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Technical Specification

Digital cellular telecommunications system (Phase 2+);
Mobile Station (MS) conformance specification;
Part 4: Subscriber Identity Module (SIM)
application toolkit conformance test specification
(3GPP TS 51.010-4 version 4.13.0 Release 4)



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#### **Foreword**

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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 R98): "Mobile radio interface; Layer 3 specification" . 3GPP TS 24.008 (R99 onwards): "Mobile radio interface layer 3 specification; Core network protocols; Stage 3".
[11]	3GPP TS 04.11 (R96 to R98): "Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface".  3GPP TS 24.011 (R99 onwards): "Point-to-Point (PP) Short Message Service (SMS) Support on mobile radio interface".
[12]	3GPP TS 51.010-1 (Rel-5): "Mobile Station (MS) conformance specification; Part 1: Conformance specification".
[13]	3GPP TS 11.11 (R96 to R99): "Specification of the Subscriber Identity Module - Mobile Equipment (SIM-ME) interface".
[14]	3GPP TS 11.12 (R96): "Specification of the 3 Volt Subscriber Identity Module - Mobile Equipment (SIM-ME) interface".
[15]	3GPP TS 11.14 (R96 to R99): "Specification of the SIM application toolkit for the Subscriber Identity Module - Mobile Equipment (SIM - ME) interface".
[16]	Void.
[17a]	ISO/IEC 10646-1: "Information technology - Universal Multiple Octet Coded Character Set (UCS) - Part 1: Architecture and Basic Multilingual Plane".
[17b]	ISO/IEC 10646-2: "Information technology - Universal Multiple Octet Coded Character Set (UCS) - Part 2: Supplementary Planes".

[18]	3GPP TS 07.07 (R96 to R98): "AT command set for GSM Mobile Equipment (ME)" 3GPP TS 27.007 (R99 onwards): "AT command set for 3G User Equipment (UE)".
[19]	ISO/IEC 9646-7 (1995): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".
[20]	ETSI ETS 300 406 (1995): "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".
[21]	3GPP TS 31.124: "Mobile Equipment (ME) conformance test specification; Universal Subscriber Identity Module Application Toolkit (USAT) conformance test specification".
[22]	3GPP TS 31.111: "USIM Application Toolkit (USAT)"

## 3 Definitions and abbreviations

## 3.1 Mobile station definition and configurations

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

### 3.2 Applicability

#### 3.2.1 Applicability of the present document

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

#### 3.2.2 Applicability of the individual tests

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

## 3.2.3 Applicability to terminal equipment

The applicability to terminal equipment specified in TS 51.010-1 [12] clause 3.2.3 shall apply, unless otherwise specified in the present clause.

See table B.1.

#### 3.2.4 Definitions

For the purposes of the present document, the terms and definitions given in TS 51.010-1 [12], clause 3.3, apply.

#### 3.2.4.1 Format of the table of optional features

Option

The optional feature supported or not by the implementation.

Support Answer notation

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

Y or y	supported by the implementation				
N or n	not supported by the implementation				

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

Mnemonic column

The Mnemonic column contains mnemonic identifiers for each item.

#### 3.2.4.2 Format of the applicability table

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

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

- In the "Item" column a local entry number for the requirement in the table is given.
- In the "Description" column a short non-exhaustive description of the requirement is found.
- The "Release" column gives the Release applicable and onwards, for the item in the "Description" column
- The "Test Sequence(s)" column gives a reference to the test sequence number(s) detailed in the present document and required to validate the implementation of the corresponding item in the "Description" column.
- For a given Release, the corresponding "Rel 9x ME" column lists the tests required for a Mobile Station to be declared compliant to this Release.
- The "Support" column is blank in the proforma, and shall be completed by the manufacturer in respect of each particular requirement to indicate the choices, which have been made in the implementation.
- The "Terminal Profile" column gives a reference to the corresponding bit that needs to be present in the Terminal Profile.
- The "Recommendation for terminals also supporting USAT" column should be used in conjunction with the entry in the "Rel9x ME" column. The column indicates if the test is applicable or redundant providing that the equivalent USAT test has been performed with the terminal supporting SAT and USAT.
- The "Additional test case execution parameter" column shall be used in conjunction with the entry in the "Rel9x ME" column. The column indicates if the test is affected by additional test case execution parameters.

#### 3.2.4.3 Status and notations

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

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

M mandatory - the capability is required to be supported.

O optional - the capability may be supported or not.

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

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

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

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

The "Recommendation for terminals also supporting USAT" column shows the status of the entries as follows:

A applicable - the test is applicable according to the corresponding entry in the "R9x ME" column

R redundant – the test has to be considered as redundant when the corresponding TS 31.124 [21] test

has been validated and executed. In that case the requirement may be verified by means of

TS 31.124 [21].

AERi Additional test Execution Recommendation – with respect to the above listed definitions of ("A")

and ("R") the test is applicable ("A") or redundant ("R") depending on the support of other optional or conditional items. "i" is an integer identifying an unique conditional status expression which is defined immediately following the table. For nested conditional expressions, the syntax

"IF ... THEN (IF ... THEN ... ELSE...) ELSE ..." shall be used to avoid ambiguities.

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

TCEPi Test Case Execution Parameter –defines additional parameters which have to be taken into account

when executing affected test case(s). "i" is an integer identifying a unique parameter which is

defined immediately following the table.

#### References to items

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

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

## 3.3 Table of optional features

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

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

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

Table A.1: Options

Item		Status	Support	Mnemonic
1	Option Capability Configuration parameter	0	Сирроп	O_Cap_Conf
2	Sustained text	0		O sust text
3	UCS2 coding scheme for Entry	Ö		O_Ucs2_Entry
4	Extended Text String	0		O_Ext_Str
5	Help information	0		O_Help
6	Icons	Ö		O_lcons
7	Class A: Dual Slot	0		O_Dual_Slot
8	Detachable reader	0		O_Detach_Rdr
9	Class B: RUN AT	0		O_Run_At
10	Class C: LAUNCH BROWSER	0		O_LB
11	Class D: Soft keys	0		O_Soft_key
12	Class E: B.I.P related to CSD	0		O_BIP_CSD
13	Screen sizing parameters	0		O_Scr_Siz
14	Screen Resizing	0		O_Scr_Resiz
15	UCS2 coding scheme for Display	0		O_Ucs2_Disp
16	Mobile supporting GPRS	0		O_GPRS
17	Mobile supporting UDP	0		O_UDP
18	Mobile supporting TCP	0		O_TCP
19	Redial in Set Up Call	0		O_Redial
20	Mobile decision to respond with "No response from user" in finite time	0		O_D_NoResp
21	Class E: B.I.P related to GPRS	0		O_BIP_GPRS
22	Mobile supporting Called Party Subaddress	0		O_CP_Subaddr
23	Mobile supporting Fixed Dialling Numbers	0		O_FDN
24	Mobile supporting Barred Dialling Numbers	0		O_BDN
25	Mobile supporting "+CIMI" in combination with Run AT Command	0		O_+CIMI
26	UCS2 in Cyrillic	0		O_UCS2_Cyrillicc
27	Mobile supporting '9EXX' response	0		O_9EXX
	code for SIM data download error			
28	Mobile supporting Envelope Call Control always sent to the SIM during automatic redial mode	0		O_CC_Auto_Redial
29	Mobile supporting 2nd alpha identifier in SET UP CALL	0		O_SetUp_Call_Sec_Al pha_ld
30	Mobile supporting Open Channel (GPRS) not containing a Network Access Name TLV when no default Access Point Name is set in the terminal configuration	0		O_Open_Channel_GP RS_without_DefaultAP N
31	Preferred buffer size supported by the terminal for Open Channel command is greater than 0 byte and less than 65535 bytes	0		O_BUFFER_SIZE
32	Terminal supports Dual Transfer Mode (allowing GPRS connection and call at the same time)	0		O_DTM
33	Terminal supports Long ForwardToNumber	0		O_longFTN
34	Terminal executes User confirmation phase before sending PDP context activation request	0		O_User_Confirm_Befo re_PDP_Context_Req uest
35	Terminal supports SAT and USAT	0		O_SAT_USAT
36	ME requesting for user confirmation before sending the Envelope Call Control command	0		O_UC_Before_EnvCC

37	ME requesting for user	0	O_UC	_After_EnvCC
	confirmation after sending the			_
	Envelope Call Control command			
38	ME supports Call Hold	0	O_Sei	v_SS_HOLD
	Supplementary Service			
39	ME supports icons as defined in record 1 of EF(IMG)	0	O_I	cons_Rec1
40	ME supports icons as defined in record 2 of EF(IMG)	0	0_l	cons_Rec2
41	ME supports icons as defined in record 5 of EF(IMG)	0	O_l(	cons_Rec5
42	Terminal supports at least one	0	O_ <i>P</i>	\ddInfo_SS
	supplementary service.			
43	Terminal supports "Call	0	O_ Se	erv_SS_CFU
	Forwarding Unconditional"			
44	Terminal supports "Calling Line Identification Restriction"	0	O_Se	rv_SS_CLIR
45	Terminal supports display capability	C001	O_N	o_Type_ND
46	Terminal supports keypad	C001	O_N	o_Type_NK
47	Terminal supports audio altering	C001	O_N	o_Type_NA
48	Terminal supports speech call	C001	O_N	o_Type_NS
49	Terminal supports multiple	C001	O_N	o_Type_NL
	languages			
C001	If feature is implemented according	to TS 31.1	11 [22] Rel-8 or lat	er then O, else
	M			

## 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	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
1	PROFILE DOWNLOAD 27.22.1	R96	1	M	M	M	М	E.1/1	No			
2	Contents of the TERMINAL PROFILE command 27.22.2	R96		M	M	M	M	E.1/1	No			
3	Servicing of Proactive SIM Commands 27.22.3	R96		M	M	M	М		No			
4	DISPLAY TEXT 27.22.4.1											
	Unpacked	R96	1.1	C139	C139	C139	C139	E.1/17 AND E.1/110	No		AER001	
	Screen busy	R96	1.2	C139	C139	C139	C139	E.1/17 AND E.1/110	No		AER001	
	high priority	R96	1.3	C139	C139	C139	C139	E.1/17 AND E.1/110	No		AER001	
	Packed	R96	1.4	C139	C139	C139	C139	E.1/17 AND E.1/110	No		AER001	
	clear after delay	R96	1.5	C139	C139	C139	C139	E.1/17 AND E.1/110	No		AER001	
	long text up to 160 bytes	R96	1.6	C139	C139	C139	C139	E.1/17 AND E.1/110	No		AER001	
	Backwards move in SIM session	R96	1.7	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/17 AND E.1/110 AND E.1/111	No		AER001	

em	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	Session terminated by user	R96	1.8	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/17 AND E.1/110 AND E.1/111	No		AER001	
	Command not understood by ME	R96	1.9	C139			C139	E.1/17 AND E.1/110	No		AER001	
	no response from user	R96	2.1	C120 AND C139 AND C140	C120 AND C139 AND C140	C120 AND C139 AND C140	C120 AND C139 AND C140	E.1/17 AND E.1/110 AND E.1/111	No		AER001	
	Extension Text	R98	3.1			C106 AND C139	C106 AND C139	E.1/17 AND E.1/16 AND E.1/110	No		AER001	
	sustained text	R98	4.1, 4.2			C104 AND C139	C104 AND C139	E.1/17 AND E.1/65 AND E.1/110	No			
	sustained text	R98	4.3			C104 AND C139 AND C140	C104 AND C139 AND C140	E.1/17 AND E.1/65	No			
	sustained text	R98	4.4			C104 AND C139 AND C140	C104 AND C139 AND C140	E.1/17 AND E.1/65	Yes			
	Icons – basic icon	R98	5.1, 5.3			C108 AND C139	C108 AND C139	E.1/17 AND E.1/111	No			
	Icons – colour icon	R98	5.2			C134 AND C139	C134 AND C139	E.1/17 AND E.1/111	No			

em	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	UCS2 display	R97	6.1		C118 AND C139	C118 AND C139	C118 AND C139	E.1/17 AND E.1/15 AND E.1/111	No			
5	GET INKEY 27.22.4.2											
	prompt unpacked	R96	1.1	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/18 AND E.1/110 AND E.1/111	No		AER001	
	prompt packed	R96	1.2	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/18 AND E.1/110 AND E.1/111	No		AER001	
	digits only	R96	1.1	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/18 AND E.1/110 AND E.1/111	No		AER001	
	Backwards move in SIM session	R96	1.3	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/18 AND E.1/110 AND E.1/111	No		AER001	
	Session terminated by user	R96	1.4	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/18 AND E.1/110 AND E.1/111	No		AER001	
	SMS alphabet	R96	1.5	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/18 AND E.1/110 AND E.1/111	No		AER001	
	Long text up to 160 bytes	R96	1.6	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/18 AND E.1/110 AND E.1/111	No		AER001	

n	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	no response	R96	2.1	C120	C120	C120	C120	E.1/18	No		AER001	
	from user			AND	AND	AND	AND	AND				
				C139 AND	C139 AND	C139 AND	C139	E.1/110 AND				
				C140		C140	AND C140	E.1/111				
ŀ	UCS2 display	R97	3.1	0140	C118	C118	C118	E.1/18	No			
	CCC2 diopidy	1107	0.1		AND	AND	AND	AND	140			
						C139	C139	E.1/15				
					AND	AND	AND	AND				
						C140	C140	E.1/110				
								AND				
								E.1/111				
	UCS2 display,	R97	3.2				C118	E.1/18	No			
	Long text up to				AND	AND	AND	AND				
	70 chars					C139	C139	E.1/15				
					AND	AND	AND	AND				
					C140	C140	C140	E.1/110 AND				
								E.1/111				
ŀ	UCS2 format of	R97	4.1		C105	C105	C105	E.1/18	No			
	entry	107	7.1		AND	AND	AND	AND	140			
	····· y					C139	C139	E.1/14				
					AND	AND	AND	AND				
					C140	C140	C140	E.1/110				
								AND				
								E.1/111				
	"Yes/No"	R98	5.1				C139	E.1/18	No		AER001	
	response					AND	AND	AND				
						C140	C140	E.1/60				
								AND E.1/110				
								AND				
								E.1/111				
ŀ	Icons – basic	R98	6.1, 6.2		†	C108	C108	E.1/18	No			
	icon	. 100	011, 012			AND	AND	AND	140			
						C139	C139	E.1/110				
						AND	AND	AND				
						C140		E.1/111				
	Icons - colour	R98	6.3, 6.4			C134	C134	E.1/18	No			
	icon					AND	AND	AND				
						C139	C139	E.1/110				
						AND	AND	AND				
						C140	C140	E.1/111				1

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	Help information	R97	7.1		C107 AND C139 AND C140	C107 AND C139 AND C140	C107 AND C139 AND C140	E.1/18 AND E.1/110 AND E.1/111	No		AER001	
6	GET INPUT 27.22.4.3											
	input unpacked	R96	1.1	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/19 AND E.1/110 AND E.1/111	No		AER001	
	input packed	R96	1.2	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/19 AND E.1/110 AND E.1/111	No		AER001	
	digits only	R96	1.1	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/19 AND E.1/110 AND E.1/111	No		AER001	
	SMS alphabet	R96	1.3	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/19 AND E.1/110 AND E.1/111	No		AER001	
	hidden input	R96	1.4	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/19 AND E.1/110 AND E.1/111	No		AER001	
	min / max acceptable length	R96	1.5, 1.9	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/19 AND E.1/110 AND E.1/111	No		AER001	
	Backwards move in SIM session	R96	1.6	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/19 AND E.1/110 AND E.1/111	No		AER001	

tem	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	Session terminated by user	R96	1.7	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/19 AND E.1/110 AND E.1/111	No		AER001	
	Prompt text up to 160 bytes	R96	1.8	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/19 AND E.1/110 AND E.1/111	No		AER001	
	SMS default alphabet, ME to echo text, packing not required	R96	1.9	C139 AND C140M	C139 AND C140	C139 AND C140	C139 AND C140	E.1/19 AND E.1/110 AND E.1/111	No		AER001	
	Null length for the text string	R96	1.10	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/19 AND E.1/110 AND E.1/111	No		AER001	
	no response from user	R96	2.1	C120 AND C139 AND C140	C120 AND C139 AND C140	C120 AND C139 AND C140	C120 AND C139 AND C140	E.1/19 AND E.1/110 AND E.1/111	No		AER001	
	UCS2 display	R97	3.1, 3.2		C118 AND C139 AND C140	C118 AND C139 AND C140	C118 AND C139 AND C140	E.1/19 AND E.1/15 AND E.1/110 AND E.1/111	No			
	UCS2 entry	R97	4.1, 4.2		C105 AND C139 AND C140	C105 AND C139 AND C140	C105 AND C139 AND C140	E.1/19 AND E.1/14 AND E.1/110 AND E.1/111	No			

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	default text for the input	R97	5.1, 5.2		C139 AND C140	C139 AND C140	C139 AND C140	E.1/19 AND E.1/110 AND	No		AER001	
								E.1/111				
	Icons – basic	R98	6.1, 6.2			C108	C108	E.1/19	No			
	icon		, ,			AND	AND	AND				
						C139	C139	E.1/110				
						AND	AND	AND				
						C140	C140	E.1/111				
	Icons – colour	R98	6.3, 6.4			C134	C134	E.1/19	No			
	icon						AND	AND				
							C139	E.1/110				
							AND	AND				
		D.0-7			0407	0.407	C140	E.1/111				
	help information	R97	7.1		C107		C107	E.1/19 AND	No			
					AND	AND C139	AND C139	E.1/110				
					AND	AND	AND	AND				
					C140		C140	E.1/111				
7	MORE TIME 27.22.4.4	R96	1.1	М	M	M	M	E.1/20	No			
8	PLAY TONE 27.22.4.5											
	play all tones	R96	1.1	C140	C140	C140	C140	E.1/21	Yes			
				AND	AND	AND	AND	AND				
				C141		C141	C141	E.1/110				
				AND	AND	AND	AND	AND				
				C142	C142	C142	C142	E.1/111				
	UCS2 display	R97	TBD					E.1/21				
								AND				
								E.1/15 AND				
								E.1/110				
								AND				
								E.1/111				
	icons	R98	TBD					E.1/21				
		1.00	.55					AND				
								E.1/110				
								AND				
								E.1/111				

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
9	POLL INTERVAL 27.22.4.6											
	duration	R96	1.1	M	M	M	M	E.1/22	No		AER001	
10	REFRESH 27.22.4.7											
	SIM initialization, enabling FDN mode	R96	1.1	C125 AND C139 AND C140 AND C142	C125 AND C139 AND C140 AND C142	C125 AND C139 AND C140 AND C142	C125 AND C139 AND C140 AND C142	E.1/24 AND E.1/110 AND E.1/111	Yes			
	file change notification of FDN file	R96	1.2	C125 AND C139 AND C140 AND C142	C125 AND C139 AND C140 AND C142	C125 AND C139 AND C140 AND C142	C125 AND C139 AND C140 AND C142	E.1/24 AND E.1/110 AND E.1/111	Yes			
	SIM initialization and file change notification of PLMN	R96	1.3	M	M	M	М	E.1/24	Yes			
	SIM initialization and full file change notification, enabling FDN mode	R96	1.4	C125 AND C139 AND C140 AND C142	C125 AND C139 AND C140 AND C142	C125 AND C139 AND C140 AND C142	C125 AND C139 AND C140 AND C142	E.1/24 AND E.1/110 AND E.1/111	Yes			
	SIM reset	R96	1.5	М	М	М	М	E.1/24	Yes			
	SIM Initialization after SMS-PP data download	R96	1.6	C125 AND C139 AND C140 AND C142	C125 AND C139 AND C140 AND C142	C125 AND C139 AND C140 AND C142	C125 AND C139 AND C140 AND C142	E.1/24 AND E.1/110 AND E.1/111	Yes			

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	IMSI Changing procedure, SIM Initialization and File Change Notification)	R98	2.1			M	M	E.1/24	Yes			
	IMSI Changing procedure, SIM Initialization and Full File Change Notification)	R98	2.2			M	M	E.1/24	Yes			
	IMSI Changing procedure, SIM Reset	R98	2.3			М	М	E.1/24	Yes			
11	SET UP MENU 27.22.4.8											
	Set up, menu selection, replace and remove menu	R96	1.1	C139 AND C140	C139 AND C140	AND	C139 AND C140	E.1/30 AND E.1/4 AND E.1/110 AND E.1/111	No		AER001	
	Large menu	R96	1.2	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/30 AND E.1/4 AND E.1/110 AND E.1/111	No		AER001	
	help information	R97	2.1		C107 AND C139 AND C140	AND C139 AND	C107 AND C139 AND C140	E.1/30 AND E.1/4 AND E.1/110 AND E.1/111	No		AER001	
	next action indicator	R97	3.1		C139 AND C140	AND	C139 AND C140	E.1/30 AND E.1/110 AND E.1/111	No		AER001	

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	Icons – basic icon	R98	4.1, 4.2			C135 AND C139 AND C140	C135 AND C139 AND C140	E.1/30 AND E.1/110 AND E.1/111	No			
	soft key access	R99	5.1			0140	C112 AND C139 AND C140	E.1/30 AND E.1/74 AND E.1/110 AND E.1/111	No			
12	SELECT ITEM 27.22.4.9											
	Mandatory features	R96	1.1	C139 AND C140	C139 AND C140	C139 AND C140	C139 AND C140	E.1/25 AND E.1/110 AND E.1/111	No		AER001	
	Large menu	R96	1.2, 1.3, 1.5,1.6	C139 AND C140	AND	C139 AND C140	C139 AND C140	E.1/25 AND E.1/110 AND E.1/111	No		AER001	
	Backwards move	R96	1.4	C139 AND C140	AND	C139 AND C140	C139 AND C140	E.1/25 AND E.1/110 AND E.1/111	No		AER001	
	user termination	R96	1.5	C139 AND C140	AND	AND	C139 AND C140	E.1/25 AND E.1/110 AND E.1/111	No		AER001	
	next action indicator	R97	2.1		AND	C139 AND C140	C139 AND C140	E.1/25 AND E.1/110 AND E.1/111	No			

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	default selected item	R97	3.1		C139 AND C140	C139 AND C140	C139 AND C140	E.1/25 AND E.1/110 AND E.1/111	No		AER001	
	help information	R97	4.1		C107 AND C139 AND C140	C107 AND C139 AND C140	C107 AND C139 AND C140	E.1/25 AND E.1/110 AND E.1/111	No			
	Icons – basic icon	R98	5.1, 5.2			C135 AND C139 AND C140	C135 AND C139 AND C140	E.1/25 AND E.1/110 AND E.1/111	No			
	Presentation style	R98	6.1, 6.2			C139 AND C140	C139 AND C140	E.1/25 AND E.1/110 AND E.1/111	No			
	Soft keys	R99	7.1				C112 AND C139 AND C140	E.1/25 AND E.1/73 AND E.1/110 AND E.1/111	No			
	no response from user	R96	8.1	C120 AND C139 AND C140	C120 AND C139 AND C140	C120 AND C139 AND C140	C120 AND C139 AND C140	E.1/25 AND E.1/110 AND E.1/111	No		AER001	
13	SEND SMS 27.22.4.10											
	Packing not required, 8 bit data	R96	1.1	М	М	М	М	E.1/26 AND E.1/110	Yes			TCEP001
	Packing required, 8 bit data	R96	1.2	M	М	М	М	E.1/26 AND E.1/110	Yes		AER001	TCEP001
	Packing not required, SMS default alphabet	R96	1.3	M	M	M	М	E.1/26 AND E.1/110	Yes		AER001	TCEP001

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	Packing required, 8 bit data, 160 bytes length	R96	1.4	M	M	M	М	E.1/26 AND E.1/110	Yes		AER001	TCEP001
	Packing not required, SMS default alphabet, 160 bytes length	R96	1.5	M	M	M	M	E.1/26 AND E.1/110	Yes		AER001	TCEP001
	Alpha identifier	R96	1.6, 1.8	M	M	М	М	E.1/26 AND E.1/110	Yes		AER001	TCEP001
	Alpha identifier length "00"	R96	1.7	М	М	М	М	E.1/26	Yes		AER001	
	UCS2 SMS	R97	2.1		C118	C118	C118	E.1/26 AND E.1/15 AND E.1/110	Yes			TCEP001
	Icons – basic icon	R98	3.1, 3.2			C108	C108	E.1/26 AND E.1/110	Yes			TCEP001
14	SEND SS 27.22.4.11											
	call forward unconditional, all bearers, successful	R96	1.1	C129 AND C137	C129 AND C137	C129 AND C137	C129 AND C137	E.1/27 AND E.1/110	Yes			TCEP001
	call forward unconditional, all bearers, Return Error	R96	1.2	C137	C137	C137	C137	E.1/27 AND E.1/110	Yes		AER001	TCEP001
	call forward unconditional, all bearers, Reject	R96	1.3	C137	C137		C137	E.1/27 AND E.1/110	Yes		AER001	TCEP001
	call forward unconditional, all bearers, successful, SS request size limit	R96	1.4	C129 AND C137	C129 AND C137	C129 AND C137	C129 AND C137	E.1/27 AND E.1/110	Yes		AER001	TCEP001

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	interrogate CLIR status, successful, alpha identifier limits	R96	1.5	C138	C138	C138	C138	E.1/27 AND E.1/110	Yes		AER001	TCEP001
	call forward unconditional, all bearers, successful, null data alpha identifier	R96	1.6	C129 AND C137	C129 AND C137	C129 AND C137	C129 AND C137	E.1/27 AND E.1/110	Yes		AER001	
	call forward unconditional, all bearers, successful, basic icon support	R98	2.1, 2.3, 2.4			C108 AND C137	C108 AND C137	E.1/27 AND E.1/110	Yes		AER001	TCEP001
	call forward unconditional, all bearers, successful, colour icon support	R98	2.2			C134 AND C137	C134 AND C137	E.1/27 AND E.1/110	Yes		AER001	TCEP001
	UCS2 display	R97	3.1		C118 AND C137	C118 AND C137	C118 AND C137	E.1/27 AND E.1/15 AND E.1/110	Yes			TCEP001
15	SEND USSD 27.22.4.12											
	7-bit data, successful	R96	1.1			М	М	E.1/28 AND E.1/110	Yes			TCEP001
	8-bit data, successful	R96	1.2			M	M	E.1/28 AND E.1/110	Yes		AER001	TCEP001
	UCS2 data, successful	R96	1.3			М	М	E.1/28 AND E.1/110	Yes		AER001	TCEP001
	7-bit data, unsuccessful	R96	1.4			М	М	E.1/28 AND E.1/110	Yes		AER001	TCEP001

Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	for terminals also supporting USAT	Additional test case execution parameter
7-bit data, unsuccessful	R96	1.5			M	M	E.1/28 AND E.1/110	Yes		AER001	TCEP001
256 octets, 7-bit data, successful, long alpha identifier	R96	1.6			M	М	E.1/28 AND E.1/110	Yes		AER001	TCEP001
7-bit data, successful, no alpha identifier	R96	1.7			M	М	E.1/28 AND E.1/110	Yes		AER001	
7-bit data, successful, null length alpha identifier	R96	1.8			M	М	E.1/28 AND E.1/110	Yes		AER001	
Icons – basic icon	R98	2.1, 2.3, 2.4			C108	C108	E.1/28 AND E.1/110	Yes			TCEP001
Icons – colour icon	R98	2.2			C134	C134	E.1/28 AND	Yes			TCEP001
UCS2	R97	3.1			C118	C118	E.1/28 AND E.1/15 AND	Yes			TCEP001
SET UP CALL 27.22.4.13											
Call confirmed by the user and connected	R96	1.1	C139 AND C140 AND C142	AND C140 AND C142	AND C140 AND C142	C139 AND C140 AND C142	E.1/29 AND E.1/110 AND E.1/111	Yes			
call rejected by the user	R96	1.2	C139 AND C140 AND C142	C139 AND C140 AND C142	C139 AND C140 AND C142	C139 AND C140 AND C142	E.1/29 AND E.1/110 AND E.1/111	Yes		AER001	
	7-bit data, unsuccessful 256 octets, 7-bit data, successful, long alpha identifier 7-bit data, successful, no alpha identifier 7-bit data, successful, null length alpha identifier Icons – basic icon Icons – colour icon UCS2  SET UP CALL 27.22.4.13 Call confirmed by the user and connected	7-bit data, unsuccessful  256 octets, 7-bit data, successful, long alpha identifier  7-bit data, successful, no alpha identifier  7-bit data, successful, null length alpha identifier  Icons – basic icon  Icons – colour icon  UCS2  R97  SET UP CALL 27.22.4.13  Call confirmed by the user and connected  R96  R96  R96  R97	7-bit data, unsuccessful  256 octets, 7-bit data, successful, long alpha identifier  7-bit data, successful, no alpha identifier  7-bit data, successful, no alpha identifier  Icons – basic icon  SET UP CALL 27.22.4.13  Call confirmed by the user and connected  R96  1.5  R96  1.6  R96  1.7  R96  1.7  R96  1.8  Sequence (s)  R96  1.6  R96  1.7  R96  1.7  R96  1.8  Sequence (s)  R96  1.6  R96  1.7  R96  1.8  Sequence (s)  R96  1.1  R96  1.1  Sequence (s)  R96  1.1  R96  1.1  Sequence (s)  R96  1.1  R96  1.1	Sequence (s)   ME	Sequence (s)   ME   97   ME	Sequence (s)   ME   97   ME   ME	Sequence (s)   ME   97   98   99   ME	Sequence (s)   ME   97   ME   98   ME   ME   ME   ME   ME   ME   ME   M	Sequence (s)   ME   97   98   ME   ME   ME   ME   ME   ME   ME   M	Sequence (s)   ME   97   98   99   ME   Profile   Dependency   ME   ME   ME   ME   ME   ME   Profile   Dependency   ME   ME   ME   ME   ME   ME   ME   M	Sequence (s)   ME   97   98   ME   ME   ME   Dependency   Ifor terminals also supporting USAT

1	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	putting all other	R96	1.4	C133	C133	C133	C133	E.1/29	Yes		AER001	
	calls on hold,			AND	AND	AND	AND	AND				
	ME busy			C139	C139	C139	C139	E.1/110				
				AND	AND	AND	AND	AND				
				C140	C140	C140	C140	E.1/111				
				AND	AND	AND	AND					
_				C142	C142	C142	C142					
	disconnecting	R96	1.5	C139	C139	C139	C139	E.1/29	Yes		AER001	
	all other calls,			AND	AND	AND	AND	AND				
	ME busy			C140	C140	C140	C140	E.1/110				
				AND	AND	AND	AND	AND				
L				C142	C142	C142	C142	E.1/111				
	only if not	R96	1.6	C139	C139	C139	C139	E.1/29	Yes		AER001	
	currently busy			AND	AND	AND	AND	AND				
	on another call,			C140	C140	C140	C140	E.1/110				
	ME busy			AND	AND	AND	AND	AND				
				C142	C142	C142	C142	E.1/111				
	putting all other	R96	1.7	C133	C133	C133	C133	E.1/29	Yes		AER001	
	calls on hold,			AND	AND	AND	AND	AND				
	call hold is not			C139	C139	C139	C139	E.1/110				
	allowed			AND	AND	AND	AND	AND				
				C140	C140	C140	C140	E.1/111				
				AND	AND	AND	AND					
L				C142	C142	C142	C142					
	Capability	R96	1.8	C101	C101	C101	C101	E.1/29	Yes		AER001	
	configuration			AND	AND	AND	AND	AND				
				C139	C139	C139	C139	E.1/110				
				AND	AND	AND	AND	AND				
				C140	C140	C140	C140	E.1/111				
				AND	AND	AND	AND					
L				C142	C142	C142	C142					
	long dialling	R96	1.9	C139	C139	C139	C139	E.1/29	Yes		AER001	
	number string			AND	AND	AND	AND	AND				
				C140	C140	C140	C140	E.1/110				
				AND	AND	AND	AND	AND				
				C142	C142	C142	C142	E.1/111				
	long first alpha	R96	1.10	C139	C139	C139	C139	E.1/29	Yes		AER001	
	identifier			AND	AND	AND	AND	AND				
				C140	C140	C140	C140	E.1/110				
				AND	AND	AND	AND	AND				
				C142	C142	C142	C142	E.1/111				

			(s)	ME	97 ME	98 ME	99 ME	Profile	Dependency	for terminals also supporting USAT	test case execution
			(3)		IVIL	IVIL	IVIL			Supporting COAT	parameter
	Called party	R96	1.11	C124	C124	C124	C124	E.1/29	Yes	AER001	
S	subaddress			AND C139	AND C139	AND C139	AND C139	AND E.1/110			
				AND	AND	AND	AND	AND			
				C140	C140	C140	C140	E.1/111			
				AND	AND	AND	AND				
		R96	4.40	C142	C142	C142	C142	E 4/00	V.	AED004	
	maximum duration for the	K96	1.12	C119 AND	C119 AND	C119 AND	C119 AND	E.1/29 AND	Yes	AER001	
	redial			C139	C139	C139	C139	E.1/110			
r	mechanism			AND	AND	AND	AND	AND			
				C140	C140	C140	C140	E.1/111			
				AND C142	AND C142	AND C142	AND C142				
	second alpha	R98	2.1	C142	C142	C139	C139	E.1/29	Yes		
	dentifier	1100	2.1			AND	AND	AND	103		
						C140	C140	E.1/63			
						AND	AND	AND			
						C142	C142	E.1/110 AND			
								E.1/111			
Ī	JCS2 Display	R97	TBD					E.1/29	Yes		
								AND			
	cons – basic	R98	3.1,3.2,			C108	C108	E.1/15 E.1/29	Yes		
	con – basic	K90	3.1,3.2,			AND	AND	AND	res		
	0011		0.1			C139	C139	E.1/110			
						AND	AND	AND			
						C140	C140	E.1/111			
						AND C142	AND C142				
I	cons – colour	R98	3.3			C134	C134	E.1/29	Yes		
	con					AND	AND	AND			
						C139	C139	E.1/110			
						AND C140	AND C140	AND E.1/111			
						AND	AND	□. 1/ 1 1 1			
						C142	C142				
	POLLING OFF 27.22.4.14	R96	1.1	C142	C142	C142	C142	E.1/23	Yes		
	PROVIDE										
<b>L</b>	LOCAL INFO 27.22.4.15										

Item		Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	location information	R96	1.1	М	М	М	М	E.1/31	Yes			
	IMEI	R96	1.2	M	М	М	М	E.1/31	Yes		AER001	
	network measurement results and BCCH channel list	R98	1.3			M	M	E.1/32 AND E.1/67	Yes		AER001	
	Date, time and time zone	R98	1.4			М	М	E.1/59	No		AER001	
	language setting	R99	1.5				М	E.1/68	No		AER001	
	Timing advance	R99	1.6				М	E.1/69	Yes		AER001	
	SET UP EVENT LIST 27.22.4.16											
	Set up call connected event	R97	1.1		C142	C142	C142	E.1/33 AND E.1/35	Yes		AER001	
	Replace by new event list	R97	1.2		C142	C142	C142	E.1/33 AND E.1/35 AND E.1/36	Yes		AER001	
	Remove event	R97	1.3		C142	C142	C142	E.1/33 AND E.1/35	Yes		AER001	
	Remove Event on ME Power Cycle	R97	1.4		C142	C142	C142	E.1/33 AND E.1/35	Yes		AER001	
20	PERFORM CARD APDU 27.22.4.17											
	Additional card inserted, Select MF and Get Response	R98	1.1			C109	C109	E.1/51	No			

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	Additional card inserted, Select DF GSM, Select EF PLMN, Update Binary, Read Binary on EF PLMN	R98	1.2			C109	C109	E.1/51	No			
	Additional card inserted, card powered off	R98	1.3				C109	E.1/51	No			
	No card inserted, card powered off	R98	1.4			C109	C109	E.1/51	No			
	Invalid card reader identifier	R98	1.5			C109	C109	E.1/51	No			
	Detachable reader	R98	2.1			C116	C116	E.1/51	No			
21	POWER OFF CARD 27.22.4.18											
	Additional card inserted	R98	1.1			C109	C109	E.1/50	No			
	No card inserted	R98	1.2			C109	C109	E.1/50	No			
	Detachable reader	R98	2.1			C116	C116	E.1/50	No			
22	POWER ON CARD 27.22.4.19											
	Additional card inserted	R98	1.1			C109	C109	E.1/49	No			
	No ATR	R98	1.2			C109	C109	E.1/49	No			
	No card inserted	R98	1.3			C109	C109	E.1/49	No			
	Detachable reader	R98	2.1			C116	C116	E.1/49	No			
23	GET READER STATUS 27.22.4.20											
	Additional card inserted, card powered	R98	1.1			C109	C109	E.1/52	No			

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	Additional card inserted, card not powered	R98	1.2			C109	C109	E.1/52	No			
	Additional card inserted, card not present	R98	1.3			C109	C109	E.1/52	No			
	Detachable reader	R98	2.1			C116	C116	E.1/52	No			
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	No		AER001	
	Start timer 2 several times, get the current value of the timer and deactivate the timer successfully	R98	1.2			M	M	E.1/57 AND E.1/58	No		AER001	
	Start timer 8 several times, get the current value of the timer and deactivate the timer successfully	R98	1.3			M	M	E.1/57 AND E.1/58	No		AER001	
	Try to get the current value of a timer which is not started: action in contradiction with the current timer state	R98	1.4			M	M	E.1/57 AND E.1/58	No		AER001	

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	for terminals also supporting USAT	Additional test case execution parameter
	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	No		AER001	
	Start 8 timers successfully	R98	1.6			М	М	E.1/57 AND E.1/58	No		AER001	
25	ENVELOPE TIMER EXPIRATION 27.22.4.21.2											
	Pending proactive SIM command	R98	2.1			М	М	E.1/6 AND E.1/57	No		AER001	
	SIM application toolkit busy	R98	2.2			M	M	E.1/6 AND E.1/57 AND E.1/20	No		AER001	
26	SET UP IDLE MODE TEXT 27.22.4.22											
	Display idle mode text	R98	1.1			C139	C139	E.1/61 AND E.1/33 AND E.1/39 AND E.1/110	Yes			
	Replace idle mode text	R98	1.2			C139	C139	E.1/61 AND E.1/33 AND E.1/39 AND E.1/110	Yes			

em	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	Remove idle mode test	R98	1.3			C139	C139	E.1/61 AND E.1/33 AND E.1/39 AND E.1/110	Yes			
	Competing information on ME display	R98	1.4			C139	C139	E.1/61 AND E.1/33 AND E.1/39 AND E.1/110	Yes			
	ME powered cycled	R98	1.5			C139	C139	E.1/61 AND E.1/33 AND E.1/39 AND E.1/110	Yes			
	Refresh with SIM initialization	R98	1.6			C139	C139	E.1/61 AND E.1/24 AND E.1/33 AND E.1/39 AND E.1/110	Yes			
	Large text string	R98	1.7			C139		E.1/61 AND E.1/33 AND E.1/39 AND E.1/110	Yes			
	Icons – basic icon	R98	2.1, 2.2, 2.4			C108 AND C139	C108 AND C139	E.1/61 AND E.1/39 AND E.1/110	Yes			

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	Icons – colour icon	R98	2.3			C134 AND C139	C134 AND C139	E.1/61 AND E.1/39 AND E.1/110	Yes			
	UCS2 display	R98	3.1			C118 AND C139	C118 AND C139	E.1/61 AND E.1/15 AND E.1/39 AND E.1/110	Yes			
27	RUN AT COMMAND 27.22.4.23											
	No alpha Identifier	R98	1.1			C110	C110	E.1/62	No			
	null data alpha identifier presented	R98	1.2			C110	C110	E.1/62	No			
	alpha identifier presented	R98	1.3			C110	C110	E.1/62 AND E.1/110	No			
	Icons – basic icon	R98	2.1, 2.3, 2.5			C114 AND C139	C114 AND C139	E.1/62 AND E.1/110	No			
	Icons – colour icon	R98	2.2 2.4,			C136 AND	C136 AND C139	E.1/62 AND E.1/110	No			
28	SEND DTMF 27.22.4.24											
	Normal	R98	1.1			C142	C142	E.1/66	Yes		AER001	
	alpha identifier	R98	1.2, 1.3			C142	C142	E.1/66 AND E.1/110	Yes			TCEP001
	Mobile is not in a speech call	R98	1.4			C142	C142	E.1/66 AND E.1/110	Yes		AER001	TCEP001
	Icons – basic icon	R98	2.1, 2.3			C108 AND C142	C108 AND C142	E.1/66 AND E.1/110	Yes			TCEP001

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	Icons – colour icon	R98	2.2			C134 AND C142	C134 AND C142	E.1/66 AND E.1/110	Yes			TCEP001
	UCS2 display	R98	3.1			C118 AND C142	C118 AND C142	E.1/66 AND E.1/15 AND E.1/110	Yes			TCEP001
29	LANGUAGE NOTIFICATION 27.22.4.25											
	Specific language notification	R99	1.1				C143	E.1/70	No			
	Non specific language notification	R99	1.2				C143	E.1/70	No			
30	LAUNCH BROWSER 27.22.4.26											
	No session already launched: Connect to the default URL	R99	1.1				C111 AND C139 AND C140	E.1/71 AND E.1/110 AND E.1/111	Yes			
	connect to the specified URL, alpha identifier length=0	R99	1.2				C111 AND C139 AND C140	E.1/71 AND E.1/110 AND E.1/111	Yes			
	Browser identity, no alpha identifier	R99	1.3				C111 AND C139 AND C140	E.1/71 AND E.1/110 AND E.1/111	Yes			
	one bearer specified and gateway/proxy identity	R99	1.4				C122 AND C139 AND C140	E.1/71 AND E.1/110 AND E.1/111	Yes			
	void	R99	1.5				Void	Void				

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	Interaction with current session	R99	2.1, 2.2				C111 AND C139 AND C140	E.1/71 AND E.1/110 AND E.1/111	Yes			
	Interaction with current session	R99	2.3				C111 AND C139 AND C140	E.1/71 AND E.1/110 AND E.1/111	Yes		AER001	
	UCS2 display	R99	3.1				C117 AND C139 AND C140	E.1/71 AND E.1/15 AND E.1/110 AND E.1/111	Yes			
	Icons – basic icon	R99	4.1, 4.2				C115 AND C139 AND C140	E.1/71 AND E.1/110 AND E.1/111	Yes			
31	OPEN CHANNEL 27.22.4.27											
	Void immediate link establishment, GPRS, no local address, no alpha identifier, no network access name	R99 R99	1.1 - 1.10 2.1				Void C121	Void E.1/89 AND E.1/98	Yes			
	immediate link establishment GPRS, no alpha identifier, with network access name	R99	2.2				C121	E.1/89 AND E.1/98	Yes			

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	immediate link establishment, GPRS, with alpha identifier	R99	2.3				C121	E.1/89 AND E.1/98 AND E.1/110 AND E.1/111	Yes			TCEP001, TCEP002
	immediate link establishment, GPRS, with null alpha identifier	R99	2.4				C121	E.1/89 AND E.1/98	Yes			
	immediate link establishment, GPRS, command performed with modifications (buffer size)	R99	2.5				C127	E.1/89 AND E.1/98	Yes			
	Void immediate link establishment, GPRS, open command with alpha identifier, User did not accept the proactive command	Void R99	2.6				Void C130	Void E.1/89 AND E.1/98 AND E.1/110 AND E.1/111	Yes			TCEP001, TCEP002
	GPRS, ME busy on call	R99	2.8				C128	E.1/89 AND E.1/98	Yes			
32	CLOSE CHANNEL 27.22.4.28											
	successful	R99	1.1				C121	E.1/89 AND E.1/90	Yes			
	with an invalid channel identifier	R99	1.2				C121	E.1/89 AND E.1/90	Yes		AER001	
	on an already closed channel	R99	1.3				C121	E.1/90	Yes		AER001	

