CALL CONTROL 1.4.1	
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 1.4.1

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 Aera 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 1.4.1

Logically:

    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)

Step	Direction	Message / Action	Comments
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:

    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 1.5.1

Logically:

    Device identities
        Source device: ME
        Destination device: SIM
    Address
        TON: International
        NPI: "ISDN / telephone numbering plan" or "unknown"
        Dialling number string   "012340123456"
    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	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 1.5.1

Logically:
    Call control result :   '01' = not Allowed
Coding

        BER-TLV: 01   00

TERMINAL RESPONSE : SET UP CALL 1.5.1

Logically:

Command details
    Command number: 1
    Command type: SET UP CALL
    Command qualifier: Only if not currently busy on another call
Device identities
    Source device: ME
    Destination device: SIM
Result
    General Result: Interaction with call control by SIM or MO short message control by SIM, permanent problem
    Additional information :   Action not allowed

Coding:

| BER-TLV: | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 39 |
| | 01 | | | | | | | | | | | |

Expected Sequence 1.6 (CALL CONTROL BY SIM , set up call attempt by user, allowed with modifications)

Step	Direction	Message / Action	Comments
1	User -> ME	Set up a call to "+012345678901234 56789"	
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:

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 Aera 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
Address
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:

 Device identities
  Source device: ME
  Destination device: SIM
 Address
  TON: National
  NPI: "ISDN / telephone numbering plan" or "unknown"
  Dialling number string "+012340123456"
 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	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 1.7.1

Logically:

 Device identities
  Source device: ME
  Destination device: SIM
 Address
  TON: International
  NPI: "ISDN / telephone numbering plan" or "unknown"
  Dialling number string "012340123456"
 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	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 1.7.1

Logically:

 Call control result :   '02' = Allowed with modifications
 Address
  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)

Step	Direction	Message / Action	Comments
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 Aera 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 Aera 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 dialled numbers allowed by call control in its register.

Step	Direction	Message / Action	Comments
1	User -> ME	Set up a call to "+01234567890123456789"	
2	ME -> SIM	ENVELOPE CALL CONTROL 1.1.1	
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 dialled 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 dialled numbers allowed by call control in its register.

Step	Direction	Message / Action	Comments
1	User -> ME	Set up a call to "+01234567890123456789"	
2	ME -> SIM	ENVELOPE CALL CONTROL 1.2.1	
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.

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	
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.

Step	Direction	Message / Action	Comments
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')

Step	Direction	Message / Action	Comments
1	User -> ME	The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator).	
2	ME -> SIM	ENVELOPE CALL CONTROL 2.1.1	
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:

    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 Aera 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)

Step	Direction	Message / Action	Comments
1	User -> ME	The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator).	
2	ME -> SIM	ENVELOPE CALL CONTROL 2.2.1	
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 Aera 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)

Step	Direction	Message / Action	Comments
1	User -> ME	The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator).	
2	ME -> SIM	ENVELOPE CALL CONTROL 2.3.1	
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 Aera 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)

Step	Direction	Message / Action	Comments
1	User -> ME	The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator).	
2	ME -> SIM	ENVELOPE CALL CONTROL 2.4.1	
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 Aera 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 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.

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$_{FDN}$)

Step	Direction	Message / Action	Comments
1	User -> ME	The user sets up a call to "4321"	
2	ME	The ME does not send the ENVELOPE (CALL CONTROL) command to the SIM and does not set up the call.	

Expected Sequence 3.2 (CALL CONTROL BY SIM , set up a call in EF$_{FDN}$, the SIM responds with '90 00')

Step	Direction	Message / Action	Comments
1	User -> ME	The user sets up a call to "123"	
2	ME -> SIM	ENVELOPE CALL CONTROL 3.2.1	
3	SIM -> ME	90 00	
4	ME	The ME sets up the call without modification	[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)

Step	Direction	Message / Action	Comments
1	User -> ME	The user sets up a call to "9876"	
2	ME -> SIM	ENVELOPE CALL CONTROL 3.3.1	
3	SIM -> ME	9F 02	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 3.3.1	[Call control result : "Allowed without modifications"]
6	ME	The ME sets up the call without modification	[Set up call to "9876"]

ENVELOPE CALL CONTROL 3.3.1

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	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:

    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	89	67	13
	07	00	F1	10	00	01	00	01				

CALL CONTROL RESPONSE 3.4.1

Logically:

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)

Step	Direction	Message / Action	Comments
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 3.5.1

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   89   67   13
                     07   00   F1   10   00   01   00   01

CALL CONTROL RESPONSE 3.5.1

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

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 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.

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})

Step	Direction	Message / Action	Comments
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 4.1.1

Logically:

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

CALL CONTROL RESPONSE 4.1.1

Logically:

    Call control result   Not Allowed

      Coding: 01   00

Expected Sequence 4.2 (CALL CONTROL BY SIM , set up a call not in EF$_{BDN}$, Allowed without modifications)

Step	Direction	Message / Action	Comments
1	User -> ME	The user sets up a call to "1234"	
2	ME -> SIM	ENVELOPE CALL CONTROL 4.2.1	
3	SIM -> ME	9F 02	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 4.2.1	[Call control result : "Allowed without modifications"]
6	ME	The ME sets up the call without modification	[Set up call to "1234"]

ENVELOPE CALL CONTROL 4.2.1

Logically:

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

Step	Direction	Message / Action	Comments
1	User -> ME	The user sets up a call to "1111"	
2	ME -> SIM	ENVELOPE CALL CONTROL 4.3.1	
3	SIM -> ME	9F 07	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 4.3.1	[Call control result : "Allowed with modifications"]
6	ME	The ME sets up the call with data sent by the SIM	[Set up call to "2222"]

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)

Step	Direction	Message / Action	Comments
1	User -> ME	The user sets up a call to "123"	
2	ME -> SIM	ENVELOPE CALL CONTROL 4.4.1	
3	SIM -> ME	9F 0A	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	CALL CONTROL RESULT 4.4.1	[Call control result : "Allowed with modifications"]
6	ME	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 4.4.1

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	89	67	13
	07	00	F1	10	00	01	00	01

CALL CONTROL RESPONSE 4.4.1

Logically:

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

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

27.22.7   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 test

27.22.7.1.1.4.1   Initial Conditions

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

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.1.1.4.2   Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD –MT Call event)

Step	Direction	Message / Action	Behaviour
1	SIM -> ME	PROACTIVE COMMAND PENDING	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME -> SIM	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	SS -> ME	CALL SET UP without CLI	[MT Call Set Up Without CLI]
6	ME -> SIM	ENVELOPE: EVENT DOWNLOAD – MT Call 1.1.1	
7	SS -> ME	CALL DISCONNECT	
8	SS -> ME	CALL SET UP with CLI	[MT Call Set Up With CLI]
9	ME -> SIM	ENVELOPE: EVENT DOWNLOAD – MT Call 1.1.2	
10	SS -> ME	CALL DISCONNECT	
11	SS -> ME	CALL SET UP with CLI and sub-address	[MT Call Set Up with CLI and sub-address]
12	ME -> SIM	ENVELOPE: EVENT DOWNLOAD – MT Call 1.1.3	
13	SS -> ME	CALL DISCONNECT	

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details
    Command number: 1
    Command type: SET UP EVENT LIST
    Command qualifier: '00'

Device identities
    Source device: SIM
    Destination device: ME
Event List
    Event 1:   MT call

Coding:

BER-TLV: D0 0C 81 03 01 05 00 82 02 81 82 99
        01 00

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

    BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

EVENT DOWNLOAD – MT CALL 1.1.1

Logically:
    Event List :   MT call event
    Device identities
        Source device: Network
        Destination device: SIM
    Transaction identifier :
        Ti value :   0 (bit 5-7)
        Ti flag :   0 (bit 8)

    Coding:

    BER-TLV: D6 0A 19 01 00 82 02 83 81 1C 01 00

EVENT DOWNLOAD – MT CALL 1.1.2

Logically:
    Event List :   MT call event
    Device identities
        Source device: Network
        Destination device: SIM
    Transaction identifier :
        Ti value :   0 (bit 5-7)
        Ti flag :   0 (bit 8)
    Address :
        TON   Unknown
        NPI   "ISDN / telephone numbering plan"
        Dialling number string   "9876"

    Coding:

    BER-TLV: D6 0F 19 01 00 82 02 83 81 1C 01 00
        86 03 90 89 67

EVENT DOWNLOAD – MT CALL 1.1.3

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"
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:   D6  19  19  01  00  82  02  83  81  1C  01  00
           86  03  91  89  67  88  88  07  80  50  95  95
           95  95  95
```

27.22.7.1.1.5   Test Requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

27.22.7.2   Call Connected Event

27.22.7.2.1   Call Connected Event (MT and MO call)

27.22.7.2.1.1   Definition and applicability

See 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 test

27.22.7.2.1.4.1   Initial Conditions

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

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.2.1.4.2   Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD –CALL CONNECTED)

Step	Direction	Message / Action	Behaviour
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 test

27.22.7.2.2.4.1   Initial Conditions

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

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.2.2.4.2   Procedure

Expected Sequence 2.1 (EVENT DOWNLOAD –CALL CONNECTED, ME supporting SET UP CALL)

Step	Direction	Message / Action	Behaviour
1	SIM -> ME	PROACTIVE COMMAND PENDING	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SET UP EVENT LIST 2.1.1	[EVENT: Call Connected active]
4	ME -> SIM	TERMINAL RESPONSE: SET UP EVENT LIST 2.1.1	
5	SIM -> ME	PROACTIVE COMMAND PENDING	
6	ME -> SIM	FETCH	
7	SIM -> ME	PROACTIVE COMMAND: SET UP CALL 2.1.1	[SAT Call]
8	ME		ME BEHAVIOUR: SET UP CALL
9	USER -> ME	Confirm call set up	
10	ME -> SS	SETUP	Ti=0
11	SS -> ME	CONNECT	
12	ME -> SIM	TERMINAL RESPONSE: SET UP CALL 2.1.1	
13	ME -> SIM	ENVELOPE: CALL CONNECTED 2.1.1	

PROACTIVE COMMAND : SET UP EVENT LIST 2.1.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'

    Device identities
        Source device: SIM
        Destination device: ME
    Event List
        Event 1:   Call Connected

Coding:

    BER-TLV: D0   0C   81   03   01   05   00   82   02   81   82   99
              01   01

TERMINAL RESPONSE : SET UP EVENT LIST 2.1.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

    BER-TLV: 81   03   01   05   00   82   02   82   81   83   01   00

PROACTIVE COMMAND : SET UP CALL 2.1.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: Only if not currently busy on another call
    Device identities
        Source device: SIM
        Destination device: Network
    Alpha identifier: 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

ETSI

Logically:

    Command details
        Command number: 1
        Command type: SET UP CALL
        Command qualifier: Only if not currently busy on another call
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

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

EVENT DOWNLOAD – CALL CONNECTED 2.1.1

Logically:

    Event List :   Call connected
    Device identities
        Source device: Network
        Destination device: SIM
    Transaction identifier :
        Ti value :   0 (bit 5-7)
        Ti flag :   1 (bit 8)

  Coding:

BER-TLV:	D6	0A	19	01	01	82	02	83	81	1C	01	80

27.22.7.2.2.5   Test Requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

27.22.7.3   Call Disconnected Event

27.22.7.3.1   Call Disconnected Event

27.22.7.3.1.1   Definition and applicability

See 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)

Step	Direction	Message / Action	Behaviour
1	SIM -> ME	PROACTIVE COMMAND PENDING	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[EVENT: Call Disconnected active]
4	ME -> SIM	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	SS -> ME	SETUP	[incoming call] Ti=0
6	USER -> ME	Accept Call Set Up	
7	SS -> ME	DISCONNECT	[MT DISCONNECT]
8	ME-> SIM	ENVELOPE: CALL DISCONNECTED 1.1.1	
9	SS -> ME	SETUP	[incoming call] Ti=0
10	USER -> ME	Accept Call Set Up	
11	SS -> ME	RELEASE	[MT RELEASE]
12	ME-> SIM	ENVELOPE: CALL DISCONNECTED 1.1.1	
13	SS -> ME	SETUP	[incoming call] Ti=0
14	USER -> ME	Accept Call Set Up	
15	SS -> ME	RELEASE COMPLETE	[MT RELEASE COMPLETE]
16	ME-> SIM	ENVELOPE: CALL DISCONNECTED 1.1.1	
17	SS -> ME	SETUP	[incoming call] Ti=0
18	USER -> ME	Accept Call Set Up	
19	USER -> ME	End Call	
20	ME -> SS	DISCONNECT	[MO DISCONNECT]
21	ME -> SIM	ENVELOPE: CALL DISCONNECTED 1.1.2	
22	SS -> ME	DISCONNECT ACK ???	
23	SS -> ME	SETUP	[incoming call] Ti=0
24	USER -> ME	Accept Call Set Up	
25	SS -> ME	DISCONNECT	[MT DISCONNECT + CAUSE : normal call clearing]
26	ME-> SIM	ENVELOPE: CALL DISCONNECTED 1.1.3	
27	SS -> ME	SETUP	Ti=0
28	USER -> ME	Accept Call Set Up	
29	SS	TX POWER to XX	[RADIO LINK FAILURE]
30	ME-> SIM	ENVELOPE: CALL DISCONNECTED 1.1.4A or 1.1.1B	

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'

    Device identities
        Source device: SIM
        Destination device: ME
    Event List
        Event 1:   Call Disconnected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	02										

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

EVENT DOWNLOAD – CALL DISCONNECTED 1.1.1

Logically:
    Event List :   Call Disconnected
    Device identities
        Source device: Network
        Destination device: SIM
    Transaction identifier :
        Ti value :   0 (bit 5-7)
        Ti flag :   0 (bit 8)
    Cause :

  Coding:

BER-TLV:	D6	0A	19	01	02	82	02	83	81	1C	01	00

EVENT DOWNLOAD – CALL DISCONNECTED 1.1.2

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 1.1.4A

Logically:

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 1.1.4B

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 :	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)

Step	Direction	Message / Action	Behaviour
1	SIM -> ME	PROACTIVE COMMAND PENDING	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	