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
33	RECEIVE DATA 27.22.4.29											
	already opened channel	R99	1.1				C121	E.1/89 AND E.1/91 AND E.1/92	Yes			
34	SEND DATA 27.22.4.30											
	immediate mode	R99	1.1				C121	E.1/89 AND E.1/92	Yes			
	Store mode	R99	1.2				C121	E.1/89 AND E.1/92	Yes		AER001	
	Store mode, Tx buffer fully used	R99	1.3				C121	E.1/89 AND E.1/92	Yes		AER001	
	2 consecutive SEND DATA Store mode	R99	1.4				C121	E.1/89 AND E.1/92	Yes		AER001	
	immediate mode with a bad channel identifier	R99	1.5				C121	E.1/89 AND E.1/92	Yes		AER001	
	Void	Void	1.6				Void	Void				
35	GET CHANNEL STATUS 27.22.4.31											
	without any BIP channel opened	R99	1.1				C121	E.1/93	Yes		AER001	
	with a BIP channel currently opened	R99	1.2				C121	E.1/89 AND E.1/93	Yes			
	after a link dropped	R99	1.3				C121	E.1/89 AND E.1/93	Yes		AER001	
36	DATA DOWNLOAD TO SIM 27.22.5											

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
37	SMS-PP DATA DOWNLOAD 27.22.5.1								Yes			
	[void]		1.1									
	SIM responds with '91 XX'	R96	1.2	М	М	М	M	E.1/2	Yes			
	More time	R96	1.3	М	М	М	М	E.1/2	Yes			
	8 bit alphabet	R96	1.4	М	М	М	М	E.1/2	Yes			
	[void]		1.5									
	Data coding / message class	R96	1.6	М	М	М	М	E.1/2	Yes			
38	SMS-CB DATA DOWNLOAD 27.22.5.2											
	ME does not display message	R96	1.1	M	М	М	М	E.1/3	Yes			
	More time	R96	1.2	M	М	М	М	E.1/3 AND E.1/20	Yes			
	ME displays message	R96	1.3	C139	C139	C139	C139	E.1/3 AND E.1/110	Yes			
39	CALL CONTROL BY SIM 27.22.6											
	Procedure for MO calls (Cell identity in envelope call control)	R97	1.1, 1.2, 1.4, 1.8 to 1.14		C142	C142	C142	E.1/10 AND E.1/11 AND E.1/13 AND E.1/29	Yes		AER001	

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	Procedure for MO calls (Cell identity in envelope call control)	R97	1.3 A, 1.5 A		C131 AND C139 AND C140 AND C142	C131 AND C139 AND C140 AND C142	C131 AND C139 AND C140 AND C142	E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 AND E.1/110 AND E.1/111	Yes		AER001	
	Procedure for MO calls (Cell identity in envelope call control)	R97	1.3 B		AND C139 AND	C132 AND C139 AND C140 AND C142	C132 AND C139 AND C140 AND C142	E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 AND E.1/110 AND E.1/111	Yes		AER001	
	Procedure for MO calls (Cell identity in envelope call control)	R97	1.5 B		C132 AND C142	AND	C132 AND C142	E.1/10 AND E.1/11 AND E.1/13 AND E.1/29 AND E.1/110 AND E.1/111	Yes		AER001	
	Procedure for MO calls (Cell identity in envelope call control)	R97	1.6		C142	C142	C142	E.1/10 AND E.1/11 AND E.1/13 AND E.1/29	Yes			

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution
												parameter
	Procedure for	R97	1.7 A		C131	C131	C131	E.1/10	Yes			
	MO calls (Cell				AND	AND	AND	AND				
	identity in					C139	C139	E.1/11				
	envelope call				AND	AND	AND	AND				
	control)					C140	C140	E.1/13				
					AND C142	AND C142	AND C142	AND E.1/29				
					C142	C142	C142	AND				
								E.1/110				
								AND				
								E.1/111				
	Procedure for	R97	1.7 B		C132	C132	C132	E.1/10	Yes			
	MO calls (Cell	137	1.7 5		AND	AND	AND	AND	162			
	identity in					C139	C139	E.1/11				
	envelope call				AND	AND	AND	AND				
	control)					C140	C140	E.1/13				
	55.15.,				AND	AND	AND	AND				
					C142		C142	E.1/29				
								AND				
								E.1/110				
								AND				
								E.1/111				
	Procedure for	R97	2.1, 2.2,		C137	C137	C137	E.1/10	Yes			
	SS (Cell identity		2.3, 2.4					AND				
	in envelope call							E.1/11				
	control)											
	Interaction with	R97	3.1, 3.2,			C125	C125	E.1/10	Yes			
	FDN (Cell		3.3, 3.4,		AND	AND	AND	AND				
	identity in		3.5		C142	C142	C142	E.1/110				
	envelope call							AND				
	control)	D07			0.400	0.400	0400	E.1/111	.,			
	Support of BDN	R97	4.1, 4.2,			C126	C126	E.1/10	Yes			
	service (Cell		4.3, 4.4		AND	AND	AND	AND				
	identity in					C139	C139	E.1/110				
	envelope call				AND	AND C140	AND C140	AND E.1/111				
	control)				AND	AND	AND	<b>□</b> . 1/ 1 1 1				
					C142		C142					
40	EVENT				0142	0142	0142					+
70												
40	EVENT DOWNLOAD 27.22.7											

	•	Release	sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	.22.7.1: MT Il event	R97	1.1		C142	C142	C142	E.1/34 AND E.1/33	Yes		AER001	
cor	.22.7.2.1: call nnected ent	R97	1.1		C142	C142	C142	E.1/35 AND E.1/33	Yes		AER001	
sup	22.7.2.2: ME pporting SET CALL	R97	2.1		AND C140 AND	C139 AND C140 AND C142	C139 AND C140 AND C142	E.1/35 AND E.1/29 AND E.1/33 AND E.1/110 AND E.1/111	Yes			
dis	.22.7.3: call sconnected ent	R97	1.1		C142	C142	C142	E.1/36 AND E.1/33	Yes		AER001	
loc	.22.7.4: cation status ent	R97	1.1		М	М	М	E.1/37 AND E.1/33	Yes			
27.	.22.7.5: user tivity event	R97	1.1		C139	C139	C139	E.1/38 AND E.1/33 AND E.1/111	No		AER001	
scr	.22.7.6: idle reen available ent	R97	1.1		AND	AND	C139 AND C140	E.1/39 AND E.1/33 AND E.1/110 AND E.1/111	Yes		AER001	
Ca	.22.7.7.1: ard reader atus normal	R98	1.1			C109	C109	E.1/40 AND E.1/33	No			
27. De	.22.7.7.2: etachable rd reader	R98	2.1			C116	C116	E.1/40 AND E.1/33	No			

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	27.22.7.8: language selection event	R99	1.1				C139 AND C140 AND C142	E.1/41 AND E.1/33 AND E.1/110 AND E.1/111	No			
	27.22.7.9: Browser termination event	R99	1.1				C111 AND C139 AND C140	E.1/42 AND E.1/33 AND E.1/110 AND E.1/111	Yes		AER001	
	27.22.7.10: Data available event	R99	1.1				C121	E.1/43 AND E.1/89 AND E.1/33	Yes		AER001	
	27.22.7.11: Channel status event	R99	1.1				C121	E.1/44 AND E.1/89 AND E.1/33	Yes		AER001	
41	MO SMS Control by SIM 27.22.8											
	With proactive command, Allowed, no modification	R98	1.1			М	М	E1/12 AND E.1/26 AND E.1/110	Yes			TCEP001
	With user SMS, Allowed, no modification	R98	1.2			М	М	E1/12	Yes			
	With proactive command, Not allowed	R98	1.3			M	М	E1/12 AND E.1/26 AND E.1/110	Yes			TCEP001
	With user SMS, Not allowed	R98	1.4			М	М	E1/12	Yes			

tem	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Network Dependency	Support	Recommendation for terminals also supporting USAT	Additional test case execution parameter
	With proactive command, Allowed, with modifications	R98	1.5			M	M	E1/12 AND E.1/26 AND E.1/110	Yes			TCEP001
	With user SMS, Allowed, with modifications	R98	1.6			М	М	E1/12	Yes			
	With Proactive command, the SIM responds with '90 00', Allowed, no modification	R98	1.7			M	M	E1/12 AND E.1/26 AND E.1/110	Yes			TCEP001
	Send Short Message attempt by user, the SIM responds with '90 00', Allowed, no modification	R98	1.8			М	М	E1/12	Yes			
	Void											

Item	Description	Release	Test	Rel 96	Rel	Rel	Rel	Terminal	Network	Support	Recommendation	Additional
	-		sequence	ME	97	98	99	Profile	Dependency		for terminals also	test case
			(s)		ME	ME	ME				supporting USAT	execution
2121	15 A 4/4 THE		N./A				<u> </u>					parameter
C101	IF A.1/1 THE	N M ELSE	N/A			O_Cap	_Conf					
C102	void											
C103	void		. N1/A			0.0						
C104	IF A.1/2 THE			- N1/A		O_Sus		ANDOL	ICCO Curillia			
C105	IF A.1/3 AND			: IN/A				Y AND O_U	ICS2_Cyrillic			
C106 C107	IF A.1/4 THE IF A.1/5 THE					O_Ext_ O_Help	-					
C107	IF A.1/6 THE			O_I		O_i ieit	,					
C108	IF A.1/7 THE			0_1		O_Dua	I Slot					
C109	IF (A.1/9 AND			E NI/A				ID O_+CIM	1			
C110	IF A.1/10 TH	,		)L IN/A		O_IXUII		ID O_+CIIVI	1			
C112	IF A.1/11 THE					O_EB	kov					
C113	void	LIN IVI LLO				O_0011	_KCy					
C114	IF C110 AND	Δ 1/6 TH	EN O 1 ELS	F N/Δ		O Run	Δτ ΔΝ	ID O +CIM	I AND O_lcons	<u>.</u>		
C115	IF C111 AND					O_LB A			1711112 0_100110	,		
C116	IF A1/7 AND							_100110 AND O_De1	tach Rdr			
C117	IF C111 AND								AND O_UCS2	2 Cyrillic		
C118	IF A.1/15 AN								CS2_Cyrillic			
C119	IF A.1/19 TH			, .		O_Red		2 0_0				
C120	IF A.1/20 TH					O_D_N		1				
C121	IF A.1/21 AN			E N/A				AND O_U	DP			
C122	IF C111 AND							_GPRS				
C123	void					_		_				
C124	IF A.1/22, tes	t x.A M EL	SE x.B M (v	vhere x is	the ex	pected	sequer	nce number	value) C	D_CP_Sub	addr	
C125	IF A. 1/23 TH					O_FDN			,			
C126	IF A. 1/24 TH	EN M ELS	SE N/A			O_BDN	1					
C127	IF C121 AND	A.1/31 Th	HEN M ELSE	N/A		O_BIP_	_GPRS	AND O_U	DP AND O_BU	IFFER_SIZ	ZE	
C128	IF C121 AND	(NOT A.1	/32) THEN N	Λ ELSE Ν				AND O_U	DP AND (NOT	O_DTM)		
C129	IF A.1/33 TH	EN test x.A	A M ELSE te	st x.B M		O_long						
C130	IF (C121 ANI							S AND O_ ${\sf L}$	JDP AND			
	O_User_Con	firm_Befor	e_PDP_Cor	ntext_Rec	quest) (	OR (O_E	BIP_GF	PRS				
				M AND (					firm_Before_PD	OP_Contex	t_Request)	
C131	IF A.1/36 TH							_EnvCC				
C132	IF A.1/37 TH					O_UC_						
C133	IF A.1/38 TH					O_Ser\		HOLD				
C134	IF A.1/6 THE					O_lcon						
C135	IF A.1/6 THE					O_lcon						
C136	IF C110 AND								I AND O_lcons	;		
C137	IF A.1/42 AN								Serv_SS_CFU			
C138	IF A.1/42 AN			o⊏ IN/A					Serv_SS_CLIR			
C139	IF A.1/45 TH					O_No_						
C140	IF A.1/46 TH					O_No_						
C141	IF A.1/47 TH					O_No_						
C142	IF A.1/48 TH					O_No_						
C143	IF A.1/49 TH	LIN IVI ELS	DE IN/A			O_No_		NL.				
O 1	IF & 1/20 tost	e v v/Δ M/F	El QE taete v	VR M (w/	hara v	v ie tha	ETSI expect	ad sanijano	nılmhar vəlili	۵۱		

# 3.5 Conventions for mathematical notations

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

# 3.6 Conventions on electrical terms

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

# 3.7 Terms on test conditions

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

# 4 Test equipment

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

# 5 Testing methodology in general

# 5.1 Testing of optional functions and procedures

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

# 5.2 Test interfaces and facilities

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

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

# 5.3 Different protocol layers

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

# 5.4 Information to be provided by the apparatus supplier

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

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

Table A.2: ME"s default configuration

Item	Description Valu	ıe	Status
1	DISPLAY TEXT: No Response from user timeout interval		С
2	GET INKEY: No response from user Timeout interval		С
3	GET INPUT: No response from user Timeout interval		С
4	SELECT ITEM: No response from user Timeout interval		С
5	Preferred buffer size supported by the terminal for Open Channel command		С
6	Channel Id		С
Note:	Conditional values shall be provided if the corresponding option is supported in the	table	e A.1

# 5.5 Definitions of transmit and receive times

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

# 6 Reference test methods

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

# 7 Implicit testing

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

It should be noted that for these features some aspects have to be and are explicitly tested, e.g. the ability to switch between 3v and 5v operation.

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

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

# 8 Measurement uncertainty

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

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

# 9 Format of tests

In general the following basic format for tests is used:

27.22.X.X. Tested command

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

27.22.X.X.1.1 Definition and applicability

This clause refers back to clause 3.2.2.

## 27.22.X.X.1.2 Conformance requirement

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

# 27.22.X.X.1.3 Test purpose

This clause details the purpose of the test.

## 27.22.X.X.1.4 Method of test

#### 27.22.X.X.1.4.1 Initial conditions

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

#### 27.22.X.X.1.4.2 Procedure

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

- Sequence 1.1 (further initial conditions, added here)

Comma	and 1.1.1
TERM	NAL RESPONSE1.1.1A or
1.1.1B	
Comma	and 1.1.2
TERMI	NAL RESPONSE1.1.2

PROACTIVE COMMAND 1.1.1

**TERMINAL RESPONSE 1.1.1A** 

**TERMINAL RESPONSE 1.1.1B** 

PROACTIVE COMMAND 1.1.2

TERMINAL RESPONSE 1.1.2

- Sequence 1.2

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

PROACTIVE COMMAND 1.2.1

PROACTIVE COMMAND 1.2.2

PROACTIVE COMMAND 1.2.3

TERMINAL RESPONSE 1.2.1

TERMINAL RESPONSE 1.2.2

#### **TERMINAL RESPONSE 1.2.3**

- Sequence 1.3

Command 1.3.1

TERMINAL RESPONSE1.3.1

#### PROACTIVE COMMAND 1.3.1

#### **TERMINAL RESPONSE 1.3.1**

# 27.22.X.X.1.5 Test requirement

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

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

27.22.X.X. 2.1 Definition and applicability

27.22.X.X. 2.2 Conformance requirement

**27.22.X.X. 2.3** Test purpose

**27.22.X.X. 2.4** Method of test

27.22.X.X. 2.4.1.1 Initial conditions

#### 27.22.X.X. 2.4.1.2 Procedure

- Sequence 2.1

Command 2.1.1

TERMINAL RESPONSE2.1.1A or 2.1.1B

Command 2.1.2

TERMINAL RESPONSE2.1.2

PROACTIVE COMMAND 2.1.1

**TERMINAL RESPONSE 2.1.1A** 

**TERMINAL RESPONSE 2.1.1B** 

PROACTIVE COMMAND 2.1.2

TERMINAL RESPONSE 2.1.2

- Sequence 2.2

Command	2.2.1

TERMINAL RESPONSE 2.2.1

Command 2.2.2

TERMINAL RESPONSE 2.2.2 (same as TERMINAL RESPONSE 2.2.1)

Command 2.2.3

**TERMINAL RESPONSE 2.2.3** 

PROACTIVE COMMAND 2.2.1

PROACTIVE COMMAND 2.2.2

PROACTIVE COMMAND 2.2.3

Coding TERMINAL RESPONSE 2.2.1

Coding TERMINAL RESPONSE 2.2.2

Coding TERMINAL RESPONSE 2.2.3

27.22.X.X.2.5 Test requirement

# 10 Generic call set up procedures

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

# 11 - 26 Not used

# 27 Testing of the SIM/ME interface

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

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

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

A SIM Simulator with the appropriate SIM Application Toolkit functionality will be required. The SIM data defined below shall be used for all test cases unless otherwise specified within the test case.

The comprehension required flags in SIMPLE-TLV objects that are included in a TERMINAL RESPONSE or an ENVELOPE shall be set as described in TS 11.14 [15]. This means that in cases where it is up to the ME to decide if this flag is used or not, the corresponding Tag coding in the TERMINAL RESPONSEs and ENVELOPEs in this document represents only one of the two valid possibilities.

TS 11.14 [15] defines that in case of the general result "Command performed successfully" some proactive commands require additional information in the command result and in which cases this is mandatory or optional. Thus when additional information bytes are optional in the Result TLV, the additional information bytes of the Result TLV in the Terminal Responses shall be ignored.

# 27.1 - 27.21 Void

# 27.22 SIM Application Toolkit

# 27.22.1A General Test purpose

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

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

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

Note:

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

# 27.22.2A Definition of default values for SIM Application Toolkit testing

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

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

- TS 51.010-1 [12], clause 27.
- Note 1: Bx represents byte x of the coding.
- Note 2: Unless otherwise defined, the coding values in binary.

EFSST (SIM Service Table)

#### Logically:

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

Coding:	B1	B2	B3	B4

xx1111xx	XXXXXXX	1111111xx	xxxx11xx
B5	B6	B7	B8
XXXXXXX	XXXXXXX	01111111	11011111
B9	B10	B11	B12
XXXXXXX	xx11xx01	xxxx1111	11xxxxxx

EF<sub>Phase</sub> (SIM Phase Identification)

Logically: Phase 2+

Coding:	'03'

EF<sub>IMSI</sub> (International Mobile Subscriber Identity)

Logically:

Length: 8 bytes

IMSI: 001 01 0123456789

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

EF<sub>CBMI</sub> (Cell Broadcast Message Identifier)

Logically:

Cell Broadcast Message Identifier 1: '03 E7'

Coding:	03	E7	FF	 FF			

EF<sub>CBMID</sub> (Cell Broadcast Message Identifier for Data Download)

Logically:

Cell Broadcast Message Identifier 1: '10 01'

Coding:	10	01	FF	 FF			

EF<sub>FDN</sub> (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	В3	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	В3	B4	 B32	B33	B34	B35	B36	B37	 B46
Record 1:	44	45	46	FF	 FF	03	81	89	67	FF	 FF

EF<sub>BDN</sub> (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
Comprehension Method Info: None

Coding:	B1	B2	В3	B4	 B32	B33	B34	B35	B36	B37	 B47
Record 1:	43	42	41	FF	 FF	03	81	23	F1	FF	 FF

Note: EF<sub>BDN</sub> shall be invalidated unless otherwise stated, i.e. by indicating that Barred Dialling Numbers

service is enabled.

EF<sub>ECC</sub> (Emergency Call Codes)

Logically:

Emergency Call Code 1: '1020'

Coding:		01	02	FF		
1						

Emergency Call Code 2: '112'

Coding:		11	F2	FF		

EF<sub>SMSP</sub> (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	В3	 B13	B14	B15	B16	B17	B18	B19	B20	B21	B22	B23
Record 1:	FD	FF	FF	 FF	09	91	11	22	33	44	55	66	77	F8

B24	B25	B26	B27	B28
FF	FF	FF	FF	FF

## For the display of icon:

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

# EF<sub>Img</sub> (Image, 4F20)

#### Record 1:

## Logically:

Number of Actual Images Instances: 01 Image Instance Width: 08 Image Instance Height: 08

 $\begin{array}{ll} \text{Image Coding Scheme:} & 11 \text{ (basic image)} \\ \text{Image Instance File Identifier:} & 4F \text{ 04 } \text{(EF}_{\text{Instance}}) \end{array}$ 

Offset into Image Instance File: 00 00 Length of Image Instance Data: 00 0A

#### Coding:

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

#### Record 2:

# Logically:

Number of Actual Images Instances: 01 Image Instance Width: 08 Image Instance Height: 08

 $\begin{array}{ll} \text{Image Coding Scheme:} & 21 \text{ (colour image)} \\ \text{Image Instance File Identifier:} & 4F \ 02 \text{(EF}_{\text{Instance}}) \\ \end{array}$ 

Offset into Image Instance File: 00 00 Length of Image Instance Data: 00 16

## Coding:

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

#### 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<sub>Instance</sub>)

Offset into Image Instance File: 00 00 Length of Image Instance Data: 00 32

## Coding:

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

#### 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<sub>Instance</sub>)

Offset into Image Instance File: 00 00 Length of Image Instance Data: 00 E8

#### Coding:

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

# 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<sub>Instance</sub>)

Offset into Image Instance File: 00 00 Length of Image Instance Data: 00 08

## Coding:

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

# EF<sub>Instance</sub> (4F01)

# Logically:

Image Instance Data: see below

# Coding:

Coding:	2E	28	00	00	00	00	00	00	00	01	FF	80

	00	00	00	0F	FF	00	00	00	00	77	FE	00
(	00	00	01	BF	F8	00	00	00	06	FF	E0	00
	00	00	1A	03	80	00	00	00	6B	F6	ВС	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
1	1B	FF	90	10	00	00	6D	EE	40	40	00	01
E	3F	F9	01	00	00	6F	FF	E4	04	00	00	1B
F	FF.	90	10	00	00	6F	FE	40	40	00	01	BF
F	F9	01	00	00	06	FF	E6	04	00	00	1B	FF
8	88	10	00	00	6F	FE	20	40	00	01	BF	F8
6	66	00	00	06	FF	E0	F0	00	00	1B	FF	80
8	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
1	1C	21	08	44	EE	00	48	C4	31	92	20	01
2	25	11	45	50	80	07	14	45	15	43	80	12
7	71	1C	4D	08	00	4A	24	89	32	20	01	C8
9	9E	24	4E	E0								

# EF<sub>Instance</sub> (4F02)

# Logically:

Image Instance Data:

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

# Coding:

Coding:	08	80	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<sub>Instance</sub> (4F03)

Logically:

Image Instance Data: see below

Coding:

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

EF<sub>Instance</sub> (4F04)

Logically:

Image Instance Data: see below

Coding:

Coding: 08	08 FF	03 A5	99 9	99 A5	C3	FF	
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EF<sub>Instance</sub> (4F05)

Logically:

Image Instance Data: see below

Coding:

Coding: 05	05 FE	FE EB BF	F   FF   I	FF   FF
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# 27.22.1 Initialization of SIM Application Toolkit Enabled SIM by SIM Application Toolkit Enabled ME (Profile Download)

# 27.22.1.1 Definition and applicability

See clause 3.2.2.

# 27.22.1.2 Conformance requirement

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

- TS 11.14 [15] clause 5.2.

# 27.22.1.3 Test purpose

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

# 27.22.1.4 Method of test

## 27.22.1.4.1 Initial conditions

The ME is connected to the SIM Simulator. All elementary files are coded as the default Toolkit personalization, with the CHV1 enabled.

# 27.22.1.4.2 Procedure

# **Expected Sequence 1 (PROFILE DOWNLOAD)**

Step	Direction	Message / Action	Comments
1	$USER \to ME$	Power on ME	
2	$ME \to USER$	PIN entry request	
3	$USER \to ME$	Enter "1111"	
4	$ME \rightarrow SIM$	VERIFY CHV1 1.1A	[CHV1 code: "1111"]
5	$SIM \rightarrow ME$	VERIFY CHV ATTEMPT UNSUCCESSFUL 1.1A	
6	$ME \rightarrow USER$	PIN entry request	
7	$USER \to ME$	Enter "1234"	
8	$ME \rightarrow SIM$	VERIFY CHV1 1.1B	[CHV1 code: "1234"]
9	$SIM \rightarrow ME$	NORMAL ENDING OF COMMAND 1.1A	
10	$ME \to SIM$	TERMINAL PROFILE 1.4	The ME shall have read EF PHASE prior to the Profile Download
11	$SIM \to ME$	NORMAL ENDING OF COMMAND 1.1A	
40			
12	$ME \rightarrow SIM$	SELECT EF IMSI 1.5 or	
		SELECT EF LOCI 1.6	
		SELECT EF LOCI 1.6	

# **VERIFY CHV1: 1.1A**

Logically:

Coding:

AP	DU:	CLA=A0	INS=2	INS=20 P1:		:00	P2=01	Р	3=08	
DATA IN:	31	31	31	31	1	FF	FF	:	FF	FF

# **VERIFY CHV1 ATTEMPT UNSUCCESSFUL: 1.1A**

Logically:

Coding:

SW1=98	SW2=04

**VERIFY CHV1: 1.1B** 

Logically:

Coding:

API	OU:	CLA=A0	INS=2	INS=20		P1=00		2=01	P3=08		
DATA IN:	31	32	33	34	4	FF		FF	FF		FF

## **NORMAL ENDING OF COMMAND: 1.1A**

Logically:

Coding:

SW1=90 SW2=00

#### **TERMINAL PROFILE: 1.4**

Logically:

Coding:

APDU:	CLA=A0	INS=10	P1=00	P2=00	P3=XX
	DATA IN:	YY	ZZ		

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

## **SELECT EF IMSI: 1.5**

Logically:

Coding:

APDU:	CLA=A0	INS:	=A4	P1=	P1=00		2=00	P3=02
	DATA I	N:	6F	=	07			

# **SELECT EF LOCI: 1.6**

Logically:

Coding:

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

# 27.22.1.5 Test requirement

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

# 27.22.2 Contents of the TERMINAL PROFILE command

# 27.22.2.1 Definition and applicability

See table E.1.

# 27.22.2.2 Conformance requirement

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

- TS 11.14 [15] clause 5.2.

## 27.22.2.3 Test purpose

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

#### 27.22.2.4 Method of test

## 27.22.2.4.1 Initial conditions

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

#### 27.22.2.4.2 Procedure

- a) The ME is powered on.
- b) After the ME sends the TERMINAL PROFILE command to the SIM Simulator, the SIM Simulator shall record the content of the TERMINAL PROFILE.
- c) The SIM Simulator shall return SW1 / SW2 of '90 00'.
- d) The contents of the TERMINAL PROFILE is recorded and compared to the corresponding table E.1 "status" column.

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

# 27.22.2.5 Test requirement

- 1) After step a) the ME shall send the TERMINAL PROFILE command to the SIM Simulator with bit 1 of the first byte set to 1 (facility supported by ME).
- 2) In table E.1 for the corresponding ME Sim Toolkit Release and Options, The TERMINAL PROFILE information "support" recorded must be in accordance with the "Status" column. Support of features defined only in releases later than present release shall be ignored.

# 27.22.3 Servicing of proactive SIM commands

# 27.22.3.1 Definition and applicability

See clause 3.2.2.

# 27.22.3.2 Conformance requirement

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

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

- TS 11.14 [15] clause 6.3.

# 27.22.3.3 Test purpose

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

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

#### 27.22.3.4 Method of test

#### 27.22.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

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

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

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

#### 27.22.3.4.2 Procedure

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

# 27.22.3.5 Test requirement

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

# 27.22.4 Proactive SIM commands

# 27.22.4.1 DISPLAY TEXT

# 27.22.4.1.1 DISPLAY TEXT (Normal)

# 27.22.4.1.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.1.1.2 Conformance requirements

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

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

#### 27.22.4.1.1.3 Test purpose

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

27.22.4.1.1.4 Method of test

27.22.4.1.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

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

#### 27.22.4.1.1.4.2 Procedure

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

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

## PROACTIVE COMMAND: DISPLAY TEXT 1.1.1

## Logically:

Command details

Command number:

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

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	$SIM \to ME$	PROACTIVE COMMAND	The ME screen is in a mode other than the
		PENDING: DISPLAY TEXT 1.3.1	normal stand by display.
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[High priority]
		DISPLAY TEXT 1.3.1	
4	$ME \rightarrow USER$	Display "Toolkit Test 2"	
5	$USER \to ME$	Clear Message	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	
		DISPLAY TEXT 1.3.1	
7	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
8	$USER \to ME$	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	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[Packed, SMS default alphabet]
		DISPLAY TEXT 1.4.1	
4	$ME \rightarrow USER$	Display "Toolkit Test 3"	
5	$USER \rightarrow ME$	Clear Message	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		DISPLAY TEXT 1.4.1	

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:

|--|

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Clear message after a delay]
		DISPLAY TEXT 1.5.1	
4		Display "Toolkit Test 4" and clear	
	USER	this message after a short delay	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		DISPLAY TEXT 1.5.1	
6	$SIM \rightarrow ME$	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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[Text string with 160 bytes - maximum for non
		DISPLAY TEXT 1.6.1	extension text]
4	$ME \rightarrow USER$	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	$USER \to ME$		
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	Command performed successfully
		DISPLAY TEXT 1.6.1	

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:

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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 1.7.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		DISPLAY TEXT 1.7.1	
4	$ME \rightarrow USER$	Display " <go-backwards>"</go-backwards>	
5	$USER \to ME$	Indicate the need to go backwards	
		in the proactive SIM application	
		session	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Backward move in the proactive SIM session
		DISPLAY TEXT 1.7.1	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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 1.8.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		DISPLAY TEXT 1.8.1	
4	$ME \rightarrow USER$	Display " <abort>"</abort>	
5	$USER \to ME$	Indicate the need to end the	
		proactive SIM application session	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Proactive SIM session terminated by the
		DISPLAY TEXT 1.8.1	user]
7	$SIM \rightarrow ME$	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>"

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

TERMINAL RESPONSE: DISPLAY TEXT 1.8.1

Logically:

Command details

Command number:

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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 1.9.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	Including icon identifier, icon shall be
		DISPLAY TEXT 1.9.1	displayed together with the alpha text string,
			but no text string given
4	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command data not understood by ME
		DISPLAY TEXT 1.9.1	(clause 6.5.4)]
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	

#### PROACTIVE COMMAND: DISPLAY TEXT 1.9.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: SIM
Destination device: Display

Text string

Contents: null data object

Icon Identifier:

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

Coding:

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

TERMINAL RESPONSE: DISPLAY TEXT 1.9.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command data not understood by ME

Coding:

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

#### 27.22.4.1.1.5 Test requirement

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

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

## 27.22.4.1.2.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.1.2.2 Conformance requirement

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

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

## 27.22.4.1.2.3 Test purpose

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

#### 27.22.4.1.2.4 Method of test

#### 27.22.4.1.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

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

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

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

## 27.22.4.1.2.4.2 Procedure

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

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

Command type: DISPLAY TEXT

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

Device identities

Source device: ME
Destination device: SIM

Result

General Result: No response from user

## Coding:

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

# 27.22.4.1.2.5 Test requirement

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

## 27.22.4.1.3 DISPLAY TEXT (Display of extension text)

## 27.22.4.1.3.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.1.3.2 Conformance requirement

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

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

## 27.22.4.1.3.3 Test purpose

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

#### 27.22.4.1.3.4 Method of test

#### 27.22.4.1.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

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

## 27.22.4.1.3.4.2 Procedure

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

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

# PROACTIVE COMMAND: DISPLAY TEXT 3.1.1

#### Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: SIM
Destination device: Display

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "This command instructs the ME to display a text message and/or an icon (see

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

Coding:

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

TERMINAL RESPONSE: DISPLAY TEXT 3.1.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

## 27.22.4.1.3.5 Test requirement

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

# 27.22.4.1.4 DISPLAY TEXT (Sustained text)

# 27.22.4.1.4.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.1.4.2 Conformance requirement

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

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

#### 27.22.4.1.4.3 Test purpose

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

#### 27.22.4.1.4.4 Method of test

#### 27.22.4.1.4.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table. The elementary files are coded as SIM Application Toolkit default.

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

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

#### 27.22.4.1.4.4.2 Procedure

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

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

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	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 4.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[Clear message after a delay]
		DISPLAY TEXT 4.2.1	
4	$ME \rightarrow USER$	Display "Toolkit Test 2"	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		DISPLAY TEXT 4.2.1	
6	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
7	$ME \rightarrow USER$	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:

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

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

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:

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

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

#### PROACTIVE COMMAND: DISPLAY TEXT 4.4.1

## Logically:

Command details

Command number:

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:

## 27.22.4.1.4.5 Test requirement

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

# 27.22.4.1.5 DISPLAY TEXT (Display of icons)

#### 27.22.4.1.5.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.1.5.2 Conformance requirement

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

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

## 27.22.4.1.5.3 Test purpose

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

#### 27.22.4.1.5.4 Method of test

## 27.22.4.1.5.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

#### 27.22.4.1.5.4.2 Procedure

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

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

# 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:

 $\begin{array}{ll} \mbox{Icon qualifier:} & \mbox{icon is self-explanatory} \\ \mbox{Icon Identifier:} & \mbox{record 1 in } \mbox{EF}_{(IMG)} \\ \end{array}$ 

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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 5.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[BASIC-ICON, self-explanatory]
		DISPLAY TEXT 5.1.1	
4	$ME \rightarrow USER$	Display "Basic Icon" without icon	
5	$USER \to ME$	Clear Message	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully, but
		DISPLAY TEXT 5.1.1B	requested icon could not be displayed]

TERMINAL RESPONSE: DISPLAY TEXT 5.1.1B

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: ME
Destination device: SIM

Result

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

Coding:

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

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

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

#### 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

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

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

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

TERMINAL RESPONSE: DISPLAY TEXT 5.2.1B

Logically:

Command details

Command number:

Command type: DISPLAY TEXT

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

Device identities

Source device: ME Destination device: SIM

Result

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

Coding:

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

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

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

PROACTIVE COMMAND: DISPLAY TEXT 5.3.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: SIM
Destination device: Display

Text String

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

Icon qualifier: icon is not self-explanatory

Icon Identifier: record 1 in  $EF_{(IMG)}$ 

Coding:

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

TERMINAL RESPONSE: DISPLAY TEXT 5.3.1A

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

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

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

TERMINAL RESPONSE: DISPLAY TEXT 5.3.1B

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: ME
Destination device: SIM

Result

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

Coding:

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

# 27.22.4.1.5.5 Test requirement

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

# 27.22.4.1.6 DISPLAY TEXT (UCS2 display supported)

#### 27.22.4.1.6.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.1.6.2 Conformance requirement

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

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

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

## 27.22.4.1.6.3 Test purpose

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

## 27.22.4.1.6.4 Method of test

#### 27.22.4.1.6.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

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

#### 27.22.4.1.6.4.2 Procedure

## Expected Sequence 6.1 (DISPLAY TEXT, UCS2 coded)

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

Logically:

Command details

Command number:

Command type: DISPLAY TEXT

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

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

## Coding:

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

## 27.22.4.1.6.5 Test requirement

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

# 27.22.4.2 GET INKEY

## 27.22.4.2.1 GET INKEY(normal)

## 27.22.4.2.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.2.1.2 Conformance Requirement

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

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

## 27.22.4.2.1.3 Test purpose

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

27.22.4.2.1.4 Method of test

27.22.4.2.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

#### 27.22.4.2.1.4.2 Procedure

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

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

## 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:

Command type: GET INKEY

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

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

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

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

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

## PROACTIVE COMMAND: GET INKEY 1.2.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: SIM Destination device: ME

**Text String** 

Data coding scheme: SMS default alphabet

Text: "Enter "0""

Coding:

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

#### TERMINAL RESPONSE: GET INKEY 1.2.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "0"

## Coding:

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

## **Expected Sequence 1.3 (GET INKEY, backward move)**

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

BER-TLV:	- 81	03	Λ1	22	00	82	02	82	21	83	Λ1	11
DER-ILV.	.   01	US	UI		UU	02	UZ	02	01	ಂ	UI	11

# **Expected Sequence 1.4 (GET INKEY, abort)**

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

DED TIVE	DO	12	01	03	01	22	00	82	02	81	02	8D
BER-TLV:	D0	13	01	03	UI	22	00	02	02	01	02	٥٥
	08	04	3C	41	42	4F	52	54	3E			

TERMINAL RESPONSE: GET INKEY 1.4.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: ME Destination device: SIM

Result

General Result: Proactive SIM session terminated by the user

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

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

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

PROACTIVE COMMAND: GET INKEY 1.5.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: SMS default alphabet, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data

Text: "Enter "q""

Coding:

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

TERMINAL RESPONSE: GET INKEY 1.5.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: SMS default alphabet, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "q"

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

#### PROACTIVE COMMAND: GET INKEY 1.6.1

## Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: SMS default alphabet, no help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "Enter "x". This command instructs the ME to display text, and to expect the user to

enter a single character. Any response entered by the user shall be passed t"

#### Coding:

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

TERMINAL RESPONSE: GET INKEY 1.6.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: SMS default alphabet, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "x'

Coding:

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

## 27.22.4.2.1.5 Test requirement

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

## 27.22.4.2.2 GET INKEY (No response from User)

## 27.22.4.2.2.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.2.2.2 Conformance requirement

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

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

## 27.22.4.2.2.3 Test purpose

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

# 27.22.4.2.2.4 Method of test

## 27.22.4.2.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

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

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

## 27.22.4.2.2.4.2 Procedure

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

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

# PROACTIVE COMMAND: GET INKEY 2.1.1

## Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "<TIME-OUT>"

Coding:

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

# TERMINAL RESPONSE: GET INKEY 2.1.1

## Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: ME Destination device: SIM

Result

General Result: No response from user

Coding:

BER-TLV:
----------

# 27.22.4.2.2.5 Test requirement

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

## 27.22.4.2.3 GET INKEY (UCS2 format display)

## 27.22.4.2.3.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.2.3.2 Conformance requirement

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

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

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

## 27.22.4.2.3.3 Test purpose

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

#### 27.22.4.2.3.4 Method of test

## 27.22.4.2.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

#### 27.22.4.2.3.4.2 Procedure

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

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

#### PROACTIVE COMMAND: GET INKEY 3.1.1

# Logically:

Command details

Command number:

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

Техt: "ЗДРАВСТВУЙТЕ"

Coding:

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

TERMINAL RESPONSE: GET INKEY 3.1.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+'

Coding:

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

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

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

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 formatText:"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:

Command type: GET INKEY

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

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+"

#### Coding:

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

## 27.22.4.2.3.5 Test requirement

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

## 27.22.4.2.4 GET INKEY (UCS2 format of entry)

## 27.22.4.2.4.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.2.4.2 Conformance requirement

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

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

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

## 27.22.4.2.4.3 Test purpose

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

27.22.4.2.4.4 Method of test

27.22.4.2.4.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

#### 27.22.4.2.4.4.2 Procedure

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

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

#### 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	6F	74	65	72					

## TERMINAL RESPONSE: GET INKEY 4.1.1

# Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: 16 bit data UCS2 alphabet format

Text: "Д"

Coding:

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

#### 27.22.4.2.4.5 Test requirement

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

# 27.22.4.2.5 GET INKEY ("Yes/No" Response)

27.22.4.2.5.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.2.5.2 Conformance requirement

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

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

# 27.22.4.2.5.3 Test purpose

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

## 27.22.4.2.5.4 Method of test

#### 27.22.4.2.5.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

## 27.22.4.2.5.4.2 Procedure

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

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

## PROACTIVE COMMAND: GET INKEY 5.1.1

## Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: "Yes/No" Response, no help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

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

Coding:

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

#### TERMINAL RESPONSE: GET INKEY 5.1.1

# Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: "Yes/No" Response, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: 01 (hex)

## Coding:

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

#### PROACTIVE COMMAND: GET INKEY 5.1.2:

Logically:

Command details

Command number:

Command type: GET INKEY

Command qualifier: "Yes/No" Response, no help information available

Device identities

Source device: SIM Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "Enter NO"

Coding:

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

## TERMINAL RESPONSE: GET INKEY 5.1.2

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: "Yes/No" Response, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: 00 (hex)

Coding:

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

## 27.22.4.2.5.5 Test requirement

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

# 27.22.4.2.6 GET INKEY (display of Icon)

27.22.4.2.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.6.2 Conformance requirement

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

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

# 27.22.4.2.6.3 Test purpose

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

27.22.4.2.6.4 Method of test

27.22.4.2.6.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

#### 27.22.4.2.6.4.2 Procedure

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

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

#### PROACTIVE COMMAND: GET INKEY 6.1.1

Logically:

Command details

Command number:

Command type: GET INKEY

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

Device identities

Source device: SIM
Destination device: ME

Text String

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

Icon Identifier

Icon qualifier: self-explanatory

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

## Coding:

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

TERMINAL RESPONSE: GET INKEY 6.1.1A

Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

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

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

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

#### TERMINAL RESPONSE: GET INKEY 6.1.1B

Logically:

Command details

Command number:

Command type: GET INKEY

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

Device identities

Source device: ME Destination device: SIM

Result

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

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+"

	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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 6.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[BASIC-ICON non self-explanatory for the
		INKEY 6.2.1	Text string]
4	$ME \rightarrow USER$	Display " <basic-icon>" and</basic-icon>	Text string coding in unpacked format
		Display the BASIC-ICON for the	
		prompt	
5	$USER \to ME$	Enter the input "+" and	
		completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[Command performed successfully]
		INKEY 6.2.1A	

#### PROACTIVE COMMAND: GET INKEY 6.2.1

## Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: SIM
Destination device: ME

**Text String** 

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

Icon Identifier

Icon qualifier: not self-explanatory

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

Coding:

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

## TERMINAL RESPONSE: GET INKEY 6.2.1A

# Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+"

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

TERMINAL RESPONSE: GET INKEY 6.2.1B

Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: ME
Destination device: SIM

Result

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

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

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

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

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

PROACTIVE COMMAND: GET INKEY 6.3.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: SIM
Destination device: ME

Text String

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

Icon Identifier

Icon qualifier: self-explanatory

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

Coding:

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

TERMINAL RESPONSE: GET INKEY 6.3.1A

Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

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

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

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

TERMINAL RESPONSE: GET INKEY 6.3.1B

Logically:

Command details

Command number:

Command type: GET INKEY

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

Device identities

Source device: ME Destination device: SIM

Result

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

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+'

Coding:

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

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

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

### PROACTIVE COMMAND: GET INKEY 6.4.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: SIM
Destination device: ME

**Text String** 

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

Icon Identifier

Icon qualifier: not self-explanatory

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

Coding:

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

### TERMINAL RESPONSE: GET INKEY 6.4.1A

Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

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

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

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

TERMINAL RESPONSE: GET INKEY 6.4.1B

Logically:

Command details

Command number: 1

Command type: GET INKEY

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

Device identities

Source device: ME
Destination device: SIM

Result

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

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

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

27.22.4.2.6.5 Test requirement

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

27.22.4.2.7 GET INKEY (Help Information)

27.22.4.2.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.7.2 Conformance requirement

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

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

# 27.22.4.2.7.3 Test purpose

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

27.22.4.2.7.4 Method of test

27.22.4.2.7.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

### 27.22.4.2.7.4.2 Procedure

# Expected Sequence 7.1 (GET INKEY, help information available)

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

# PROACTIVE COMMAND: GET INKEY 7.1.1

### Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "Enter "+""

### Coding:

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

### TERMINAL RESPONSE: GET INKEY 7.1.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Help information required by the user

Coding:

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

### PROACTIVE COMMAND: DISPLAY TEXT 7.1.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: SIM
Destination device: Display

**Text String** 

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

Coding:

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

### TERMINAL RESPONSE: DISPLAY TEXT 7.1.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

### PROACTIVE COMMAND: GET INKEY 7.1.2

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data

Text: "Enter "+""

Coding:

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

### TERMINAL RESPONSE: GET INKEY 7.1.2

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

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

### 27.22.4.2.7.5 Test requirement

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

### 27.22.4.3 GET INPUT

# 27.22.4.3.1 GET INPUT (normal)

# 27.22.4.3.1.1 Definition and applicability

See clause 3.2.2.

### 27.22.4.3.1.2 Conformance requirement

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

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

### 27.22.4.3.1.3 Test purpose

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

27.22.4.3.1.4 Method of test

27.22.4.3.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

#### 27.22.4.3.1.4.2 Procedure

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

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

#### PROACTIVE COMMAND: GET INPUT 1.1.1

### Logically:

Command details

Command number: 1

Command type: GET INPUT

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

echo text, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

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

Response length

Minimum length: 5 Maximum length: 5

### Coding:

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

TERMINAL RESPONSE: GET INPUT 1.1.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

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

echo text, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "12345"

Coding:

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

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

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

### 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	80	82	02	82	81	83	01	00
	8D	06	00	B6	9B	6A	B4	02				

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

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

### 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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to hide
		INPUT 1.4.1	text, packing not required, no help information available]
4	$ME \rightarrow USER$	Display	Range of expected length is 4-8
		"Password 1 <send>2345678"</send>	Text string coding in unpacked format
5	$USER \to ME$	Enter the input "2345678" and completion	User"s input not to be revealed at any time, optionally indication of key entries such as by displaying "*"
6	$ME \rightarrow USER$	Input not revealed	optionally indication of key entries such as by displaying "*"
7	$ME \rightarrow SIM$	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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to echo
		INPUT 1.5.1	text, packing not required, no help information
			available]
4	$ME \rightarrow USER$	Display "Enter 19,09,0(1)"	Range of expected length is 1-20
			Text string coding in unpacked format
5	$USER \to ME$	Completion without input	
6	$ME \rightarrow USER$	The ME MMI takes action to	
		manage the entry of correct	
		numbers of characters.	
7	$USER \to ME$	Enter	
		"12345678901234567890" and	
		completion	
8	$ME \rightarrow SIM$		[command performed successfully]
		INPUT 1.5.1	

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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 1.6.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to echo
		INPUT 1.6.1	text, packing not required, no help information
			available]
4	$ME \rightarrow USER$	Display " <go-backwards>"</go-backwards>	Range of expected length is 0-8
			Text string coding in unpacked format
5	$USER \to ME$	Backwards move MMI action	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[backward move in the proactive SIM session
		INPUT 1.6.1	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:

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	l
----------	----	----	----	----	----	----	----	----	----	----	----	----	---

### Expected Sequence 1.7 (GET INPUT, abort)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 1.7.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to echo
		INPUT 1.7.1	text, packing not required, no help information available]
4	$ME \rightarrow USER$	Display " <abort>"</abort>	Range if expected length is 0-8
_			Text string coding in unpacked format
5	$USER \to ME$	Terminate the Proactive SIM	
		session MMI action	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[Proactive SIM session terminated by the
		INPUT 1.7.1	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
	80	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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 1.8.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET INPUT 1.8.1	[digits only, SMS default alphabet, ME to echo text, packing not required, no help information available]
4	$ME \rightarrow USER$	Display	Range of length expected is 160-160
		"***111111111###***2222222	Text string coding in unpacked format
		222###***333333333###***44	
		4444444###***555555555	
		#***6666666666###***7777777	
		777###***888888888###***99	
		9999999###***000000000##  #"	
5	$USER \to ME$	Enter the input	
		"***111111111###***2222222	
		222###***333333333###***44	
		4444444###***555555555	
		#***6666666666###***7777777	
		777###***888888888###***99	
		9999999###***000000000##  #"	
		and completion	
6	$ME \rightarrow SIM$	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: "\*\*\*111111111###\*\*\*222222222###\*\*\*33333333###\*\*\*44444444###\*\*\*

555555555###\*\*\*666666666###\*\*\*77777777###\*\*\*888888888###\*\*\*9999

99999###\*\*\*000000000###"

Response length

Minimum length: 160 Maximum length: 160

### Coding:

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

# TERMINAL RESPONSE: GET INPUT 1.8.1

### Logically:

Command details

Command number: 1

Command type: GET INPUT

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

echo text, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "\*\*\*111111111###\*\*\*22222222###\*\*\*

333333333###\*\*\*44444444### \*\*\*5555555555###\*\*\*666666666### \*\*\*77777777###\*\*\*88888888### \*\*\*999999999###\*\*\*000000000###"

# Coding:

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

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

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

### PROACTIVE COMMAND: GET INPUT 1.9.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

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

echo text, no help information available

Device identities

Source device: SIM
Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: "<SEND>"

Response length

Minimum length: 0 Maximum length: 1

Coding:

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

TERMINAL RESPONSE: GET INPUT 1.9.1A

### Logically:

Command details

Command number: 1

Command type: GET INPUT

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

echo text, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

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

Coding:

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

### TERMINAL RESPONSE: GET INPUT 1.9.1B

# Logically:

Command details

Command number: 1

Command type: GET INPUT

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

echo text, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Contents: Null data object

Coding:

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

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

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

PROACTIVE COMMAND: GET INPUT 1.10.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

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

echo text, no help information available

Device identities

Source device: SIM
Destination device: ME

Text string

Text: length null (00).

Response length

Minimum length: 1 Maximum length: 5

Coding:

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

### TERMINAL RESPONSE: GET INPUT 1.10.1

### Logically:

Command details

Command number: 1

Command type: GET INPUT

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

echo text, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "12345"

Coding:

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

# 27.22.4.3.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.10.

# 27.22.4.3.2 GET INPUT (No response from User)

### 27.22.4.3.2.1 Definition and applicability

See clause 3.2.2.

### 27.22.4.3.2.2 Conformance requirement

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

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

### 27.22.4.3.2.3 Test purpose

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

27.22.4.3.2.4 Method of test

27.22.4.3.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

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

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

### 27.22.4.3.2.4.2 Procedure

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet
		INPUT 2.1.1	ME to echo text, packing not required, no help
			information available]
4	$ME \rightarrow USER$	Display " <time-out>"</time-out>	Range of expected length is 0-10
			Text string coding in unpacked format
5	USER	Waiting and no completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[No response from user] within 5 s after the
		INPUT 2.1.1	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	l
	0B	04	3C	54	49	4D	45	2D	4F	55	54	3E	l
	91	02	00	0A									l

TERMINAL RESPONSE: GET INPUT 2.1.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

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

echo text, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: No response from user

Coding:

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

### 27.22.4.3.2.5 Test requirement

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

# 27.22.4.3.3 GET INPUT (UCS2 format display)

### 27.22.4.3.3.1 Definition and applicability

See clause 3.2.2.

### 27.22.4.3.3.2 Conformance requirement

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

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

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

### 27.22.4.3.3.3 Test purpose

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

### 27.22.4.3.3.4 Method of test

#### 27.22.4.3.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

### 27.22.4.3.3.4.2 Procedure

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

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

### PROACTIVE COMMAND: GET INPUT 3.1.1

### Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: alphabet set, SMS default alphabet, input in unpacked format, ME to echo text, no

help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: 16 bit data UCS2 alphabet format

Техt: "ЗДРАВСТВУЙТЕ "

Response length

Minimum length: 5 Maximum length: 5

# Coding:

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

# TERMINAL RESPONSE: GET INPUT 3.1.1

### Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: alphabet set, SMS default alphabet, input in unpacked format, ME to echo text, no

help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "HELLO"

# Coding:

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

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

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

### PROACTIVE COMMAND: GET INPUT 3.2.1

# Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: alphabet set, SMS default alphabet, input in unpacked format, ME to echo text, no

help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme:16 bit data UCS2 alphabet formatText:"ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ

ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ ЗДРАВСТВУЙТЕЗДРАВСТВУЙ"

Response length

Minimum length: 5 Maximum length: 5

### Coding:

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

TERMINAL RESPONSE: GET INPUT 3.2.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: alphabet set, SMS default alphabet, input in unpacked format, ME to echo text, no

help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "HELLO"

Coding:

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

### 27.22.4.3.3.5 Test requirement

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

# 27.22.4.3.4 GET INPUT (UCS2 format of entry)

# 27.22.4.3.4.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.3.4.2 Conformance requirement

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

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

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

# 27.22.4.3.4.3 Test purpose

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

### 27.22.4.3.4.4 Method of test

### 27.22.4.3.4.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

### 27.22.4.3.4.4.2 Procedure

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

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

### PROACTIVE COMMAND: GET INPUT 4.1.1

### Logically:

Command details

Command number: 1

Command type: GET INPUT

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

information available

Device identities

Source device: SIM
Destination device: ME

Text String

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

Response length

Minimum length: 12 Maximum length: 12

# Coding:

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

### TERMINAL RESPONSE: GET INPUT 4.1.1

# Logically:

Command details

Command number: 1

Command type: GET INPUT

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

information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: UCS2

Text: "ЗДРАВСТВУЙТЕ"

# Coding:

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

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

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

### PROACTIVE COMMAND: GET INPUT 4.2.1

### Logically:

Command details

Command number: 1

Command type: GET INPUT

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

information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

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

Response length

Minimum length: 5

Maximum length: No maximum length requirement

### Coding:

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

# TERMINAL RESPONSE: GET INPUT 4.2.1

### Logically:

Command details

Command number: 1

Command type: GET INPUT

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

information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Data coding scheme: UCS2

Text: "ЗДРАВСТВУЙТЕ...ЗДРАВСТВУЙ" (70 chars)

Coding:

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

# 27.22.4.3.4.5 Test requirement

The ME shall operate in the manner defined in expected sequences 4.1 to 4.2.

# 27.22.4.3.5 GET INPUT (default text)

27.22.4.3.5.1 Definition and applicability

See clause 3.2.2.

### 27.22.4.3.5.2 Conformance requirement

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

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

### 27.22.4.3.5.3 Test purpose

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

27.22.4.3.5.4 Method of test

27.22.4.3.5.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

### 27.22.4.3.5.4.2 Procedure

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

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

### PROACTIVE COMMAND: GET INPUT 5.1.1

### Logically:

Command details

Command number: 1

Command type: GET INPUT

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

echo text, no help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

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

Response length

Minimum length: 5 Maximum length: 5

Default Text

Data coding scheme: unpacked, 8 bit data

Text: "12345"

### Coding:

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

### TERMINAL RESPONSE: GET INPUT 5.1.1

### Logically:

Command details

Command number: 1

Command type: GET INPUT

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

echo text, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "12345"

Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 5.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to echo
		INPUT 5.2.1	text, packing not required, no help
			information available]
4	$ME \rightarrow USER$	Display "Enter:"	Range of expected length is 160-160
		Display default text input:	Text string coding in unpacked format
		"***111111111###***22222222	Default text length 160 bytes coding in
		22###***33333333###***4444	unpacked format
		444444###***555555555###***	
		6666666666###***777777777	
		##***888888888###***999999	
		999###***000000000###"	
5	$USER \to ME$	Completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[command performed successfully]
		INPUT 5.2.1	

### 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: "\*\*\*11111111###\*\*\*222222222###\*\*\*33333333###\*\*\*444444444###\*\*\*

55555555###\*\*\*666666666###\*\*\*77777777###\*\*\*888888888###\*\*\*9999

999999###\*\*\*0000000000###"

# Coding:

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

TERMINAL RESPONSE: GET INPUT 5.2.1

Logically:

Command details

Command number:

Command type: GET INPUT

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

echo text, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text String

Data coding scheme: unpacked, 8 bit data

Text: "\*\*\*111111111###\*\*\*22222222###\*\*\*33333333###\*\*\*444444444###\*\*\*

99999###\*\*\*0000000000###"

# Coding:

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

# 27.22.4.3.5.5 Test requirement

The ME shall operate in the manner defined in expected sequences 5.1 to 5.2.

# 27.22.4.3.6 GET INPUT (display of Icon)

### 27.22.4.3.6.1 Definition and applicability

See clause 3.2.2.

### 27.22.4.3.6.2 Conformance requirement

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

- TS 11.14 [15] clause 5.2, clause 6.4.3, clause 6.5.4, clause 6.6.3, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3, clause 12.13 and clause 12.31.

### 27.22.4.3.6.3 Test purpose

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

### 27.22.4.3.6.4 Method of test

### 27.22.4.3.6.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

### 27.22.4.3.6.4.2 Procedure

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

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

### PROACTIVE COMMAND: GET INPUT 6.1.1

### Logically:

Command details

Command number: 1

Command type: GET INPUT

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

Device identities

Source device: SIM
Destination device: ME

**Text String** 

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

Response length

Minimum length: 0 Maximum length: 10

Icon Identifier

Icon qualifier: self-explanatory

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

Coding:

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

TERMINAL RESPONSE: GET INPUT 6.1.1A

Logically:

Command details

Command number: 1

Command type: GET INPUT

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

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 6.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[BASIC-ICON self-explanatory for the Text
		INPUT 6.1.1	string]
4	$ME \rightarrow USER$	Display " <no-icon>" for the</no-icon>	
		prompt without the icon	
			Text string coding in unpacked format
5	$USER \to ME$	Enter "+" and completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[Command performed successfully, but
		INPUT 6.1.1B	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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 6.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[BASIC-ICON non self-explanatory for the
4	ME LICED	INPUT 6.2.1	Text string]
4	INE → USER	Display " <basic-icon>" and Display the BASIC-ICON for the</basic-icon>	
		prompt	
		prompt	Text string coding in unpacked format
5	$USER \to ME$	Enter the input "+" and completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET INPUT 6.2.1A	[Command performed successfully]

### PROACTIVE COMMAND: GET INPUT 6.2.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

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

Device identities

Source device: SIM
Destination device: ME

Text String

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

Response length

Minimum length: 0 Maximum length: 10

Icon Identifier

Icon qualifier: not self-explanatory

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

Coding:

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

TERMINAL RESPONSE: GET INPUT 6.2.1A

Logically:

Command details

Command number: 1

Command type: GET INPUT

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

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "+"

### Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
_		PENDING: GET INPUT 6.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[BASIC-ICON non self-explanatory for the
		INPUT 6.2.1	Text string]
4	$ME \rightarrow USER$	Display " <basic-icon>" for the</basic-icon>	
		prompt without the icon	
			Text string coding in unpacked format
			· · · · · · · · · · · · · · · · · · ·
5	$USER \to ME$	Enter the input "+" and	
		completion	
6	$ME \to SIM$	TERMINAL RESPONSE: GET	[Command performed successfully, but
		INPUT 6.2.1B	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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 6.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[COLOUR-ICON self-explanatory for the Text
		INPUT 6.3.1	string]
4	$ME \rightarrow USER$	Display the COLOUR-ICON for	
		the prompt	
			Text string coding in unpacked format
5	LICED ME	Enter the input ", " and	
3	USEK → ME	Enter the input "+" and completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[Command performed successfully]
	IVIL -> SIIVI	INPUT 6.3.1A	[Command performed successfully]
		1141 01 0.3.17	

### 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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 6.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET INPUT 6.3.1	[COLOUR-ICON self-explanatory for the Text string]
4	$ME \rightarrow USER$	Display " <no-icon>" for the</no-icon>	
		prompt without the icon	Text string coding in unpacked format
5	$USER \to ME$	Enter the input "+" and completion	
6	$ME \to SIM$	•	[Command performed successfully, but requested icon could not be displayed]

TERMINAL RESPONSE: GET INPUT 6.3.1B

Logically:

Command details

Command number: 1

Command type: GET INPUT

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

Device identities

Source device: ME
Destination device: SIM

Result

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

Text string

Data coding scheme: unpacked, 8 bit data

Text: "+"

# Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 6.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	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</colour-icon>	
			Text string coding in unpacked format
5	$USER \to ME$	Enter the input "+" and completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET INPUT 6.4.1A	[Command performed successfully]

#### PROACTIVE COMMAND: GET INPUT 6.4.1

#### Logically:

Command details

Command number: 1

Command type: GET INPUT

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

Device identities

Source device: SIM Destination device: ME

**Text String** 

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

Response length

Minimum length: 0 Maximum length: 10

Icon Identifier

Icon qualifier: not self-explanatory

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

Coding:

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

#### TERMINAL RESPONSE: GET INPUT 6.4.1A

#### Logically:

Command details

Command number: 1

Command type: GET INPUT

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

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "+"

# Coding:

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

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

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

TERMINAL RESPONSE: GET INPUT 6.4.1B

Logically:

Command details

Command number:

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
<u></u>	8D	02	04	2B								

# 27.22.4.3.6.5 Test Requirement

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

# 27.22.4.3.7 GET INPUT (Help Information)

# 27.22.4.3.7.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.3.7.2 Conformance requirement

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

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

#### 27.22.4.3.7.3 Test purpose

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

27.22.4.3.7.4 Method of test

27.22.4.3.7.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

#### 27.22.4.3.7.4.2 Procedure

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

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

### PROACTIVE COMMAND: GET INPUT 7.1.1

#### Logically:

Command details

Command number: 1

Command type: GET INPUT

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

echo text, help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

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

Response length

Minimum length: 5 Maximum length: 5

#### Coding:

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

TERMINAL RESPONSE: GET INPUT 7.1.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

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

echo text, help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Help information required by the user

Coding:

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

# 27.22.4.3.7.5 Test requirement

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

#### 27.22.4.4 MORE TIME

# 27.22.4.4.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.4.2 Conformance requirement

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

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

# 27.22.4.4.3 Test purpose

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

# 27.22.4.4.4 Method of test

#### 27.22.4.4.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

#### 27.22.4.4.4.2 Procedure

#### **Expected Sequence 1.1 (MORE TIME)**

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

#### PROACTIVE COMMAND: MORE TIME 1.1.1

Logically:

Command details

Command number:

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												
	BE	R-TLV:	03	01	02	00	82	1 02	82	 83	01	00

#### 27.22.4.4.5 Test requirement

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

#### 27.22.4.5 PLAY TONE

# 27.22.4.5.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.5.2 Conformance requirement

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

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

# 27.22.4.5.3 Test purpose

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

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

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

# 27.22.4.5.4 Method of test

#### 27.22.4.5.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table. The elementary files are coded as Toolkit default.

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

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

27.22.4.5.4.2 Procedure

# **Expected Sequence 1.1 (PLAY TONE)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: PLAY	
4	$ME \to USER$	TONE 1.1.1 Display "Dial Tone"	
		Play a standard supervisory dial tone through the external ringer for a duration of 5 s	
5	$ME \to SIM$	TERMINAL RESPONSE: PLAY	[Command performed successfully]
6	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
7	$SIM \to ME$	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.2	
8	$ME \to SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND: PLAY TONE 1.1.2	
10	$ME \rightarrow USER$	Display "Sub. Busy"	
		Play a standard supervisory called subscriber busy tone for a duration of 5 s	
11	$ME \to SIM$	TERMINAL RESPONSE: PLAY TONE 1.1.2	[Command performed successfully]
12	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
13	$SIM \to ME$	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.3	
14	$ME \rightarrow SIM$	FETCH	
15	$SIM \to ME$	PROACTIVE COMMAND: PLAY	
16	$ME \to USER$	TONE 1.1.3 Display "Congestion"	
		Play a standard supervisory congestion tone for a duration of 5	
17	$ME \to SIM$	TERMINAL RESPONSE: PLAY TONE 1.1.3	[Command performed successfully]
18	$SIM \to ME$	PROACTIVE SIM SESSION	
19	$SIM \to ME$	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.4	
20	$ME \to SIM$	FETCH	
21	$SIM \rightarrow ME$	PROACTIVE COMMAND: PLAY	
22	$ME \to USER$	TONE 1.1.4 Display "RP Ack"	
		Play a standard supervisory radio	
23	$ME \to SIM$	path acknowledgement tone TERMINAL RESPONSE: PLAY	[Command performed successfully]
24	$SIM \to ME$	TONE 1.1.4 PROACTIVE SIM SESSION	
25	$SIM \to ME$	PROACTIVE COMMAND	
26 27	$ME \rightarrow SIM$	PENDING: PLAY TONE 1.1.5 FETCH PROACTIVE COMMAND: PLAY	
41	$SIM \rightarrow ME$	TONE 1.1.5	

Step	Direction	MESSAGE / Action	Comments
28	$ME \rightarrow USER$	Display "No RP"	
		Play a standard supervisory radio path not available / call dropped tone for a duration of 5 s	
29	$ME \rightarrow SIM$	TERMINAL RESPONSE: PLAY TONE 1.1.5	[Command performed successfully]
30	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
31	$SIM \to ME$	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.6	
32 33	$\begin{array}{c} ME \to SIM \\ SIM \to ME \end{array}$	FETCH PROACTIVE COMMAND: PLAY TONE 1.1.6	
34	$ME \to USER$	Display "Spec Info"	
		Play a standard supervisory error / special information tone for a duration of 5 s	
35	$ME \rightarrow SIM$	TERMINAL RESPONSE: PLAY TONE 1.1.6	[Command performed successfully]
36	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
37	$SIM \to ME$	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.7	
38 39	$\begin{array}{c} ME \to SIM \\ SIM \to ME \end{array}$	FETCH PROACTIVE COMMAND: PLAY TONE 1.1.7	
40	$ME \to USER$	Display "Call Wait"	
41	$ME \to SIM$	Play a standard supervisory call waiting tone for a duration of 5 s TERMINAL RESPONSE: PLAY TONE 1.1.7	[Command performed successfully]
42	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
43	$SIM \to ME$	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.8	
44	$ME \to SIM$	FETCH	
45	$SIM \rightarrow ME$	PROACTIVE COMMAND: PLAY TONE 1.1.8	
46	$ME \rightarrow USER$	Display "Ring Tone"	
		Play a standard supervisory ringing tone for duration of 5 s	
47	$ME \rightarrow SIM$	TERMINAL RESPONSE: PLAY TONE 1.1.8	[Command performed successfully]
48	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
49	$USER \to ME$	Set up a voice call	User dials 123456789 to connect to the network manually]
50 51	$\begin{array}{c} ME \to SS \\ SIM \to ME \end{array}$	Establish voice call PROACTIVE COMMAND PENDING: PLAY TONE 1.1.9	[Voice call is established]
52 53	$\begin{array}{c} ME \to SIM \\ SIM \to ME \end{array}$	FETCH PROACTIVE COMMAND: PLAY	
54	$ME \to USER$	TONE 1.1.9 Display "Dial Tone"	
		Superimpose the standard supervisory dial tone on the audio	
55	$ME \to SIM$	downlink for the duration of 5 s TERMINAL RESPONSE: PLAY	[Command performed successfully]
56	$SIM \to ME$	TONE 1.1.9 PROACTIVE SIM SESSION ENDED	
57	$USER \to ME$	The user ends the call	

Step	Direction	MESSAGE / Action	Comments
58	$SIM \to ME$	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.10	
59	$ME \to SIM$	FETCH	
60	$SIM \rightarrow ME$	PROACTIVE COMMAND: PLAY TONE 1.1.10	
61	ME → USER	Display "This command instructs the ME to play an audio tone. Upon receiving this command, the ME shall check if it is currently in, or in the process of setting up (SET-UP message sent to the network, see GSM"04.08"(8)), a speech call If the ME I"	
62	$ME \to SIM$	Play a general beep TERMINAL RESPONSE: PLAY TONE 1.1.10a or TERMINAL RESPONSE: PLAY	[Command performed successfully] or [Command beyond ME's capabilities]
63	$SIM \to ME$	TONE 1.1.10b PROACTIVE SIM SESSION ENDED	
64	$SIM \to ME$	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.11	
65	$ME \to SIM$	FETCH	
66	$SIM \rightarrow ME$	PROACTIVE COMMAND: PLAY	
67	$ME \to USER$	Display "Beep"	
68	$ME \to SIM$	Play a ME proprietary general beep TERMINAL RESPONSE: PLAY TONE 1.1.11a Or	[Command performed successfully]
		TERMINAL RESPONSE: PLAY TONE 1.1.11b	[Command beyond ME's capabilities]
69	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
70	$SIM \to ME$	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.12	
71	$ME \to SIM$	FETCH	
72	$SIM \to ME$	PROACTIVE COMMAND: PLAY TONE 1.1.12	
73	$ME \to USER$	Display "Positive"	
74	$ME \to SIM$	Play a ME proprietary positive acknowledgement tone TERMINAL RESPONSE: PLAY TONE 1.1.12a or	[Command performed successfully] or [Command beyond ME's capabilities]
75	SIM  o ME	TERMINAL RESPONSE: PLAY TONE 1.1.12b PROACTIVE SIM SESSION	[Command beyond ME's capabilities]
76	$SIM \to ME$	ENDED PROACTIVE COMMAND	
		PENDING: PLAY TONE 1.1.13	
77 78	$ME \to SIM$ $SIM \to ME$	PROACTIVE COMMAND: PLAY	
79	$ME \to USER$	TONE 1.1.13 Display "Negative"	
		Play a ME proprietary negative acknowledgement tone	

Step	Direction	MESSAGE / Action	Comments
80	$ME \to SIM$	TERMINAL RESPONSE: PLAY	[Command performed successfully]
		TONE 1.1.13a	
		Or	Or
		TERMINAL RESPONSE: PLAY TONE 1.1.13b	[Command beyond ME's capabilities]
81	$SIM \to ME$	PROACTIVE SIM SESSION	
	· · · · · · · · · · · · · · · · · · ·	ENDED	
82	$SIM \to ME$	PROACTIVE COMMAND	
00	N.E. 01N4	PENDING: PLAY TONE 1.1.14	
83 84	$ME \rightarrow SIM$	FETCH PROACTIVE COMMAND: PLAY	
04	$SIM \rightarrow ME$	TONE 1.1.14	
85	$ME \to USER$	Display "Quick"	
		Play a ME proprietary general	
86	ME  o SIM	beep TERMINAL RESPONSE: PLAY	[Command performed successfully]
	IVIL -> OIIVI	TONE 1.1.14a	[Command performed successfully]
		or	or
		TERMINAL RESPONSE: PLAY	[Command beyond ME's capabilities]
87	$SIM \to ME$	TONE 1.1.14b PROACTIVE SIM SESSION	
07	SIIVI → IVIE	ENDED	
88	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: PLAY TONE 1.1.15	
89	$ME \rightarrow SIM$	FETCH	
90	$SIM \rightarrow ME$	PROACTIVE COMMAND: PLAY TONE 1.1.15	
91	$ME \to USER$	Display " <abort>"</abort>	
	/ 00Lix		
		Play an ME Error / Special	
		information tone until user aborts	
		this command (the command shall be aborted by the user within 1	
		minute)	
92	$ME \to SIM$	TERMINAL RESPONSE: PLAY	[Proactive SIM session terminated by the
00	0114 145	TONE 1.1.15	user]
93	$SIM \rightarrow ME$	PROACTIVE SIM SESSION ENDED	
94	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: PLAY TONE 1.1.16	
95	$ME \rightarrow SIM$	FETCH	
96	$SIM \to ME$	PROACTIVE COMMAND: PLAY	[No alpha identifier, no tone tag, no duration
97	ME  o User	TONE 1.1.16 ME plays general beep, or if not	tag] [ME uses default duration defined by
	IVIL -7 USEI	supported any (defined by ME-	ME-manufacturer]
		manufacturer) other supported	_
00	ME O'L	tone	Common discontinue di common di comm
98	$ME \rightarrow SIM$	TERMINAL RESPONSE: PLAY TONE 1.1.16	[Command performed successfully], [ME uses general beep, or if not supported any (defined
		TORE I.I.IO	by ME-manufacturer) other supported tone,
			uses default duration defined by
			ME-manufacturer]
99	$SIM \to ME$	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:

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:

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece
Alpha identifier: "No RP"

Tone: Standard supervisory tones: radio path not available

Duration

Time unit: Seconds
Time interval: 5

Coding:

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

### PROACTIVE COMMAND: PLAY TONE 1.1.6

#### Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Earpiece

Alpha identifier: "Spec Info"

Tone: Standard supervisory tones: Error/ special information

Duration

Time unit: Seconds
Time interval: 5

# Coding:

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

#### PROACTIVE COMMAND: PLAY TONE 1.1.7

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

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

Tone: Standard supervisory tones: call waiting tone

Duration

Time unit: Seconds
Time interval: 5

Coding:

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

#### PROACTIVE COMMAND: PLAY TONE 1.1.8

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

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

Tone: Standard supervisory tones: ringing tone

Duration

Time unit: Seconds
Time interval: 5

Coding:

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

#### PROACTIVE COMMAND: PLAY TONE 1.1.9

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece

Alpha identifier: "Dial Tone"

Tone: Standard supervisory tones: dial tone

Duration

Time unit: Seconds
Time interval: 5

Coding:

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

PROACTIVE COMMAND: PLAY TONE 1.1.10

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece

Alpha identifier: "This command instructs the ME to play an audio tone. Upon receiving this

command, the ME shall check if it is currently in, or in the process of setting up (SET-UP message sent to the network, see GSM"04.08"(8)), a speech call. - If the

ME I'

Coding:

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

PROACTIVE COMMAND: PLAY TONE 1.1.11

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Earpiece Alpha identifier: "Beep"

Tone: ME proprietary tones: general beep

Duration

Time unit: Seconds
Time interval: 1

Coding:

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

#### PROACTIVE COMMAND: PLAY TONE 1.1.12

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

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

Tone: ME proprietary tones: positive acknowledgement tone

Duration

Time unit: Seconds
Time interval: 1

Coding:

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

# PROACTIVE COMMAND: PLAY TONE 1.1.13

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

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

Tone: ME proprietary tones: negative acknowledgement tone

Duration

Time unit: Seconds
Time interval: 1

Coding:

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

## PROACTIVE COMMAND: PLAY TONE 1.1.14

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

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

Tone: ME proprietary tones: general beep

Duration

Time unit: Tenths of seconds

Time interval: 2

Coding:

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

#### PROACTIVE COMMAND: PLAY TONE 1.1.15

#### Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Earpiece

Alpha identifier: "<ABORT>"

Tone: Standard supervisory tones: Error / Special information

Duration

Time unit: Minutes
Time interval: 1

Coding:

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

#### PROACTIVE COMMAND: PLAY TONE 1.1.16

# Logically:

Command details

Command number:

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:

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

TERMINAL RESPONSE: PLAY TONE 1.1.10b ..1.1.14b

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command beyond ME's capabilities

Coding:

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

TERMINAL RESPONSE: PLAY TONE 1.1.15

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Proactive SIM session terminated by user

Coding:

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

#### 27.22.4.5.5 Test requirement

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

# 27.22.4.6 POLL INTERVAL

# 27.22.4.6.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.6.2 Conformance requirement

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

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

# 27.22.4.6.3 Test purpose

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

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

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

#### 27.22.4.6.4 Method of test

#### 27.22.4.6.4.1 Initial conditions

The ME is connected to the SIM Simulator.

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

## 27.22.4.6.4.2 Procedure

# **Expected Sequence 1.1 (POLL INTERVAL, Seconds)**

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

PROACTIVE COMMAND: POLL INTERVAL 1.1.1

Logically:

Command details

Command number:

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:

Command type: POLL INTERVAL

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Duration

Time unit: Seconds
Time interval: 20

### Coding:

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

Note: If the requested poll interval is not supported by the ME, the ME is allowed to use a different one as stated in TS 11.14 [13], subclause 6.4.6.

# 27.22.4.6.5 Test requirement

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

## 27.22.4.7 REFRESH

# 27.22.4.7.1 REFRESH (normal)

# 27.22.4.7.1.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.7.1.2 Conformance requirement

The ME shall support the REFRESH command as defined in:

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

#### 27.22.4.7.1.3 Test purpose

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

#### 27.22.4.7.1.4 Method of test

#### 27.22.4.7.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and 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.

Prior to the execution of expected sequence 1.2 the FDN service shall be enabled.

#### 27.22.4.7.1.4.2 Procedure

# **Expected Sequence 1.1 (REFRESH, SIM Initialization)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: REFRESH 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		REFRESH 1.1.1	
4	SIM	Invalidate EF IMSI, EF LOCI and	[Restricted dialling feature is enabled]
_		EF ADN	THAT ( ONA) SELECT
5	$ME \rightarrow SIM$	SIM Initialization	[ME performs SIM initialization]
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	
		REFRESH 1.1.1A	
		Or	
		TERMINAL RESPONSE:	[additional EFs read]
		REFRESH 1.1.1B	
7	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
8	$USER \rightarrow ME$	Call setup to "321"	
9	$ME \rightarrow USER$	Call set up not allowed	
10	$USER \to ME$	Call setup to "123"	
11	$ME \rightarrow SS$	Setup	Called party BCD number shall be "123"

#### PROACTIVE COMMAND: REFRESH 1.1.1

## Logically:

Command details

Command number: 1

Command type: REFRESH
Command qualifier: SIM Initialization

Device identities

Source device: SIM Destination device: ME

# Coding:

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

# TERMINAL RESPONSE: REFRESH 1.1.1A

#### Logically:

#### Command details

Command number: 1

Command type: REFRESH
Command qualifier: SIM Initialization

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	03	82	02	82	81	83	01	00
D	<b>O</b> .	00			00		~_				<b>.</b>	

TERMINAL RESPONSE: REFRESH 1.1.1B

Logically:

Command details

Command number: 1

Command type: REFRESH
Command qualifier: SIM Initialization

Device identities

Source device: ME Destination device: SIM

Result

General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	03	82	02	82	81	83	01	03
D-1. 1-1.		00	, .	U .	00	_ <del>_</del>	~ <u> </u>	_ <del>_</del>	, o.	00	, .	

# **Expected Sequence 1.2 (REFRESH, File Change Notification)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: REFRESH 1.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		REFRESH 1.2.1	
4	SIM	Update EF FDN RECORD 1	[EF FDN record 1 updated to contain the
			dialling string "0123456789"]
5	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[normal ending]
		REFRESH 1.2.1A	
		Or	
		TERMINAL RESPONSE:	[additional EFs read]
_		REFRESH 1.2.1B	
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
7		Call setup to "123"	
8	$ME \rightarrow USER$	Call set up not allowed	
9	$USER \to ME$	Call setup to "0123456789"	
10	$ME \rightarrow SS$	Setup	Called party BCD number shall be
			"0123456789"

PROACTIVE COMMAND: REFRESH 1.2.1

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: File Change Notification

Device identities

Source device: SIM

Destination device: ME File List: EF FDN

Coding:

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

TERMINAL RESPONSE: REFRESH 1.2.1A

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: File Change Notification

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

TERMINAL RESPONSE: REFRESH 1.2.1B

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: File Change Notification

Device identities

Source device: ME
Destination device: SIM

Result

General Result: REFRESH performed with additional EFs read

Coding:

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

# **Expected Sequence 1.3 (REFRESH, SIM Initialization and File Change Notification)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: REFRESH 1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	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	$ME \rightarrow SIM$	SIM initialization and READ	
		BINARY: EF PLMN	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[normal ending]
		REFRESH 1.3.1A	
		Or	
		TERMINAL RESPONSE:	[additional EFs read]
		REFRESH 1.3.1B	
7	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	

PROACTIVE COMMAND: REFRESH 1.3.1

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

Device identities

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

Coding:

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

TERMINAL RESPONSE: REFRESH 1.3.1A

Logically:

Command details

Command number:

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	02	82	02	82	81	83	01	00	١
----------	----	----	----	----	----	----	----	----	----	----	----	----	---

TERMINAL RESPONSE: REFRESH 1.3.1B

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME Destination device: SIM

Result

General Result: REFRESH performed with additional EFs read

Coding:

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

# Expected Sequence 1.4 (REFRESH, SIM Initialization and Full File Change Notification)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: REFRESH 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	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
		ONAL SE E	dialling string "0123456789"]
6	$ME \rightarrow SIM$	SIM Initialization	[ME performs SIM initialization]
7	$ME \rightarrow SIM$	TERMINAL RESPONSE:	
		REFRESH 1.4.1A	
		Or	
		TERMINAL RESPONSE:	[additional EFs read]
		REFRESH 1.4.1B	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
	0	ENDED	
9	$USER \rightarrow ME$	Call setup to "321"	
10	$ME \rightarrow USER$	Call set up not allowed	
11	$USER \to ME$	Call setup to "0123456789"	
12	$ME \to SS$	Setup	Called party BCD number shall be
			"0123456789"

# PROACTIVE COMMAND: REFRESH 1.4.1

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and Full File Change Notification

Device identities

Source device: SIM
Destination device: ME

Coding:

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

# TERMINAL RESPONSE: REFRESH 1.4.1A

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and Full File Change Notification

Device identities

Source device: ME Destination device: SIM Result

General Result: Command performed successfully

Coding:

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

TERMINAL RESPONSE: REFRESH 1.4.1B

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and Full File Change Notification

Device identities

Source device: ME Destination device: SIM

Result

General Result: REFRESH performed with additional EFs read

Coding:

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

# Expected Sequence 1.5 (REFRESH, SIM Reset)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: REFRESH 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		REFRESH 1.5.1	
4	$ME \rightarrow SIM$	GSM Termination Procedure	
5	$ME \rightarrow SIM$	GSM Activation Procedure	
6	$ME \rightarrow SIM$	SIM Initialization	
7	$ME \rightarrow SIM$		[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:

# Expected Sequence 1.6 (REFRESH, SIM Initialization after SMS-PP data download)

Step	Direction	MESSAGE / Action	Comments
1	ME	The ME shall be in its normal idle	[Start a sequence to verify that the ME returns
		mode	the RP-ACK message back to the system
			Simulator, if the SIM responds with '90 00']
2	$SS \rightarrow ME$	SMS-PP Data Download Message	
		1.6.1	
3	$ME \rightarrow USER$	The ME shall not display the	
		message or alert the user of a short message waiting	
4	$ME \rightarrow SIM$	ENVELOPE: SMS-PP	
7	IVIL -> SIIVI	DOWNLOAD 1.6.1	
5	$SIM \rightarrow ME$	SW1/SW2 of '90 00'	
6	$ME \rightarrow SS$	RP-ACK	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: REFRESH 1.1.1	
8	$ME \rightarrow SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		REFRESH 1.1.1	
10	SIM	Invalidate EF IMSI, EF LOCI and	[Restricted dialling feature is enabled]
		EF ADN	n
11	$ME \rightarrow SIM$	SIM Initialization	[ME performs SIM initialization]
12	$ME \rightarrow SIM$	TERMINAL RESPONSE:	
		REFRESH 1.1.1A Or	
		TERMINAL RESPONSE:	[additional EFs read]
		REFRESH 1.1.1B	[additional Et 3 read]
13	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
	0 / <u></u>	ENDED	
14	$USER \to ME$	Call setup to "321"	
15	$ME \rightarrow USER$	Call set up not allowed	
16	$USER \to ME$	Call setup to "123"	
17	$ME \rightarrow SS$	Setup	Called party BCD number shall be "123"

# SMS-PP (Data Download) Message 1.6.1

#### Logically:

SMS TPDU

TP-MTI SMS-DELIVER

TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME

TP-OA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "1234"

TP-PID SIM Data download

TP-DCS

Coding Group General Data Coding Compression Text is uncompressed

Message Class Class 2 SIM Specific Message

Alphabet 8 bit data

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

TP-UDL 13

TP-UD "Short Message"

## Coding:

Coding	04	04	91	21	43	7F	16	89	10	10	00	00

00	00	00	0D	53	68	6F	72	74	20	4D	65	73
73	'3	61	67	65								

**ENVELOPE: SMS-PP DOWNLOAD 1.6.1** 

Logically:

SMS-PP Download

Device identities

Source device: Network
Destination device: SIM

Address

TON International number

NPI "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-DELIVER

TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME

TP-OA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "1234"

TP-PID SIM Data download

**TP-DCS** 

Coding Group General Data Coding Compression Text is uncompressed

Message Class Class 2 SIM Specific Message

Alphabet 8 bit data

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

TP-UDL 13

TP-UD "Short Message"

Coding:

BER-TLV:	D1	2D	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1C	04	04	91	21	43
	7F	16	89	10	10	00	00	00	00	0D	53	68
	6F	72	74	20	4D	65	73	73	61	67	65	

27.22.4.7.1.5 Test requirement

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

27.22.4.7.2 REFRESH (IMSI changing procedure)

27.22.4.7.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.7.2.2 Conformance requirement

The ME shall support the REFRESH command as defined in:

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

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

- TS 11.11 [13] clause 12.2.1.

#### 27.22.4.7.2.3 Test purpose

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

#### 27.22.4.7.2.4 Method of test

#### 27.22.4.7.2.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table. The elementary files are coded as SIM Application Toolkit default.

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

The ATT flag broadcast in the L3-RR SYSTEM INFORMATION TYPE 3 message on the BCCH is set to "MSs shall apply IMSI attach and detach procedure" for Expected Sequences 2.2 and 2.3.

#### 27.22.4.7.2.4.2 Procedure

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

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

### PROACTIVE COMMAND: REFRESH 2.1.1

#### Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: SIM
Destination device: ME

File List

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

Coding:

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

TERMINAL RESPONSE: REFRESH 2.1.1A

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

TERMINAL RESPONSE: REFRESH 2.1.1B

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME Destination device: SIM

Result

General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	01 0	03
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# **Expected Sequence 2.2 (REFRESH, SIM Initialization and Full File Change Notification)**

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

PROACTIVE COMMAND: REFRESH 2.2.1

Logically:

Command details

Command number:

Command type: REFRESH

Command qualifier: SIM Initialization and Full File Change Notification

Device identities

Source device: SIM
Destination device: ME

Coding:

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

TERMINAL RESPONSE: REFRESH 2.2.1A

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

TERMINAL RESPONSE: REFRESH 2.2.1B

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME Destination device: SIM

Result

General Result: REFRESH performed with additional EFs read

Coding:

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

#### **Expected Sequence 2.3 (REFRESH, SIM Reset)**

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

#### PROACTIVE COMMAND: REFRESH 2.3.1

#### Logically:

Command details

Command number: 1

Command type: REFRESH Command qualifier: SIM Reset

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	04	82	02	81	82
			• .		<b>.</b>	• .	• .	~-	~-	• .	

# 27.22.4.7.2.5 Test requirement

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

# 27.22.4.8 SET UP MENU and ENVELOPE MENU SELECTION

# 27.22.4.8.1 SET UP MENU (normal) and ENVELOPE MENU SELECTION

# 27.22.4.8.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.8.1.2 Conformance requirement

The ME shall support the SET UP MENU command as defined in:

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

The ME shall support MENU SELECTION as defined in:

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

#### 27.22.4.8.1.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME replaces the current list of menu items with the list of menu items contained in the SET UP MENU command.

To verify that the ME removes the current list of menu items following receipt of a SET UP MENU command with no items.

To verify that the ME correctly passes the identifier of the selected menu item to the SIM using the ENVELOPE (MENU SELECTION) command.