4	ME -> SIM	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	SS		Cell 2 is switched on and cell 1 is switched off
6			ME performs cell reselection to cell 2
7	ME -> SS	Location Updating Request	
8	SS -> ME	Location updating accept	
9	ME -> SIM	ENVELOPE: EVENT DOWNLOAD – Location Status 1.1.1	[NOTE : The inclusion of the location information is optional : (If location status indicates normal status)

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'

    Device identities
        Source device: SIM
        Destination device: ME
    Event List
        Event 1:   Location status

Coding:

| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | 03 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

EVENT DOWNLOAD – LOCATION STATUS 1.1.1

Logically:

    Event List :   Location status
    Device identities
        Source device: ME
        Destination device: SIM
    Location status :   normal service
    Location Information
        MCC & MNC   the mobile country and network code (F110)
        LAC   the location Aera 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)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1	[set up event list : event User Activity]
2	ME → SIM	TERMINAL RESPONSE: SET UP EVENT LIST 1.1	[command performed successfully]
3	USER	press any key	
4	ME → SIM	ENVELOPE EVENT DOWNLOAD -USER ACTIVITY 1.1	
9	USER	press any key	check if no envelope Event Download-User activity sending to the SIM (this event is reported once)

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier:

    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 test

27.22.7.6.1.4.1   Initial Conditions

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

The elementary files are coded as SIM Application Toolkit default.

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

27.22.7.6.1.4.2   Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD - IDLE SCREEN AVAILABLE)

Step	Direction	MESSAGE / Action	Comments
1	USER → ME	Select screen other than the ME idle screen	
2	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	[set up event list : idle screen available]
3	ME → SIM	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 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

EVENT DOWNLOAD - IDLE SCREEN AVAILABLE 1.1.1

Logically:
    Event List   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)

Step	Direction	Message / Action	Behaviour
1	SIM -> ME	PROACTIVE COMMAND 1.1.1 PENDING	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[EVENT: Card Reader Status]
4	ME -> SIM	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[Successfully]
5	User->ME	Insert a card in Reader	
6	ME-> SIM	ENVELOPE: CARD READER STATUS 1.1.1a or ENVELOPE: CARD READER STATUS 1.1.1b Or ENVELOPE: CARD READER STATUS 1.1.1c Or ENVELOPE: CARD READER STATUS 1.1.1d	
7	User->ME	Remove the card from Reader	
8	ME-> SIM	ENVELOPE: CARD READER STATUS 1.1.2a Or ENVELOPE: CARD READER STATUS 1.1.2b Or ENVELOPE: CARD READER STATUS 1.1.2c Or ENVELOPE: CARD READER STATUS 1.1.2d	

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'
    Device identities
        Source device: SIM
        Destination device: ME
    Event list
        Event 1:   Card Reader Status

    Coding:

        BER-TLV: D0   0D   81   03   01   05   00   82   02   81   82
                    99   01   06

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

  Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1a

Logically:
    Event list
        Event 1:   Card Reader Status
    Device identities
        Source device: ME
        Destination device: SIM
    Card reader status
        Identity of card reader: 01
        Card reader removable: Yes
        Card reader present: Yes
        Card reader ID-1 size: Yes
        Card present in reader: Yes
        Card powered: No

  Coding:

BER-TLV:	D6	0A	99	01	06	82	02	82	81	A0	01	97

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1b

Logically:
    Event list
        Event 1:   Card Reader Status
    Device identities
        Source device: ME
        Destination device: SIM
    Card reader status
        Identity of card reader: 01
        Card reader removable: Yes
        Card reader present: Yes
        Card reader ID-1 size: No
        Card present in reader: Yes
        Card powered: No

  Coding:

BER-TLV:	D6	0A	99	01	06	82	02	82	81	A0	01	95

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1c

Logically:

Event list
  Event 1:   Card Reader Status
Device identities
  Source device: ME
  Destination device: SIM
Card reader status
  Identity of card reader: 01
  Card reader removable: No
  Card reader present: Yes
  Card reader ID-1 size: Yes
  Card present in reader: Yes
  Card powered: No

  Coding:

      BER-TLV: D6   0A   99   01   06   82   02   82   81   A0   01   17

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1d

Logically:

Event list
  Event 1:   Card Reader Status
Device identities
  Source device: ME
  Destination device: SIM
Card reader status
  Identity of card reader: 01
  Card reader removable: No
  Card reader present: Yes
  Card reader ID-1 size: No
  Card present in reader: Yes
  Card powered: No

  Coding:

      BER-TLV: D6   0A   99   01   06   82   02   82   81   A0   01   15

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2a

Logically:

Event list
  Event 1:   Card Reader Status
Device identities
  Source device: ME
  Destination device: SIM
Card reader status
  Identity of card reader: 01
  Card reader removable: Yes
  Card reader present: Yes
  Card reader ID-1 size: Yes
  Card present in reader: No
  Card powered: No

Coding:

    BER-TLV: D6   0A   99   01   06   82   02   82   81   A0   01   93

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2b

Logically:

Event list	
Event 1:	Card Reader Status
Device identities	
Source device:	ME
Destination device:	SIM
Card reader status	
Identity of card reader:	01