To verify that when the help is available for the command and the user 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	$SIM \rightarrow ME$	PROACTIVE COMMAND	[First Set Up Menu]
		PENDING: SET UP MENU 1.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND SET UP	
		MENU 1.1.1	
4	$ME \rightarrow USER$	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	$ME \to SIM$	TERMINAL RESPONSE: SET UP	[Command Performed Successfully]
_		MENU 1.1.1	
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
	$USER \to ME$	ENDED Select the Toolkit Menu "Toolkit	
7	USER → IVIE	Menu"	
	$ME \rightarrow USER$	Display "Item 1", "Item 2", "Item 3",	
8		"Item 4"	
9	$USER \to ME$	Select the "Item 2" Menu entry	
4.0	$ME \rightarrow SIM$	Send the ENVELOPE 1.1.1:	
10		MENU SELECTION	
11	$SIM \to ME$	(Identifier of item: 2) PROACTIVE COMMAND	[Second Set Up Menu, REPLACE Old Menu]
	Olivi -> IVIL	PENDING: SET UP MENU 1.1.2	[Second Set op Mend, Ref Ertor Sid Mend]
12	$ME \to SIM$	FETCH	
13	$SIM \to ME$	PROACTIVE COMMAND SET UP	
		MENU 1.1.2	
14	$ME \rightarrow USER$	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	$ME \to SIM$	TERMINAL RESPONSE: SET UP	[Command Performed Successfully]
40	0114 145	MENU 1.1.2	
16	$SIM \to ME$	PROACTIVE SIM SESSION	
	$USER \to ME$	Select the Toolkit Menu "Toolkit	
17	00Lit / IIIL	Menu"	
18	$ME \to USER$	Display "One", "Two"	
19	$USER \to ME$	Select the "Two" menu entry	
20	$ME \rightarrow SIM$	Send the ENVELOPE 1.1.2:	
20		MENU SELECTION (Identifier of item: 12)	
21	$SIM \rightarrow ME$	PROACTIVE COMMAND	[Third Set Up Menu, REMOVE Toolkit Menu]
	J / WIL	PENDING: SET UP MENU 1.1.3	[ ]
		with SW1 / SW2 of '91 0F'.	
22	$ME \to SIM$	FETCH	
23	$SIM \rightarrow ME$	PROACTIVE COMMAND SET UP	
24	ME LIGER	MENU 1.1.3 Remove the menu "Toolkit Menu"	
24	$ME \rightarrow USER$	from its menu system.	
25	$ME \to SIM$	TERMINAL RESPONSE: SET UP	[Command Performed Successfully]
	, , , , , , , , , , , , , , , , , , , ,	MENU 1.1.3	,,
26	$SIM \to ME$	PROACTIVE SIM SESSION	
0.7		ENDED	
27	$USER \to ME$	Has to unsuccessfully find the Toolkit Menu	
		I OOIKIL IVIETIU	

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:

#### **ENVELOPE 1.1.1: MENU SELECTION**

Logically:

Menu selection

Device identities

Source device: Keypad Destination device: SIM Item identifier 02

Coding:

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

# **ENVELOPE 1.1.2: MENU SELECTION**

Logically:

Menu selection

Device identities

Source device: Keypad
Destination device: SIM
Item identifier 12

Coding:

BER-TLV: D3 07 82 02 01 81 90	01	12	ĺ
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Expected Sequence 1.2 (SET UP MENU, Large Menu with many items or with large items or with Large Alpha Identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	[First Large Menu with many items, Fetch of
		PENDING: SET UP MENU 1.2.1	FF bytes]
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND SET UP	
4	ME LICED	MENU 1.2.1	
+	$ME \rightarrow USER$	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	$ME \to SIM$	TERMINAL RESPONSE: SET UP	[Command Performed Successfully]
		MENU 1.2.1	
6	$SIM \to ME$	PROACTIVE SIM SESSION	
_	LICED AT	ENDED	
7 8	USER → ME	Select the Toolkit "LargeMenu1" Display "Zero", "One", "Two"	
0	$ME \rightarrow USER$	"pico"	
9	$USER \to ME$	Select the "Orange" menu entry	
10	$ME \rightarrow SIM$	Send the ENVELOPE 1.2.1:	
	-	MENU SELECTION	
		(Identifier of item: 0x3D)	
11	$SIM \to ME$	PROACTIVE COMMAND	[Second Large Menu with large items, Fetch
10	NAT CINA	PENDING: SET UP MENU 1.2.2	of F6 bytes]
12 13	$ME \to SIM$ $SIM \to ME$	FETCH PROACTIVE COMMAND SET UP	
13	SIIVI → IVI⊑	MENU 1.2.2	
14	$ME \to USER$	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"	
4-		under this header.	 
15	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP MENU 1.2.2	[Command Performed Successfully]
16	$SIM \to ME$	PROACTIVE SIM SESSION	
	Olivi — IVIE	ENDED	
17	$USER \to ME$	Select the Toolkit Menu	
		"LargeMenu2"	
18	$ME \to USER$	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	$USER \to ME$	Select the "5 Barring Of All	
20	NAT CINA	Outgoing Calls" menu entry	
20	$ME \rightarrow SIM$	Send the ENVELOPE 1.2.2: MENU SELECTION	
		(Identifier of item: 0xFB)	
		11 - 2 - 11 - 11 - 11 - 11 - 11 - 11 -	·

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

# PROACTIVE COMMAND: SET UP MENU 1.2.1

# Logically:

Command number: Command type: Command qualifier:

Device identities

cvice identifies

Command details

Source device: SIM Destination device: ME

Alpha Identifier: "LargeMenu1"

1

"00"

SET UP MENU

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"

Item	Text string of item:	"Five"
пеш	Identifier of item: Text string of item:	"4A" "Six"
Item	Identifier of item:	"49"
Item	Text string of item:	"Seven"
Item	Identifier of item: Text string of item:	"48" "Eight"
пеш	Identifier of item: Text string of item:	"47" "Nine"
Item	Identifier of item:	"46"
Item	Text string of item:	"Alpha"
Τ.	Identifier of item: Text string of item:	"45" "Bravo"
Item	Identifier of item: Text string of item:	"44" "Charlie"
Item	Identifier of item:	"43"
Item	Text string of item:	"Delta"
T	Identifier of item: Text string of item:	"42" "Echo"
Item	Identifier of item: Text string of item:	"41" "Fox-trot"
Item	Identifier of item:	"40"
Item	Text string of item:	"Black"
Item	Identifier of item: Text string of item:	"3F" "Brown"
псш	Identifier of item: Text string of item:	"3E" "Red"
Item	Identifier of item:	"3D"
Item	Text string of item:	"Orange"
Item	Identifier of item: Text string of item:	"3C" "Yellow"
100111	Identifier of item: Text string of item:	"3B" "Green"
Item	Identifier of item:	"3A"
Item	Text string of item:  Identifier of item:	"Blue" "39"
Item	Text string of item:	"Violet"
	Identifier of item: Text string of item:	"38" "Grey"
Item	Identifier of item: Text string of item:	"37" "White"
Item	Teat suming of Heili:	winte

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
BEIT IEV.	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
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## **ENVELOPE 1.2.1: MENU SELECTION**

# Logically:

Menu selection

Device identities

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

Coding:

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

# ENVELOPE 1.2.2: MENU SELECTION

#### Logically:

Menu selection

Device identities

Source device: Keypad
Destination device: SIM
Item identifier FB

Coding:

BER-TLV: D3	07	82	02	01	81	90	01	FB
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#### **ENVELOPE 1.2.3: MENU SELECTION**

# Logically:

Menu selection

Device identities

Source device: Keypad
Destination device: SIM
Item identifier 01

Coding:

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

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

	Proactive SIM Command 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 1.1 and in expected sequence 1.2.

# 27.22.4.8.2 SET UP MENU (help request support) and ENVELOPE MENU SELECTION

27.22.4.8.2.1 Definition and applicability

See clause 3.2.2.

### 27.22.4.8.2.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- TS 11.14 [15] clause 12.21.

#### 27.22.4.8.2.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that when the help is available for the command and the user has indicated the need to get help information on one of the items, the ME informs properly the SIM about an HELP REQUEST, using the MENU SELECTION mechanism.

To verify that the ME correctly passes the identifier of the selected menu item to the SIM using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.2.4 Method of test

27.22.4.8.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

#### 27.22.4.8.2.4.2 Procedure

# Expected Sequence 2.1 (SET UP MENU and MENU SELECTION, with Help Request, Replace and Remove a Toolkit Menu)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	[First Set Up Menu]
		PENDING: SET UP MENU 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND SET UP	
4	ME LICED	MENU 2.1.1 Integrate the menu header of	
1 7	IVIE → USER	"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	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command Performed Successfully]
		MENU 2.1.1	
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
7	LICED ME	ENDED	
7	$USER \to ME$	Select the Toolkit Menu "Toolkit Menu"	
8	ME → USER		
	IVIL -> OOLIK	"Item 4"	
9	$USER \to ME$	Select the Help Request on	
		"Item 2" Menu entry	
10	$ME \rightarrow SIM$	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:

Text string of item: "Item 1"

Item

Identifier of item: 2

Text string of item: "Item 2"

Item

Identifier of item: 3 "Item 3"

Text string of item:

Item

Identifier of item:4

"Item 4" Text string of item:

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:

Command type: SET UP MENU

Command qualifier: " help information available"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

#### **ENVELOPE 2.1.1: MENU SELECTION**

Logically:

Menu selection

Device identities

Source device: Keypad Destination device: SIM Item identifier 02

Help request tag

Coding:

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

27.22.4.8.2.5 Test requirement

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

27.22.4.8.3 SET UP MENU (next action support) and ENVELOPE MENU SELECTION

27.22.4.8.3.1 Definition and applicability

See clause 3.2.2.

If the SIM provides an Items Next Action Indicator data object, the comprehension required flag shall be set to '0'.

#### 27.22.4.8.3.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- TS 11.14 [15] clause 12.24.

#### 27.22.4.8.3.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the next action indicator is supported.

To verify that the ME correctly passes the identifier of the selected menu item to the SIM using the ENVELOPE (MENU SELECTION) command.

# 27.22.4.8.3.4 Method of test

#### 27.22.4.8.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

#### 27.22.4.8.3.4.2 Procedure

Expected Sequence 3.1 (SET UP MENU, next action indicator "Send SM", "Set Up Call", "Launch Browser", "Provide Local Information", successful)

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

### **ENVELOPE 3.1.1: MENU SELECTION**

Logically:

Menu selection

Device identities

Source device: Keypad Destination device: SIM Item identifier 02

Coding:

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

# PROACTIVE COMMAND: SET UP MENU 3.1.1

# Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1

Text string of item: "Item 1"

Item

Identifier of item: 2

Text string of item: "Item 2"

Item

Identifier of item: 3

Text string of item: "Item 3"

Item

Identifier of item: 4

Text string of item: "Item 4"

Items next action indicator list

List: "Send SM", "Set Up Call", "Launch Browser", "Provide Local Information"

#### Coding:

BER-TLV:	D0	41	81	03	01	25	00	82	02	81	82	85
	0C	54	6F	6F	6C	6B	69	74	20	4D	65	6E
	75	8F	07	01	49	74	65	6D	20	31	8F	07
	02	49	74	65	6D	20	32	8F	07	03	49	74
	65	6D	20	33	8F	07	04	49	74	65	6D	20
	34	18	04	13	10	15	26					

#### TERMINAL RESPONSE: SET UP MENU 3.1.1

# Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "no help information available"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

#### 27.22.4.8.3.5 Test requirement

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

# 27.22.4.8.4 SET UP MENU (display of icons) and ENVELOPE MENU SELECTION

27.22.4.8.4.1 Definition and applicability

See clause 3.2.2.

### 27.22.4.8.4.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

- TS 11.14 [15] clause 6.5.4, 12.31 and 12.32.

#### 27.22.4.8.4.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that icons are displayed with the command Set Up Menu in the Alpha Identifier and Items Data Objects. To verify that the ME correctly passes the identifier of the selected menu item to the SIM using the ENVELOPE (MENU SELECTION) command.

#### 27.22.4.8.4.4 Method of test

# 27.22.4.8.4.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

#### 27.22.4.8.4.4.2 Procedure

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[First Set Up Menu]
		PENDING: SET UP MENU 4.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND SET UP	
		MENU 4.1.1	
4	$ME \rightarrow USER$	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.	10 10 (11)
5	$ME \rightarrow SIM$		[Command Performed Successfully]
		MENU 4.1.1A	
6	$SIM \to ME$	PROACTIVE SIM SESSION	
	SIIVI → IVIE	IFNDED	
7	$USER \to ME$	Select the Toolkit Menu "Toolkit	Verify the icon is displayed with alpha id.
1	OSLIN - IVIL	Menu"	verify the loon is displayed with diplia id.
8	$ME \rightarrow USER$		
9	USER → ME	Navigate in the items, then select	Verify icons are displayed for each item.
	302.	"Item 2".	
10	$ME \to SIM$	Send the ENVELOPE 3.1.1:	
		MENU SELECTION	
		(Identifier of item: 2)	

# PROACTIVE COMMAND: SET UP MENU 4.1.1

#### Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "Toolkit Menu"

Item

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

Item

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

Item

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

Icon identifier

Icon qualifier: icon is not self explanatory

Icon identifier: record 1 EF (IMG)

Item icon identifier list

Icon qualifier: icon is not self explanatory

Icon identifier list: record 5 EF (IMG), record 5 EF (IMG), record 5 EF (IMG)

# Coding:

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

TERMINAL RESPONSE: SET UP MENU 4.1.1A

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "no help information available"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SET UP MENU 4.1.1	[First Set Up Menu]
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	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	$SIM \rightarrow ME$	PROACTIVE SIM SESSION ENDED	
7	$USER \to ME$	Select the Toolkit Menu "Toolkit Menu"	
8	$ME \rightarrow USER$	Display "Item 1", "Item 2", "Item 3" under the header 'Toolkit Menu'.	Verify that either for the header or for each of the items no icon is displayed
9	$USER \to ME$	Navigate in the items, then select "Item 2".	
10	$ME \rightarrow SIM$	Send the ENVELOPE 3.1.1: MENU SELECTION (Identifier of item: 2)	

TERMINAL RESPONSE: SET UP MENU 4.1.1B

Logically:

Command details

Command number:

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
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# 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	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SET UP MENU 4.2.1	[First Set Up Menu]
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND SET UP	
		MENU 4.2.1	
4	$ME \rightarrow USER$	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	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command Performed Successfully]
3	IVIE -> SIIVI	MENU 4.2.1A	[Command renormed Successibility]
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
7	$USER \to ME$	Select the Toolkit Menu "Toolkit	Verify the icon is displayed in alpha id.
		Menu"	
8		Display "Item 1", "Item 2", "Item 3".	
9	$USER \to ME$	Navigate in the items, then select	Verify icons are displayed for each item.
10	ME CIM	"Item 2".	
10	$ME \rightarrow SIM$	Send the ENVELOPE 3.1.1:  MENU SELECTION	
		(Identifier of item: 2)	
		(Idontinoi oi itoini Z)	

#### 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
DEIX IEV.	0.	00	0.	20	00	02	02	02	U .	00		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	$SIM \to ME$	PROACTIVE COMMAND	[First Set Up Menu]
		PENDING: SET UP MENU 4.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND SET UP	
		MENU 4.2.1	
4	$ME \rightarrow USER$	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	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command Performed Successfully]
		MENU 4.2.1B	
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
7		ENDED	
7	$USER \to ME$	Select the Toolkit Menu "Toolkit	
	ME HOED	Menu"	Navific that aith as for the place day or for a calculat
8	$ME \rightarrow USER$	Display "Item 1", "Item 2", "Item 3"	Verify that either for the header or for each of
0	LIOED ME	under the header 'Tookit Menu'.	the items no icon is displayed
9	$USER \to ME$	Navigate in the items, then select	
40	145 0114	"Item 2".	
10	$ME \rightarrow SIM$	Send the ENVELOPE 3.1.1:	
		MENU SELECTION	
		(Identifier of item: 2)	

TERMINAL RESPONSE: SET UP MENU 4.2.1B

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "no help information available"

Device identities

Source device: ME
Destination device: SIM

Result

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

Coding:

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

#### 27.22.4.8.4.5 Test requirement

The ME shall operate in the manner defined in expected sequences 4.1A to 4.2B.

# 27.22.4.8.5 SET UP MENU (soft keys support) and ENVELOPE MENU SELECTION

27.22.4.8.5.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.8.5.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1.

#### 27.22.4.8.5.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that if soft key preferred is indicated in the command details and soft key for SET UP MENU is supported by the ME and the number of icon items does not exceed the number of soft keys available, then the ME displays those icons as soft key.

To verify that the ME correctly passes the identifier of the selected menu item to the SIM using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.5.4 Method of test

27.22.4.8.5.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

#### 27.22.4.8.5.4.2 Procedure

# Expected Sequence 5.1 (SET UP MENU, SOFT KEY PREFERRED, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[First Set Up Menu]
		PENDING: SET UP MENU 5.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND SET UP	
		MENU 5.1.1	
4	$ME \rightarrow USER$	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	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command Performed Successfully]
_		MENU 5.1.1	
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
_		ENDED	
7	$USER \to ME$	Select the Toolkit Menu "Toolkit	
		Menu"	
8		Display "Item 1", "Item 2"	
9	$USER \to ME$	Navigate in the items, then select	Verify we can select items through soft keys
40		"Item 2".	
10	$ME \rightarrow SIM$	Send the ENVELOPE 3.1.1:	
		MENU SELECTION	
		(Identifier of item: 2)	

# PROACTIVE COMMAND: SET UP MENU 5.1.1

#### Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: '01' (selection using soft key preferred)

Device identities

Source device: SIM Destination device: ME

Alpha identifier: "Toolkit Menu"

Item

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

Item

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

Coding:

BER-TLV:	D0	29	81	03	01	25	01	82	02	81	82	85
	0C	54	6F	6F	6C	6B	69	74	20	4D	65	6E
	75	8F	07	01	49	74	65	6D	20	31	8F	07
	02	49	74	65	6D	20	32					

#### TERMINAL RESPONSE: SET UP MENU 5.1.1

# Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: '01' (selection using soft key preferred)

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	25	01	82	02	82	81	83	01	00	1
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#### 27.22.4.8.5.5 Test requirement

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

#### 27.22.4.9 SELECT ITEM

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

#### 27.22.4.9.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.9.1.2 Conformance requirement

The ME shall support the Proactive SIM: Select Item facility as defined in the following technical specifications:

- TS 11.14 [15] clause 5, clause 6.4.9, clause 6.6.8, clause 6.8, clause 12.6, clause 13.4 and clause 14.

### 27.22.4.9.1.3 Test purpose

To verify that the ME correctly presents the set of items contained in the SELECT ITEM proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM with the identifier of the item chosen.

To verify that the ME allows a SELECT ITEM proactive SIM command within the maximum 255 byte BER-TLV boundary.

To verify that the ME returns a TERMINAL RESPONSE with "Proactive SIM application session terminated by the user", if the user has indicated the need to end the proactive SIM session.

To verify that the ME returns a TERMINAL RESPONSE with "Backwards move in the proactive SIM application session requested by the user", if the user has indicated the need to go backwards in the proactive SIM application session.

#### 27.22.4.9.1.4 Method of test

#### 27.22.4.9.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

#### 27.22.4.9.1.4.2 Procedure

# Expected Sequence 1.1 (SELECT ITEM, mandatory features, successful)

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

# PROACTIVE COMMAND: SELECT ITEM 1.1.1

#### Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 1

Text string of item: "Item 1"

Item

Identifier of item: 2

Text string of item: "Item 2"

Item

Identifier of item: 3

Text string of item: "Item 3"

Item

Identifier of item: 4

Text string of item: "Item 4"

#### Coding:

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

#### TERMINAL RESPONSE: SELECT ITEM 1.1.1

# Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 02

Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 1.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		SELECT ITEM 1.2.1	
4	$ME \rightarrow USER$	Present the items of "Zero", "One",	
		"Two", Three", "Four", "Five", "Six",	
		"Seven", "Eight", "Nine", "Alpha",	
		"Bravo", "Charlie", "Delta", "Echo",	
		"Fox-trot", "Black", "Brown", "Red",	
		"Orange", "Yellow", "Green",	
		"Blue", "Violet", "Grey", "White",	
		"milli", "micro", "nano" and "pico"	
		under the header of "LargeMenu1"	
5		Select item "Orange".	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	Command performed successfully
		ITEM 1.2.1	

#### PROACTIVE COMMAND: SELECT ITEM 1.2.1

# Logically:

Command details

Command number:

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	X.1 .10	
	Identifier of item:	"46"
T4	Text string of item:	"Alpha"
Item	T.1	"45"
	Identifier of item:	"45" "D====="
Itama	Text string of item:	"Bravo"
Item	Identifier of item:	"44"
	Text string of item:	"Charlie"
Item	Text string of item.	Charne
псш	Identifier of item:	"43"
	Text string of item:	"Delta"
Item	Text string of item.	Delta
Ittili	Identifier of item:	"42"
	Text string of item:	"Echo"
Item	Text string of item.	Leno
100111	Identifier of item:	"41"
	Text string of item:	"Fox-trot"
Item		
	Identifier of item:	"40"
	Text string of item:	"Black"
Item	C	
	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	X.1 .10	"25"
	Identifier of item:	"3B"
Τ.	Text string of item:	"Green"
Item	I.d	"2 A "
	Identifier of item:	"3A"
Item	Text string of item:	"Blue"
пеш	Identifier of item:	"39"
	Text string of item:	"Violet"
Item	Text string of item.	Violet
IUIII	Identifier of item:	"38"
	Text string of item:	"Grey"
Item	zoni samg or nom.	City
_,,,,,,,	Identifier of item:	"37"
	Text string of item:	"White"
Item	6	
	Identifier of item:	"36"
	Identifier of item: Text string of item:	"36" "milli"
Item		
Item		

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:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 3D

Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		SELECT ITEM 1.3.1	
4	$ME \rightarrow USER$	Present the items of " Call	
		Forwarding Unconditional", "Call	
		Forwarding On User Busy", "Call	
		Forwarding On No Reply", "Call	
		Forwarding On User Not	
		Reachable", "Barring Of All	
		Outgoing Calls", "Barring Of All	
		Outgoing International Calls" and	
		"CLI Presentation" under the	
_		header of " LargeMenu2	
5	$USER \to ME$	Select item "Barring Of All	
		Outgoing Calls".	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	Command performed successfully
		ITEM 1.3.1	
7	$SIM \rightarrow ME$	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:         DO         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 </th <th></th>													
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	BER-TLV:	D0	81	FB	81	03	01	24	00	82	02	81	82
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 4F 6E 20 4E 6F 20 52 65 70 6C 79 8F 26 FC 43 61 6C 6C 20 4F 6E 20 55 73 65 72 20 4F 6E 20 4E 6F 20 52 65 70 6C 79 8F 26 FC 43 61 6C 6C 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 20 4F 6E 20 65 67 20 47 67 67 67 69 68 67 20 48 61 62 6C 73 8F 2C FA 42 61 72 72 69 6E 67 20 4F 66 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		85	0A	4C	61	72	67	65	4D	65	6E	75	32
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 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 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		8F	1E	FF	43	61	6C	6C	20	46	6F	72	77
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 4F 6E 20 4F 6E 20 4F 6E 20 55 73 65 72 20 4F 6E 6F 6F 72 77 61 72 64 6F 72 77 61 72 64 69 6E 67 20 4F 6E 20 55 73 65 72 20 4F 6F 74 20 52 65 61 63 68 61 62 6C 6C 65 8F 1E FB 42 61 72 72 69 6E 67 20 4F 6F 69 6E 67 20 41 6C 6C 20 4F 75 74 67 6F 69 6E 67 20 43 61 6C 6C 20 43 61 6C 6C 20 45 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 41 6C 6C 73 8F 2C FA 42 61 72 72 69 6E 67 20 41 6C 6C 73 8F 2C FA 42 61 72 72 69 6E 67 20 4F 66 20 41 6C 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		61	72	64	69	6E	67	20	55	6E	63	6F	6E
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 4F 6E 20 55 73 65 72 20 4E 6F 74 20 52 65 61 63 68 61 62 6C 6C 65 8F 1E FB 42 61 72 72 69 6E 67 20 4F 6E 20 4F 75 74 67 6F 69 6E 67 20 43 61 6C 6C 20 45 65 67 20 4F 6E 20 6C 6C 6C 6C 20 6F		64	69	74	69	6F	6E	61	6C	8F	1D	FE	43
75		61	6C	6C	20	46	6F	72	77	61	72	64	69
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 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		6E	67	20	4F	6E	20	55	73	65	72	20	42
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		75	73	79	8F	1C	FD	43	61	6C	6C	20	46
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		6F	72	77	61	72	64	69	6E	67	20	4F	6E
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 47 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		20	4E	6F	20	52	65	70	6C	79	8F	26	FC
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		43	61	6C	6C	20	46	6F	72	77	61	72	64
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		69	6E	67	20	4F	6E	20	55	73	65	72	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		4E	6F	74	20	52	65	61	63	68	61	62	6C
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		65	8F	1E	FB	42	61	72	72	69	6E	67	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     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		4F	66	20	41	6C	6C	20	4F	75	74	67	6F
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		69	6E	67	20	43	61	6C	6C	73	8F	2C	FA
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		42	61	72	72	69	6E	67	20	4F	66	20	41
6C         20         43         61         6C         6C         73         8F         11         F9         43         4C           49         20         50         72         65         73         65         6E         74         61         74         69		6C	6C	20	4F	75	74	67	6F	69	6E	67	20
49 20 50 72 65 73 65 6E 74 61 74 69		49	6E	74	65	72	6E	61	74	69	6F	6E	61
		6C	20	43	61	6C	6C	73	8F	11	F9	43	4C
CE CE		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:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: FB

Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		SELECT ITEM 1.4.1	
4	$ME \rightarrow USER$	Present the items of "One" and	
		"Two" under the header of "Select	
_	LICED ME	Item".	
5	$USER \to ME$	Indicate to go backwards in the proactive SIM application session.	
6	$ME \rightarrow SIM$	1.	Backward move in the proactive SIM
	IVIL -> SIIVI	ITEM 1.4.1A	application session requested by user
		or	application session requested by user
		TERMINAL RESPONSE: SELECT	
		ITEM 1.4.1B	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 1.4.2	
8	$ME \rightarrow SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		SELECT ITEM 1.4.2	
10	$ME \rightarrow USER$	Present the items of "One" and	
		"Two" under the header of "Select	
11	LICED ME	Item".	
11	$USER \to ME$	Indicate to end the proactive SIM application and return the ME to	
		normal operation.	
12	$ME \rightarrow SIM$		Proactive SIM application terminated by the
'-	IVIL 7 OIIVI	ITEM 1.4.2A	user
		or	
		TERMINAL RESPONSE: SELECT	
		ITEM 1.4.2B	
13	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	

PROACTIVE COMMAND: SELECT ITEM 1.4.1 and 1.4.2

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "Select Item"

Item

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

Item

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

Coding:

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

TERMINAL RESPONSE: SELECT ITEM 1.4.1A

Logically:

Command details

Command number:

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
DEIX IEV.	0.	00	0 1	'	00	02	02	02	0.	00	0.	

TERMINAL RESPONSE: SELECT ITEM 1.4.1B

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

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

Item identifier

Identifier of item chosen: XX

Coding:

Ī	BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	11
Ī		90	01	XX									

TERMINAL RESPONSE: SELECT ITEM 1.4.2A

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: proactive SIM session terminated by the user

Coding:

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

TERMINAL RESPONSE: SELECT ITEM 1.4.2B

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device:

ME

Destination device: SIM

Result

General Result: proactive SIM session terminated by the user

Item identifier

Identifier of item chosen:

# Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	10
	90	01	XX									

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		SELECT ITEM 1.5.1	
4	$ME \rightarrow USER$	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	
5	LICED . ME	alpha identifier i".	
_		Select item "Y"	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	Command performed successfully
	0114 145	ITEM 1.5.1	
7	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	

## PROACTIVE COMMAND: SELECT ITEM 1.5.1

#### Logically:

Command details

Command number:

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" "Y" Text string of item:

# 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:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 01

Coding:

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

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		SELECT ITEM 1.6.1	
4	$ME \rightarrow USER$	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	
5	LICED . ME	"OLargeMenu".	
5	USEK → ME	Select item "5 Barring Of All	
6	ME SIM	Outgoing Calls". TERMINAL RESPONSE: SELECT	Command parformed successfully
0	$ME \rightarrow SIM$	ITEM 1.6.1	Confinant performed successfully

PROACTIVE COMMAND: SELECT ITEM 1.6.1

#### Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "0LargeMenu"

Item

Identifier of item: "FF"

Text string of item: "1 Call Forward Unconditional"

Item

Identifier of item: "FE"

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

Item

Identifier of item: "FD"

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

Item

Identifier of item: "FC"

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

Item

Identifier of item: "FB"

Text string of item: "5 Barring Of All Outgoing Calls"

Item

Identifier of item: "FA"

Text string of item: "6 Barring Of All Outgoing Int Calls"

Item

Identifier of item: "F9"

Text string of item: "7 CLI Presentation"

# Coding:

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

TERMINAL RESPONSE: SELECT ITEM 1.6.1

Logically:

Command details

Command number:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: FB

Coding:

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

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

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

# 27.22.4.9.1.5 Test requirement

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

27.22.4.9.2 SELECT ITEM (next action support)

27.22.4.9.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.2.2 Conformance Requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.2.3 Test purpose

To verify that the mobile supports next action indicator mode.

27.22.4.9.2.4 Method of test

27.22.4.9.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

#### 27.22.4.9.2.4.2 Procedure

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 2.1.1	
4	$ME \to USER$	Display items of "Item 1", "Item 2"	The ME may indicate to the user the
		and "Item 3" under the header of	consequences of performing the selection of
		"Toolkit Select".	an item.
5	$USER \to ME$	Navigate in the items, then select	The ME may indicate to the user the
		"Item 2".	consequences of performing the selection of
			an item.
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	Command performed successfully
		ITEM 2.1.1	

### PROACTIVE COMMAND: SELECT ITEM 2.1.1

# Logically:

Command details

Command number: 1

SELECT ITEM

Command qualifier: "00"

Command type:

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:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 02

Coding:

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

27.22.4.9.2.5 Test requirement

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

27.22.4.9.3 SELECT ITEM (default item support)

27.22.4.9.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.3.2 Conformance requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.3.3 Test purpose

To verify that the mobile supports "default item" mode.

27.22.4.9.3.4 Method of test

27.22.4.9.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

# 27.22.4.9.3.4.2 Procedure

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	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	$USER \to ME$	Navigate in the items, then select "Item 3".	
6	$ME \rightarrow SIM$	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:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 03

Coding:

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

27.22.4.9.3.5 Test requirement

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

27.22.4.9.4 SELECT ITEM (help request support)

27.22.4.9.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.4.2 Conformance requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.4.3 Test purpose

To verify that the mobile supports "help request" for the command Select Item.

27.22.4.9.4.4 Method of test

27.22.4.9.4.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.9.4.4.2 Procedure

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 4.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Help information available]
		SELECT ITEM 4.1.1	
4	$ME \rightarrow USER$	Display items of "Item 1", "Item 2"	
		and "Item 3" under the header of	
		"Toolkit Select".	
5	$USER \to ME$	Navigate in the items until "Item 1".	
6	$USER \rightarrow ME$	Select the Help Request on "Item	
		1" Menu entry	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	[Help information required by the user]
		ITEM 4.1.1	

PROACTIVE COMMAND: SELECT ITEM 4.1.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "80" help information available

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01

Text string of item: "Item 1"

Item

Identifier of item: 02

Text string of item: "Item 2"

Item

Identifier of item: 03
Text string of item: "Item 3"

Coding:

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

TERMINAL RESPONSE: SELECT ITEM 4.1.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "80"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Help information required by the user

Item identifier

Identifier of item chosen: 01

Coding:

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

27.22.4.9.4.5 Test requirement

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

27.22.4.9.5 SELECT ITEM (icons support)

27.22.4.9.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.5.2 Conformance requirement

Same as clause 27.22.4.9.1.2 and TS 11.14 [15] clause 12.31 and clause 12.32.

27.22.4.9.5.3 Test purpose

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

27.22.4.9.5.4 Method of test

27.22.4.9.5.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

#### 27.22.4.9.5.4.2 Procedure

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

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

#### PROACTIVE COMMAND: SELECT ITEM 5.1.1

#### Logically:

Command details

Command number:

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  $EF_{(IMG)}$ 

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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 5.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		SELECT ITEM 5.1.1	
4	$ME \rightarrow USER$	Display items of "Item 1", "Item 2"	Verify that either for the header or for each of
		and "Item 3" under the header of	the items no icon is displayed
		"Toolkit Select".	
5	$USER \to ME$	Navigate in the items, then select	
		"Item 1" under the header 'Toolkit	
		Select'.	
6	$ME \rightarrow SIM$		[Command performed successfully, but
		ITEM 5.1.1 B	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

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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 5.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 5.2.1	
4	$ME \rightarrow USER$	Display items of "Item 1", "Item 2"	Verify icons are displayed without text as
		and "Item 3" under the header of	alpha id and for the all 3 items.
		"Toolkit Select".	
5	$USER \rightarrow ME$	Navigate in the items, then select	
		"Item 1".	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	[command performed successfully]
		ITEM 5.2.1 A	

#### 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:

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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 5.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 5.2.1	
4	$ME \rightarrow USER$	Display items of "Item 1", "Item 2"	Verify that either for the header or for each of
		and "Item 3" under the header of	the items no icon is displayed.
		"Toolkit Select".	
5	$USER \to ME$	Navigate in the items, then select	
		"Item 1" under the header "Toolkit	
		Select".	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	[command performed successfully but
		ITEM 5.2.1B	requested icon could not be displayed]

TERMINAL RESPONSE: SELECT ITEM 5.2.1B

Logically:

Command details

Command number:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

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

Item identifier

Identifier of item chosen: 01

Coding:

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

27.22.4.9.5.5 Test requirement

The ME shall operate in the manner defined in expected sequences 5.1A to 5.2B.

27.22.4.9.6 SELECT ITEM (presentation style)

27.22.4.9.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.6.2 Conformance requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.6.3 Test purpose

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

27.22.4.9.6.4 Method of test

27.22.4.9.6.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

27.22.4.9.6.4.2 Procedure

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

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

## 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:

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

PROACTIVE COMMAND: SELECT ITEM 6.2.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "01" (presentation as a choice of data values)

Device identities

Source device: SIM Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01
Text string of item: "Item 1"

Item

Identifier of item: 02
Text string of item: "Item 2"

Item

Identifier of item: 03
Text string of item: "Item 3"

Coding:

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

TERMINAL RESPONSE: SELECT ITEM 6.2.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "01"(presentation as a choice of data values)

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 01

Coding:

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

27.22.4.9.6.5 Test requirement

The ME shall operate in the manner defined in expected sequences 6.1 and 6.2.

27.22.4.9.7 SELECT ITEM (soft keys support)

27.22.4.9.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.7.2 Conformance requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.7.3 Test purpose

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

27.22.4.9.7.4 Method of test

27.22.4.9.7.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

## 27.22.4.9.7.4.2 Procedure

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

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

# 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

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

# 27.22.4.9.7.5 Test requirement

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

27.22.4.9.8 SELECT ITEM (Support of "No response from user")

27.22.4.9.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.8.2 Conformance requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.8.3 Test purpose

To verify that after a period of user inactivity the ME returns a "No response from user" result value in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.9.8.4 Method of test

27.22.4.9.8.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

The ME Manufacturer shall have defined the "no response from user" period of time.

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

27.22.4.9.8.4.2 Procedure

# Expected Sequence 8.1 (SELECT ITEM, no response from user)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 8.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 8.1.1	
4	$ME \rightarrow USER$	Display items of "Item 1", "Item 2"	
		and "Item 3" under the header of	
		" <time-out>".</time-out>	
5	USER	Waiting and no completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	[No response from user] within 5 s after the
		ITEM 8.1.1	end of that defined period of time
7	USER	Check if the delay of TERMINAL	
		RESPONSE is reasonable or not	

PROACTIVE COMMAND: SELECT ITEM 8.1.1

## Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

Alpha identifier: "<TIME-OUT>"

Item

Identifier of item: 01

Text string of item: "Item 1"

Item

Identifier of item: 02
Text string of item: "Item 2"

Item

Identifier of item: 03
Text string of item: "Item 3"

Coding:

BER-TLV:	D0	30	81	03	01	24	00	82	02	81	82	85
	0A	3C	54	49	4D	45	2D	4F	55	54	3E	8F
	07	01	49	74	65	6D	20	31	8F	07	02	49
	74	65	6D	20	32	8F	07	03	49	74	65	6D
	20	33										

#### TERMINAL RESPONSE: SELECT ITEM 8.1.1

## Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: No response from user

Coding:

## 27.22.4.9.8.5 Test requirement

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

# 27.22.4.10 SEND SHORT MESSAGE

# 27.22.4.10.1 SEND SHORT MESSAGE (normal)

# 27.22.4.10.1.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.10.1.2 Conformance requirement

The ME shall support the Proactive SIM: SEND SHORT MESSAGE facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 12.6, clause 12.7, clause 12.2, clause 12.1, clause 12.13, clause 12.31 and clause 5.2.

#### 27.22.4.10.1.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (System Simulator) as indicated in the SEND SHORT MESSAGE proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the Short Message.

#### 27.22.4.10.1.4 Method of test

#### 27.22.4.10.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.10.1.4.2 Procedure

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing not required, 8-bit data]
		SHORT MESSAGE 1.1.1	
4	$ME \rightarrow USER$	Display "Send SM"	[Alpha Identifier]
5	$ME \to SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 1.1	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 1.1.1	]

## PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1

#### Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE 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 TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "01"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data
Message class class 0
TP-UDL 12

TP-UD "Test Message"

Coding:

Coding	01	01	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

# TERMINAL RESPONSE: SEND SHORT MESSAGE 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing required, 8-bit data]
		SHORT MESSAGE 1.2.1	
4	$ME \rightarrow USER$	Display "Send SM"	[Alpha Identifier]
5	$ME \to SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 1.2	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 1.2.1	

## 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 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"

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 TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "01"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding SMS default alphabet

Message class 0 TP-UDL 7

TP-UD "Send SM"

# Coding:

Coding	01	01	09	91	10	32	54	76	F8	40	F0	07	
	D3	B2	9B	0C	9A	36	01						

# TERMINAL RESPONSE: SEND SHORT MESSAGE 1.2.1

## Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE

Command qualifier: packing required

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

#### Coding:

DED TIV: 04 02 04 12 04 02 0	22 02 04	00 04	0
	02   82   81	1 83   01	00

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing not required, SMS default alphabet]
		SHORT MESSAGE 1.3.1	
4	$ME \rightarrow USER$	Display "Short Message"	[Alpha Identifier]
5	$ME \to SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 1.3	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 1.3.1	

#### PROACTIVE COMMAND: SEND SHORT MESSAGE 1.3.1

#### Logically:

Command details

Command number:

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 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 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 TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "01"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

**TP-DCS** 

Message coding SMS default alphabet

Message class 0 TP-UDL 13

TP-UD "Short Message"

# Coding:

Coding	01	01	09	91	10	32	54	76	F8	40	F0	0D
	53	F4	5B	4E	07	35	СВ	F3	79	F8	5C	06

#### TERMINAL RESPONSE: SEND SHORT MESSAGE 1.3.1

## Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

## Coding:

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

# Expected Sequence 1.4 (SEND SHORT MESSAGE, packing required, 8 bit data, message of 160 characters user data, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.4. 1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[packing required, 8 bit data]
		SHORT MESSAGE 1.4.1	
4	$ME \rightarrow USER$	Display "The address data object	[Alpha Identifier]
		holds the RP_Destination_Address	
		"	
5	$ME \to SS$	Send SMS-PP(SEND SHORT	[message of 140 bytes user data]
		MESSAGE) Message 1.4	
6	$SS \rightarrow ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 1.4.1	

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

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8 bit data
Message class class 0
TP-UDL 160

TP-UD "Two types are defined: - A short message to be sent to the network in an

SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can

be passed transp"

## Coding:

											T	
BER-TLV:	D0	81	FD	81	03	01	13	01	82	02	81	83
	85	38	54	68	65	20	61	64	64	72	65	73
	73	20	64	61	74	61	20	6F	62	6A	65	63
	74	20	68	6F	6C	64	73	20	74	68	65	20
	52	50	11	44	65	73	74	69	6E	61	74	69
	6F	6E	11	41	64	64	72	65	73	73	86	09
	91	11	22	33	44	55	66	77	F8	8B	81	AC
	01	00	09	91	10	32	54	76	F8	40	F4	A0
	54	77	6F	20	74	79	70	65	73	20	61	72
	65	20	64	65	66	69	6E	65	64	3A	20	2D
	20	41	20	73	68	6F	72	74	20	6D	65	73
	73	61	67	65	20	74	6F	20	62	65	20	73
	65	6E	74	20	74	6F	20	74	68	65	20	6E
	65	74	77	6F	72	6B	20	69	6E	20	61	6E
	20	53	4D	53	2D	53	55	42	4D	49	54	20
	6D	65	73	73	61	67	65	2C	20	6F	72	20
	61	6E	20	53	4D	53	2D	43	4F	4D	4D	41
	4E	44	20	6D	65	73	73	61	67	65	2C	20
	77	68	65	72	65	20	74	68	65	20	75	73
	65	72	20	64	61	74	61	20	63	61	6E	20
	62	65	20	70	61	73	73	65	64	20	74	72
	61	6E	73	70								

SMS-PP (SEND SHORT MESSAGE) Message 1.4

## Logically:

**SMS TPDU** 

TP-MTI SMS-SUBMIT

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

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "01"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding SMS default alphabet

Message class 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	01	09	91	10	32	54	76	F8	40	F0
A0	D4	FB	1B	44	CF	C3	СВ	73	50	58	5E
06	91	СВ	E6	B4	BB	4C	D6	81	5A	A0	20
68	8E	7E	СВ	E9	A0	76	79	3E	0F	9F	СВ
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	СВ
41	61	37	68	DA	9C	В6	86	CF	66	33	E8
24	82	DA	E5	F9	3C	7C	2E	В3	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	СВ	64	10	5D	1E	76	CF	E1			
	06 68 20 83 ED 24 41 24 59	A0 D4  06 91  68 8E  20 FA  83 E8  ED 06  24 15  41 61  24 82  59 5E  61 7A	A0 D4 FB  06 91 CB  68 8E 7E  20 FA 1B  83 E8 E8  ED 06 85  24 15 D4  41 61 37  24 82 DA  59 5E 06  61 7A 18	A0 D4 FB 1B  06 91 CB E6  68 8E 7E CB  20 FA 1B 24  83 E8 E8 32  ED 06 85 DD  24 15 D4 2E  41 61 37 68  24 82 DA E5  59 5E 06 D1  61 7A 18 34	A0 D4 FB 1B 44  06 91 CB E6 B4  68 8E 7E CB E9  20 FA 1B 24 2E  83 E8 E8 32 C8  ED 06 85 DD A0  24 15 D4 2E CF  41 61 37 68 DA  24 82 DA E5 F9  59 5E 06 D1 D1  61 7A 18 34 0E	A0         D4         FB         1B         44         CF           06         91         CB         E6         B4         BB           68         8E         7E         CB         E9         A0           20         FA         1B         24         2E         83           83         E8         E8         32         C8         5D           ED         06         85         DD         A0         69           24         15         D4         2E         CF         E7           41         61         37         68         DA         9C           24         82         DA         E5         F9         3C           59         5E         06         D1         D1         65           61         7A         18         34         0E         BB	A0         D4         FB         1B         44         CF         C3           06         91         CB         E6         B4         BB         4C           68         8E         7E         CB         E9         A0         76           20         FA         1B         24         2E         83         E6           83         E8         E8         32         C8         5D         A6           ED         06         85         DD         A0         69         73           24         15         D4         2E         CF         E7         E1           41         61         37         68         DA         9C         B6           24         82         DA         E5         F9         3C         7C           59         5E         06         D1         D1         65         50           61         7A         18         34         0E         BB         41	A0         D4         FB         1B         44         CF         C3         CB           06         91         CB         E6         B4         BB         4C         D6           68         8E         7E         CB         E9         A0         76         79           20         FA         1B         24         2E         83         E6         65           83         E8         E8         32         C8         5D         A6         DF           ED         06         85         DD         A0         69         73         DA           24         15         D4         2E         CF         E7         E1         73           41         61         37         68         DA         9C         B6         86           24         82         DA         E5         F9         3C         7C         2E           59         5E         06         D1         D1         65         50         7D           61         7A         18         34         0E         BB         41         E2	A0         D4         FB         1B         44         CF         C3         CB         73           06         91         CB         E6         B4         BB         4C         D6         81           68         8E         7E         CB         E9         A0         76         79         3E           20         FA         1B         24         2E         83         E6         65         37           83         E8         E8         32         C8         5D         A6         DF         DF           ED         06         85         DD         A0         69         73         DA         9A           24         15         D4         2E         CF         E7         E1         73         99           41         61         37         68         DA         9C         B6         86         CF           24         82         DA         E5         F9         3C         7C         2E         B3           59         5E         06         D1         D1         65         50         7D         5E           61         7A	A0         D4         FB         1B         44         CF         C3         CB         73         50           06         91         CB         E6         B4         BB         4C         D6         81         5A           68         8E         7E         CB         E9         A0         76         79         3E         OF           20         FA         1B         24         2E         83         E6         65         37         1D           83         E8         E8         32         C8         5D         A6         DF         DF         F2           ED         06         85         DD         A0         69         73         DA         9A         56           24         15         D4         2E         CF         E7         E1         73         99         05           41         61         37         68         DA         9C         B6         86         CF         66           24         82         DA         E5         F9         3C         7C         2E         B3         40           59         5E         06	A0         D4         FB         1B         44         CF         C3         CB         73         50         58           06         91         CB         E6         B4         BB         4C         D6         81         5A         A0           68         8E         7E         CB         E9         A0         76         79         3E         OF         9F           20         FA         1B         24         2E         83         E6         65         37         1D         44           83         E8         E8         32         C8         5D         A6         DF         DF         F2         35           ED         06         85         DD         A0         69         73         DA         9A         56         85           24         15         D4         2E         CF         E7         E1         73         99         05         7A           41         61         37         68         DA         9C         B6         86         CF         66         33           24         82         DA         E5         F9         3C