Card reader removable:	Yes
Card reader present:	Yes
Card reader ID-1 size:	No
Card present in reader:	No
Card powered:	No

 Coding:

    BER-TLV: D6   0A   99   01   06   82   02   82   81   A0   01   91

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2c

Logically:

Event list	
Event 1:	Card Reader Status
Device identities	
Source device:	ME
Destination device:	SIM
Card reader status	
Identity of card reader:	01
Card reader removable:	No
Card reader present:	Yes
Card reader ID-1 size:	Yes
Card present in reader:	No
Card powered:	No

 Coding:

    BER-TLV: D6   0A   99   01   06   82   02   82   81   A0   01   13

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2d

Logically:

Event list		
Event 1:	Card Reader Status	
Device identities		
Source device:	ME	
Destination device:	SIM	
Card reader status		
Identity of card reader:	01	
Card reader removable:	No	
Card reader present:	Yes	
Card reader ID-1 size:	No	
Card present in reader:	No	
Card powered:	No	

Coding:

BER-TLV: D6   0A   99   01   06   82   02   82   81   A0   01   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 test

27.22.7.7.2.4.1   Initial Conditions

The ME is connected to the SIM Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.7.2.4.2   Procedure

Expected Sequence 2.1 (EVENT DOWNLOAD, Detachable reader, Card reader 1, detachable card reader
              not attached, no card inserted)

Step	Direction	Message / Action	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 2.1.1b

Logically:

Event list		
Event 1:	Card Reader Status	
Device identities		
Source device:	ME	
Destination device:	SIM	
Card reader status		
Identity of card reader:	01	
Card reader removable:	Yes	
Card reader present:	Yes	
Card reader ID-1 size:	No	
Card present in reader:	No	
Card powered:	No	

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 91

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.2a

Logically:

Event list		
Event 1:	Card Reader Status	
Device identities		
Source device:	ME	
Destination device:	SIM	
Card reader status		
Identity of card reader:	01	
Card reader removable:	Yes	
Card reader present:	No	
Card reader ID-1 size:	Yes	
Card present in reader:	No	
Card powered:	No	

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 92

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.2b

Logically:

Event list		
Event 1:	Card Reader Status	
Device identities		
Source device:	ME	
Destination device:	SIM	
Card reader status		
Identity of card reader:	01	
Card reader removable:	Yes	
Card reader present:	No	
Card reader ID-1 size:	No	
Card present in reader:	No	
Card powered:	No	

Coding:

BER-TLV:	D6	0A	99	01	06	82	02	82	81	A0	01	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 event

27.22.7.8.1 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 test

27.22.7.8.1.4.1 Initial Conditions

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

The elementary files are coded as SIM Application Toolkit default.

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

The current language shall have been set to english. Another language has to be supported, german is an example.

27.22.7.8.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD - LANGUAGE SELECTION)

Step	Direction	MESSAGE / Action	Comments
1	SIM → ME	PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1	[set up event list : language selection]
2	ME → SIM	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 1.1.2

Logically:

    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 event

27.22.7.9.1 Browser termination (normal)

27.22.7.9.1.1 Definition and applicability

This test is only applicable to ME's that support the EVENT: browser termination event driven information.

27.22.7.9.1.2 Conformance requirement

The ME shall support the EVENT: Browser termination event as defined in 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)

Step	Direction	Message / Action	Behaviour
1	SIM -> ME	PROACTIVE COMMAND 1.1.1 PENDING	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[EVENT: Browser termination Status]
4	ME -> SIM	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[Successfully]
5	User->ME	Launch the browser , go to an URL, then stop the session and the browser.	
6	ME-> SIM	ENVELOPE: BROWSER TERMINATION 1.1.1	

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:
          Command details
                    Command number: 1
                    Command type: SET UP EVENT LIST
                    Command qualifier: '00'
          Device identities
                    Source device: SIM
                    Destination device: ME
          Event list
                    Event 1:   Browser termination

  Coding:

          BER-TLV: D0   0D   81   03   01   05   00   82   02   81   82
                      99   01   08

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:
    Command details
        Command number: 1
        Command type: SET UP EVENT LIST
        Command qualifier: '00'
    Device identities
        Source device: ME
        Destination device: SIM
    Result
        General Result: Command performed successfully

    Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

ENVELOPE: EVENT DOWNLOAD BROWSER TERMINATION 1.1.1

Logically:
    Event list
        Event 1:   Browser termination
    Device identities
        Source device: ME
        Destination device: SIM
    Browser termination cause: User termination

    Coding:

BER-TLV:	D6	0A	99	01	08	82	02	82	81	B4	01	00

27.22.7.10 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]

Additionnally 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   Procedure

Expected 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).

Step	Direction	MESSAGE / Action	Comments
1	SERVER → ME	Data sent through the BIP channel	
2	ME → SIM	ENVELOPE 1.1.1 (Event-Data Available)	