#### TERMINAL RESPONSE: SEND SHORT MESSAGE 1.4.1

# Logically:

Command details

Command number:

Command type: SEND SHORT MESSAGE

Command qualifier: packing required

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

|--|

Expected Sequence 1.5 (SEND SHORT MESSAGE, packing not required, SMS default alphabet, message of 160 characters user data, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing not required, SMS default alphabet]
		SHORT MESSAGE 1.5.1	
4	$ME \rightarrow USER$	Display "The address data object	[Alpha Identifier]
		holds the RP Destination Address "	
5	$ME \to SS$	Send SMS-PP (SEND SHORT	[message of 140 bytes user data]
		MESSAGE) Message 1.5	
6	$SS \rightarrow ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 1.5.1	

#### PROACTIVE COMMAND: SEND SHORT MESSAGE 1.5.1

# Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "The address data object holds the RP Destination Address"

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

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

TP-VPF TP-VP field not present

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

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	СВ	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	СВ	41
	61	37	68	DA	9C	B6	86	CF	66	33	E8	24
	82	DA	E5	F9	3C	7C	2E	В3	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
	СВ	64	10	5D	1E	76	CF	E1				

# SMS-PP (SEND SHORT MESSAGE) Message 1.5

## Logically:

**SMS TPDU** 

TP-MTI SMS-SUBMIT

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

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "01"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding SMS default alphabet

Message class 0 TP-UDL 160

TP-UD "Two types are defined: - A short message to be sent to the network in an SMS-

SUBMIT message, or an SMS-COMMAND message, where the user data can be

passed transp"

# Coding:

Coding	01	01	09	91	10	32	54	76	F8	40	F0	A0
	D4	FB	1B	44	CF	C3	СВ	73	50	58	5E	06
	91	СВ	E6	B4	BB	4C	D6	81	5A	A0	20	68
	8E	7E	СВ	E9	A0	76	79	3E	0F	9F	СВ	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	СВ	41
61	37	68	DA	9C	B6	86	CF	66	33	E8	24
82	DA	E5	F9	3C	7C	2E	В3	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
СВ	64	10	5D	1E	76	CF	E1				

TERMINAL RESPONSE: SEND SHORT MESSAGE 1.5.1

Logically:

Command details

Command number:

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[packing not required, SMS default alphabet]
		SHORT MESSAGE 1.6.1	
4	$ME \rightarrow USER$	Display "Two types are defined: - A	[Alpha Identifier of 160 bytes]
		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 "	
5	$ME \rightarrow SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 1.6	
6	$SS \rightarrow ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 1.6.1	

PROACTIVE COMMAND: SEND SHORT MESSAGE 1.6.1

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE 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 0
TP-UDL 1
TP-UD " "

#### Coding:

BER-TLV:	D0	81	FD	81	03	01	13	00	82	02	81	83
	85	81	E6	54	77	6F	20	74	79	70	65	73
	20	61	72	65	20	64	65	66	69	6E	65	64
	3A	20	2D	20	41	20	73	68	6F	72	74	20
	6D	65	73	73	61	67	65	20	74	6F	20	62
	65	20	73	65	6E	74	20	74	6F	20	74	68
	65	20	6E	65	74	77	6F	72	6B	20	69	6E
	20	61	6E	20	53	4D	53	2D	53	55	42	4D
	49	54	20	6D	65	73	73	61	67	65	2C	20
	6F	72	20	61	6E	20	53	4D	53	2D	43	4F
	4D	4D	41	4E	44	20	6D	65	73	73	61	67
	65	2C	20	77	68	65	72	65	20	74	68	65
	20	75	73	65	72	20	64	61	74	61	20	63
	61	6E	20	62	65	20	70	61	73	73	65	64
	20	74	72	61	6E	73	70	61	72	65	6E	74
	6C	79	3B	20	2D	20	41	20	73	68	6F	72
	74	20	6D	65	73	73	61	67	65	20	74	6F
	20	62	65	20	73	65	6E	74	20	74	6F	20
	74	68	65	20	6E	65	74	77	6F	72	6B	20
	69	6E	20	61	6E	20	53	4D	53	2D	53	55
	42	4D	49	54	20	8B	09	01	00	02	91	10
	40	F0	01	20								

## SMS-PP (SEND SHORT MESSAGE) Message 1.6

# Logically:

 $SMS\ TPDU$ 

TP-MTI SMS-SUBMIT

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

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "01"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "01"

TP-PID Short message type 0

TP-DCS

SMS default alphabet Message coding

Message class class 0 TP-UDL TP-UD

Coding:

Coding	01	01	02	91	10	40	F0	01	20

## TERMINAL RESPONSE: SEND SHORT MESSAGE 1.6.1

Logically:

Command details

Command number:

SEND SHORT MESSAGE Command type: packing not required

Command qualifier:

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	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.7.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing not required, 8-bit data]
		SHORT MESSAGE 1.7.1	
4	ME	No information to user	[Alpha identifier length '00']
5	$ME \to SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 1.7	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 1.7.1	

## PROACTIVE COMMAND: SEND SHORT MESSAGE 1.7.1

Logically:

Command details

Command number:

Command type: SEND SHORT MESSAGE

Command qualifier: packing not required

Device identities

Source device: SIM Network Destination device:

Alpha identifier:

Address

TON: International number NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

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

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

**TP-DCS** 

Message coding 8-bit data
Message class class 0
TP-UDL 12

TP-UD "Test Message"

#### Coding:

BER-TLV:	D0	30	81	03	01	13	00	82	02	81	83	85
	00	86	09	91	11	22	33	44	55	66	77	F8
	8B	18	01	00	09	91	10	32	54	76	F8	40
	F4	0C	54	65	73	74	20	4D	65	73	73	61
	67	65										

## SMS-PP (SEND SHORT MESSAGE) Message 1.7

# Logically:

SMS TPDU

TP-MTI SMS-SUBMIT

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

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "01"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data
Message class class 0
TP-UDL 12

TP-UD "Test Message"

# Coding:

Coding	01	01	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

TERMINAL RESPONSE: SEND SHORT MESSAGE 1.7.1

## Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.8.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing not required, 8-bit data]
		SHORT MESSAGE 1.8.1	
4	$ME \rightarrow USER$	May give information to user	[No Alpha Identifier]
		concerning what is happening	
5	$ME \rightarrow SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 1.8	
6	$SS \rightarrow ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 1.8.1	

#### PROACTIVE COMMAND: SEND SHORT MESSAGE 1.8.1

# Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE 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 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 TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "01"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data Message class class 0 TP-UDL 12

TP-UD "Test Message"

Coding:

Coding	01	01	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

#### TERMINAL RESPONSE: SEND SHORT MESSAGE 1.8.1

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE

Command qualifier: packing not required

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-	ΓLV:	81	03	01	13	00	82	02	82	81	83	01	00	ĺ
------	------	----	----	----	----	----	----	----	----	----	----	----	----	---

## 27.22.4.10.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.8.

# 27.22.4.10.2 SEND SHORT MESSAGE (UCS2 support)

27.22.4.10.2.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.10.2.2 Conformance requirement

The ME shall support the Proactive SIM: SEND SHORT MESSAGE facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 12.6, clause 12.7, clause 12.2, clause 12.1, clause 12.13, clause 12.31 and clause 5.2.

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

#### 27.22.4.10.2.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (System Simulator) as indicated in the SEND SHORT MESSAGE proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the Short Message.

#### 27.22.4.10.2.4 Method of test

#### 27.22.4.10.2.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

# 27.22.4.10.2.4.2 Procedure

## Expected Sequence 2.1 (SEND SHORT MESSAGE, packing not required, UCS2 (16-bit data))

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[packing not required, 16-bit data]
		SHORT MESSAGE 2.1.1	
4	$ME \rightarrow USER$	Display "Send SM"	[Alpha Identifier]
5	$ME \to SS$	Send SMS-PP (SEND SHORT	["ЗДРАВСТВУЙТЕ" = "Hello" in Russian]
		MESSAGE) Message 2.1	
6	$SS \rightarrow ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 2.1.1	

# PROACTIVE COMMAND: SEND SHORT MESSAGE: 2.1.1

## Logically:

Command details

Command number:

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: SIM

Destination device: Network
Alpha identifier: "Send SM"

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

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

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 16-bit data Message class class 0 TP-UDL 24

TP-UD "ЗДРАВСТВУЙТЕ"

#### Coding:

BER-TLV:	D0	43	81	03	01	13	00	82	02	81	83	85
	07	53	65	6E	64	20	53	4D	86	09	91	11
	22	33	44	55	66	77	F8	8B	24	01	00	09
	91	10	32	54	76	F8	40	08	18	04	17	04
	14	04	20	04	10	04	12	04	21	04	22	04
	12	04	23	04	19	04	22	04	15			

# SMS-PP (SEND SHORT MESSAGE) Message 2.1

## Logically:

SMS TPDU

TP-MTI SMS-SUBMIT

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

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "01"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding UCS2 (16-bit data)

Message class 0 TP-UDL 24

TP-UD "ЗДРАВСТВУЙТЕ"

#### Coding:

Coding	01	01	09	91	10	32	54	76	F8	40	08	18

04	17	04	14	04	20	04	10	04	12	04	21
04	22	04	12	04	23	04	19	04	22	04	15

TERMINAL RESPONSE: SEND SHORT MESSAGE 2.1.1

Logically:

Command details

Command number:

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
	<b>.</b>		• .	. •			~-		• .		• .	

# 27.22.4.10.2.5 Test requirement

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

# 27.22.4.10.3 SEND SHORT MESSAGE (icon support)

27.22.4.10.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.3.2 Conformance requirement

27.22.4.10.3.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (System Simulator) as indicated in the SEND SHORT MESSAGE proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the Short Message.

27.22.4.10.3.4 Method of test

27.22.4.10.3.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table. The elementary files are coded as Toolkit default.

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

#### 27.22.4.10.3.4.2 Procedure

# Expected Sequence 3.1A (SEND SHORT MESSAGE, basic icon self-explanatory, packing not required, 8-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[packing not required, 8-bit data]
		SHORT MESSAGE 3.1.1	
4	$ME \rightarrow USER$	Displays the icon and not the	[basic icon self-explanatory]
		alpha identifier	
5	$ME \rightarrow SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 3.1	
6	$SS \rightarrow ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 3.1.1A	

#### 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)

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

# SMS-PP (SEND SHORT MESSAGE) Message 3.1

# Logically:

**SMS TPDU** 

TP-MTI SMS-SUBMIT

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

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "01"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data
Message class class 0
TP-UDL 12

TP-UD "Test Message"

## Coding:

Coding	01	01	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

## TERMINAL RESPONSE: SEND SHORT MESSAGE 3.1.1A

# Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TI V	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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing not required, 8-bit data, basic icon
		SHORT MESSAGE 3.1.1	self-explanatory]]
4	$ME \rightarrow USER$	Displays the alpha identifier	
		without the icon	
5	$ME \to SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 3.1	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \to SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully, but
		SHORT MESSAGE 3.1.1B	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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 3.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing not required, 8-bit data]
		SHORT MESSAGE 3.2.1	
4	$ME \rightarrow USER$	display the icon and "Send SM"	[basic icon non-self-explanatory]
5	$ME \to SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 3.2	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \to SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 3.2.1A	

# PROACTIVE COMMAND: SEND SHORT MESSAGE 3.2.1

## Logically:

Command details

Command number:

Command type: SEND SHORT MESSAGE 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 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 TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "01"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data
Message class class 0
TP-UDL 12

TP-UD "Test Message"

Coding	01	01	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

TERMINAL RESPONSE: SEND SHORT MESSAGE 3.2.1A

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 3.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing not required, 8-bit data, basic icon
		SHORT MESSAGE 3.2.1	non-self-explanatory ]
4	$ME \rightarrow USER$	display "Send SM" without the icon	
5	$ME \to SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 3.2	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \to SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully, but
		SHORT MESSAGE 3.2.1B	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 packing not required

Device identities

Source device: ME
Destination device: SIM

Result

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

Coding:

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

## 27.22.4.10.3.5 Test requirement

The ME shall operate in the manner defined in expected sequences 3.1A to 3.2B.

## 27.22.4.11 SEND SS

## 27.22.4.11.1 SEND SS (normal)

## 27.22.4.11.1.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.11.1.2 Conformance requirement

The ME shall support the Proactive SIM: Send SS facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 12.12.1, clause 5.2, clause 12.6, clause 12.7, clause 12.2, clause 12.14, clause 12.31 and clause 6.5.4.

## 27.22.4.11.1.3 Test purpose

To verify that the ME correctly translates and sends the supplementary service request indicated in the SEND SS proactive SIM command to the system Simulator.

To verify that the ME returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the SS and any contents of the SS result as additional data.

## 27.22.4.11.1.4 Method of test

## 27.22.4.11.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table.

The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

#### 27.22.4.11.1.4.2 Procedure

# Expected Sequence 1.1A (SEND SS, call forward unconditional, all bearers, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SS 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	
		SS 1.1.1	
4	$ME \rightarrow USER$	Display "Call Forward"	
5	$ME \to SS$	REGISTER 1.1A	
6	$SS \to ME$	RELEASE COMPLETE (SS	[Successful]
		RETURN RESULT) 1.1A	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	
		SS 1.1.1A	

# Expected Sequence 1.1B (SEND SS, call forward unconditional, all bearers, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SS 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	
		SS 1.1.1	
4	$ME \rightarrow USER$	Display "Call Forward"	
5	$ME \to SS$	REGISTER 1.1B	
6	$SS \to ME$	RELEASE COMPLETE (SS	[Successful]
		RETURN RESULT) 1.1B	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	
		SS 1.1.1B	

PROACTIVE COMMAND: SEND SS 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Call Forward"

SS String

TON: International

NPI: "ISDN / telephone numbering plan" SS string: "\*\*21\*01234567890123456789\*10#"

Coding:

BER-TLV:	D0	29	81	03	01	11	00	82	02	81	83	85
-	0C	43	61	6C	6C	20	46	6F	72	77	61	72
	64	89	10	91	AA	12	0A	21	43	65	87	09
	21	43	65	87	A9	01	FB					

## **REGISTER 1.1A**

Logically (only SS argument):

# REGISTER SS ARGUMENT

SS-Code:

- Call Forwarding Unconditional

TeleserviceCode

- All Tele Services

Forwarded To Number

- nature of address ind.: international

numbering plan ind.: ISDN/Telephony (E.164)
 TBCD String: 01234567890123456789

- longFTN-Supported

## Coding:

Coding	30	15	04	01	21	83	01	00	84	0B	91	10
	32	54	76	98	10	32	54	76	98	89	00	

**REGISTER 1.1B** 

Logically (only SS argument):

## REGISTER SS ARGUMENT

SS-Code:

- Call Forwarding Unconditional

TeleserviceCode

- All Tele Services

ForwardedToNumber

- nature of address ind.: international

numbering plan ind.: ISDN/Telephony (E.164)
 TBCD String: 01234567890123456789

# Coding:

Coding	30	13	04	01	21	83	01	00	84	0B	91	10
1	32	54	76	98	10	32	54	76	98			

## RELEASE COMPLETE (SS RETURN RESULT) 1.1A

Logically (only from operation code):

## REGISTER SS RETURN RESULT

ForwardingInfo

SS-Code

- Call Forwarding Unconditional

ForwardFeatureList

ForwardingFeature

TeleserviceCode

- All Tele Services

SS-Status

- state ind.: operative

provision ind.: provisionedregistration ind.: registeredactivation ind.: active

ForwardedToNumber

- nature of address ind.: international

- numbering plan ind.: ISDN/Telephony (E.164)

- TBCD String: 01234567890123456789

# Coding:

Coding	0A	A0	1A	04	01	21	30	15	30	13	83	01
	00	84	01	07	89	0B	91	10	32	54	76	98
	10	32	54	76	98							

# RELEASE COMPLETE (SS RETURN RESULT) 1.1B

Logically (only from operation code):

# REGISTER SS RETURN RESULT

ForwardingInfo

SS-Code

- Call Forwarding Unconditional

Forward Feature List

ForwardingFeature

TeleserviceCode

- All Tele Services

SS-Status

state ind.: operativeprovision ind.: provisionedregistration ind.: registeredactivation ind.: active

#### Coding:

Coding	0A	A0	0D	04	01	21	30	08	30	06	83	01
	00	84	01	07								

TERMINAL RESPONSE: SEND SS 1.1.1A

Logically:

Command details

Command number: 1

Command type: SEND SS

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	1E	
	00	0A	A0	1A	04	01	21	30	15	30	13	
	83	01	00	84	01	07	89	0B	91	10	32	
	54	76	98	10	32	54	76	98				

TERMINAL RESPONSE: SEND SS 1.1.1B

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	11
	00	0A	A0	0D	04	01	21	30	80	30	06
	83	01	00	84	01	07					

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

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

## RELEASE COMPLETE (SS RETURN ERROR) 1.1

Logically (only from error code):

Error Code: Facility not supported

Coding:

Coding	02	01	15	
--------	----	----	----	--

TERMINAL RESPONSE: SEND SS 1.2.1

Logically:

Command details

Command number: 1

SEND SS Command type: "00"

Command qualifier:

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	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND SS 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND SS 1.1.1	
4	$ME \rightarrow USER$	Display "Call Forward"	
5	$ME \to SS$	REGISTER 1.1A	
		Or	
		REGISTER 1.1B	
6	$SS \rightarrow ME$	RELEASE COMPLETE (SS REJECT) 1.1.	[Reject]
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND SS 1.3.1	

# RELEASE COMPLETE (SS REJECT) 1.1

Logically (only from problem code):

Problem Code:

- General problem

- Unrecognized component

Coding:

Coding	80	01	00

TERMINAL RESPONSE: SEND SS 1.3.1

Logically:

Command details

Command number:

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: SS Return Error

Additional information: No specific cause can be given

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	02
	34	00									

Expected Sequence 1.4A (SEND SS, call forward unconditional, all bearers, successful, SS request size limit)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND SS 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND SS 1.4.1	
4	$ME \rightarrow USER$	Display "Call Forward"	
5	$ME \to SS$	REGISTER 1.2A	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN RESULT) 1.2A	[Successful]
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND SS 1.4.1A	

Expected Sequence 1.4B (SEND SS, call forward unconditional, all bearers, successful, SS request size limit)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND SS 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND SS 1.4.1	
4	$ME \rightarrow USER$	Display "Call Forward"	
5	$ME \to SS$	REGISTER 1.2B	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN RESULT) 1.2B	[Successful]
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND SS 1.4.1B	

PROACTIVE COMMAND: SEND SS 1.4.1

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "Call Forward"

SS String

TON: International

NPI: "ISDN / telephone numbering plan"

SS string: "\*\*21\*0123456789012345678901234567\*11#"

Coding:

BER-TLV:	D0	2D	81	03	01	11	00	82	02	81	83	85
	0C	43	61	6C	6C	20	46	6F	72	77	61	72
	64	89	14	91	AA	12	0A	21	43	65	87	09
	21	43	65	87	09	21	43	65	A7	11	FB	

#### **REGISTER 1.2A**

Logically (only SS argument):

#### **REGISTER SS ARGUMENT**

RegisterSSArg SS-Code

Call Forwarding Unconditional

TeleserviceCode

See Note 1

ForwardedToNumber

nature of address ind.: international

numbering plan ind.: ISDN/Telephony (E.164)

TBCD String: 0123456789012345678901234567

longFTN-Supported

Coding:

Coding	30	19	04	01	21	83	01	Note 1	84	0F	91	10
	32	54	76	98	10	32	54	76	98	10	32	54
	76	89	00									

Note 1: TeleserviceCode is '11' for "Telephony" or is '10' for "allSpeechTransmissionServices"

## **REGISTER 1.2B**

Logically (only SS argument):

#### REGISTER SS ARGUMENT

RegisterSSArg

SS-Code

Call Forwarding Unconditional

TeleserviceCode

See Note 1

ForwardedToNumber

nature of address ind.: international

numbering plan ind.: ISDN/Telephony (E.164)

TBCD String: 0123456789012345678901234567

Coding:

Coding	30	17	04	01	21	83	01	Note 1	84	0F	91	10
	32	54	76	98	10	32	54	76	98	10	32	54
	76											

Note 1: TeleserviceCode is '11' for "Telephony" or is '10' for "allSpeechTransmissionServices"

#### RELEASE COMPLETE (SS RETURN RESULT) 1.2A

Logically (only from operation code):

#### REGISTER SS RETURN RESULT

ForwardingInfo

SS-Code

- Call Forwarding Unconditional

ForwardFeatureList

ForwardingFeature

TeleserviceCode

- See Note 1

SS-Status

- state ind.: operative

provision ind.: provisionedregistration ind.: registered

- activation ind.: active

long Forwarded To Number

- nature of address ind.: international

numbering plan ind.: ISDN/Telephony (E.164)TBCD String: 0123456789012345678901234567

## Coding:

BER-TLV	0A	A0	1E	04	01	21	30	19	30	17	83	01
	Note 1	84	01	07	89	0F	91	10	32	54	76	98
	10	32	54	76	98	10	32	54	76			

Note 1: TeleserviceCode is '11' for "Telephony" or is '10' for "allSpeechTransmissionServices" RELEASE COMPLETE (SS RETURN RESULT) 1.2B

Logically (only from operation code):

#### REGISTER SS RETURN RESULT

ForwardingInfo

SS-Code

- Call Forwarding Unconditional

ForwardFeatureList

ForwardingFeature

TeleserviceCode

See Note 1

SS-Status

- state ind .: operative

provision ind.: provisionedregistration ind.: registered

- activation ind.: active

#### Coding:

BER-TLV	0A	A0	0D	04	01	21	30	80	30	06	83	01
	Note 1	84	01	07								

Note 1: TeleserviceCode is '11' for "Telephony" or is '10' for "allSpeechTransmissionServices"

TERMINAL RESPONSE: SEND SS 1.4.1A

Logically:

Command details

Command number:

1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully Additional information: Operation Code and SS Parameters

## Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	22
	00	0A	A0	1E	04	01	21	30	19	30	17
	83	01	Note 1	84	01	07	89	0F	91	10	32
	54	76	98	10	32	54	76	98	10	32	54
	76										

Note 1: TeleserviceCode is '11' for "Telephony" or is '10' for "allSpeechTransmissionServices"

TERMINAL RESPONSE: SEND SS 1.4.1B

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully Additional information: Operation Code and SS Parameters

## Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	11
-	00	0A	A0	0D	04	01	21	30	80	30	06
	83	01	Note 1	84	01	07					

Note 1: TeleserviceCode is '11' for "Telephony" or is '10' for "allSpeechTransmissionServices"

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

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND SS 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	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	$ME \rightarrow SS$	REGISTER 1.3	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN RESULT) 1.3	[Successful]
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND SS 1.5.1	

PROACTIVE COMMAND: SEND SS 1.5.1

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "Even if the Fixed Dialling Number service is enabled, the supplementary service

control string included in the SEND SS proactive command shall not be checked against those of the FDN list. Upon receiving this command, the ME shall deci"

SS String

TON: Undefined NPI: Undefined SS string: "\*#31#"

Coding:

BER-TLV:	D0	81	FD	81	03	01	11	00	82	02	81	83
	85	81	EB	45	76	65	6E	20	69	66	20	74
	68	65	20	46	69	78	65	64	20	44	69	61
	6C	6C	69	6E	67	20	4E	75	6D	62	65	72
	20	73	65	72	76	69	63	65	20	69	73	20
	65	6E	61	62	6C	65	64	2C	20	74	68	65
	20	73	75	70	70	6C	65	6D	65	6E	74	61
	72	79	20	73	65	72	76	69	63	65	20	63
	6F	6E	74	72	6F	6C	20	73	74	72	69	6E
	67	20	69	6E	63	6C	75	64	65	64	20	69
	6E	20	74	68	65	20	53	45	4E	44	20	53
	53	20	70	72	6F	61	63	74	69	76	65	20
	63	6F	6D	6D	61	6E	64	20	73	68	61	6C
	6C	20	6E	6F	74	20	62	65	20	63	68	65
	63	6B	65	64	20	61	67	61	69	6E	73	74
	20	74	68	6F	73	65	20	6F	66	20	74	68
	65	20	46	44	4E	20	6C	69	73	74	2E	20
	55	70	6F	6E	20	72	65	63	65	69	76	69
	6E	67	20	74	68	69	73	20	63	6F	6D	6D
	61	6E	64	2C	20	74	68	65	20	4D	45	20
	73	68	61	6C	6C	20	64	65	63	69	89	04
	FF	BA	13	FB								

### **REGISTER 1.3**

Logically (only SS argument):

## INTERROGATE SS ARGUMENT

SS-Code

- Calling Line Id Restriction

Coding:

Coding	30	03	04	01	12

# RELEASE COMPLETE (SS RETURN RESULT) 1.3

Logically (only from operation code):

#### INTERROGATE SS RESULT

CliRestriction Info

SS-Status

- state ind .: operative

- provision ind.: provisioned - registration ind.: registered

- activation ind.: not active

CliRestrictionOption

- Temporary Def Allowed

Coding:

Coding	0E	A4	06	04	01	06	0A	01	02

TERMINAL RESPONSE: SEND SS 1.5.1

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Additional information

Operation Code: SS Code

Parameters: SS Return Result

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	0A
	00	0E	A4	06	04	01	06	0A	01	02	

Expected Sequence 1.6A (SEND SS, call forward unconditional, all bearers, successful, null data alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND SS 1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	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	$ME \to SS$	REGISTER 1.1A	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN RESULT) 1.1A	[Successful]
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND SS 1.1.1A	

Expected Sequence 1.6B (SEND SS, call forward unconditional, all bearers, successful, null data alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND SS	
		1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	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	$ME \to SS$	REGISTER 1.1B	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN RESULT)	[Successful]
		1.1B	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND SS 1.1.1B	

PROACTIVE COMMAND: SEND SS 1.6.1

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: null data object

SS String

TON: International

NPI: "ISDN / telephone numbering plan" SS string: "\*\*21\*01234567890123456789\*10#"

Coding:

BER-TLV:	D0	1D	81	03	01	11	00	82	02	81	83	85
	00	89	10	91	AA	12	0A	21	43	65	87	09
	21	43	65	87	A9	01	FB					

#### 27.22.4.11.1.5 Test requirement

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

27.22.4.11.2 SEND SS (Icon support)

27.22.4.11.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.2.2 Conformance requirement

27.22.4.11.2.3 Test purpose

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

In addition to verify that if an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.11.2.4 Method of test

27.22.4.11.2.4.1 Initial conditions

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

The elementary files are coded as Toolkit default.

#### 27.22.4.11.2.4.2 Procedure

# Expected Sequence 2.1A (SEND SS, call forward unconditional, all bearers, successful, basic icon self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND SS 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND SS 2.1.1	[BASIC-ICON, self-explanatory]
4	$ME \rightarrow USER$	Display the basic icon without the alpha identifier	
5	$ME \rightarrow SS$	REGISTER 1.1A Or	Option A applies if A.1/33 is supported,
		REGISTER 1.1B	Option B applies if A.1/33 is not supported
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN	[Successful]
		RESULT) 1.1A or	Option A applies if A.1/33 is
		RELEASE COMPLETE (SS RETURN	supported,
		RESULT) 1.1B	Option B applies if A.1/33 is not supported
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND SS 2.1.1AA	[Command performed successfully]
		or	Option AA applies if A.1/33 is
		TERMINAL RESPONSE: SEND SS 2.1.1AB	supported,
			Option AB applies if A.1/33 is not
			supported

#### PROACTIVE COMMAND: SEND SS 2.1.1

#### Logically:

Command details

Command number: 1

Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Basic Icon"

SS String

TON: International

NPI: "ISDN / telephone numbering plan" SS string: "\*\*21\*01234567890123456789\*10#"

Icon Identifier:

 $\begin{array}{ll} \mbox{Icon qualifier:} & \mbox{icon is self-explanatory} \\ \mbox{Icon Identifier:} & \mbox{record 1 in } \mbox{EF}_{(\mbox{IMG})} \end{array}$ 

# Coding:

BER-TLV:	D0	2B	81	03	01	11	00	82	02	81	83	85
·	0A	42	61	73	69	63	20	49	63	6F	6E	89
	10	91	AA	12	0A	21	43	65	87	09	21	43
	65	87	A9	01	FB	9E	02	00	01			

# TERMINAL RESPONSE: SEND SS 2.1.1AA

# Logically:

Command details

Command number: 1

Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	1E
	00	0A	A0	1A	04	01	21	30	15	30	13
	83	01	00	84	01	07	89	0B	91	10	32
	54	76	98	10	32	54	76	98			

TERMINAL RESPONSE: SEND SS 2.1.1AB

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	11
	00	0A	A0	0D	04	01	21	30	80	30	06
	83	01	00	84	01	07					

Expected Sequence 2.1B (SEND SS, call forward unconditional, all bearers, successful, basic icon self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SS 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, self-explanatory]
		SS 2.1.1	
4	$ME \rightarrow USER$	Display "Basic Icon" without the	
		icon	
5	$ME \to SS$	REGISTER 1.1A	Option A applies if A.1/33 is supported,
		Or	Option B applies if A.1/33 is not supported
		REGISTER 1.1B	
6	$SS \rightarrow ME$	RELEASE COMPLETE (SS	[Successful]
		RETURN RESULT) 1.1A or	Option A applies if A.1/33 is supported,
		RELEASE COMPLETE (SS	Option B applies if A.1/33 is not supported
		RETURN RESULT) 1.1B	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully, but
		SS 2.1.1BA or	requested icon could not be displayed]
		TERMINAL RESPONSE: SEND	Option BA applies if A.1/33 is supported,
		SS 2.1.1BB	Option BB applies if A.1/33 is not supported

TERMINAL RESPONSE: SEND SS 2.1.1BA

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00" Device identities

Source device: ME
Destination device: SIM

Result

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

Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:

81	03	01	11	00	82	02	82	81	03	1E
04	0A	A0	1A	04	01	21	30	15	30	13
83	01	00	84	01	07	89	0B	91	10	32
54	76	98	10	32	54	76	98			

TERMINAL RESPONSE: SEND SS 2.1.1BB

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

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

Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:

81	03	01	11	00	82	02	82	81	03	11
04	0A	A0	0D	04	01	21	30	08	30	06
83	01	00	84	01	07					

Expected Sequence 2.2A (SEND SS, call forward unconditional, all bearers, successful, colour icon self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SS 2.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[COLOUR-ICON, self-explanatory]
		SS 2.2.1	
4	$ME \rightarrow USER$	Display the colour icon without the	
		alpha identifier	
5	$ME \rightarrow SS$	REGISTER 1.1A	Option A applies if A.1/33 is supported,
		Or	Option B applies if A.1/33 is not supported
		REGISTER 1.1B	
6	$SS \to ME$	RELEASE COMPLETE (SS	[Successful]
		RETURN RESULT) 1.1A or	Option A applies if A.1/33 is supported,
		RELEASE COMPLETE (SS	Option B applies if A.1/33 is not supported
		RETURN RESULT) 1.1B	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SS 2.1.1AA or	Option AA applies if A.1/33 is supported,
		TERMINAL RESPONSE: SEND	Option AB applies if A.1/33 is not supported
		SS 2.1.1AB	

PROACTIVE COMMAND: SEND SS 2.2.1

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "Colour Icon"

SS String

TON: International

NPI: "ISDN / telephone numbering plan" SS string: "\*\*21\*01234567890123456789\*10#"

Icon Identifier:

 $\begin{array}{ll} \mbox{Icon qualifier:} & \mbox{icon is self-explanatory} \\ \mbox{Icon Identifier:} & \mbox{record 2 in } EF_{(IMG)} \end{array}$ 

Coding:

BER-TLV:	D0	2C	81	03	01	11	00	82	02	81	83	85
•	0B	43	6F	6C	6F	75	72	20	49	63	6F	6E
	89	10	91	AA	12	0A	21	43	65	87	09	21
	43	65	87	A9	01	FB	9E	02	00	02		

Expected Sequence 2.2B (SEND SS, call forward unconditional, all bearers, successful, colour icon self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SS 2.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[COLOUR-ICON, self-explanatory]
		SS 2.2.1	
4	$ME \rightarrow USER$	Display "Colour Icon" without the	
		icon	
5	$ME \to SS$	REGISTER 1.1A	Option A applies if A.1/33 is supported,
		Or	Option B applies if A.1/33 is not supported
		REGISTER 1.1B	
6	$SS \rightarrow ME$	RELEASE COMPLETE (SS	[Successful]
		RETURN RESULT) 1.1A or	Option A applies if A.1/33 is supported,
		RELEASE COMPLETE (SS	Option B applies if A.1/33 is not supported
		RETURN RESULT) 1.1B	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed but requested icon
		SS 2.1.1BA or	could not be displayed]
		TERMINAL RESPONSE: SEND	Option BA applies if A.1/33 is supported,
		SS 2.1.1BB	Option BB applies if A.1/33 is not supported

# Expected Sequence 2.3A (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SS 2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, non self-explanatory]
		SS 2.3.1	
4	$ME \rightarrow USER$	Display "Basic Icon" and the basic	
		icon	
5	$ME \to SS$	REGISTER 1.1A	Option A applies if A.1/33 is supported,
		Or	Option B applies if A.1/33 is not supported
		REGISTER 1.1B	
6	$SS \rightarrow ME$	RELEASE COMPLETE (SS	[Successful]
		RETURN RESULT) 1.1A or	Option A applies if A.1/33 is supported,
		RELEASE COMPLETE (SS	Option B applies if A.1/33 is not supported
		RETURN RESULT) 1.1B	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SS 2.1.1AA or	Option AA applies if A.1/33 is supported,
		TERMINAL RESPONSE: SEND	Option AB applies if A.1/33 is not supported
		SS 2.1.1AB	

PROACTIVE COMMAND: SEND SS 2.3.1

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

Alpha Identifier

Text: "Basic Icon"

SS String

TON: International

NPI: "ISDN / telephone numbering plan" SS string: "\*\*21\*01234567890123456789\*10#"

Icon Identifier

Icon qualifier: icon is non self-explanatory

Icon Identifier: record 1 in  $EF_{(IMG)}$ 

# Coding:

BER-TLV:	D0	2B	81	03	01	11	00	82	02	81	83	85
	0A	42	61	73	69	63	20	49	63	6F	6E	89
	10	91	AA	12	0A	21	43	65	87	09	21	43
	65	87	A9	01	FB	9E	02	01	01			

# $\ \, \textbf{Expected Sequence 2.3B (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory) } \\$

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SS 2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, non self-explanatory]
		SS 2.3.1	
4	$ME \rightarrow USER$	Display "Basic Icon" without the	
		icon	
5	$ME \to SS$	REGISTER 1.1A	Option A applies if A.1/33 is supported,
		Or	Option B applies if A.1/33 is not supported
		REGISTER 1.1B	
6	$SS \rightarrow ME$	RELEASE COMPLETE (SS	[Successful]
		RETURN RESULT) 1.1A or	Option A applies if A.1/33 is supported,
		RELEASE COMPLETE (SS	Option B applies if A.1/33 is not supported
		RETURN RESULT) 1.1B	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed but requested icon
		SS 2.1.1BA or	could not be displayed]
		TERMINAL RESPONSE: SEND	Option BA applies if A.1/33 is supported,
		SS 2.1.1BB	Option BB applies if A.1/33 is not supported

Expected Sequence 2.4 (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory, no alpha identifier presented)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		SEND SS 2.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND SS 2.4.1	[BASIC-ICON, non self-explanatory]
4	$ME \to SIM$	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:

ER-TLV: 81 03 01	11 00	82 02	82	81	83	01	32
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#### 27.22.4.11.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1A to 2.4.

# 27.22.4.11.3 SEND SS (UCS2 support)

27.22.4.11.3.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.11.3.2 Conformance requirement

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

# 27.22.4.11.3.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND SS proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

# 27.22.4.11.3.4 Method of test

# 27.22.4.11.3.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table.

The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

#### 27.22.4.11.3.4.2 Procedure

# Expected Sequence 3.1 (SEND SS, call forward unconditional, all bearers, successful, UCS2 text)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SS 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	
		SS 3.1.1	
4	$ME \rightarrow USER$	Display "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]
5	$ME \to SS$	REGISTER 1.1A	Option A applies if A.1/33 is supported,
		Or	Option B applies if A.1/33 is not supported
		REGISTER 1.1B	
6	$SS \to ME$	RELEASE COMPLETE (SS	[Successful]
		RETURN RESULT) 1.1A or	Option A applies if A.1/33 is supported,
		RELEASE COMPLETE (SS	Option B applies if A.1/33 is not supported
		RETURN RESULT) 1.1B	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SS 1.1.1A or	Option A applies if A.1/33 is supported,
		TERMINAL RESPONSE: SEND	Option B applies if A.1/33 is not supported
		SS 1.1.1B	

#### PROACTIVE COMMAND: SEND SS 3.1.1

## Logically:

Command details

Command number: 1

Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

Alpha Identifier

Data coding scheme: UCS2 (16bit)

Text: "ЗДРАВСТВУЙТЕ"

SS String

TON: International

NPI: "ISDN / telephone numbering plan" SS string: "\*\*21\*01234567890123456789\*10#"

#### Coding:

BER-TLV:	D0	36	81	03	01	11	00	82	02	81	83	85
	19	80	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15	89	10	91	AA	12	0A	21	43	65	87
	09	21	43	65	87	A9	01	FB				

# 27.22.4.11.3.5 Test requirement

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

#### 27.22.4.12 SEND USSD

# 27.22.4.12.1 SEND USSD (normal)

# 27.22.4.12.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.12.1.2 Conformance requirement

The ME shall support the Proactive SIM: Send USSD facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 12.12.7, clause 5.2, clause 12.6, clause 12.7, clause 12.2, clause 12.17, clause 12.31 and clause 6.5.4.
- TS 03.38 [7] clause 5.

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

#### 27.22.4.12.1.3 Test purpose

To verify that the ME correctly translates and sends the unstructured supplementary service request indicated in the SEND USSD proactive SIM command to the system Simulator.

To verify that the ME returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the USSD request and including a USSD result as a text string in the TERMINAL RESPONSE.

#### 27.22.4.12.1.4 Method of test

#### 27.22.4.12.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table.

The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

#### 27.22.4.12.1.4.2 Procedure

## Expected Sequence 1.1 (SEND USSD, 7-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND USSD 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	
		USSD 1.1.1	
4	$ME \rightarrow USER$	Display "7-bit USSD"	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS	["USSD string received from SS"]
		RETURN RESULT) 1.1	
7	$ME \rightarrow SIM$	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:

Coding	30	3D	04	01	F0	04	38	41	E1	90	58	34
	1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
	5A	B5	5E	B1	59	6D	2B	2C	1E	93	СВ	E6
	33	3A	AD	5E	В3	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-Data Coding Scheme:

- 7-bit default, no message class

USSD string:

- "USSD string received from SS"

#### Coding:

Coding	30	1E	04	01	F0	04	19	D5	E9	94	80	9A
	D3	E5	69	F7	19	24	2F	8F	СВ	69	7B	99
	0C	32	СВ	DF	6D	D0	74	0A				

TERMINAL RESPONSE: SEND USSD 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Text String

Data coding scheme: 7-bit default, no message class String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	80	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	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND USSD 1.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	
		USSD 1.2.1	
4	$ME \rightarrow USER$	Display "8-bit USSD"	
5	$ME \to SS$	REGISTER 1.2	
6	$SS \to ME$	RELEASE COMPLETE (SS	["USSD string received from SS"]
		RETURN RESULT) 1.2	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	
		USSD 1.2.1	

#### PROACTIVE COMMAND: SEND USSD 1.2.1

# Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "8-bit USSD"

**USSD String** 

Data coding scheme: Uncompressed, no message class meaning, 8-bit data

USSD string: "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:

Coding	30	45	04	01	44	04	40	41	42	43	44	45
	46	47	48	49	4A	4B	4C	4D	4E	4F	50	51
	52	53	54	55	56	57	58	59	5A	2D	61	62
	63	64	65	66	67	68	69	6A	6B	6C	6D	6E
	6F	70	71	72	73	74	75	76	77	78	79	7A
	2D	31	32	33	34	35	36	37	38	39	30	

#### RELEASE COMPLETE (SS RETURN RESULT) 1.2

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT

USSD-DataCodingScheme:

- Uncompressed, no message class meaning, 8-bit data

USSD string:

- "USSD string received from SS"

#### Coding:

	Coding	30	21	04	01	44	04	1C	55	53	53	44	20
•		73	74	72	69	6E	67	20	72	65	63	65	69
		76	65	64	20	66	72	6F	6D	20	53	53	

TERMINAL RESPONSE: SEND USSD 1.2.1

Logically:

Command details

Command number:

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

**Text String** 

Data coding scheme: Uncompressed, no message class meaning, 8-bit data

String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
_	00	8D	1D	04	55	53	53	44	20	73	74
	72	69	6E	67	20	72	65	63	65	69	76
	65	64	20	66	72	6F	6D	20	53	53	

# Expected Sequence 1.3 (SEND USSD, UCS2 data, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND	
		USSD 1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND USSD 1.3.1	
4	$ME \rightarrow USER$	Display "UCS2 USSD"	
5	$ME \to SS$	REGISTER 1.3	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN RESULT)	["USSD string received from SS"]
		1.3	-
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND USSD 1.3.1	

PROACTIVE COMMAND: SEND USSD 1.3.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "UCS2 USSD"

**USSD String** 

Data coding scheme: Uncompressed, no message class meaning, UCS2 (16 bit)

USSD string: "ЗДРАВСТВУЙТЕ" ("Hello" in Russian)

Coding:

BER-TLV:	D0	2F	81	03	01	12	00	82	02	81	83	85
·	09	55	43	53	32	20	55	53	53	44	8A	19
	48	04	17	04	14	04	20	04	10	04	12	04
	21	04	22	04	12	04	23	04	19	04	22	04
	15											

#### **REGISTER 1.3**

Logically (only USSD argument):

ProcessUnstructuredSS-Request ARGUMENT

USSD-DataCodingScheme:

- Uncompressed, no message class meaning, UCS2 (16 bit)

USSD string:

- "ЗДРАВСТВУЙТЕ" ("Hello" in Russian)

#### Coding:

Coding	30	1D	04	01	48	04	18	04	17	04	14	04
	20	04	10	04	12	04	21	04	22	04	12	04
	23	04	19	04	22	04	15					

#### RELEASE COMPLETE (SS RETURN RESULT) 1.3

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT

USSD-DataCodingScheme:

- Uncompressed, no message class meaning, UCS2 (16 bit)

USSD string:

- "USSD string received from SS"

#### Coding:

Coding	30	3D	04	01	48	04	38	00	55	00	53	00
	53	00	44	00	20	00	73	00	74	00	72	00
	69	00	6E	00	67	00	20	00	72	00	65	00
	63	00	65	00	69	00	76	00	65	00	64	00
	20	00	66	00	72	00	6F	00	6D	00	20	00
	53	00	53									

TERMINAL RESPONSE: SEND USSD 1.3.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text String

Data coding scheme: Uncompressed, no message class meaning, UCS2 (16 bit)

String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	39	08	00	55	00	53	00	53	00
	44	00	20	00	73	00	74	00	72	00	69
	00	6E	00	67	00	20	00	72	00	65	00
	63	00	65	00	69	00	76	00	65	00	64
	00	20	00	66	00	72	00	6F	00	6D	00
	20	00	53	00	53						

# Expected Sequence 1.4 (SEND USSD, 7-bit data, unsuccessful (Return Error))

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND USSD 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND USSD 1.1.1	
4	$ME \rightarrow USER$	Display "7-bit USSD"	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \rightarrow ME$	RELEASE COMPLETE (SS RETURN ERROR) 1.1	Return Error
7	$MF \rightarrow SIM$	TERMINAL RESPONSE: SEND USSD 1.4.1	

# RELEASE COMPLETE (SS RETURN ERROR) 1.1

Logically (only from Return Error code):

ProcessUnstructuredSS-Request RETURN ERROR

Return Error code:

- Unknown alphabet

Coding:

Coding	02	01	47

TERMINAL RESPONSE: SEND USSD 1.4.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: USSD Return Error Additional information: "Unknown alphabet"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	02
	37	47									

# Expected Sequence 1.5 (SEND USSD, 7-bit data, unsuccessful (Reject))

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND USSD 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND USSD 1.1.1	
4	$ME \rightarrow USER$	Display "7-bit USSD"	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS REJECT) 1.1	Reject
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND USSD 1.5.1	

## RELEASE COMPLETE (SS REJECT) 1.1

Logically (only from Problem code):

ProcessUnstructuredSS-Request REJECT

Invoke Problem code:

- Mistyped parameter

Coding:

Coding	81	01	02

TERMINAL RESPONSE: SEND <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	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
		USSD 1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND USSD 1.6.1	
4	$ME \rightarrow USER$	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	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN	["USSD string received from SS"]
		RESULT) 1.1	
7	$ME \rightarrow SIM$	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: D		FD	81	00	~ 4						
0			01	03	01	12	00	82	02	81	83
0:	5 81	B6	6F	6E	63	65	20	61	20	52	45
40	C 45	41	53	45	20	43	4F	4D	50	4C	45
5-	4 45	20	6D	65	73	73	61	67	65	20	63
6	F 6E	74	61	69	6E	69	6E	67	20	74	68
6	5 20	55	53	53	44	20	52	65	74	75	72
6	E 20	52	65	73	75	6C	74	20	6D	65	73
73	3 61	67	65	20	6E	6F	74	20	63	6F	6E
7-	4 61	69	6E	69	6E	67	20	61	6E	20	65
7:	2 72	6F	72	20	68	61	73	20	62	65	65
6	E 20	72	65	63	65	69	76	65	64	20	66
7:	2 6F	6D	20	74	68	65	20	6E	65	74	77
6	F 72	6B	2C	20	74	68	65	20	4D	45	20
73	3 68	61	6C	6C	20	69	6E	66	6F	72	6D
2	0 74	68	65	20	53	49	4D	20	74	68	61
7-	4 20	74	68	65	20	63	6F	6D	6D	61	6E
6	4 20	68	61	73	8A	39	F0	41	E1	90	58
3.	4 1E	91	49	E5	92	D9	74	3E	A1	51	E9
9.	4 5A	B5	5E	B1	59	6D	2B	2C	1E	93	СВ
E	6 33	3A	AD	5E	В3	DB	EE	37	3C	2E	9F
D	3 EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
7	6 C3	E5	60								

# Expected Sequence 1.7 (SEND USSD, 7-bit data, successful, no alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND	
		USSD 1.7.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND USSD 1.7.1	
4	$ME \rightarrow USER$	Optionally display an informative message	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN RESULT)	["USSD string received from SS"]
		1.1	
7	$ME \rightarrow SIM$	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	СВ	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	F5	60		

#### Expected Sequence 1.8 (SEND USSD, 7-bit data, successful, null length alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
		USSD 1.8.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND USSD 1.8.1	
4	$ME \rightarrow USER$	the ME should not give any information to the	
		user on the fact that the ME is sending a USSD	
		request	
5	$ME \rightarrow SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN RESULT)	["USSD string received from SS"]
		1.1	-
7	$ME \rightarrow SIM$	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 clause 3.2.2.

27.22.4.12.2.2 Conformance requirement

27.22.4.12.2.3 Test purpose

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

In addition to verify that if an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.12.2.4 Method of test

27.22.4.12.2.4.1 Initial conditions

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

The elementary files are coded as Toolkit default.

#### 27.22.4.12.2.4.2 Procedure

# Expected Sequence 2.1A (SEND USSD, 7-bit data, successful, basic icon self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND	
		USSD 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND USSD 2.1.1	[BASIC-ICON, self-explanatory]
4	$ME \rightarrow USER$	Display BASIC ICON	
5	$ME \to SS$	REGISTER 2.1	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN	["USSD string received from SS"]
		RESULT) 2.1	
7	$ME \rightarrow SIM$	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	54	81	03	01	12	00	82	02	81	83	85
\ <u>-</u>	0A	42	61	73	69	63	20	49	63	6F	6E	8A
	39	F0	41	E1	90	58	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	В3
	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:

Coding	30	3D	04	01	F0	04	38	41	E1	90	58	34
	1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
	5A	B5	5E	B1	59	6D	2B	2C	1E	93	СВ	E6
	33	3A	AD	5E	В3	DB	EE	37	3C	2E	9F	D3
	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD	76
	C3	E5	60									

# RELEASE COMPLETE (SS RETURN RESULT) 2.1

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT

USSD-DataCodingScheme:

- 7-bit default, no message class

USSD string:

- "USSD string received from SS"

#### Coding:

Coding	30	1E	04	01	F0	04	19	D5	E9	94	80	9A
	D3	E5	69	F7	19	24	2F	8F	СВ	69	7B	99
	0C	32	СВ	DF	6D	D0	74	0A				

TERMINAL RESPONSE: SEND USSD 2.1.1A

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text String

Data coding scheme: 7-bit default, no message class String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	80	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	СВ	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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND USSD 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, self-explanatory]
		USSD 2.1.1	
4	$ME \rightarrow USER$	Display "Basic Icon" without the	
		icon	
5	$ME \rightarrow SS$	REGISTER 2.1	
6	$SS \rightarrow ME$	RELEASE COMPLETE (SS	["USSD string received from SS"]
		RETURN RESULT) 2.1	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed but requested icon
		USSD 2.1.1B	could not be displayed]

TERMINAL RESPONSE: SEND USSD 2.1.1B

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

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

Text String

Data coding scheme: 7-bit default, no message class String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	04	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	СВ	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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND USSD 2.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[COLOUR-ICON, self-explanatory]
		USSD 2.2.1	
4	$ME \rightarrow USER$	Display COLOUR-ICON	
		or	
		May give information to user	
		concerning what is happening	
5	$ME \to SS$	REGISTER 2.1	
6	$SS \to ME$	RELEASE COMPLETE (SS	["USSD string received from SS"]
		RETURN RESULT) 2.1	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		USSD 2.1.1A	or
		or	[Command performed but requested icon
		TERMINAL RESPONSE: SEND	could not be displayed]
		USSD 2.1.1B	

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:

 $\begin{array}{ll} \mbox{Icon qualifier:} & \mbox{icon is self-explanatory} \\ \mbox{Icon Identifier:} & \mbox{record 2 in } EF_{(IMG)} \\ \end{array}$ 

#### Coding:

BER-TLV:	D0	54	81	03	01	12	00	82	02	81	83	85
	0A	43	6F	6C	6F	72	20	49	63	6F	6E	8A
	39	F0	41	E1	90	58	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	В3
	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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND USSD 2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, non self-explanatory]
		USSD 2.3.1	·
4	$ME \rightarrow USER$	Display "Basic Icon" and BASIC-	
		ICON	
5	$ME \rightarrow SS$	REGISTER 2.1	
6	$SS \rightarrow ME$	RELEASE COMPLETE (SS	["USSD string received from SS"]
		RETURN RESULT) 2.1	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		USSD 2.1.1A	

# 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	54	81	03	01	12	00	82	02	81	83	85
'-	0A	42	61	73	69	63	20	49	63	6F	6E	8A
	39	F0	41	E1	90	58	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	B3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E5	60	9E	02
	01	01										

Expected Sequence 2.3B (SEND USSD, 7-bit data, successful, basic icon non self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND USSD 2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, non self-explanatory]
		USSD 2.3.1	
4	ME  o	Display "Basic Icon" without the	
	USER	icon	
5	$ME \to SS$	REGISTER 2.1	
6	$SS \to ME$	RELEASE COMPLETE (SS	["USSD string received from SS"]
		RETURN RESULT) 2.1	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed but requested icon
		USSD 2.1.1B	could not be displayed]

Expected Sequence 2.4 (SEND USSD, 7-bit data, basic icon non self-explanatory, no alpha identifier presented)

Ste	p Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND USSD 2.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, non self-explanatory]
		USSD 2.4.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command data not understood by ME]
		USSD 2.4.1	

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	A8
	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	В3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E5	60	9E	02
	01	01										

TERMINAL RESPONSE: SEND USSD 2.4.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command data not understood by ME

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01	32

#### 27.22.4.12.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 - 2.4.

# 27.22.4.12.3 SEND USSD (UCS2 support)

27.22.4.12.3.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.12.3.2 Conformance requirement

The ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in:

- ISO/IEC 10646 [17].

## 27.22.4.12.3.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND USSD proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

#### 27.22.4.12.3.4 Method of test

#### 27.22.4.12.3.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table. The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

#### 27.22.4.12.3.4.2 Procedure

#### Expected Sequence 3.1 (SEND USSD, 7-bit data, successful, UCS2 text)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
		USSD 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND USSD 3.1.1	
4	$ME \rightarrow USER$	Display "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]
5	$ME \to SS$	REGISTER 3.1	
6	$SS \rightarrow ME$	RELEASE COMPLETE (SS RETURN	[Successful]
		RESULT) 3.1	-
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND USSD 3.1.1	[Command performed successfully]

#### PROACTIVE COMMAND: SEND USSD 3.1.1

#### Logically:

Command details

Command number:

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	В3	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:

Coding	30	3D	04	01	F0	04	38	41	E1	90	58	34
	1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
	5A	B5	5E	B1	59	6D	2B	2C	1E	93	СВ	E6

33	3A	AD	5E	В3	DB	EE	37	3C	2E	9F	D3
EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD	76
C3	E5	60									

#### RELEASE COMPLETE (SS RETURN RESULT) 3.1

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT

USSD-DataCodingScheme:

- 7-bit default, no message class

**USSD String:** 

- "USSD string received from SS"

#### Coding:

Coding	30	1E	04	01	F0	04	19	D5	E9	94	80	9A
	D3	E5	69	F7	19	24	2F	8F	СВ	69	7B	99
	0C	32	СВ	DF	6D	D0	74	0A				

TERMINAL RESPONSE: SEND USSD 3.1.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

**Text String** 

Data coding scheme: 7-bit default, no message class String: "USSD string received from SS"

#### Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	80	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

# 27.22.4.12.3.5 Test requirement

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

# 27.22.4.13 SET UP CALL

# 27.22.4.13.1 SET UP CALL (normal)

# 27.22.4.13.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.13.1.2 Conformance requirement

The ME shall support the Proactive SIM: Set Up Call facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 12.6, clause 12.7, clause 12.12, clause 12.12.3 and clause 5.2.

#### 27.22.4.13.1.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

#### 27.22.4.13.1.4 Method of test

#### 27.22.4.13.1.4.1 Initial conditions

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

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the system simulator.

#### 27.22.4.13.1.4.2 Procedure

### Expected Sequence 1.1 (SET UP CALL, call confirmed by the user and connected)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SET UP CALL 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL 1.1.1	
4	$ME \to USER$	ME displays "Not busy" during user confirmation phase.	
5	$USER \to ME$	The user confirms the call set up	[user confirmation]
6	$ME \to SS$	The ME attempts to set up a call to "+012340123456"	
7	$SS \to ME$	The ME receives the CONNECT message from the system simulator.	[The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP CALL 1.1.1 The ME shall not update EF LND with the	[Command performed successfully]
9	$USER \to ME$	called party address. The user ends the call after 10 s. The ME returns to idle mode.	

# PROACTIVE COMMAND: SET UP CALL 1.1.1

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Not busy"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

## Coding:

BER-TLV:	D0	1E	81	03	01	10	00	82	02	81	83	85
-	80	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:

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	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		CALL 1.1.1	
4	$ME \to USER$	ME displays "Not busy" during the	
		user confirmation phase	
5	$USER \to ME$	The user rejects the set up call	[user rejects the call]
6	$ME \to SIM$	TERMINAL RESPONSE: SET UP	[User did not accept call set-up request]
		CALL 1.2.1	
7	$ME \rightarrow USER$	The ME returns in idle mode.	

### TERMINAL RESPONSE: SET UP CALL 1.2.1

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: User did not accept the proactive command

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

## **Expected Sequence 1.3 Void**

## Expected Sequence 1.4 (SET UP CALL, putting all other calls on hold, ME busy)

ME is busy on a call

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SET	
		UP CALL 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP CALL 1.4.1	[putting all other calls on hold]
4	$ME \rightarrow USER$	ME displays "On hold" during the user confirmation phase	
5	$USER \to ME$	The user confirms the set up call	[user confirms the call]
6	$ME \to SS$	The active call is put on hold	
7	ME→SS	The ME attempts to set up a call to	
		"+012340123456"	
8	$SS \rightarrow ME$	The ME receives the CONNECT message from the system simulator.	[The SS also has to handle the START   DTMF and STOP DTMF messages
			sent by the ME in an appropriate way]
9	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP CALL 1.4.1	[Command performed successfully]
10	USER $\rightarrow$ ME	The user ends the call after 10 s.	
		The ME retrieves the previous call	
		automatically or on request of the user	

#### PROACTIVE COMMAND: SET UP CALL 1.4.1

## Logically:

Command details

Command number:

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	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SET	
		UP CALL 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP CALL	[disconnecting all other calls]
		1.5.1	
4	$ME \rightarrow USER$	ME displays "Disconnect" during the user	
		confirmation phase	
5	$USER \to ME$	<u>'</u>	[user confirms the call]
6	$ME \to SS$	The ME disconnects the active call	
7	ME→SS	The ME attempts to set up a call to	
		"+012340123456"	
8	$SS \rightarrow ME$	The ME receives the CONNECT message	[The SS also has to handle the
		from the system simulator.	START DTMF and STOP DTMF
			messages sent by the ME in an
	ME CIM	TERMINIAL RESPONSE: SET UR CALL	appropriate way]
9	$ME \rightarrow SIM$		[Command performed successfully]
10	LICED ME	1.5.1	
10	09EK → ME	The user ends the call after 10 s.	

### PROACTIVE COMMAND: SET UP CALL 1.5.1

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: disconnecting all other calls

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Disconnect"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Coding:

BER-TLV:	D0	20	81	03	01	10	04	82	02	81	83	85
	0A	44	69	73	63	6F	6E	6E	65	63	74	86
	09	91	10	32	04	21	43	65	1C	2C		

## TERMINAL RESPONSE: SET UP CALL 1.5.1

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: putting all other calls on hold

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	04	82	02	82	81	83	01	00

# Expected Sequence 1.6 (SET UP CALL, only if not currently busy on another call, ME busy)

ME is busy on a call

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[only if not currently busy on another call]
		CALL 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[ME currently unable to process command]
		CALL 1.6.1	·

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
<u></u>	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	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL 1.4.1	[putting all other calls on hold]
4	$ME \to USER$	ME displays "On hold" during the user confirmation phase	
5	$USER \to ME$	The user confirms the set up call	[user confirms the call]
6	$ME \to SS$	The ME attempts to put the active call on hold	
7	SS->ME	The ME receives the HOLD REJECT message from the system simulator	[SS sends "Facility Rejected" as cause value]
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP CALL 1.7.1A OR	[Network currently unable to process command]
		TERMINAL RESPONSE: SET UP CALL 1.7.1B	

TERMINAL RESPONSE: SET UP CALL 1.7.1A

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: putting all other calls on hold

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Network currently unable to process command

Additional Information: No specific cause can be given

## Coding:

BER-TLV:	81	03	01	10	02	82	02	82	81	83	02	21
	00											

## TERMINAL RESPONSE: SET UP CALL 1.7.1B

### Logically:

Command details

Command number:

Command type: SET UP CALL

Command qualifier: putting all other calls on hold

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Network currently unable to process command

Additional Information: Facility Rejected

## Coding:

BER-TLV:	81	03	01	10	02	82	02	82	81	83	02	21
	9D											

## **Expected Sequence 1.8 (SET UP CALL, Capability configuration)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.8.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[Capability configuration parameters: full rate
		CALL 1.8.1	support]
4	$ME \to USER$	ME displays "Capability config"	
		during the user confirmation phase	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	$ME \to SS$	The ME attempts to set up a call to	
		"+012340123456" using the	
		capability configuration parameters	
_		supplied by SIM	TI 00 I I I I I I OTA DT DTME
7	$SS \to ME$	The ME receives the CONNECT	[The SS also has to handle the START DTMF
		message from the system	and STOP DTMF messages sent by the ME
	NAT 0114	simulator.	in an appropriate way]
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command performed successfully]
9	LICED ME	CALL 1.8.1 The user ends the call after 10 s.	
9	$USER \to ME$	The ME returns in idle mode.	
		THE ME TELUINS III IUIE IIIUUE.	

PROACTIVE COMMAND: SET UP CALL 1.8.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: if not busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "Capability config"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Capability configuration parameters

Information transfer cap: full rate support only MS

### Coding:

BER-TLV:	D0	2B	81	03	01	10	00	82	02	81	83	85
_	11	43	61	70	61	62	69	6C	69	74	79	20
	63	6F	6E	66	69	67	86	09	91	10	32	04
	21	43	65	1C	2C	87	02	01	A0			

## TERMINAL RESPONSE: SET UP CALL 1.8.1

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: if not busy on another call

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

### Expected Sequence 1.9 (SET UP CALL, max dialling number string, no alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.9.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND SET UP	[dialling number string, no alpha identifier]
		CALL 1.9.1	
4	$USER \to ME$	The user confirms the set up call	[user confirmation]
5	$ME \rightarrow SS$	The ME attempts to set up a call to	
		"+01234567890123456789012345	
		678901"	
6	$SS \to ME$	The ME receives the CONNECT	
		message from the system	
		simulator.	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command performed successfully]
		CALL 1.9.1	
8	USER $\rightarrow$ ME	The user ends the call	
		The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 1.9.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: SIM
Destination device: Network

Address

TON: International

NPI: ISDN / telephone numbering plan
Dialling number string: "01234567890123456789012345678901"

### Coding:

BER-TLV:	D0	1C	81	03	01	10	01	82	02	81	83	86
-	11	91	10	32	54	76	98	10	32	54	76	98
	10	32	54	76	98	10						

Note: The maximum BCD number length is limited as dependencies of the lower-layer type of access, e.g. PCS

1900, GSM 900, GSM 850, UMTS FDD shall be taken into account.

TERMINAL RESPONSE: SET UP CALL 1.9.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

## Expected Sequence 1.10 (SET UP CALL,256 octets length, long first alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SET UP	
		CALL 1.10.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP CALL	[ alpha identifier]
		1.10.1	
4	$ME \rightarrow USER$	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, "	
_	LICED ME	during the user confirmation phase.	[user confirmation]
5		<u>'</u>	[user confirmation]
6	ME→SS	The ME attempts to set up a call to "+01"	
7	$SS \rightarrow ME$	The ME receives the CONNECT message from	
_		the system simulator.	
8		TERMINAL RESPONSE: SET UP CALL 1.10.1	[Command performed successfully]
9	USER $\rightarrow$ 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:

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: 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:

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

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

## Expected Sequence 1.11A (SET UP CALL, Called party subaddress, command performed successfully)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.11.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	[set up a call with called party subaddress]
		CALL 1.11.1	
4	$ME \rightarrow USER$	ME displays "Called party" during	
		the user confirmation phase	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	ME→SS	The ME attempts to set up a call to	
		"+012340123456" with the called	
_		party subaddress information	
7	$SS \rightarrow ME$	The ME receives the CONNECT	[The SS also has to handle the START DTMF
		message from the system	and STOP DTMF messages sent by the ME
		simulator.	in an appropriate way]
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command performed successfully]
		CALL 1.11.1A	
9	USER → ME	The user ends the call after 10 s.	
		The ME returns in idle mode.	

# Expected Sequence 1.11B (SET UP CALL, Called party subaddress, ME not supporting the called party subaddress)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.11.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[set up a call with called party subaddress]
		CALL 1.11.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[beyond ME's capabilities]
		CALL 1.11.1B	

#### 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
D	<b>O</b> .	00					~ <u>~</u>		<b>.</b>		<b>.</b>	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:

## 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	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.12.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[only if not currently busy on another call with
		CALL 1.12.1	redial]
4	$ME \to USER$	ME displays "Duration" during the	
		user confirmation phase	
5	$USER \to ME$	The user confirms the set up call	[user confirms the call]
6	$ME \to SS$	ME attempts to set up a call to	[redial mechanism with maximum duration of
		"+012340123456" . It stops its	10 seconds]]
		attempts after 10 seconds.	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[network currently unable to process
		CALL 1.12.1	command]
8	$ME \to USER$	The ME returns in idle mode.	

### PROACTIVE COMMAND: SET UP CALL 1.12.1

## Logically:

Command details

Command number:

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Duration"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string: "012340123456p1p2"

Duration

Unit: Seconds Interval: 10

Coding:

BER-TLV:	D0	22	81	03	01	10	01	82	02	81	83	85
	08	44	75	72	61	74	69	6F	6E	86	09	91
	10	32	04	21	43	65	1C	2C	84	02	01	0A

TERMINAL RESPONSE: SET UP CALL 1.12.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: ME
Destination device: SIM

Result

General Result: network currently unable to process command

Additional Information: User Busy

Coding:

BER-TLV:	81	03	01	10	01	82	02	82	81	83	02	21
	91											

#### 27.22.4.13.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.12.

### 27.22.4.13.2 SET UP CALL (second alpha identifier)

27.22.4.13.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.2.2 Conformance requirement

Same as clause 27.22.4.13.2.1.

27.22.4.13.2.3 Test purpose

To verify that the ME accepts a Proactive Command - Set Up Call, displays the alpha identifiers to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.2.4 Method of test

27.22.4.13.2.4.1 Initial conditions

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

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and is in updated idle mode on the system simulator.

#### 27.22.4.13.2.4.2 Procedure

## Expected Sequence 2.1 (SET UP CALL, two alpha identifiers)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING:	
		SET UP CALL 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		CALL 2.1.1	
4	$ME \rightarrow USER$	ME displays "CONFIRMATION" during	
		the user confirmation phase	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	$ME \to SS$	The ME attempts to set up a call to	[second alpha identifier]
		"+012340123456".	
		The ME displays "CALL" if the ME	
		supports 2 <sup>nd</sup> alpha identifier or otherwise	
		the ME may display "CONFIRMATION"	
7	$SS \to ME$	The ME receives the CONNECT	The SS also has to handle the START
		message from the system simulator.	DTMF and STOP DTMF messages sent
			by the ME in an appropriate way]
8	$ME \to SIM$		[Command performed successfully]
		2.1.1	
		The ME shall not update EF LND with	
		the called party address.	
9	USER $\rightarrow$ ME	The user ends the call after 10 s.	
		The ME returns in idle mode.	

### PROACTIVE COMMAND: SET UP CALL 2.1.1

## Logically:

Command details

Command number:

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:

### 27.22.4.13.2.5 Test requirement

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

# 27.22.4.13.3 SET UP CALL (display of icons)

27.22.4.13.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.3.2 Conformance requirement

27.22.4.13.3.3 Test purpose

To verify that the ME accepts a Proactive Set Up Call , displays the message or icon to the user ,attempts to set up a call to the address, returns the result in the TERMINAL response.

27.22.4.13.3.4 Method of test

27.22.4.13.3.4.1 Initial conditions

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

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and is in updated idle mode on the system simulator.

### 27.22.4.13.3.4.2 Procedure

# Expected Sequence 3.1A (SET UP CALL, display of basic icon during confirmation phase, not self-explanatory, successful )

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	Including icon identifier, icon shall be
		CALL 3.1.1	displayed in addition of the first alpha identifier
4	$ME \rightarrow USER$	ME displays "Set up call Icon 3.1.1" and the basic icon during a user confirmation phase.	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	$ME \rightarrow SS$	The ME attempts to set up a call to "+012340123456"	
7	$SS \to ME$	The ME receives the CONNECT message from the system simulator.	[The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	$ME \to SIM$	TERMINAL RESPONSE: SET UP	[Command performed successfully]
9	$USER \to ME$	The user ends the call after 10 s.	
		The ME returns in idle mode.	

### PROACTIVE COMMAND: SET UP CALL 3.1.1

### Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "Set up call Icon 3.1.1"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Icon identifier

Icon qualifier: icon is not self-explanatory
Icon identifier: <record 1 in EF IMG>

## Coding:

BER-TLV:	D0	30	81	03	01	10	00	82	02	81	83	85
	16	53	65	74	20	75	70	20	63	61	6C	6C
	20	49	63	6F	6E	20	33	2E	31	2E	31	86
	09	91	10	32	04	21	43	65	1C	2C	9E	02
	01	01										

## TERMINAL RESPONSE: SET UP CALL 3.1.1A

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00
DEIX IEV.	0.	00	0 1		00	02	02	02	0.	00	0.	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	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	Including icon identifier, icon shall be
		CALL 3.1.1	displayed in addition of the first alpha identifier
4	$ME \rightarrow USER$	ME displays "Set up call Icon 3.1.1" without the basic icon during a user confirmation phase.	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	ME→SS	The ME attempts to set up a call to "+012340123456"	
7	$SS \to ME$	The ME receives the CONNECT message from the system simulator.	[The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	$ME \to SIM$	TERMINAL RESPONSE: SET UP CALL 3.1.1B	[Command performed successfully, but requested icon could not be displayed].
9	$USER \ \to ME$	The user ends the call after 10 s.	'
		The ME returns in idle mode.	

TERMINAL RESPONSE: SET UP CALL 3.1.1B

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME
Destination device: SIM

Result

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

BER-TI V	81	03	Ω1	10	00	82	02	82	81	83	01	04

# Expected Sequence 3.2A (SET UP CALL, display of basic icon during confirmation phase, self-explanatory, successful )

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 3.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	Including icon identifier, icon shall be
		CALL 3.2.1	displayed instead of the first alpha identifier
4	$ME \to USER$	ME displays the basic icon during	
		a user confirmation phase.	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	$ME \to SS$	The ME attempts to set up a call to	
		"+012340123456"	
7	$SS \to ME$	The ME receives the CONNECT	[The SS also has to handle the START DTMF
		message from the system	and STOP DTMF messages sent by the ME
_		simulator.	in an appropriate way]
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command performed successfully]
		CALL 3.2.1A	
9	$USER \to ME$	The user ends the call after 10 s.	
		The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 3.2.1

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "Set up call Icon 3.2.1"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Icon identifier

Icon qualifier: icon is self-explanatory
Icon identifier: <record 1 in EF IMG>

### Coding:

BER-TLV:	D0	30	81	03	01	10	00	82	02	81	83	85
	16	53	65	74	20	75	70	20	63	61	6C	6C
	20	49	63	6F	6E	20	33	2E	32	2E	31	86
	09	91	10	32	04	21	43	65	1C	2C	9E	02
	00	01										

TERMINAL RESPONSE: SET UP CALL 3.2.1A

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-T	LV:	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	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 3.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$		Including icon identifier, icon shall be
		CALL 3.2.1	displayed instead of the first alpha identifier
4	$ME \to USER$	ME display "Set up call Icon 3.2.1"	
		without the icon	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	$ME \rightarrow SS$	The ME attempts to set up a call to	
		"+012340123456"	
7	$SS \to ME$	The ME receives the CONNECT	[The SS also has to handle the START DTMF
		message from the system	and STOP DTMF messages sent by the ME
_		simulator.	in an appropriate way]
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command performed successfully, but
		CALL 3.2.1B	requested icon could not be displayed].
9	USER $\rightarrow$ ME	The user ends the call after 10 s.	
		The ME returns in idle mode.	

TERMINAL RESPONSE: SET UP CALL 3.2.1B

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME
Destination device: SIM

Result

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

BER-TI V	21	Λ3	Ω1	10	00	82	02	82	21	83	01	04
IDLIX-ILV.	1 01	l UJ				02	1 02	1 02				

# Expected Sequence 3.3A (SET UP CALL, display of colour icon during confirmation phase, not self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 3.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$		Including icon identifier, icon shall be displayed in
			addition of the first alpha identifier
4	$ME \rightarrow USER$	ME displays "Set up call Icon	
		3.3.1" and the colour icon during a	
_		user confirmation phase.	
5		· •	[user confirmation]
6	ME→SS	The ME attempts to set up a call to	
		"+012340123456"	
7	$SS \to ME$		[The SS also has to handle the START DTMF and
		message from the system	STOP DTMF messages sent by the ME in an
		simulator.	appropriate way]
8	$ME \rightarrow SIM$		[Command performed successfully]
		CALL 3.3.1A	
9	USER $\rightarrow$ ME	The user ends the call after 10 s.	
		The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 3.3.1

### Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "Set up call Icon 3.3.1"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Icon identifier

Icon qualifier: icon is not self-explanatory
Icon identifier: <record 2 in EF IMG>

#### Coding:

BER-TLV:	D0	30	81	03	01	10	00	82	02	81	83	85
	16	53	65	74	20	75	70	20	63	61	6C	6C
	20	49	63	6F	6E	20	33	2E	33	2E	31	86
	09	91	10	32	04	21	43	65	1C	2C	9E	02
	01	02										

TERMINAL RESPONSE: SET UP CALL 3.3.1A

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

Expected Sequence 3.3B (SET UP CALL, display of colour icon during confirmation phase, not self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 3.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	Including icon identifier, icon shall be
		CALL 3.3.1	displayed in addition of the first alpha lidentifier
4	$ME \to USER$	ME only display alpha string: " Set up call Icon 3.3.1"	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	$ME \to SS$	The ME attempts to set up a call to "+012340123456"	
7	$SS \to ME$	The ME receives the CONNECT message from the system simulator.	[The SS also has to handle the START DTMF and STOP DTMF messages sent by the ME in an appropriate way]
8	$ME \to SIM$	TERMINAL RESPONSE: SET UP CALL 3.3.1B	[Command performed successfully, but requested icon could not be displayed].
9	$USER \to ME$	The user ends the call after 10 s.	
		The ME returns in idle mode.	

TERMINAL RESPONSE: SET UP CALL 3.3.1B

Logically:

Command details

Command number:

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

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

					-	0						
IRFR-TI V	Q1	_ ∩2	Ι Λ1	l 10	00	1 00	02	92	1 01	02	1 ()1	()4
IDEK-ILV.	1 01	1 (),5		1 1()	()()	0/	1 ()/	1 0/		$\alpha$		1 174

# Expected Sequence 3.4A (SET UP CALL, display of self explanatory basic icon during set up call, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 3.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$		Including a second alpha identifier and two
		CALL 3.4.1	icons
4	$ME \rightarrow USER$	ME displays the basic icon during	
		a user confirmation phase.	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	ME→SS	The ME attempts to set up a call to	
		"+012340123456". The ME	
		displays the basic icon without the	
		text during the set up call.	
7	$SS \to ME$	The ME receives the CONNECT	[The SS also has to handle the START DTMF
		message from the system	and STOP DTMF messages sent by the ME
_		simulator.	in an appropriate way]
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command performed successfully]
		CALL 3.4.1A	
9	$USER \to ME$	The user ends the call after 10 s.	
		The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 3.4.1

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "Set up call Icon 3.4.1"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Icon identifier

Icon qualifier: icon is self-explanatory
Icon identifier: <record 1 in EF IMG>
Alpha identifier: "Set up call Icon 3.4.2"

Icon identifier

Icon qualifier: icon is self-explanatory
Icon identifier: <record 1 in EF IMG>

## Coding:

BER-TLV:	D0	4C	81	03	01	10	00	82	02	81	83	85
	16	53	65	74	20	75	70	20	63	61	6C	6C
	20	49	63	6F	6E	20	33	2E	34	2E	31	86
	09	91	10	32	04	21	43	65	1C	2C	9E	02
	00	01	85	16	53	65	74	20	75	70	20	63
	61	6C	6C	20	49	63	6F	6E	20	33	2E	34
	2E	32	9E	02	00	01						

TERMINAL RESPONSE: SET UP CALL 3.4.1A

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

# Expected Sequence 3.4B (SET UP CALL, display of self explanatory basic icon during set up call, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 3.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	Including a second alpha identifier and two
		CALL 3.4.1	icons
4	$ME \rightarrow USER$	ME displays "Set up call Icon	
		3.4.1" without the icon	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	$ME \to SS$	The ME attempts to set up a call to	
		"+012340123456". The ME	
		displays "Set up call Icon 3.4.2"	
		without the icon during the set up	
_		call.	T
7	$SS \to ME$	The ME receives the CONNECT	[The SS also has to handle the START DTMF
		message from the system	and STOP DTMF messages sent by the ME
	NAT 0114	simulator.	in an appropriate way]
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command performed successfully, but
9	LICED . ME	CALL 3.4.1B	requested icon could not be displayed].
9	$USER \to ME$	The user ends the call after 10 s. The ME returns in idle mode.	
		THE ME TELUITIS III IUIE IIIOUE.	

TERMINAL RESPONSE: SET UP CALL 3.4.1B

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

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

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	04

## 27.22.4.13.3.5 Test requirement

The ME shall operate in the manner defined in expected sequences 3.1A to 3.4B.

## 27.22.4.14 POLLING OFF

## 27.22.4.14.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.14.2 Conformance requirement

The ME shall support the POLLING OFF as defined in:

- TS 11.14 [15] clause 5.2, clause 6.4.14, clause 6.6.14, clause 6.8, clause 6.11, clause 12.6 and clause 12.7.

## 27.22.4.14.3 Test purpose

To verify that the ME cancels the effect of any previous POLL INTERVAL commands and does not effect SIM presence detection.

## 27.22.4.14.4 Method of test

#### 27.22.4.14.4.1 Initial conditions

The ME is connected to the SIM Simulator and to the System 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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: POLL INTERVAL	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	Interval = 1 min
		POLL INTERVAL 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: POLL	[command performed successfully, duration
		INTERVAL 1.1.1 A or	depends on the ME"s capabilities]
		TERMINAL RESPONSE: POLL	
		INTERVAL 1.1.1B	
5	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: POLLING OFF	
		1.1.2	
6	$ME \rightarrow SIM$	FETCH	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		POLLING OFF 1.1.2	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[command performed successfully]
		POLLING OFF 1.1.2	
9	$USER \to ME$	Call to be set up	
10	$ME \rightarrow SIM$	Periods of inactivity on the	
		SIM-ME interfaceshall not	
		exceed 30 seconds	
11	$USER \to ME$	Call to be terminated 3 minutes	
		after call setup	

### PROACTIVE COMMAND: POLL INTERVAL 1.1.1

## Logically:

### Command details

Command number: 1

Command type: POLL INTERVAL

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Duration

Time unit: Minutes
Time interval: 1

Coding:

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

TERMINAL RESPONSE: POLL INTERVAL 1.1.1A

Logically:

Command details

Command number: 1

Command type: POLL INTERVAL

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Duration

Time unit: Minutes
Time interval: 1

Coding:

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

TERMINAL RESPONSE: POLL INTERVAL 1.1.1B

Logically:

Command details

Command number:

Command type: POLL INTERVAL

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Duration

Time unit: Seconds
Time interval: 60

Coding:

BER-TLV:	81	03	01	03	00	82	02	82	81	83	01	00
	84	02	01	3C								

Note: If the requested poll interval is not supported by the ME, the ME is allowed to use a different one as

stated in TS 11.14 [15], subclause 6.4.6.

PROACTIVE COMMAND: POLLING OFF 1.1.2

Logically:

Command details

Command number:

Command type: POLLING OFF

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

Coding:

TERMINAL RESPONSE: POLLING OFF 1.1.2

Logically:

Command details

Command number: 1

Command type: POLLING OFF

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

## 27.22.4.14.5 Test requirement

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

## 27.22.4.15 PROVIDE LOCAL INFORMATION

## 27.22.4.15.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.15.2 Conformance requirement

The ME shall support the PROVIDE LOCAL INFORMATION facility as defined in:

- TS 11.14 [15] clause 6.4.15.

## 27.22.4.15.3 Test purpose

To verify that the ME returns the following requested local information within a TERMINAL RESPONSE:

- location information:
  - Mobile Country Code (MCC);
  - Mobile Network Code (MNC);
  - Location Area Code (LAC); and
  - cell ID of the current serving cell;
- the IMEI of the ME;

- the Network Measurement Results and the BCCH channel list;
- the current date, time and time zone;
- the current ME language setting;
- the Timing Advance;

if the local information is stored in the ME; otherwise, sends the correct error code to the SIM in the TERMINAL RESPONSE.

#### 27.22.4.15.4 Method of tests

### 27.22.4.15.4.1 Initial conditions

The ME is connected to the SIM Simulator.

Except for sequences 1.4 and 1.5, theME is connected to the System Simulator and has performed the location update procedure.

The GSM parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001;
- Timing advance = 0;
- Neighbour allocations = 561, 565, 568, 569, 573, 575, 577, 581, 582 and 585.

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001;
- Timing advance = 0;
- Neighbour allocations = 561, 565, 568, 569, 573, 575, 577, 581, 582 and 585.

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

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

### 27.22.4.15.4.2 Procedure

# Expected Sequence 1.1 (PROVIDE LOCAL INFORMATION, Local Info (MCC, MNC, LAC & Cell ID))

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING	
		PROVIDE LOCAL INFORMATION	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: PROVIDE	
		LOCAL INFORMATION 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: PROVIDE	[Command performed successfully, MCC MNC LAC
		LOCAL INFORMATION 1.1.1A	and Cell Identity as system simulator, option A shall
			apply for GSM parameters]
		or	
		TERMINAL RESPONSE: PROVIDE	[Command performed successfully, MCC MNC LAC
		LOCAL INFORMATION 1.1.1B	and Cell Identity as system simulator, option B shall
			apply for PCS1900 parameters]

#### PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.1.1

### Logically:

Command details

Command number:

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "00" Location information (MCC MNC LAC and Cell Identity)

Device identities

Source device: SIM
Destination device: ME

Coding:

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

### TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.1.1A

# Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "00" Location information (MCC MNC LAC and Cell Identity)

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Location Information

MCC & MNC: MCC = 001, MNC = 01

Location Area Code: 0001 Cell Identity Value: 0001

Coding:

BER-TLV:	81	03	01	26	00	82	02	82	81	83	01	00
	93	07	00	F1	10	00	01	00	01			

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.1.1B

### Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "00" Location information (MCC MNC LAC and Cell Identity)

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

**Location Information** 

MCC & MNC: MCC = 001, MNC = 011

Location Area Code: 0001 Cell Identity Value: 0001

Coding:

BER-TLV:	81	03	01	26	00	82	02	82	81	83	01	00
	93	07	00	11	10	00	01	00	01			

### **Expected Sequence 1.2 (PROVIDE LOCAL INFORMATION, IMEI of the ME)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING	
		PROVIDE LOCAL INFORMATION	
		1.2.1	
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: PROVIDE	
		LOCAL INFORMATION 1.2.1	
4	$ME \rightarrow SIM$		[Command performed successfully, IMEI
			as system simulator, but spare digit shall
			be zero when transmitted by the ME]

### PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.2.1

## Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "01" IMEI of the ME

Device identities

Source device: SIM
Destination device: ME

Coding:

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

#### TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.2.1

## Logically:

Command details

Command number:

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									

## Expected Sequence 1.3 (PROVIDE LOCAL INFORMATION, Network Measurement Results (NMR))

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING	
		PROVIDE LOCAL INFORMATION	
		1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: PROVIDE	
		LOCAL INFORMATION 1.3.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: PROVIDE	[Command performed successfully,
		LOCAL INFORMATION 1.3.1	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:

Command type: PROVIDE LOCAL INFORMATION
Qualifier: "02" Network Measurement Results

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Network Measurement Results RXLEV-FULL-SERVING-CELL=52, BA not used, DTX not used, as

an example in the BER-TLV)

BCCH channel list 561, 565, 568, 569, 573, 575, 577, 581, 582 and 585

## Coding:

BER-TLV:	81	03	01	26	02	82	02	82	81	83	01	00
	96	10	34	34	00	00	00	00	00	00	00	00
	00	00	00	00	00	00	9D	0D	8C	63	58	E2
	39	8F	63	F9	06	45	91	A4	90			

### **Expected Sequence 1.4 (PROVIDE LOCAL INFORMATION, Date, Time, Time Zone)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING	
		PROVIDE LOCAL INFORMATION 1.4.1	
2	$\text{ME} \to \text{SIM}$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: PROVIDE	
		LOCAL INFORMATION 1.4.1	
4	$\text{ME} \to \text{SIM}$	TERMINAL RESPONSE: PROVIDE	[Command performed successfully]
		LOCAL INFORMATION 1.4.1	

#### PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.4.1

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION
Oualifier: "03" Date Time and Time Zone

Device identities

Source device: SIM
Destination device: ME

Coding:

	_										
BER-TLV:	l D0	09	81	በ3	∩1	26	በ3	82	02	21	82
DLIX-ILV.		03	01	US	01	20	US	02	02	01	02

## 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: 7<sup>th</sup> May 2002, 14h 08mn 17s, no time zone

information, as an example in TLV

BER-TLV:	81	03	01	26	03	82	02	82	81	83	01	00
	Α6	07	20	50	70	41	80	71	FF			

# **Expected Sequence 1.5 (PROVIDE LOCAL INFORMATION, Language setting)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING	
		PROVIDE LOCAL INFORMATION	
		1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: PROVIDE	
		LOCAL INFORMATION 1.5.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: PROVIDE	[Command performed successfully]
		LOCAL INFORMATION 1.5.1	

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.5.1

Logically:

Command details

Command number:

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
DLIX-ILV.	00	US	01	03	UI	20	U <del>-1</del>	02	02	01	02

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.5.1

Logically:

Command details

Command number:

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	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING	
		PROVIDE LOCAL INFORMATION 1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: PROVIDE	
		LOCAL INFORMATION 1.6.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: PROVIDE	[Command performed successfully]
		LOCAL INFORMATION 1.6.1	

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.6.1

Logically:

Command details

Command number:

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "05" Timing Advance

Device identities

Source device: SIM
Destination device: ME

Coding:

#### 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								

## 27.22.4.15.5 Test requirement

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

### 27.22.4.16 SET UP EVENT LIST

## 27.22.4.16.1 SET UP EVENT LIST (normal)

## 27.22.4.16.1.1 Definition and applicability

See clause 3.2.2.