ENVELOPE: EVENT DOWNLOAD – Data available 1.1.1

Logically:
      Event List
          Event: Data available
      Device identities
          Source device: ME
          Destination device: SIM
      Channel status
          Channel status: Channel 1 open, link established
      Channel Data Length
          Channel Data Length: 8 Bytes available in Rx buffer

  Coding:

      BER-TLV: D6   0E   99   01   09   82   02   82   81   B8   02   81
                        00   B7   01   08

27.22.7.11   Channel Status event

27.22.7.11.1   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]

Additionnally the ME shall support ENVELOPE (EVENT DOWNLOAD – Channel Status)

27.22.7.11.3   Test Purpose

To verify that the ME shall send an ENVELOPE (EVENT DOWNLOAD – Channel Status) to the SIM after the link dropped between the NETWORK and the ME.

27.22.7.11.4   Method of test

27.22.7.11.4.1   Initial Conditions

The ME is connected to the SIM Simulator. 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

<u>Expected sequence 1.1</u> (EVENT DOWNLOAD – Channel Status on a link dropped)

For that test, it is assumed that an OPEN CHANNEL proactive command has been successfully executed.

Step	Direction	MESSAGE / Action	Comments
1	NETWORK → ME	Link dropped	
2	ME → SIM	ENVELOPE 1.1.1 (Event-Channel Status)	

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):
Void

Annex B (informative):
void

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:

BER-TLV:	01	08	08	11	4F	04	00	00	00	0A	FF	FF
	FF	FF	FF	FF	FF	FF	FF	FF				

Record 2:

Logically:

    Number of Actual Images Instances: 01

    Image Instance Width: 08

    Image Instance Height: 08

    Image Coding Scheme: 21 (colour image)

    Image Instance File Identifier: 4F 02(EF_**Instance**)

    Offset into Image Instance File: 00 00

    Length of Image Instance Data: 00 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	01	FF	80
	00	00	00	0F	FF	00	00	00	00	77	FE	00
	00	00	01	BF	F8	00	00	00	06	FF	E0	00
	00	00	1A	03	80	00	00	00	6B	F6	BC	00
	00	01	AF	D8	38	00	00	06	BF	60	20	00
	00	1A	FD	80	40	00	00	6B	F6	00	80	00
	01	A0	1F	02	00	00	06	FF	E4	04	00	00
	1B	FF	90	10	00	00	6D	EE	40	40	00	01
	BF	F9	01	00	00	6F	FF	E4	04	00	00	1B
	FF	90	10	00	00	6F	FE	40	40	00	01	BF
	F9	01	00	00	06	FF	E6	04	00	00	1B	FF
	88	10	00	00	6F	FE	20	40	00	01	BF	F8
	66	00	00	06	FF	E0	F0	00	00	1B	FF	80
	80	00	00	7F	FE	00	00	00	03	00	0C	00
	00	00	1F	FF	F8	00	00	00	00	00	00	00
	00	00	00	00	00	00	00	00	00	00	00	00
	1C	21	08	44	EE	00	48	C4	31	92	20	01
	25	11	45	50	80	07	14	45	15	43	80	12
	71	1C	4D	08	00	4A	24	89	32	20	01	C8
	9E	24	4E	E0								

EF$_{Instance}$ (4F02)

Logically:

    Image Instance Data:

      Image width: 08

      Image length: 08

      Bits per raster image point: 02

Number of CLUT entries: 03

Location of CLUT: 00 16

Image body: see below

Coding:

	BER-TLV:	08	08	02	03	00	16	AA	AA	80	02	85	42
		81	42	81	42	81	52	80	02	AA	AA	FF	00
		00	00	FF	00	00	00	FF					

EF~Instance~ (4F03)

Logically:

Image Instance Data: see below

Coding:

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

EF~Instance~ (4F04)

Logically:

Image Instance Data: see below

Coding:

	BER-TLV:	08	08	FF	03	A5	99	99	A5	C3	FF

EF~Instance~ (4F05)

Logically:

Image Instance Data: see below

Coding:

	BER-TLV:	05	05	FE	EB	BF	FF	FF	FF

Annex D (normative):
Details of Test-SIM (TestSIM)

The TestSIM shall be able to present the following data:

1.   ANSWER TO RESET

    Logically:

TS (Initial character):	'3B'
T0 (Format character):	'86' (Following interface characters: TD(1), number of historical characters: 6)
TD1:	'00' (Following interface characters: none, Transfer protocol: T=0)
T1:	91
T2:	99
T3:	00
T4:	12
T5:	C1
T6:	00

    Coding:

        BER-TLV: 3B   86   00   91   99   00   12   C1   00

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. frequence for GSM algorithm:	13/8 MHz	
Technology identification:	3V Technology SIM	
CHV1:	disabled	
DFs in current directory:	2	
EFs in current dircetory:	8	
Number of CHV and admin. Codes:	3	
RFU byte 18:	00	
CHV1 status:		
False represantations remaining:	3	
RFU-bits 7-5:	000	
Secret code:	Initialised	
Unlock CHV1 status:		
False represantations remaining:	10	
RFU-bits 7-5:	000	
Secret code:	Initialised	
CHV2 status:		
False represantations remaining:	3	
RFU-bits 7-5:	000	
Secret code:	Initialised	
Unlock CHV2 status:		
False represantations 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

Byte 8

  RFU: 00

Access Condition:

  UPDATE: CHV1

  READ/SEEK: CHV1

  RFU-bits 4-1:   1111

  INCREASE: NEVER

  INVALIDATE: NEVER

  REHABILITATE: NEVER

File Status:

  Invalidation status: File not invalidated

  Readable/updateable: Not readable/updaable when invalidated

  RFU-bits 8-4, 2:   0000 0

Length of following data: 2 bytes

Structure: Transparent

Length of record: 00

The initial coding of the EF$_{PLMN}$ shall be FF FF ... FF (logically: Empty).

Annex E (normative): Details of Terminal Profile support

Table E.1: TERMINAL PROFILE support

Item	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
1	Profile Download	3GPP TS 11.14, 5	R96	M		PD_Pro_Dvnl
2	SMS-PP data download	3GPP TS 11.14, 5	R96	C201		PD_SMS_PP
3	Cell Broadcast data download	3GPP TS 11.14, 5	R96	C202		PD_CB
4	Menu selection	3GPP TS 11.14, 5	R96	M		PD_Menu_sel
5	'9EXX' response code for SIM data download error	3GPP TS 11.14, 5	R97	M		PD_9EXX
6	Timer expiration	3GPP TS 11.14, 5	R98	M		PD_TExpir
7	USSD string data object supported in Call Control	3GPP TS 11.14, 5	R98	M		PD_CC_USSD_Str
8	Envelope Call Control always sent to the SIM during automatic redial mode	3GPP TS 11.14, 5	R99	M		PD_CC_Auto_Redial
9	Command result	3GPP TS 11.14, 5	R96	M		PD_Cmd_Res
10	Call Control by SIM	3GPP TS 11.14, 5	R96	M		PD_CC
11	Cell identity included in Call Control by SIM	3GPP TS 11.14, 5	R97	M		PD_CC_Cell_Id
12	MO short message control by SIM	3GPP TS 11.14, 5	R98	M		PD_MO_SMS_CC
13	Handling of the alpha identifier	3GPP TS 11.14, 5	R97	M		PD_Alpha _Id
14	UCS2 Entry supported	3GPP TS 11.14, 5	R97	C203		PD_UCS2_entry
15	UCS2 Display supported	3GPP TS 11.14, 5	R97	C203		PD_UCS2_Display
16	Display of the extension text	3GPP TS 11.14, 5	R98	C205		PD_Disp_Ext_Text
17	DISPLAY TEXT	3GPP TS 11.14, 5	R96	M		PD_Display_Text
18	GET INKEY	3GPP TS 11.14, 5	R96	M		PD_Get_Inkey
19	GET INPUT	3GPP TS 11.14, 5	R96	M		PD_Get_Input
20	MORE TIME	3GPP TS 11.14, 5	R96	M		PD_More_Time
21	PLAY TONE	3GPP TS 11.14, 5	R96	M		PD_Play_Tone
22	POLL INTERVAL	3GPP TS 11.14, 5	R96	M		PD_Poll_interval
23	POLLING OFF	3GPP TS 11.14, 5	R96	M		PD_Polling_Off
24	REFRESH	3GPP TS 11.14, 5	R96	M		PD_Refresh
25	SELECT ITEM	3GPP TS 11.14, 5	R96	M		PD_Select_Item
26	SEND SHORT MESSAGE	3GPP TS 11.14, 5	R96	M		PD_Send_SMS
27	SEND SS	3GPP TS 11.14, 5	R96	M		PD_Send_SS
28	SEND USSD	3GPP TS 11.14, 5	R98	M		PD_Send_USSD
29	SET UP CALL	3GPP TS 11.14, 5	R96	M		PD_SetUp_Call
30	SET UP MENU	3GPP TS 11.14, 5	R96	M		PD_SetUp_Menu
31	PROVIDE LOCAL INFORMATION (LOCI & IMEI)	3GPP TS 11.14, 5	R96	M		PD_Provide_Local

Item	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
32	PROVIDE LOCAL INFORMATION (NMR)	3GPP TS 11.14, 5	R97	M		PD_Provide_Local_ NMR
33	SET UP EVENT LIST	3GPP TS 11.14, 5	R98	M		PD_Setup_Evt_List
34	Event : MT call	3GPP TS 11.14, 5	R98	M		PD_MT_Call
35	Event : Call connected	3GPP TS 11.14, 5	R98	M		PD_Call_Conn
36	Event : Call disconnected	3GPP TS 11.14, 5	R98	M		PD_Call_Disc
37	Event : Location status	3GPP TS 11.14, 5	R98	M		PD_Loc_Status
38	Event : User activity	3GPP TS 11.14, 5	R98	M		PD_User_Act
39	Event : Idle screen available	3GPP TS 11.14, 5	R98	M		PD_Idle_Scr_Avail
40	Event : Card reader status	3GPP TS 11.14, 5	R98	C206		PD_Evt_Rdr_Status
41	Event : Language selection	3GPP TS 11.14, 5	R99	M		PD_Lang_Select
42	Event : Browser Termination	3GPP TS 11.14, 5	R99	C212		PD_Browser_Term
43	Event : Data available	3GPP TS 11.14, 5	R99	C207		PD_Data_Avail
44	Event : Channel status	3GPP TS 11.14, 5	R99	C207		PD_Evt_Ch_Status
45	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_45
46	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_46
47	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_47
48	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_48
49	POWER ON CARD	3GPP TS 11.14, 5	R98	C206		PD_C_On
50	POWER OFF CARD	3GPP TS 11.14, 5	R98	C206		PD_C_Off
51	PERFORM CARD APDU	3GPP TS 11.14, 5	R98	C206		PD_C_APDU
52	GET READER STATUS (Card reader status)	3GPP TS 11.14, 5	R98	C206		PD_Get_Rdr_Status
53	GET READER STATUS (Card reader identifier)	3GPP TS 11.14, 5	R99	C208		PD_Get_Rdr_Id
54	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_54
55	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_55
56	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_56
57	TIMER MANAGEMENT (start, stop)	3GPP TS 11.14, 5	R98	M		PD_Timer_Mgt_Start _Stop
58	TIMER MANAGEMENT (get current value)	3GPP TS 11.14, 5	R98	M		PD_Timer_Val
59	PROVIDE LOCAL INFORMATION (date, time and time zone)	3GPP TS 11.14, 5	R98	M		PD_Provide_Local_ D_Time
60	Binary choice in GET INKEY	3GPP TS 11.14, 5	R98	M		PD_Bin_Get_Inkey
61	SET UP IDLE MODE TEXT	3GPP TS 11.14, 5	R98	M		PD_Stup_Id_Mod_T xt
62	RUN AT COMMAND (i.e. class "b" is supported)	3GPP TS 11.14, 5	R98	C209		PD_Run_AT
63	2nd alpha identifier in SET UP CALL	3GPP TS 11.14, 5	R98	M		PD_SetUp_Call_Sec _Alpha_Id
64	2nd capability configuration parameter	3GPP TS 11.14, 5	R98	C210		PD_Cap_Conf_Para m
65	Sustained DISPLAY TEXT	3GPP TS 11.14, 5	R98	C211		PD_Sustained_Displ _Txt
66	SEND DTMF command	3GPP TS 11.14, 5	R98	M		PD_Send_DTMF
67	PROVIDE LOCAL INFORMATION - BCCH	3GPP TS 11.14, 5	R98	M		PD_Provide_Local_B CCH_List
68	PROVIDE LOCAL INFORMATION (language)	3GPP TS 11.14, 5	R99	M		PD_Provide_Local_L S
69	PROVIDE LOCAL INFORMATION (Timing Advance)	3GPP TS 11.14, 5	R99	M		PD_Provide_Local_T A
70	LANGUAGE NOTIFICATION	3GPP TS 11.14, 5	R99	M		PD_Lang_Notif
71	LAUNCH BROWSER	3GPP TS 11.14, 5	R99	C212		PD_Launch_Brws
72	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_72
73	Soft keys support for SELECT ITEM	3GPP TS 11.14, 5	R99	C213		PD_Softkey_Select_I tem
74	Soft Keys support for SET UP MENU	3GPP TS 11.14, 5	R99	C213		PD_Softkey_SetUp _Menu

Item	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
75	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_75
76	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_76
77	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_77
78	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_78
79	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_79
80	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_80
81	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C214		PD_Max_SoftKey
82	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C214		PD_Max_SoftKey
83	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C214		PD_Max_SoftKey
84	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C214		PD_Max_SoftKey
85	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C214		PD_Max_SoftKey
86	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C214		PD_Max_SoftKey
87	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C214		PD_Max_SoftKey
88	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C124		PD_Max_SoftKey
89	OPEN CHANNEL	3GPP TS 11.14, 5	R99	C207		PD_Open_Ch
90	CLOSE CHANNEL	3GPP TS 11.14, 5	R99	C207		PD_Close_Ch
91	RECEIVE DATA	3GPP TS 11.14, 5	R99	C207		PD_Rx_Data
92	SEND DATA	3GPP TS 11.14, 5	R99	C207		PD_Send_Data
93	GET CHANNEL STATUS	3GPP TS 11.14, 5	R99	C207		PD_Get_Ch_Status
94	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_94
95	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_95
96	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_96
97	CSD supported by ME	3GPP TS 11.14, 5	R99	C207		PD_CSD