### 27.22.4.16.1.2 Conformance requirement

The ME shall support the Proactive SIM: Set Up Event List facility as defined in:

- TS 11.14 [15] clause 6.4.16 and clause 6.6.16.

Additionally the ME shall support the Event Download: Call Connect and the Event Download: Call Disconnected mechanism as defined in:

- TS 11.14 [15] clause 11.2, clause 11.2.1, clause 11.2.2, clause 11.3, clause 11.3.1 and clause 11.3.2.

#### 27.22.4.16.1.3 Test purpose

To verify that the ME accepts a list of events that it shall monitor the current list of events supplied by the SIM, is able to have this current list of events replaced and is able to have the list of events removed.

To verify that when the ME has successfully accepted or removed the list of events, it shall send TERMINAL RESPONSE (OK) to the SIM and when the ME is not able to successfully accept or remove the list of events, it shall send TERMINAL RESPONSE (Command beyond ME's capabilities).

27.22.4.16.1.4 Method of test

27.22.4.16.1.4.1 Initial conditions

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

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

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

### 27.22.4.16.1.4.2 Procedure

## **Expected Sequence 1.1 (SET UP EVENT LIST, Set Up Call Connect Event)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SET UP	
		EVENT LIST 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP EVENT	
		LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP EVENT	
		LIST 1.1.1	
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION ENDED	
6	$SS \rightarrow ME$	SETUP 1.1.1	[Incoming call alert]
7	$USER \rightarrow ME$	User shall accept the incoming call	
8	$ME \to SS$	CONNECT 1.1.1	
9	$ME \rightarrow SIM$	ENVELOPE: EVENT DOWNLOAD CALL	[Call Connected Event]
		CONNECTED 1.1.1	-
10	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	

### PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

## Logically:

Command details

Command number:

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:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

**SET UP 1.1.1** 

Logically:

Transaction identifier

Ti value: 0 (bit 5-7)

Address

TON: "Unknown"

NPI: "ISDN/ telephone numbering plan"

Dialling number string: "9876"

CONNECT 1.1.1

Logically:

Transaction identifier

Ti value: 0 (bit 5-7)
Ti flag: 1 (bit 8)

ENVELOPE: EVENT DOWNLOAD CALL CONNECTED 1.1.1

Logically

Event list

Event 1: Call Connected

Device identities

Source device: ME Destination device: SIM

Transaction identifier

Ti value: 0 (bit 5-7)
Ti flag: 1 (bit 8)

	1											
RFR-TI V	D6	0A	99	∩1	Λ1	22	02	82	Ω1	9C	∩1	80
IDENTILV.	1 00		1 33	1 01		1 02	1 02	02		1 90		1 00

# **Expected Sequence 1.2 (SET UP EVENT LIST, Replace Event)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP EVENT LIST	
_		1.2.1	
2	WE / CHM	FETCH	
3	$SIM \rightarrow ME$		[Call Connected and Call Disconnected
4	ME OIM	EVENT LIST 1.2.1	Events]
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP EVENT LIST 1.2.1	
5	$SIM \rightarrow ME$	PROACTIVE COMMAND	
	SIIVI -> IVIL	PENDING: SET UP EVENT LIST	
		1.2.2	
6	$ME \rightarrow SIM$	FETCH	
7	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[Call Disconnected Event]
		EVENT LIST 1.2.2	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
_		EVENT LIST 1.2.2	
9	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
40	00 ME	ENDED	[lassasian and slow]
10	SS → ME	SETUP 1.2.2	[Incoming call alert]
11		User shall accept the incoming call CONNECT 1.2.2	
12 13	$ME \rightarrow SS$	DISCONNECT 1.2.2	
14	SS → ME	ENVELOPE: EVENT DOWNLOAD	[Call Disconnect Event]
14	$ME \rightarrow SIM$	CALL DISCONNECT 1.2.2A	[Call Disconnect Event]
		or	
		ENVELOPE: EVENT DOWNLOAD	
		CALL DISCONNECT 1.2.2B	
15	$SIM \to ME$	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:

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:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

### **SET UP 1.2.2**

Logically:

Transaction identifier

Ti value: 0 (bit 5-7)
Ti flag: 0 (bit 8)

Address

TON: "Unknown"

NPI: "ISDN/ telephone numbering plan"

Dialling number string: "9876"

### CONNECT 1.2.2

Logically:

Transaction identifier

Ti value: 0 (bit 5-7) Ti flag: 1 (bit 8)

DISCONNECT 1.2.2

Logically:

Transaction identifier

Ti value: 0 (bit 5-7)
Ti flag: 0 (bit 8)

Cause

Value: Normal call clearing

ENVELOPE: EVENT DOWNLOAD CALL DISCONNECTED 1.2.2A

Logically:

Event list

Event 1: Call Disconnected

Device identities

Source device: Network
Destination device: SIM

Transaction identifier

Ti value: 0 (bit 5-7)
Ti flag: 0 (bit 8)

Cause

Value: Normal call clearing

Coding:

BER-TLV:	D6	0E	99	01	02	82	02	83	81	9C	01	00
	9A	02	60	90								

ENVELOPE: EVENT DOWNLOAD CALL DISCONNECTED 1.2.2B

Logically:

Event list

Event 1: Call Disconnected

Device identities

Source device: Network
Destination device: SIM

Transaction identifier

Ti value: 0 (bit 5-7) Ti flag: 0 (bit 8)

Cause

Value: Normal call clearing

BER-TLV:	D6	0E	99	01	02	82	02	83	81	9C	01	00
	9A	02	E0	90								

# **Expected Sequence 1.3 (SET UP EVENT LIST, Remove Event)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP EVENT LIST	
		1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	[Call Connected Event]
		EVENT LIST 1.3.1	
	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		EVENT LIST 1.3.1	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP EVENT LIST	
_		1.3.2	
5	$ME \rightarrow SIM$	FETCH	
6	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	[Remove Event]
7	145 0114	EVENT LIST 1.3.2	
/	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP EVENT LIST 1.3.2	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
0	SIIVI → IVIE	ENDED	
10	$SS \rightarrow ME$	SETUP 1.3.2	[Incoming call alert]
11	USER → ME	User shall accept the incoming call	[mooning oan dion]
12	ME → SS	CONNECT 1.3.2	
13	$ME \rightarrow SIM$	No ENVELOPE: EVENT	
'0	IVIL —7 SIIVI	DOWNLOAD (call connected) sent	
14	$SS \rightarrow ME$	DISCONNECT 1.3.2	

# PROACTIVE COMMAND: SET UP EVENT LIST 1.3.1

# Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM Destination device: ME

Event list

Call Connected Event 1:

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:

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: '(

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00
--

**SET UP 1.3.2** 

Logically:

Transaction identifier

Ti value: 0 (bit 5-7)
Ti flag: 0 (bit 8)

Address

TON: "Unknown"

NPI: "ISDN/ telephone numbering plan"

Dialling number string: "9876"

CONNECT 1.3.2

Logically:

Transaction identifier

Ti value: 0 (bit 5-7)

Ti flag: 1 (bit 8)

**DISCONNECT 1.3.2** 

Logically:

Transaction identifier

Ti value: 0 (bit 5-7) Ti flag: 0 (bit 8)

Cause

Value: Normal call clearing

# **Expected Sequence 1.4 (SET UP EVENT LIST, Remove Event on ME Power Cycle)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP EVENT LIST	
		1.4.1	
2	/ 0	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[Call Connected Event]
		EVENT LIST 1.4.1	
	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		EVENT LIST 1.4.1	
4	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
_		ENDED	
5	000. /	Power off ME	
6		Power on ME	
7		SETUP 1.4.1	[Incoming call alert]
8	$USER \to ME$	User shall accept the incoming call	
9	$ME \to SS$	CONNECT 1.4.1	
10	$ME \rightarrow SIM$	No ENVELOPE: EVENT	
		DOWNLOAD (call connected) sent	
11	$SS \to ME$	DISCONNECT 1.4.1	

#### PROACTIVE COMMAND: SET UP EVENT LIST 1.4.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Call Connected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	01										

TERMINAL RESPONSE: SET UP EVENT LIST 1.4.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

#### **SET UP 1.4.1**

Logically:

Transaction identifier

Ti value: 0 (bit 5-7) Ti flag: 0 (bit 8)

Address

TON: "Unknown"

NPI: "ISDN/ telephone numbering plan"

Dialling number string: "9876"

CONNECT 1.4.1

Logically:

Transaction identifier

Ti value: 0 (bit 5-7) Ti flag: 1 (bit 8)

#### **DISCONNECT 1.4.1**

Logically:

Transaction identifier

Ti value: 0 (bit 5-7)
Ti flag: 0 (bit 8)

Cause

Value: Normal call clearing

27.22.4.16.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.4.

#### 27.22.4.17 PERFORM CARD APDU

# 27.22.4.17.1 PERFORM CARD APDU (normal)

27.22.4.17.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.17.1.2 Conformance requirement

The ME shall support the Proactive SIM: Perform Card APDU facility as defined in:

- TS 11.14 [15] clause 6.1, clause 5.2, clause 6.4.17, clause 6.6.17, clause 6.8, clause 12.6, clause 12.7, clause 12.35, clause 12.36 and clause 12.12.9.

Additionally the ME shall support multiple card operation as defined in:

- TS 11.14 [15] clause 6.4.19, clause 6.6.19, clause 6.4.18 and clause 6.6.18.

#### 27.22.4.17.1.3 Test purpose

To verify that the ME sends an APDU command to the additional card identified in the PERFORM CARD APDU proactive SIM command, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

In this particular case a special Test-SIM (TestSIM) with T=0 protocol is chosen as additional card for the additional ME card reader (for coding of the TestSIM see annex D).

#### 27.22.4.17.1.4 Method of test

#### 27.22.4.17.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The TestSIM is inserted in the additional ME card reader.

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

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

The elementary files of the TestSIM are coded as defined in annex D. Another card with different parameters may be used as TestSIM to execute these tests. In this case the SIM Simulator shall take into account the corresponding response data.

#### 27.22.4.17.1.4.2 Procedure

# Expected Sequence 1.1 (PERFORM CARD APDU, card reader 1, additional card inserted, Select MF and Get Response)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: POWER ON CARD	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Power on card reader 1]
		POWER ON CARD 1.1.1	15 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (
4		RESET CARD	[Perform electrical initialization]
5		ANSWER TO RESET 1.1	[ATR]
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER ON CARD 1.1.1	[ATR]
7	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: PERFORM CARD	
		APDU 1.1.1	
8	$ME \rightarrow SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Select Masterfile]
		PERFORM CARD APDU 1.1.1	
10		C-APDU: SELECT 1.1	[Select Masterfile]
11	SIM2 → ME	R-APDU: SELECT 1.1	[Command performed successfully - length '1B' of response data]
12	$ME \rightarrow SIM$	TERMINAL RESPONSE:	
		PERFORM CARD APDU 1.1.1	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: PERFORM CARD	
		APDU 1.1.2	
14	$ME \rightarrow SIM$	FETCH	
15	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Get Response with length '1B']
		PERFORM CARD APDU 1.1.2	
16		C-APDU: GET RESPONSE 1.1	[Get Response with length '1B']
17		R-APDU: GET RESPONSE 1.1	[Response data with length '1B']
18	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Response data with length '1B']
		PERFORM CARD APDU 1.1.2	

# PROACTIVE COMMAND POWER ON CARD 1.1.1

# Logically:

Command details

Command number:

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card reader 1

Coding:

BER-TLV:	D0	09	81	03	01	31	00	82	02	81	11

#### ANSWER TO RESET 1.1

# Logically:

TS (Initial character): '3B'

T0 (Format character): '86' (Following interface characters: TD(1), number of historical characters: 6)

TD1: '00' (Following interface characters: none, Transfer protocol: T=0)

T1: 91 T2: 99 T3: 00 T4: 12 T5: C1 T6: 00

Coding:

Coding:	3B	86	00	91	99	00	12	C1	00

#### TERMINAL RESPONSE: POWER ON CARD 1.1.1

#### Logically:

Command details

Command number: 1

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card ATR

TS (Initial character): '3B'

T0 (Format character): '86' (Following interface characters: TD(1), number of historical characters: 6)

TD1: '00' (Following interface characters: none, Transfer protocol: T=0)

T1: 91
T2: 99
T3: 00
T4: 12
T5: C1
T6: 00

Coding:

BER-TLV:	81	03	01	31	00	82	02	82	81	83	01	00
	A1	09	3B	86	00	91	99	00	12	C1	00	

# PROACTIVE COMMAND PERFORM CARD APDU 1.1.1

#### Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card Reader 1

C-APDU

Class: 'A0'
Instruction: SELECT
P1 parameter: '00'
P2 parameter: '00'
Lc: '02'

Data: Master File

#### Coding:

BER-TLV:	D0	12	81	03	01	30	00	82	02	81	11	A2
	07	A0	A4	00	00	02	3F	00				

C-APDU: SELECT 1.1

Logically:

C-APDU

Class: 'A0'
Instruction: SELECT
P1 parameter: '00'
P2 parameter: '00'
Lc: '02'
Data: Master File

Coding:

Coding:	A0	A4	00	00	02	3F	00

R-APDU: SELECT 1.1

Logically:

Status Words

SW1 / SW2: Command performed successfully - length '1B' of response data

Coding:

Coding:	9F	1B

TERMINAL RESPONSE: PERFORM CARD APDU 1.1.1

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

R-APDU

Status Words

SW1 / SW2: Command performed successfully - length '1B' of response data

Coding:

BER-TLV:	81	03	01	30	00	82	02	82	81	83	01	00
	A3	02	9F	1B								

#### PROACTIVE COMMAND PERFORM CARD APDU 1.1.2

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: '00'

Device identities

Source device: SIM

Destination device: Card Reader 1

C-APDU

Class: 'A0'

Instruction: **GET RESPONSE** 

P1 parameter: '00' P2 parameter: '00' Le: '1B'

#### Coding:

BER-TLV:	D0	10	81	03	01	30	00	82	02	81	11	A2
	05	A0	C0	00	00	1B						

C-APDU: GET RESPONSE 1.1

Logically:

C-APDU

Class: 'A0'

Instruction: **GET RESPONSE** 

P1 parameter: '00' P2 parameter: '00' '1B' Le:

Coding:

Coding:	A0	C0	00	00	1B	l
						l

R-APDU: GET RESPONSE 1.1

Logically:

R-APDU data

'00 00' RFU: 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 8 EFs in current directory: Number of CHV and admin. Codes: 3 RFU byte 18: 00

CHV1 status:

False representations remaining: 3 RFU-bits 7-5: 000 Secret code: Initialized

Unlock CHV1 status:

False representations remaining: 10 RFU-bits 7-5: 000 Secret code: Initialized

CHV2 status:

False representations remaining: 3 RFU-bits 7-5: 000
Secret code: Initialized

Unlock CHV2 status:

False representations remaining: 10
RFU-bits 7-5: 000
Secret code: Initialized
RFU bytes 23: 00

Reserved for admin. management: 00 83 00 FF

Status Words

SW1 / SW2: Normal ending of command

#### Coding:

Coding:	00	00	02	8D	3F	00	01	00	00	22	FF	01
	0E	9B	02	08	03	00	83	8A	83	8A	00	00
	83	00	FF	90	00							

#### TERMINAL RESPONSE: PERFORM CARD APDU 1.1.2

#### Logically:

Command details

Command number:

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 directory:

Number of CHV and admin. Codes: 3 RFU byte 18: 00

CHV1 status:

False representations remaining: 3
RFU-bits 7-5: 000
Secret code: Initialized

Unlock CHV1 status:

False representations remaining: 10
RFU-bits 7-5: 000
Secret code: Initialized

CHV2 status:

False representations remaining: 3
RFU-bits 7-5: 000
Secret code: Initialized

Unlock CHV2 status:

False representations remaining: 10
RFU-bits 7-5: 000
Secret code: Initialized

RFU bytes 23:

Reserved for admin. management: 00 83 00 FF

Statu Words

SW1 / SW2: Normal ending of command

Coding:

BER-TLV:	81	03	01	30	00	82	02	82	81	83	01	00
	A3	0F	00	00	02	8D	3F	00	01	00	00	22
	FF	01	0E	90	00							

 $Expected \ Sequence \ 1.2 \ (PERFORM \ CARD \ APDU, \ card \ reader \ 1, \ additional \ card \ inserted, \ Select \ DF \ GSM, \ Select \ EF \ PLMN \ , \ Update \ Binary, \ Read \ Binary \ on \ EF \ PLMN)$ 

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: POWER ON CARD	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	[Dawer on condition do 1]
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Power on card reader 1]
4	ME SIMO	POWER ON CARD 1.1.1 RESET CARD	[Perform electrical initialization]
5		ANSWER TO RESET 1.1	[ATR]
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER	[ATR]
	IVIL -> OIIVI	ON CARD 1.1.1	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: PERFORM CARD	
		APDU 1.2.1	
8	$ME \rightarrow SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Select GSM]
10	ME SIMO	PERFORM CARD APDU 1.2.1 C-APDU: SELECT 1.2a	[Coloot CCM]
11		R-APDU: SELECT 1.2a	[Select GSM]
12	$ME \rightarrow SIM$	TERMINAL RESPONSE:	
12	IVIL -> SIIVI	PERFORM CARD APDU 1.2.1	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: PERFORM CARD	
		APDU 1.2.2	
14		FETCH	
15	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Select PLMN]
4.0	145 01140	PERFORM CARD APDU 1.2.2	[Coloot DI MAI]
16 17		C-APDU: SELECT 1.2b	[Select PLMN]
18		R-APDU: SELECT 1.2b TERMINAL RESPONSE:	
10	$ME \rightarrow SIM$	PERFORM CARD APDU 1.2.2	
19	$SIM \rightarrow ME$	PROACTIVE COMMAND	
	0	PENDING: PERFORM CARD	
		APDU 1.2.3	
20	$ME \rightarrow SIM$	FETCH	
21	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Update Binary]
00	145 01140	PERFORM CARD APDU 1.2.3	Il Indata Dinand
22		C-APDU: UPDATE BINARY 1.2	[Update Binary]
23 24	$SIM2 \rightarrow ME$ $ME \rightarrow SIM$	R-APDU: UPDATE BINARY 1.2 TERMINAL RESPONSE:	
24	IVIE → SIIVI	PERFORM CARD APDU 1.2.3	
25	$SIM \rightarrow ME$	PROACTIVE COMMAND	
	J 7	PENDING: PERFORM CARD	
		APDU 1.2.4	
26	$ME \rightarrow SIM$	FETCH	
27	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Read Binary]
00		PERFORM CARD APDU 1.2.4	[Dand Binard
28	$ME \rightarrow SIM2$	C-APDU: READ BINARY 1.2	[Read Binary]
29	SIM2 → ME	R-APDU: READ BINARY 1.2 TERMINAL RESPONSE:	
30	$ME \rightarrow SIM$	PERFORM CARD APDU 1.2.4	
31	$SIM \to ME$	PROACTIVE COMMAND	
	JIIVI / IVIL	PENDING: PERFORM CARD	
		APDU 1.2.5	
32	$ME \rightarrow SIM$	FETCH	
33	$SIM \to ME$	PROACTIVE COMMAND:	[Update Binary]
		PERFORM CARD APDU 1.2.5	 
34	$ME \rightarrow SIM2$	C-APDU: UPDATE BINARY 1.2a	[Update Binary]
35		R-APDU: UPDATE BINARY 1.2	
36	$ME \rightarrow SIM$	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:

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:

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'

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						

C-APDU: SELECT 1.2a

Logically:

C-APDU

Class: 'A0'
Instruction: SELECT
P1 parameter: '00'
P2 parameter: '00'
Lc: '02'
Data: DF GSM

Coding:

Coding:	A0	A4	00	00	02	7F	20

C-APDU: SELECT 1.2b

Logically:

C-APDU

Class: 'A0'
Instruction: SELECT
P1 parameter: '00'
P2 parameter: '00'
Lc: '02'
Data: EF PLMN

Coding:

Coding:	A0	A4	00	00	02	6F	30

C-APDU: UPDATE BINARY 1.2

Logically:

C-APDU

Class: 'A0'

Instruction: UPDATE BINARY

P1 parameter: '00' P2 parameter: '00' Lc: '18'

Data: '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17'

Coding:

Coding:	A0	D6	00	00	18	00	01	02	03	04	05	06
	07	08	09	0A	0B	0C	0D	0E	0F	10	11	12
	13	14	15	16	17							

C-APDU: READ BINARY 1.2

Logically:

C-APDU

Class: 'A0'

Instruction: READ BINARY

P1 parameter: '00' P2 parameter: '00' Le: '18' Coding:

Coding:	A0	B0	00	00	18

C-APDU: UPDATE BINARY 1.2a

Logically:

C-APDU

Class: 'A0'

Instruction: UPDATE BINARY

P1 parameter: '00' P2 parameter: '00' Lc: '18'

Coding:

Coding:	A0	D6	00	00	18	FF						
	FF											
	FF	FF	FF	FF	FF							

R-APDU: SELECT 1.2a

Logically:

Status Words

SW1 / SW2: Normal ending of command - length '1B' of response data

Coding:

Coding:	9F	1B

R-APDU: SELECT 1.2b

Logically:

Status Words

SW1 / SW2: Normal ending of command - length '0F' of response data

Coding:

Coding:	9F	0F

R-APDU: UPDATE BINARY 1.2

Logically:

Status Words

SW1 / SW2: Normal ending of command

Coding:

Coding:	90	00

R-APDU: READ BINARY 1.2

Logically:

R-APDU data

Data: '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17'

Status Words

SW1 / SW2: Normal ending of command

Coding:

Coding:	00	01	02	03	04	05	06	07	08	09	0A	0B
	0C	0D	0E	0F	10	11	12	13	14	15	16	17
	90	00										

TERMINAL RESPONSE: PERFORM CARD APDU 1.2.1

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

R-APDU

Status Words

SW1 / SW2: Command performed successfully - length 1B of response data

Coding:

BER-TLV:	81	03	01	30	00	82	02	82	81	83	01	00
	A3	02	9F	1B								

TERMINAL RESPONSE: PERFORM CARD APDU 1.2.2

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

R-APDU

Status Words

SW1 / SW2: Command performed successfully - length 0F of response data

Coding:

BER-TLV:	81	03	01	30	00	82	02	82	81	83	01	00
	A3	02	9F	0F								

TERMINAL RESPONSE: PERFORM CARD APDU 1.2.3

Logically:

Command details

Command number:

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

R-APDU

Status Words

SW1 / SW2: Normal ending of command

Coding:

BER-TLV:	81	03	01	30	00	82	02	82	81	83	01	00
	A3	02	90	00								

TERMINAL RESPONSE: PERFORM CARD APDU 1.2.4

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

R-APDU

R-APDU data

Data: '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17'

Status Words

SW1 / SW2: Normal ending of command

Coding:

BER-TLV:	81	03	01	30	00	82	02	82	81	83	01	00
	A3	1A	00	01	02	03	04	05	06	07	08	09
	0A	0B	0C	0D	0E	0F	10	11	12	13	14	15
	16	17	90	00		,						

# Expected Sequence 1.3 (PERFORM CARD APDU, card reader 1, card inserted, card powered off)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: POWER OFF CARD	
		1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Power off card reader 1]
		POWER OFF CARD 1.3.1	
4	$ME \rightarrow SIM2$	POWER OFF CARD	[Power off card reader 1]
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER	[Successful]
		OFF CARD 1.3.1	
6	ME	SIM2 is powered off from ME card	
		reader	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: PEFORM CARD APDU	
		1.1.1	
8	$ME \rightarrow SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Select Master File]
		PERFORM CARD APDU 1.1.1	
10	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Card powered off]
		PERFORM CARD APDU 1.3.1	

PROACTIVE COMMAND: POWER OFF CARD 1.3.1

Logically:

Command details

Command number:

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:

Command type: POWER OFF CARD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	32	00	82	02	82	81	83	01
	00										

TERMINAL RESPONSE: PERFORM CARD APDU 1.3.1

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier:

"00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: MultipleCard commands error

Additional Information: Card powered off

Coding:

BER-TLV:	81	03	01	30	00	82	02	82	81	83	02
	38	04									

#### Expected Sequence 1.4 (PERFORM CARD APDU, card reader 1, no card inserted)

Step	Direction	MESSAGE / Action	Comments
1	ME	SIM2 is removed from ME card	
		reader	
2	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: PEFORM CARD APDU	
		1.1.1	
3	$ME \rightarrow SIM$	FETCH	
4	$SIM \to ME$	PROACTIVE COMMAND:	[Select Master File]
		PERFORM CARD APDU 1.1.1	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[No card inserted]
		PERFORM CARD APDU 1.4.1	

#### TERMINAL RESPONSE: PERFORM CARD APDU 1.4.1

#### Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: MultipleCard commands error Additional Information: Card removed or not present

#### Coding:

BER-TLV:	81	03	01	30	00	82	02	82	81	83	02
	38	02									

# Expected Sequence 1.5 (PERFORM CARD APDU, card reader 7 (which is not the valid card reader identifier of the additional ME card reader))

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[invalid card reader ID]
		PENDING: PEFORM CARD APDU	
		1.5.1	
3	$ME \rightarrow SIM$	FETCH	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Select Master File]
		PERFORM CARD APDU 1.5.1	-
5	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Specified reader not valid]
		PERFORM CARD APDU 1.5.1	-

PROACTIVE COMMAND: PERFORM CARD APDU 1.5.1

# Logically:

Command details

Command number:

PERFORM CARD APDU Command type:

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card Reader 7

C-APDU

Class: 'A0' **SELECT** Instruction: P1 parameter: '00' '00' P2 parameter: '02' Lc:

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

'A0' Class: Instruction: **SELECT** P1 parameter: '00' '00' P2 parameter: Lc: '02'

Data: Master File

# Coding:

Coding:	A0	A4	00	00	02	3F	00

TERMINAL RESPONSE: PERFORM CARD APDU 1.5.1

#### Logically:

Command details

Command number:

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: MultipleCard commands error Additional Information: Specified reader not valid

#### Coding:

BER-TLV:	81	03	01	30	00	82	02	82	81	83	02
	38	09									

#### 27.22.4.17.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.5.

# 27.22.4.17.2 PERFORM CARD APDU (detachable card reader)

27.22.4.17.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.17.2.2 Conformance requirement

27.22.4.17.2.3 Test purpose

To verify that the ME sends an APDU command to the additional card identified in the PERFORM CARD APDU proactive SIM command, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

27.22.4.17.2.4 Method of test

27.22.4.17.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

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

The card reader shall be detached from the ME.

#### 27.22.4.17.2.4.2 Procedure

#### Expected Sequence 2.1 (PERFORM CARD APDU, card reader 1, card reader detached)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: PEFORM CARD APDU	
		2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Select Master File]
		PERFORM CARD APDU 2.1.1	-
4	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Card reader detached]
		PERFORM CARD APDU 2.1.1	-

#### 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	ĺ
	07	A0	A4	00	00	02	3F	00					ĺ

TERMINAL RESPONSE: PERFORM CARD APDU 2.1.1

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: MultipleCard commands error Additional Information: Card reader removed or not present

#### Coding:

BER-TLV:	81	03	01	30	00	82	02	82	81	83	02
	38	01									

#### 27.22.4.17.2.5 Test requirement

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

#### 27.22.4.18 POWER OFF CARD

# 27.22.4.18.1 POWER OFF CARD (normal)

#### 27.22.4.18.1.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.18.1.2 Conformance requirement

The ME shall support the Proactive SIM: Power Off Card facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.18, clause 6.6.18, clause 12.6, clause 12.7, clause 12.12, clause 12.12.9, clause 5.2 and annex H.

### 27.22.4.18.1.3 Test purpose

To verify that the ME closes a session with the additional card identified in the POWER OFF CARD proactive SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

#### 27.22.4.18.1.4 Method of test

#### 27.22.4.18.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2). Instead of the second SIM Simulator a card with different parameters may be used as SIM2 to execute these tests. In this case the SIM Simulator shall take into account the corresponding response data.

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

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

#### 27.22.4.18.1.4.2 Procedure

# Expected Sequence 1.1 (POWER OFF CARD, card reader 1)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		POWER OFF CARD 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: POWER OFF	[Power off card reader 1]
		CARD 1.1.1	_
4	$ME \rightarrow SIM2$	POWER OFF CARD	[Power off card reader 1]
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER OFF	[Successful]
		CARD 1.1.1	-

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:

Command type: POWER OFF CARD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	32	00	82	02	82	81	83	01
	00										

# Expected Sequence 1.2 (POWER OFF CARD, card reader 1, no card inserted)

Step	Direction	MESSAGE / Action	Comments
1	SIM2	SIM2 is removed from ME card reader	
2	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: POWER	
		OFF CARD 1.1.1	
3	$ME \rightarrow SIM$	FETCH	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND: POWER OFF CARD	[Power off card reader 1]
		1.1.1	-
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER OFF CARD	[No card inserted]
		1.2.1	

TERMINAL RESPONSE: POWER OFF CARD 1.2.1

Logically:

Command details

Command number:

Command type: POWER OFF CARD

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: MultipleCard commands error Additional Information: Card removed or not present

Coding:

BER-TLV:	81	03	01	32	00	82	02	82	81	83	02
_	38	02									

#### 27.22.4.18.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.2.

#### 27.22.4.18.2 POWER OFF CARD (detachable card reader)

27.22.4.18.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.18.2.2 Conformance requirement

Void.

27.22.4.18.2.3 Test purpose

To verify that the ME closes a session with the additional card identified in the POWER OFF CARD proactive SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.18.2.4 Method of test

27.22.4.18.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2).

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

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

The card reader shall be detached from the ME.

#### 27.22.4.18.2.4.2 Procedure

## Expected Sequence 2.1 (POWER OFF CARD, card reader 1, no card reader attached)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING:	
		POWER OFF CARD 2.1.1	
2	$ME \rightarrow SIM$	=	
3	$SIM \to ME$	PROACTIVE COMMAND: POWER	[Power off card reader 1]
		OFF CARD 2.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER OFF	[Card reader removed or not present]
		CARD 2.1.1	

## PROACTIVE COMMAND: POWER OFF CARD 2.1.1

Logically:

Command details

Command number:

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:

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:

DED TIV	0.1	02	04	22	00	00	00	00	Ω1	02	00
BER-TLV:	81	03	01	32	00	82	02	82	81	83	02
	38	01									

## 27.22.4.18.2.5 Test requirement

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

# 27.22.4.19 POWER ON CARD

# 27.22.4.19.1 POWER ON CARD (normal)

# 27.22.4.19.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.19.1.2 Conformance requirement

The ME shall support the Proactive SIM: Power On Card facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.19, clause 6.6.19, clause 12.6, clause 12.7, clause 12.12, clause 12.12.9, clause 12.34, clause 5.2 and annex H.

#### 27.22.4.19.1.3 Test purpose

To verify that the ME starts a session with the additional card identified in the POWER ON CARD proactive SIM command, and successfully returns the Answer To Reset within the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

#### 27.22.4.19.1.4 Method of test

#### 27.22.4.19.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2). Instead of the second SIM Simulator a card with different parameters may be used as SIM2 to execute these tests. In this case the SIM Simulator shall take into account the corresponding response data.

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

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

#### 27.22.4.19.1.4.2 Procedure

# Expected Sequence 1.1 (POWER ON CARD, card reader 1)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		POWER ON CARD 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: POWER ON	[Power on card reader 1]
		CARD 1.1.1	
4	$ME \rightarrow SIM2$	RESET CARD	[Perform electrical initialization]
5	$SIM2 \rightarrow ME$	ANSWER TO RESET 1.1.1	[ATR]
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER ON	[ATR]
		CARD 1.1.1	-

#### 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' 'a' T9 (Historical character): 'r' T10 (Historical character): 'd' T11 (Historical character): 'T' T12 (Historical character): T13 (Historical character): 'e' 's' T14 (Historical character): 't' T15 (Historical character):

#### Coding:

Coding	3B	0F	50	6F	77	65	72	4F	6E	43	61	72
	64	54	65	74	75							

#### TERMINAL RESPONSE: POWER ON CARD 1.1.1

#### Logically:

Command details

Command number: 1

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card ATR

TS (Initial character): '3B' 0F T0 (Format character): T1 (Historical character): 'P' 'o' T2 (Historical character): T3 (Historical character): 'w' T4 (Historical character): 'e' 'r' T5 (Historical character): 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' 'e' T13 (Historical character):

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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: POWER ON CARD	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[Power on card reader 1]
		POWER ON CARD 1.1.1	
4	$ME \rightarrow SIM2$	RESET CARD	[Perform electrical initialization]
5	$SIM2 \rightarrow ME$	NO ATR	[No ATR]
6	$ME \to SIM$	TERMINAL RESPONSE: POWER	[No ATR]
		ON CARD 1.2.1	

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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: POWER ON CARD	
		1.1.1	
3	$ME \rightarrow SIM$	FETCH	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Power on card reader 1]
		POWER ON CARD 1.1.1	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER	[Card removed or not present]
		ON CARD 1.3.1	_

TERMINAL RESPONSE: POWER ON CARD 1.3.1

Logically:

Command details

Command number: 1

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: Card reader 0

Destination device: SIM

Result

General Result: MultipleCard commands error Additional Information: Card removed or not present

Coding:

BER-TLV:	81	03	01	31	00	82	02	82	81	83	02	38
_	02											

#### 27.22.4.19.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

# 27.22.4.19.2 POWER ON CARD (detachable card reader)

27.22.4.19.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.19.2.2 Conformance requirement

27.22.4.19.2.3 Test purpose

To verify that the ME starts a session with the additional card identified in the POWER ON CARD proactive SIM command, and successfully returns the Answer To Reset within the TERMINAL RESPONSE command send to the SIM.

27.22.4.19.2.4 Method of test

27.22.4.19.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

The card reader shall be detached from the ME.

#### 27.22.4.19.2.4.2 Procedure

# Expected Sequence 2.1 (POWER ON CARD, card reader 1, no card reader attached)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: POWER ON CARD	
		2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Power on card reader 1]
		POWER ON CARD 2.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER	[Card reader removed or not present]
		ON CARD 2.1.1	

PROACTIVE COMMAND: POWER ON CARD 2.1.1

Logically:

Command details

Command number:

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card reader 1

Coding:

TERMINAL RESPONSE: POWER ON CARD 2.1.1

Logically:

Command details

Command number: 1

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: Card reader 0

Destination device: SIM

Result

General Result: MultipleCard commands error Additional Information: Card reader removed or not present

Coding:

BER-TLV:	81	03	01	31	00	82	02	82	81	83	02	38
	01											

### 27.22.4.19.2.5 Test requirement

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

#### 27.22.4.20 GET READER STATUS

# 27.22.4.20.1 GET READER STATUS (normal)

27.22.4.20.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.20.1.2 Conformance requirement

The ME shall support the Proactive SIM: Get Card Reader Status facility as defined in:

- TS 11.14 [15] clause 6.1, clause 5.2, clause 6.4.20, clause 6.6.20, clause 6.8, clause 12.6, clause 12.7, clause 12.33, clause 12.57 and annex H.

Additionally the ME shall support multiple card operation as defined in:

- TS 11.14 [15] clause 6.4.19, clause 6.6.19, clause 6.4.18 and clause 6.6.18.

# 27.22.4.20.1.3 Test purpose

To verify that the ME sends starts a session with the additional card identified in the GET CARD READER STATUS proactive SIM command, and successfully returns information about all interfaces to additional card reader(s) in the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

In this test case the second SIM-Simulator (SIM2) shall response with the ATR "3B 00".

#### 27.22.4.20.1.4 Method of test

#### 27.22.4.20.1.4.1 Initial conditions

The ME shall support the Proactive SIM: Get Card Reader Status (Card Reader Status) facility. The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2). Instead of the second SIM Simulator a card with different parameters may be used as SIM2 to execute these tests. In this case the SIM Simulator shall take into account the corresponding response data.

The elementary files are coded as SIM Application Toolkit default.

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

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

#### 27.22.4.20.1.4.2 Procedure

#### Expected Sequence 1.1 (GET CARD READER STATUS, card reader 1, card inserted, card powered)

Step	Direction	MESSAGE / Action	Comments
1	SIM → MF	PROACTIVE COMMAND PENDING:	- Commonto
	Olivi 7 WIL	POWER ON CARD 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: POWER ON	[Power on card reader 1]
		CARD 1.1.1	
4	$ME \rightarrow SIM2$	RESET CARD	[Perform electrical initialization]
5	$SIM2 \rightarrow ME$	ANSWER TO RESET 1.1.1	[ATR]
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER ON	[ATR]
		CARD 1.1.1	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: GET	
		CARD READER STATUS 1.1.1	
8	1VIL / CIIVI	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET CARD	[Get Card Reader Status]
		READER STATUS 1.1.1	
10	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET CARD	[Successful]
		READER STATUS 1.1.1a	
		Or TERMINAL RESPONSE: GET CARD	[Cuasasful]
		READER STATUS 1.1.1b	[Successful]
		or	
		TERMINAL RESPONSE: GET CARD	[Successful]
		READER STATUS 1.1.1c	[240000014.]
		or	
		TERMINAL RESPONSE: GET CARD	
		READER STATUS 1.1.1d	[Successful]

#### PROACTIVE COMMAND: POWER ON CARD 1.1.1

### Logically:

#### Command details

Command number:

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' TO (Format character): '00'

Coding:

Coding: 3B 00

#### TERMINAL RESPONSE: POWER ON CARD 1.1.1

Logically:

Command details

Command number:

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:

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	$SIM \to ME$	PROACTIVE COMMAND PENDING: POWER OFF CARD 1.2.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: POWER OFF CARD 1.2.1	[Power off card reader 1]
4	$ME \rightarrow SIM2$	POWER OFF CARD	[Power off card reader 1]
5	$ME \to SIM$	TERMINAL RESPONSE: POWER OFF CARD 1.2.1	[Successful]
6	$SIM \to ME$	PROACTIVE COMMAND PENDING: GET CARD READER STATUS 1.1.1	
7	$ME \to SIM$	FETCH	
8	$SIM \to ME$	PROACTIVE COMMAND: GET CARD READER STATUS 1.1.1	[Get Card Reader Status]
9	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1a Or	[Successful]
		TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1b	[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	83	01
	00										

## TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1a

#### Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
Card reader removable: 'No'
Card reader present: Yes
Card reader ID-1 size: 'Yes'
Card present in reader: Yes
Card powered: No

Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	71							

#### TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1b

#### Logically:

Command details

Command number:

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:

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	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		GET CARD READER STATUS 1.1.1	
3	$ME \rightarrow SIM$	FETCH	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET CARD	[Get Card Reader Status]
		READER STATUS 1.1.1	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET CARD	[Successful]
		READER STATUS 1.3.1a	
		or	
		TERMINAL RESPONSE: GET CARD	[Successful]
		READER STATUS 1.3.1b	
		or	
			[Successful]
		READER STATUS 1.3.1c	
		or	
		TERMINAL RESPONSE: GET CARD	
		READER STATUS 1.3.1d	[Successful]

TERMINAL RESPONSE: GET CARD READER STATUS 1.3.1a

## Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '1'
Card reader removable: 'No'
Card reader present: Yes
Card reader ID-1 size: 'Yes'
Card present in reader: No
Card powered: No

## Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
<u> </u>	00	A0	01	31							

#### TERMINAL RESPONSE: GET CARD READER STATUS 1.3.1b

#### Logically:

Command details

Command number:

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:

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:

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '1'
Card reader removable: 'Yes'
Card reader present: Yes
Card reader ID-1 size: 'No'
Card present in reader: No
Card powered: No

## Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	19							

# 27.22.4.20.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

# 27.22.4.20.2 GET CARD READER STATUS (detachable card reader)

27.22.4.20.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.20.2.2 Conformance requirement

Void.

27.22.4.20.2.3 Test purpose

To verify that the ME closes a session with the additional card identified in the GET CARD READER STATUS proactive SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.20.2.4 Method of test

27.22.4.20.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

The card reader shall be detached from the ME.

#### 27.22.4.20.2.4.2 Procedure

## Expected Sequence 2.1 (GET CARD READER STATUS, no card reader attached)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: GET CARD	
		READER STATUS 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET CARD READER	[Get Card Reader Status]
		STATUS 2.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET CARD READER	[Successful]
		STATUS 2.1.1a	
		or	
		TERMINAL RESPONSE: GET CARD READER	[Successful]
		STATUS 2.1.1b	

#### 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 8	03 01	33 00	82	02	81	82
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## 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	Α0	01	29							

TERMINAL RESPONSE: GET CARD READER STATUS 2.1.1b

Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: No
Card reader ID-1 size: No
Card present in reader: No
Card powered: No

Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
·	00	A0	01	09							

#### 27.22.4.20.2.5 Test requirement

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

# 27.22.4.21 TIMER MANAGEMENT and ENVELOPE TIMER EXPIRATION

# 27.22.4.21.1 TIMER MANAGEMENT (normal)

# 27.22.4.21.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.21.1.2 Conformance Requirement

The ME shall support the TIMER MANAGEMENT as defined in:

- TS 11.14 [15] clause 5.2, clause 6.4.21, clause 6.8, clause 12.6, clause 12.7, clause 12.37 and clause 12.38.

# 27.22.4.21.1.3 Test purpose

To verify that the ME manages correctly its internal timers, start a timer, deactivate a timer or return the current value of a timer according to the Timer Identifier defined in the TIMER MANAGEMENT proactive SIM command.