98	GPRS supported by ME	3GPP TS 11.14, 5	R99	C215		PD_GPRS
99	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_99
100	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_100
101	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_101
102	Number of channels supported by ME	3GPP TS 11.14, 5	R99	C207		PD_Nb_Channel
103	Number of channels supported by ME	3GPP TS 11.14, 5	R99	C207		PD_Nb_Channel
104	Number of channels supported by ME	3GPP TS 11.14, 5	R99	C207		PD_Nb_Channel
105	Number of characters supported down the ME	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char
106	Number of characters supported down the ME	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char
107	Number of characters supported down the ME	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char
108	Number of characters supported down the ME	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char
109	Number of characters supported down the ME	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char
110	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_110
111	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_111
112	Screen Sizing Parameters	3GPP TS 11.14, 5	R99	C216		PD_Screen_Siz
113	Number of characters supported across the ME display	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char_Disp
114	Number of characters supported across the ME display	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char_Disp
115	Number of characters supported across the ME display	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char_Disp

Item	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
116	Number of characters supported across the ME display	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char_Disp
117	Number of characters supported across the ME display	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char_Disp
118	Number of characters supported across the ME display	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char_Disp
119	Number of characters supported across the ME display	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char_Disp
120	Variable size fonts Supported	3GPP TS 11.14, 5	R99	C217		PD_Var_Font
121	Display can be resized	3GPP TS 11.14, 5	R99	C218		PD_Disp_Resiz
122	Text Wrapping supported	3GPP TS 11.14, 5	R99	C218		PD_Txt_Wrap
123	Text Scrolling supported	3GPP TS 11.14, 5	R99	C218		PD_Txt_Scroll
124	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_124
125	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_125
126	Width reduction when in a menu	3GPP TS 11.14, 5	R99	C217		PD_Width_Reduc
127	Width reduction when in a menu	3GPP TS 11.14, 5	R99	C217		PD_Width_Reduc
128	Width reduction when in a menu	3GPP TS 11.14, 5	R99	C217		PD_Width_Reduc
129	TCP	3GPP TS 11.14, 5	R99	C220		PD_TCP
130	UDP	3GPP TS 11.14, 5	R99	C221		PD_UDP
131	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_131
132	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_132
133	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_133
134	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_134
135	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_135
136	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_136
137	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_137
138	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_138
139	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_139
140	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_140
141	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_141
142	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_142
143	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_143
144	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_144
145	Protocol Version	3GPP TS 11.14, 5	R99	TBD		
146	Protocol Version	3GPP TS 11.14, 5	R99	TBD		
147	Protocol Version	3GPP TS 11.14, 5	R99	TBD		
148	Protocol Version	3GPP TS 11.14, 5	R99	TBD		
149	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_149
150	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_150
151	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_151
152	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_152
C201	IF E.1/3 THEN O ELSE M			-- PD_CB		
C202	IF E.1/2 THEN O ELSE M			-- PD_SMS_PP		

Item	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
C203	IF A.1/3 THEN M				--	O_Ucs2_Entry
C204	IF A.1/14 THEN M				--	O_Ucs2_Disp
C205	IF A.1/4 THEN M				--	O_Ext_Str
C206	IF A.1/7 THEN M				--	O_Dual_Slot
C207	IF A.1/12 THEN M				--	O_BIP
C208	IF (A.1/7 AND A.1/8) THEN M				--	O_Dual_Slot AND O_Detach_Rdr
C209	IF A.1/9 THEN M				--	O_Run_At
C210	IF A.1/1 THEN M				--	O_Cap_Conf
C211	IF A.1/2 THEN M				--	O_sust_text
C212	IF A.1/10 THEN M				--	O_LB
C213	IF A.1/11 THEN M				--	O_Softkey
C214	IF C213 THEN bit values "0" / "1" allowed				--	O_Softkey (parameters)
C215	IF C207 AND A.1/16				--	O_BIP AND O_GPRS
C216	IF A.1/13 THEN M				--	O_Scr_Siz
C217	IF C217 THEN bit values "0" / "1" allowed				--	O_Scr_Siz (parameters)
C218	IF A.1/14 THEN M				--	O_Scr_Resiz
C219	IF C218 THEN bit values "0" / "1" allowed				--	O_Scr_Resiz (parameters)
C220	IF C207 AND A.1/18				--	O_BIP AND O_TCP
C221	IF C207 AND A.1/17				--	O_BIP AND O_UDP

Comments:

This static requirement for the TERMINAL PROFILE is specifying the bit coding of this command. In the support column a "Yes" (or "Y" or "y") means bit coding "1" and a "No" (or "N" or "n") and "X" means bit coding "0" in the command.

Annex F (informative): Change History

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
11.10-4	A008	99	2+	5.5.0	Upgrade of the MS SAT test specification to Release 99	F	8.1.0
11.10-4	A010r1	99	2+	8.1.0	Addition of Terminal Profile information, suppression of PLAY TONE Test sequence 1.2	F	8.2.0

History

Document history		
V8.1.0	December 2002	Publication
V8.2.0	February 2003	Publication