27.22.4.21.1.4 Method of Test

27.22.4.21.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

## 27.22.4.21.1.4.2 Procedure

# Expected Sequence 1.1 (TIMER MANAGEMENT, start timer 1 several times, get the current value of the timer and deactivate the timer successfully)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3		PROACTIVE COMMAND:	[start timer 1]
		TIMER MANAGEMENT 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
		MANAGEMENT 1.1.1	
5	$SIM \rightarrow ME$	PROACTIVE COMMAND	After 1 minute following reception of Terminal
		PENDING: TIMER	Response
_		MANAGEMENT 1.1.2	
6	$ME \rightarrow SIM$	FETCH	
7		PROACTIVE COMMAND:	[ask value of timer 1]
		TIMER MANAGEMENT 1.1.2	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
	0114 145	MANAGEMENT 1.1.2	Defens time an exeminant
9	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: TIMER	Before timer expires!
		MANAGEMENT 1.1.3	
10	ME → SIM	FETCH	
11	IVIE -> SIIVI	PROACTIVE COMMAND:	[reinitialize timer 1]
111		TIMER MANAGEMENT 1.1.3	[remidalize timer 1]
12	ME SIM	TERMINAL RESPONSE: TIMER	[command performed successfully]
12	IVIL -> SIIVI	MANAGEMENT 1.1.3	[command performed successfully]
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	After 30 s following reception of the Terminal
	Olivi 7 IVIL	PENDING: TIMER	Response
		MANAGEMENT 1.1.4	. isopones
14	$ME \rightarrow SIM$	FETCH	
15		PROACTIVE COMMAND:	[deactivate timer 1]
		TIMER MANAGEMENT 1.1.4	
16	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
		MANAGEMENT 1.1.4	

## 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:

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
	01	01										

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: 1min 30s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	01	A5	03	00	10	03					

# PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	01										

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.1 and 1.1.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 1

Coding::

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	01									

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.2

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: value < to the timer value of command 1.1.1

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	00
	A4	01	01	A5	03	XX	XX	XX				

# TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT 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	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.2.1	
2	$ME \rightarrow SIM$	FETCH	
3		PROACTIVE COMMAND:	[start timer 2]
		TIMER MANAGEMENT 1.2.1	
4	$ME \rightarrow SIM$		[command performed successfully]
		MANAGEMENT 1.2.1	
5	$SIM \rightarrow ME$	PROACTIVE COMMAND	After 1 minute following reception of Terminal
		PENDING: TIMER	Response
		MANAGEMENT 1.2.2	
6	$ME \rightarrow SIM$	FETCH	
7		PROACTIVE COMMAND:	[ask value of timer 2]
		TIMER MANAGEMENT 1.2.2	
8	$ME \rightarrow SIM$		[command performed successfully]
		MANAGEMENT 1.2.2	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND	Before timer expires!
		PENDING: TIMER	
4.0		MANAGEMENT 1.2.3	
10	$ME \rightarrow SIM$	FETCH	
11		PROACTIVE COMMAND:	[reinitialize timer 2]
4.0		TIMER MANAGEMENT 1.2.3	
12	$ME \rightarrow SIM$		[command performed successfully]
40	0114 145	MANAGEMENT 1.2.3	After 40 consents following grounding of
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	After 10 seconds following reception of
		PENDING: TIMER	Terminal Response
1 4 4	NAT OINA	MANAGEMENT 1.2.4	
14	$ME \rightarrow SIM$	FETCH	[decetivete times 2]
15		PROACTIVE COMMAND: ITIMER MANAGEMENT 1.2.4	[deactivate timer 2]
16	ME OU		[sommand performed augeocafully]
16	$ME \rightarrow SIM$		[command performed successfully]
		MANAGEMENT 1.2.4	

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.1

# Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 2

Timer value

Value of timer: 23 h 59 min 59 s

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:

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 2

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
_	01	02										

# PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 2

Timer value

Value of timer: 1 min 10 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	02	A5	03	00	10	01					

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT Command qualifier: deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 2

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	02										

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.1 and 1.2.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 2

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	02									

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.2

#### Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 2

Timer value

Value of timer: value < to the timer value of command 1.2.1

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	00
	A4	01	02	A5	03	XX	XX	XX				

# TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.4

## Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT 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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3		PROACTIVE COMMAND:	[start timer 8]
		TIMER MANAGEMENT 1.3.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
		MANAGEMENT 1.3.1	
5	$SIM \rightarrow ME$	PROACTIVE COMMAND	After 1 minute following reception of Terminal
		PENDING: TIMER	Response
		MANAGEMENT 1.3.2	
6	$ME \rightarrow SIM$	FETCH	[
7		PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.2	[ask value of timer 8]
8	ME → SIM	TERMINAL RESPONSE: TIMER	[command parformed supposefully]
0	INE → SIIVI	MANAGEMENT 1.3.2	[command performed successfully]
9	$SIM \rightarrow ME$	PROACTIVE COMMAND	Before timer expires!
3	SIIVI - IVIE	PENDING: TIMER	Delote titlet expires:
		MANAGEMENT 1.3.3	
10	$ME \rightarrow SIM$	FETCH	
11		PROACTIVE COMMAND:	[reinitialize timer 8]
		TIMER MANAGEMENT 1.3.3	[remman=e miner e]
12	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
		MANAGEMENT 1.3.3	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	After 30 seconds following reception of
		PENDING: TIMER	Terminal Response
		MANAGEMENT 1.3.4	
14	$ME \rightarrow SIM$	FETCH	
15		PROACTIVE COMMAND:	[deactivate timer 8]
		TIMER MANAGEMENT 1.3.4	
16	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
		MANAGEMENT 1.3.4	

## 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

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:

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 8

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
	01	08										

# PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.3

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 8

Timer value

Value of timer: 01 h 00 min 00 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	08	A5	03	10	00	00					

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT Command qualifier: deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 8

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	80										

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.1 and 1.3.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 8

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
_	A4	01	08									

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.2

#### Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 8

Timer value

Value of timer: value < to the timer value of command 1.3.1

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	00
	A4	01	80	A5	03	XX	XX	XX				

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.4

## Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT 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	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: TIMER	
		MANAGEMENT 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3		PROACTIVE COMMAND:	[get current value from timer 1]
4	ME → SIM	TIMER MANAGEMENT 1.4.1 TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
-	IVIL -> SIIVI	MANAGEMENT 1.4.1A	state]
		or	•
		TERMINAL RESPONSE: TIMER	
5	$SIM \rightarrow ME$	MANAGEMENT 1.4.1B PROACTIVE COMMAND	
	0 / <u></u>	PENDING: TIMER	
		MANAGEMENT 1.4.2	
6 7	$ME \rightarrow SIM$	FETCH PROACTIVE COMMAND:	[get current value from timer 2]
'		TIMER MANAGEMENT 1.4.2	[get current value from timer 2]
8	$ME \to SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
		MANAGEMENT 1.4.2A	state]
		or TERMINAL RESPONSE: TIMER	
		MANAGEMENT 1.4.2B	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER MANAGEMENT 1.4.3	
10	$ME \rightarrow SIM$	FETCH	
11		PROACTIVE COMMAND:	[get current value from timer 3]
12	ME → SIM	TIMER MANAGEMENT 1.4.3 TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
12	IVIL -> OIIVI	MANAGEMENT 1.4.3A	state]
		or	•
		TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.3B	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
14	ME → SIM	MANAGEMENT 1.4.4 FETCH	
15	IVIL -> OIIVI	PROACTIVE COMMAND:	[get current value from timer 4]
		TIMER MANAGEMENT 1.4.4	
16	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.4A	[action in contradiction with the current timer
		or	state]
		TERMINAL RESPONSE: TIMER	
17	$SIM \rightarrow MF$	MANAGEMENT 1.4.4B PROACTIVE COMMAND	
''	SIIVI → IVIE	PENDING: TIMER	
		MANAGEMENT 1.4.5	
18	$ME \rightarrow SIM$	FETCH	Front comment could be forced time on 51
19		PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.5	[get current value from timer 5]
20	$ME \to SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
		MANAGEMENT 1.4.5A	state]
		or TERMINAL RESPONSE: TIMER	
		MANAGEMENT 1.4.5B	
21	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER MANAGEMENT 1.4.6	
22	$ME \rightarrow SIM$	FETCH	
23		PROACTIVE COMMAND:	[get current value from timer 6]
24	ME → SIM	TIMER MANAGEMENT 1.4.6 TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
	IVIL -> SIIVI	MANAGEMENT 1.4.6A	state]
		or	
		TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.6B	
I	I	IN THE COLUMN THE PROPERTY OF	I

Step	Direction	MESSAGE / Action	Comments
25	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.4.7	
26	$ME \rightarrow SIM$	FETCH	
27		PROACTIVE COMMAND:	[get current value from timer 7]
		TIMER MANAGEMENT 1.4.7	
28	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
		MANAGEMENT 1.4.7A	state]
		or	
		TERMINAL RESPONSE: TIMER	
		MANAGEMENT 1.4.7B	
29	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
00		MANAGEMENT 1.4.8	
30	$ME \rightarrow SIM$	FETCH	
31		PROACTIVE COMMAND:	[get current value from timer 8]
00		TIMER MANAGEMENT 1.4.8	
32	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
		MANAGEMENT 1.4.8A	state]
		or TERMINAL RESPONSE: TIMER	
		MANAGEMENT 1.4.8B	

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.1

# Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
	01	01										

# TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.1A

# Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 1

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
•	A4	01	01									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.1B

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TLV: 81 03 01 27 02 82 02 82 81 83 01 24

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.2

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 2

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
	01	02										

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.2A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 2

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
	A4	01	02									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.2B

Logically:

Command details

Command number:

TIMER MANAGEMENT Command type: Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

## Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.3

## Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT Command qualifier: get the current value of the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 3

#### Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
	01	03										

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.3A

## Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 3

#### Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
	A4	01	03									

# TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.3B

## Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT Command qualifier: get current value from the Timer Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TLV: 81 03	01 27	02 82	02 82	81	83	01	24
----------------	-------	-------	-------	----	----	----	----

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 4

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
	01	04										

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.4A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 4

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
	A4	01	04									

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.4B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TLV: 81 03 01 27 02 82 02 82 81 83 01 24

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.5

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 5

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
_	01	05										

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.5A

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 5

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
	A4	01	05									

# TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.5B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME
Destination device: SIM

Result

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.6

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 6

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
·	01	06										

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.6A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 6

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
	A4	01	06									

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.6B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
	•				~-		~-		<b>.</b>		• .	

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.7

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 7

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
	01	07										

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.7A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 7

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
	A4	01	07									

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.7B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24	1
----------	----	----	----	----	----	----	----	----	----	----	----	----	---

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.8

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 8

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
·	01	08										

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.8A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 8

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
	A4	01	08									

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.8B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24

 ${\bf Expected \ Sequence 1.5\ (TIMER\ MANAGEMENT, try\ to\ deactivate\ a\ timer\ which\ is\ not\ started:\ action\ in\ contradiction\ with\ the\ current\ timer\ state)}$ 

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER MANAGEMENT 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3		PROACTIVE COMMAND:	[deactivate timer 1]
4	ME → SIM	TIMER MANAGEMENT 1.5.1 TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
	1VIL -7 SIIVI	MANAGEMENT 1.5.1A	state]
		OF	
		TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.1B	
5	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER MANAGEMENT 1.5.2	
6	$ME \rightarrow SIM$		
7		PROACTIVE COMMAND:	[deactivate timer 2]
8	ME → SIM	TIMER MANAGEMENT 1.5.2 TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
	/ Jilvi	MANAGEMENT 1.5.2A	state]
		or TERMINAL RESPONSE: TIMER	
		MANAGEMENT 1.5.2B	
9	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER MANAGEMENT 1.5.3	
10	$ME \rightarrow SIM$	FETCH	
11		PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.3	[deactivate timer 3]
12	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
		MANAGEMENT 1.5.3A	state]
		or TERMINAL RESPONSE: TIMER	
	0.11	MANAGEMENT 1.5.3B	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: TIMER	
		MANAGEMENT 1.5.4	
14 15	$ME \rightarrow SIM$	FETCH  PPOACTIVE COMMAND:	[deactivate timer 4]
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.4	[deactivate timer 4]
16	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
		MANAGEMENT 1.5.4A lor	state]
		TERMINAL RESPONSE: TIMER	
17	$SIM \rightarrow ME$	MANAGEMENT 1.5.4B PROACTIVE COMMAND	
''	JUN → ME	PENDING: TIMER	
1.0		MANAGEMENT 1.5.5	
18 19	$ME \rightarrow SIM$	FETCH PROACTIVE COMMAND:	[deactivate timer 5]
13		TIMER MANAGEMENT 1.5.5	
20	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.5A	[action in contradiction with the current timer
		or	state]
		TERMINAL RESPONSE: TIMER	
21	SIM → MF	MANAGEMENT 1.5.5B PROACTIVE COMMAND	
1	/ IVIL	PENDING: TIMER	
22	ME → SIM	MANAGEMENT 1.5.6 FETCH	
22	INIE → SIIVI	PROACTIVE COMMAND:	[deactivate timer 6]
		TIMER MANAGEMENT 1.5.6	
24	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.6A	[action in contradiction with the current timer state]
		or	,
		TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.6B	
I	l	INN THE COUNTRIES IN THE PROPERTY OF THE PROPE	I I

Step	Direction	MESSAGE / Action	Comments
25	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.5.7	
26	$ME \rightarrow SIM$	FETCH	
27		PROACTIVE COMMAND:	[deactivate timer 7]
		TIMER MANAGEMENT 1.5.7	r at the state of
28	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
		MANAGEMENT 1.5.7A	state]
		or TERMINAL RESPONSE: TIMER	
		MANAGEMENT 1.5.7B	
29	$SIM \rightarrow ME$	PROACTIVE COMMAND	
20	Olivi -> IVIL	PENDING: TIMER	
		MANAGEMENT 1.5.8	
30	$ME \rightarrow SIM$	FETCH	
31		PROACTIVE COMMAND:	[deactivate timer 8]
		TIMER MANAGEMENT 1.5.8	,
32	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
		MANAGEMENT 1.5.8A	state]
		or	
		TERMINAL RESPONSE: TIMER	
		MANAGEMENT 1.5.8B	

# PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.1

## Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT Command qualifier: deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

Coding:

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	01										

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.1A

# Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 1

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	Δ4	Λ1	01									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.1B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 24

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.2

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 2

Coding:

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	02										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.2A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 2

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	02									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.2B

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

## Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24

#### PROACTIVE COMMAND3: TIMER MANAGEMENT 1.5.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT Command qualifier: deactivate the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 3

Coding:

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4	ĺ
	01	03											

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.3A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 3

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	03									

# TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.3B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT Command qualifier: deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 4

Coding:

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	04										

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.4A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 4

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	04									

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.4B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 24

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.5

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT Command qualifier: deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 5

Coding:

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	05										

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.5A

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 5

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	05									

# TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.5B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME
Destination device: SIM

Result

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.6

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT Command qualifier: deactivate the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 6

Coding:

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
·	01	06										

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.6A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 6

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	06									

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.6B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.7

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 7

Coding:

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
_	01	07										

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.7A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 7

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	07									

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.7B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.8

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT Command qualifier: deactivate the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 8

Coding:

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
_	01	80										

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.8A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 8

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	08									

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.8B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24

# **Expected Sequence 1.6 (TIMER MANAGEMENT, start 8 timers successfully)**

SIM → ME	Step	Direction	MESSAGE / Action	Comments
MANAGEMENT 1.6.1  ME → SIM  ME → SI	1	$SIM \to ME$		
2				
A	2	ME → SIM		
TIMER MANAGEMENT 1.6.1  ME → SIM → ME  MANAGEMENT 1.6.3  ME → SIM → ME  MANAGEMENT 1.6.4  ME → SIM → ME  ME →		IVIL → SIIVI		[timer 1]
SIM → ME				
5 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.2 FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.2 FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.2 FETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.3 FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.3 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.3 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4 FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4 FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5 TERCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.5 TIMER MANAGEMENT 1.6.6 TERCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6 TERCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6 TERCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6 TERCH MANAGEMENT 1.6.7 FETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8 TETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8 T	4	$ME \to SIM$		[command performed successfully]
PENDING: TIMER   MANAGEMENT 1.6.2   FETCH   PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.2   FETCH   PROACTIVE COMMAND   TIMER MANAGEMENT 1.6.2   FETCH   PROACTIVE COMMAND   FETCH   FETCH   PROACTIVE COMMAND   FETCH   FETCH   PROACTIVE COMMAND   FETCH   PR	_	OIM ME		
ME → SIM PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.2 FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.2 FETCH PROACTIVE COMMAND SIM → ME SIM → ME SIM → ME ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3 FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.3  ME → SIM → ME SIM → ME FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4  ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4  ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4  ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5  ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5  ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5  ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6  ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6  TIMER MANAGEMENT 1.6.6  ME → SIM PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6  TIMER MANAGEMENT 1.6.7  FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8	5	SIM → ME		
PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.2   TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.2   TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.3   TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4   TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5   TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6   TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7   TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8   TERMINAL RESPONSE:				
TIMER MANAGEMENT 1.6.2 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.2 PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.3 TIMER MANAGEMENT 1.6.3 TIMER MANAGEMENT 1.6.3 TIMER MANAGEMENT 1.6.3 TIMER MANAGEMENT 1.6.4 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5 TIMER MANAGEMENT 1.6.5 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5 TIMER MANAGEMENT 1.6.5 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8	6	$ME \to SIM$	FETCH	
S	7			[timer 2]
MANAGEMENT 1.6.2 PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.3 FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3  ITMER MANAGEMENT 1.6.3  SIM → ME → SIM	0	ME CIM		[command parformed augocoafully]
9 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.3 10 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3 11 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.3 12 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4 13 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.4 14 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4 15 ME → SIM FETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.4 16 ME → SIM HE PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.5 18 ME → SIM ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.5 19 ME → SIM ME → SIM MANAGEMENT 1.6.5 10 ME → SIM MADE PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6 11 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6 12 ME → SIM ME → SIM MANAGEMENT 1.6.6 13 ME → SIM ME → SIM TIMER MANAGEMENT 1.6.7 14 ME → SIM ME → SIM TIMER MANAGEMENT 1.6.6 15 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6 16 ME → SIM MADE PENDING: TIMER MANAGEMENT 1.6.6 17 TIMER MANAGEMENT 1.6.6 18 ME → SIM MADE PENDING: TIMER MANAGEMENT 1.6.6 18 ME → SIM MANAGEMENT 1.6.6 19 (timer 5) 10 (timer 6) 11 (timer 7) 11 (timer 7) 11 (timer 7) 12 (command performed successfully) 13 (timer 7) 13 (timer 8) 14 ME → SIM MANAGEMENT 1.6.8 15 (timer 8) 15 (timer 8) 16 (timer 8)	0	IVIE -> SIIVI		[confinant penomied successibility]
MANAGEMENT 1.6.3   FETCH   ROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3   TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.3   TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4   TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5   TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6   TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7   TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8   TETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8   T	9	$SIM \to ME$		
10				
11	10	NAT 01114		
TIMER MANAGEMENT 1.6.3  SIM → ME  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4  FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4  FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4  FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5  FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6  TIMER MANAGEMENT 1.6.6  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8  TERMINAL RESPONSE: TIMER MANAGE		$ME \rightarrow SIM$		[timer 3]
12  ME → SIM	''			[unier 5]
13 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.4  14 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4  16 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4  17 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.5  18 ME → SIM FETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.5  19 ME → SIM TIMER MANAGEMENT 1.6.5  20 ME → SIM PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6  21 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6  22 ME → SIM FETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6  23 ME → SIM FETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6  24 ME → SIM FETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7  TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8	12	$ME \to SIM$		[command performed successfully]
PENDING: TIMER MANAGEMENT 1.6.4  15  ME → SIM  ME → SIM  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4  TREMINAL RESPONSE: TIMER MANAGEMENT 1.6.5  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5  ME → SIM  MANAGEMENT 1.6.5  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8  TETCH  PROACTIVE COMMAND  PENDING: TIMER MANAGEMENT 1.6.8  TETCH  PROACTIVE COMMAND  PENDING: TIMER MANAGEMENT 1.6.8  TIMER MANAGEMENT 1.6.8  TETCH  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8  TETCH  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8  TETCH  T				
MANAGEMENT 1.6.4  ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4  PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.5  ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6  PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TIMER MANAGEMENT 1.6.8  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TIMER MANAGEMENT 1.6.8  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TIMER MANAGEMENT 1.6.8  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TIMER MANAGEMENT 1.6.7  TIMER MANAGEMENT 1.6.8  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TIMER MANAGEMENT 1.6.8  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TIMER MANAGEMENT 1.6.7  TIMER MANAGEMENT 1.6.8	13	$SIM \rightarrow ME$		
14				
TIMER MANAGEMENT 1.6.4 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4 PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.5  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6  TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TIMER MANAGEMENT 1.6.7  TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8	14	$\text{ME} \to \text{SIM}$		
16 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4  17 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.5  18 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5  20 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5  21 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6  22 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6  23 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6  24 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6  25 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7  26 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  27 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  28 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  29 SIM → ME FETCH FETCH (command performed successfully)  30 ME → SIM → ME FETCH (command performed successfully)  31 ME → SIM FETCH (command performed successfully)  [timer 7]  [timer 7]  [timer 8]	15			[timer 4]
MANAGEMENT 1.6.4 PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.5  18 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5  20 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5  21 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6  22 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6  24 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6  25 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7  PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8  ME → SIM ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8	10	NAT 01114		
17 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.5  18 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5  20 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5  21 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6  22 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6  24 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6  25 SIM → ME PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  26 ME → SIM FETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7  27 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  28 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  29 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7  29 SIM → ME MANAGEMENT 1.6.8  30 ME → SIM ME → SIM FETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8  31 ME → SIM FETCH FETCH FETCH FETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8  30 ME → SIM FETCH FETCH FETCH FETCH MANAGEMENT 1.6.8  4 ME → SIM FETCH FETCH FETCH FETCH MANAGEMENT 1.6.8  4 ME → SIM FETCH FET	16	ME → SIM		[command performed successfully]
18	17	$SIM \to ME$		
18				
19 20 ME → SIM PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5 21 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6 22 ME → SIM PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6 23 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6 24 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6 25 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7 26 ME → SIM PENDING: TIMER MANAGEMENT 1.6.7 27 FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7 28 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7 29 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7 30 ME → SIM PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8 31 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8 32 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8 33 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8 34 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8 35 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8 36 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8 37 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8 38 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8 39 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8 30 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8 31 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8 32 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8 33 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8	40	NAT 01114		
TIMER MANAGEMENT 1.6.5 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5 PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6  PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8		IVIE → SIIVI		[timer 5]
20 ME → SIM ANAGEMENT 1.6.5 21 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6 22 ME → SIM PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6 23 ME → SIM PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6 24 ME → SIM PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6 25 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7 26 ME → SIM PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7 27 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7 28 ME → SIM PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7 29 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7 30 ME → SIM FETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8 31 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8 32 ITMER MANAGEMENT 1.6.8 33 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8 34 ITMER MANAGEMENT 1.6.8 35 ITMER MANAGEMENT 1.6.8 36 ITMER MANAGEMENT 1.6.8 37 ITMER MANAGEMENT 1.6.8	13			
21 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6  22 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6  24 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6  25 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7  26 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  27 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  28 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  29 SIM → ME MANAGEMENT 1.6.8  30 ME → SIM FETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8  31 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8  [timer 8]	20	$ME \to SIM$		[command performed successfully]
22 ME → SIM PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6  24 ME → SIM PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6  PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7  PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8	04	0114 145		
22	21	$SIM \rightarrow ME$		
22 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6  24 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6  25 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7  26 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  28 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  28 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  29 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8  30 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8  [timer 6]  [timer 6]  [timer 6]  [command performed successfully]				
TIMER MANAGEMENT 1.6.6 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6 PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7 FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  Z8 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  Z9 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8  30 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8 FETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8  FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8  [timer 8]	22	$ME \to SIM$		
24 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6  25 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7  26 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  28 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  29 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8  30 ME → SIM FETCH PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8  [timer 8]	23			[timer 6]
25 SIM → ME MANAGEMENT 1.6.6 PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7  26 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  28 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  29 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8  30 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8  [timer 8]	24	ME CIM		[command parformed augocoafully]
25 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7  26 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  28 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  29 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8  30 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8  31 IN TIMER MANAGEMENT 1.6.8  [timer 8]	24	IVIE → SIIVI		[confinant performed successfully]
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	25	$SIM \to ME$		
26 ME → SIM FETCH 27 PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  28 ME → SIM TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  29 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8  30 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8  [timer 7]  [command performed successfully]  [timer 7]  [timer 7]  [timer 7]  [timer 7]  [timer 8]				
PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7  TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7  PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8  ME → SIM  ME → SIM  ME → SIM  TIMER MANAGEMENT 1.6.8  FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8  [timer 7]  [command performed successfully]  [timer 7]  [timer 7]  [timer 7]  [timer 7]  [timer 8]	26	ME OIM		
TIMER MANAGEMENT 1.6.7 TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7 PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8  SIM → ME  ME → SIM  ME → SIM  TIMER MANAGEMENT 1.6.8 FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8  [timer 8]		IVIE → SIIVI		[timer 7]
29 SIM → ME MANAGEMENT 1.6.7 PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8 FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8  [timer 8]				
29 SIM → ME PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8 FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8  [timer 8]	28	$ME \to SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
PENDING: TIMER  MANAGEMENT 1.6.8  FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8  [timer 8]		0114		
30 ME → SIM FETCH PROACTIVE COMMAND: [timer 8] TIMER MANAGEMENT 1.6.8	29	$SIM \rightarrow ME$		
30 ME → SIM FETCH PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8 [timer 8]				
TIMER MANAGEMENT 1.6.8	1	$ME \to SIM$	FETCH	
	31			[timer 8]
TO A TOUR A SING LIER WIND RESPUNSE: HOWER HOURINGING DAITORMAN CHOOCCITIENT	32	$ME \rightarrow SIM$	TIMER MANAGEMENT 1.6.8 TERMINAL RESPONSE: TIMER	[command performed successfully]
MANAGEMENT 1.6.8	32	IVIE -> SIIVI		[command performed successfully]

### PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: 5 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	01	A5	03	00	00	50					

### TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 1

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	01									

### PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.2

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 2

Timer value

Value of timer: 5 s

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	02	A5	03	00	00	50					

### TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.2

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 2

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	02									

### PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3

### Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 3

Timer value

Value of timer: 5 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	03	A5	03	00	00	50					

### TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.3

# Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 3

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	03									

### PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 4

Timer value

Value of timer: 5 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
•	01	04	A5	03	00	00	50					

### TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 4

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	04									

### PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 5

Timer value

Value of timer: 5 s

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	05	A5	03	00	00	50					

### TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 5

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	05									

### PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6

### Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 6

Timer value

Value of timer: 5 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	06	A5	03	00	00	50					

### TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6

# Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 6

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	06									

### PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 7

Timer value

Value of timer: 5 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
•	01	07	A5	03	00	00	50					

### TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 7

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	07									

### PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 8

Timer value

Value of timer: 5 s

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
_	01	80	A5	03	00	00	50					

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 8

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	08									

### 27.22.4.21.1.5 Test requirement

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

### 27.22.4.21.2 ENVELOPE TIMER EXPIRATION (normal)

### 27.22.4.21.2.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.21.2.2 Conformance requirement

The ME shall support the ENVELOPE (TIMER EXPIRATION) command as defined in the following technical specifications:

- TS 11.14 [15] clause 4.10, clause 10.1 and clause 10.2.

The ME shall support the TIMER MANAGEMENT as defined in the following technical specifications:

- TS 11.14 [15] clause 5.2, clause 6.4.21, clause 6.8, clause 12.6, clause 12.7, clause 12.37 and clause 12.38.

### 27.22.4.21.2.3 Test purpose

To verify that the ME shall pass the identifier of the timer that has expired and its value using the ENVELOPE (TIMER EXPIRATION) command, when a timer previously started in a TIMER MANAGEMENT proactive command expires.

### 27.22.4.21.2.4 Method of test

### 27.22.4.21.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

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

The timer 1 is not started.

When the SIM is busy when the envelope TIMER EXPIRATION is sent, either the ME retries periodically to send the envelope or it waits for a status not indicating busy.

### 27.22.4.21.2.4.2 Procedure

### **Expected Sequence 2.1 (TIMER EXPIRATION, pending proactive SIM command)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3		PROACTIVE COMMAND: TIMER	[timer 1]
		MANAGEMENT 2.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
		MANAGEMENT 2.1.1	
5	$ME \rightarrow SIM$	ENVELOPE: TIMER EXPIRATION	
		2.1.1	
6	$SIM \to ME$	PROACTIVE COMMAND	[response to envelope is "91 xx"]
		PENDING: MORE TIME X.1(or an	
		other SAT command tested before	
		to ensure it is properly supported	
		by the mobile).	
7	$ME \to SIM$	FETCH	

### PROACTIVE COMMAND: TIMER MANAGEMENT 2.1.1

### Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: 0 h 0 min 10 s

### Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	01	A5	03	00	00	01					

### TERMINAL RESPONSE: TIMER MANAGEMENT 2.1.1

### Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 1

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

 $\begin{array}{lll} \mbox{Hour:} & \mbox{'00'} \\ \mbox{Minute:} & \mbox{'00'} \\ \mbox{Second:} & \mbox{'10'} \pm 1 \mbox{ s} \\ \end{array}$ 

Coding:

BER-TLV:	D7	0C	82	02	82	81	A4	01	01	A5	03	00
·	00	XX										

# Expected Sequence 2.2 (TIMER EXPIRATION, SIM application toolkit busy)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
_	NAE CINA	MANAGEMENT 2.2.1	
2	$ME \rightarrow SIM$	PROACTIVE COMMAND: TIMER	[timer 1]
3		MANAGEMENT 2.2.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
		MANAGEMENT 2.2.1	,,,
5	$ME \rightarrow SIM$	ENVELOPE: TIMER EXPIRATION	
		2.2.1A	FOIL
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION BUSY	[SIM is busy; response to the envelope = "93 00"]
			[SIM is busy during 10 seconds. If the ME
			periodically retries to send the envelope until
			it is accepted, then step 7a-10a apply. If the
			ME does not periodically retry to send the
			envelope, e.g. it waits for a TERMINAL
			RESPONSE processed by the SIM with status
7a	ME -> SIM	ENVELOPE: TIMER EXPIRATION	'90 00', then step 7b – 14b apply] [Branch applies for MEs periodically retrying
Ι 'α	IVIL -> SIIVI	2.2.1B	to send the envelope
8a	$SIM \rightarrow ME$	PROACTIVE SIM SESSION BUSY	
			00"]
9a	$ME \rightarrow SIM$	ENVELOPE: TIMER EXPIRATION	
10a	CIM . ME	2.2.1C SW1/SW2=90 00	
Tua	SIIVI → IVIE	300 1/3002=90 00	
7b	MF → SIM	STATUS or other command	[Branch applies for MEs not periodically
			retrying to send the envelope (in compliance
			with TS 11.14 [15], cl. 10.1)]
			04-11-74-404-11-11-11-11-11-11-11-11-11-11-11-11-11
			Steps 7b – 12b are repeated maximal 100 times (to prevent infinite testing) or until the
			terminals sends ENVELOPE: TIMER
			EXPIRATION 2.2.1B in step 13b or at any
			time during steps 7b - 12b (in latter case step
			13b is obsolete).
8b	$SIM \rightarrow ME$	Response to the command issued	[SW1/SW2=91 xx]
		in step 7b PROACTIVE COMMAND	
		PENDING	
9b	$ME \rightarrow SIM$	_	
10b		PROACTIVE COMMAND: e.g.	
		MORE TIME 2.2.2	
11b	$ME \rightarrow SIM$	TERMINAL RESPONSE: e.g.	[command performed successfully]
126	CINA . NAT	MORE TIME 2.2.2	[SW4/SW2 - 00 00]
12b	SIIVI → IVIE	Response to the command issued in step 11b	[SW1/SW2 = 90 00]
13b	MF → SIM	ENVELOPE: TIMER EXPIRATION	
	, / O.I.VI	2.2.1B	
14b	$SIM \rightarrow ME$	SW1/SW2=90 00	

PROACTIVE COMMAND: TIMER MANAGEMENT 2.2.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: 0 h 0 min 30 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
_	01	01	A5	03	00	00	03					

TERMINAL RESPONSE: TIMER MANAGEMENT 2.2.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 1

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	01									

**ENVELOPE: TIMER EXPIRATION 2.2.1A** 

Logically:

Device identities

Source device: ME Destination device: SIM

Timer identifier

Timer 1

Timer value

Hour: '00' Minute: '00' Second: '30'  $\pm$  1 s

Coding:

BER-TLV:	D7	0C	82	02	82	81	A4	01	01	A5	03	00
•	00	XX										

**ENVELOPE: TIMER EXPIRATION 2.2.1B** 

Logically:

Device identities

Source device: ME Destination device: SIM

Timer identifier

Timer 1

Timer value

Hour: '00' Minute: '00'

Second:  $\geq$  timer in clause 2.2.1A

BER-TLV:	D7	0C	82	02	82	81	A4	01	01	A5	03	00
	00	XX										

**ENVELOPE: TIMER EXPIRATION 2.2.1C** 

Logically:

Device identities

Source device: ME
Destination device: SIM

Timer identifier

Timer 1 Timer value

> Hour: '00' Minute: '00'

Second:  $\geq$  timer in 2.2.1B

Coding:

BER-TLV:	D7	0C	82	02	82	81	A4	01	01	A5	03	00
	00	XX										

PROACTIVE COMMAND: MORE TIME 2.2.2

Logically:

Command details

Command number: 1

Command type: MORE TIME

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Coding:

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

TERMINAL RESPONSE: MORE TIME 2.2.2

Logically:

Command details

Command number:

Command type: MORE TIME

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

27.22.4.21.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.2.

# 27.22.4.22 SET UP IDLE MODE TEXT

# 27.22.4.22.1 SET UP IDLE MODE TEXT (normal)

### 27.22.4.22.1.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.22.1.2 Conformance requirement

- TS 11.14 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 11.6, clause 6.8, clause 11, clause 12.25, clause 6.4.7 and clause 6.6.13.

Additionally the ME shall support the REFRESH proactive SIM facility as defined in:

- TS 11.14 [15] clause 5.2, clause 6.1, clause 6.4.7, clause 6.6.13, clause 6.11, clause 12.6, clause 12.12, clause 13.4 and clause 14.

### 27.22.4.22.1.3 Test purpose

To verify that the text passed to the ME is displayed as idle mode text.

### 27.22.4.22.1.4 Method of test

#### 27.22.4.22.1.4.1 Initial conditions

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

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in update idle mode on the System Simulator.

### 27.22.4.22.1.4.2 Procedure

### Expected Sequence 1.1 (SET UP IDLE MODE TEXT, display idle mode text)

Step	Direction	Message / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	[Idle Mode Text]
		PENDING: SET UP IDLE MODE	
		TEXT 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command performed successfully]
		IDLE MODE TEXT 1.1.1	
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
6	$USER \to ME$	Select idle screen	Only if idle screen not already available
7	$ME \rightarrow USER$	Display "Idle Mode Text"	

### PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.1.1

# Logically:

Command details

Command number:

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "Idle Mode Text"

Coding:

BER-TLV:	D0	1A	81	03	01	28	00	82	02	81	82	8D
	0F	04	49	64	6C	65	20	4D	6F	64	65	20
	54	65	78	74								

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.1.1

Logically:

Command details

Command number:

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	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP IDLE MODE	
		TEXT 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[Idle Mode Text]
		IDLE MODE TEXT 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		IDLE MODE TEXT 1.1.1	
5		Select idle screen	Only if idle screen not already available
6	$ME \rightarrow USER$	Display "Idle Mode Text"	
7	$SIM \to ME$	PROACTIVE COMMAND	[Idle Mode Text]
		PENDING: SET UP IDLE MODE	
		TEXT 1.2.1	
8	$ME \rightarrow SIM$	FETCH	
9	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[Idle Mode Text]
		IDLE MODE TEXT 1.2.1	
10	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		IDLE MODE TEXT 1.2.1	
11	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
12		Select idle screen	Only if idle screen not already available
13	$ME \rightarrow USER$	Display "Toolkit Test"	

PROACTIVE COMMAND: SETUP IDLE MODE TEXT 1.2.1

Logically:

Command details

Command number:

Command type: SETUP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM

Destination device: ME

**Text String** 

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

Coding:

BER-TLV:	D0	18	81	03	01	28	00	82	02	81	82	8D
	0D	04	54	6F	6F	6C	6B	69	74	20	54	65
	73	74										

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.2.1

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	00

# **Expected Sequence 1.3 (SET UP IDLE MODE TEXT, remove idle mode text)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		SET UP IDLE MODE TEXT 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	["Idle Mode Text"]
		IDLE MODE TEXT 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		IDLE MODE TEXT 1.1.1	
5	$USER \to ME$	Select idle screen	Only if idle screen not already available
6	$ME \rightarrow USER$	Display "Idle Mode Text"	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		SET UP IDLE MODE TEXT 1.3.1	
8	$ME \rightarrow SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	[Remove idle mode text]
		IDLE MODE TEXT 1.3.1	
10	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		IDLE MODE TEXT 1.3.1	
11	•	PROACTIVE SIM SESSION ENDED	
12	00=:: / :::=	Select idle screen	Only if idle screen not already available
13	$ME \rightarrow USER$	' '	
		not to be displayed	

PROACTIVE COMMAND: SETUP IDLE MODE TEXT 1.3.1

Logically:

Command details

Command number:

Command type: SETUP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM

Destination device: ME

Text String: zero length TLV

Coding:

BER-TLV:	D0	0B	81	03	01	28	00	82	02	81	82	8D
	00											

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.3.1

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	00

# **Expected Sequence 1.4 (SET UP IDLE MODE TEXT, competing information on ME display)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP IDLE MODE	
		TEXT 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	["Idle Mode Text"]
		IDLE MODE TEXT 1.1.1	
4	$ME \rightarrow SIM$		[Command performed successfully]
_		IDLE MODE TEXT 1.1.1	
5	$USER \to ME$	Select idle screen	Only if idle screen not already available
6	$ME \rightarrow USER$	Display "Idle Mode Text"	
7	$SS \to ME$	SMS PP 1.4.1	[Display immediate SMS]
8	$ME \rightarrow USER$	Display "Test Message"	
9	$USER \to ME$	Clear display and select idle	
		screen	
10	$ME \rightarrow USER$	Display "Idle Mode Text"	
11	$SIM \rightarrow ME$	PROACTIVE COMMAND	
4.0		PENDING: DISPLAY TEXT 1.4.1	
12	$ME \rightarrow SIM$	FETCH	B
13	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Normal priority, wait for user to clear
4.4	ME LIGED	DISPLAY TEXT 1.4.1	message, unpacked, 8 bit data]
14	ME → USER	Display "Toolkit Test 1"	
15	USER → ME	Clear Message TERMINAL RESPONSE:	
16	$ME \rightarrow SIM$	DISPLAY TEXT 1.4.1	[Command performed successfully]
17	$ME \rightarrow USER$	Display "Idle Mode Text"	
18	$SIM \rightarrow USER$	PROACTIVE COMMAND	
10	SIIVI → IVIE	PENDING: PLAY TONE 1.4.1	
19	$ME \to SIM$	FETCH	
20	SIM → ME	PROACTIVE COMMAND: PLAY	
20	Olivi -> IVIL	TONE 1.4.1	
21	$ME \rightarrow USER$	Display "Dial Tone"	
	WIE 7 OOLIK	Biopiay Biai Forio	
		Play a standard supervisory dial	
		tone through the external ringer for	
1		a duration of 5 s	
22	$ME \to SIM$	TERMINAL RESPONSE: PLAY	[Command performed successfully]
		TONE 1.4.1	·
23	$SIM \to ME$	PROACTIVE SIM SESSION	
1 _		ENDED	
24	$ME \rightarrow USER$	Display "Idle Mode Text"	

# SMS-PP 1.4.1

Logically:

SMS TPDU

TP-MTI SMS-DELIVER

TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the ME

TP-OA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "1234" TP-PID '00'

TP-DCS

Coding Group General Data Coding Compression Text is uncompressed

Message Class Class 0

Alphabet GSM 7 bit default alphabet

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

TP-UDL 12

TP-UD "Test Message"

### Coding:

Coding	04	04	91	21	43	00	10	89	10	10	00	00
	00	00	0C	D4	F2	9C	0E	6A	96	E7	F3	F0
	В9	0C										

### PROACTIVE COMMAND: DISPLAY TEXT 1.4.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

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

Device identities

Source device: SIM
Destination device: Display

**Text String** 

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

Coding:

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

TERMINAL RESPONSE: DISPLAY TEXT 1.4.1

Logically:

Command details

Command number:

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 0	BER-TLV:	00
---	----------	----

# PROACTIVE COMMAND: PLAY TONE 1.4.1

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece

Alpha identifier: "Dial Tone"

TONe: Standard supervisory tones: dial tone

Duration

Time unit: Seconds
Time interval: 5

Coding:

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

TERMINAL RESPONSE: PLAY TONE 1.4.1

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

# **Expected Sequence 1.5 (SET UP IDLE MODE TEXT, ME power cycled)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP IDLE MODE	
		TEXT 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	["Idle Mode Text"]
		IDLE MODE TEXT 1.1.1	
4	$ME \rightarrow SIM$		[command performed successfully]
		IDLE MODE TEXT 1.1.1	
5	$USER \to ME$	Select idle screen	Only if idle screen not already available
6		Display "Idle Mode Text"	
7	$USER \to ME$	Power off ME	
8	$ME \Leftrightarrow SIM$	GSM TERMINATION	
		PROCEDURE	
9	$USER \to ME$	Power on ME	
10	$ME \Leftrightarrow SIM$	GSM ACTIVATION PROCEDURE	
11	$ME \Leftrightarrow SIM$	SIM INITIALIZATION	
12	$USER \to ME$	Select idle screen	Only if idle screen not already available
13	$ME \rightarrow USER$	Display idle screen / "Idle Mode	
		Text" not to be displayed	

# **Expected Sequence 1.6 (SET UP IDLE MODE TEXT, REFRESH with SIM Initialization)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	[Idle Mode Text]
		PENDING: SET UP IDLE MODE	
		TEXT 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		IDLE MODE TEXT 1.1.1	
5	$USER \to ME$	Select idle screen	Only if idle screen not already available
6	$ME \rightarrow USER$	Display "Idle Mode Text"	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: REFRESH 1.6.1	
8	$ME \rightarrow SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[SIM Initialization]
		REFRESH 1.6.1	
10	$ME \Leftrightarrow SIM$	SIM INITIALIZATION	
11	$USER \to ME$	Select idle screen	Only if idle screen not already available
12	$ME \rightarrow USER$	Display idle screen / "Idle Mode	
		Text" not to be displayed	
13	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		REFRESH 1.6.1A	
		or	
		TERMINAL RESPONSE:	[Command performed successfully with
		REFRESH 1.6.1B	additional files read]
14	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	

PROACTIVE COMMAND: REFRESH 1.6.1

Logically:

Command details

Command number: 1

Command type: REFRESH
Command qualifier: SIM Initialization

Device identities

Source device: SIM
Destination device: ME

Coding:

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

TERMINAL RESPONSE: REFRESH 1.6.1A

Logically:

Command details

Command number: 1

Command type: REFRESH
Command qualifier: SIM Initialization

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

DED TIV	0.4	20	04	04	00	00	00	0	0.4	00	04	00
BFR-TLV:	1 81	1 (),3	()1	1 ()1	(),3	1 82	()2	1 82	1 81	83	01	()()

TERMINAL RESPONSE: REFRESH 1.6.1B

Logically:

Command details

Command number: 1

Command type: REFRESH
Command qualifier: SIM Initialization

Device identities

Source device: ME
Destination device: SIM

Result

General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	03	82	02	82	81	83	01	03
	0.	00	0 1		00	02	02	02		00	0.	00

# **Expected Sequence 1.7 (SET UP IDLE MODE TEXT, large text string)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	[large text string]
		PENDING: SET UP IDLE MODE	
		TEXT 1.7.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 1.7.1	
4	$ME \rightarrow SIM$		[command performed successfully]
		IDLE MODE TEXT 1.7.1	
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
_		ENDED	
6	$USER \to ME$	Select idle screen	Only if idle screen not already available
7	$ME \rightarrow USER$	Display "The SIM shall supply a	[274 characters]
		text string, which shall be	
		displayed by the ME as an idle	
		mode text if the ME is able to do it.	
		The presentation style is left as an	
		implementation decision to the ME	
		manufacturer. The idle mode text	
		shall be displayed in a manner that	
		ensures that ne"	

### PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.7.1

Logically:

Command details

Command number: Command type:

SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: packed, SMS default alphabet

Text: "The SIM shall supply a text string, which shall be displayed by the ME as an idle

mode text if the ME is able to do it. The presentation style is left as an

implementation decision to the ME manufacturer. The idle mode text shall be

displayed in a manner that ensures that ne"

BER-TLV:	D0	81	FD	81	03	01	28	00	82	02	81	82
	8D	81	F1	00	54	74	19	34	4D	36	41	73
	74	98	CD	06	CD	EB	70	38	3B	0F	0A	83
	E8	65	3C	1D	34	A7	CB	D3	EE	33	0B	74
	47	A7	C7	68	D0	1C	1D	66	В3	41	E2	32
	88	9C	9E	C3	D9	E1	7C	99	0C	12	E7	41
	74	74	19	D4	2C	82	C2	73	50	D8	0D	4A
	93	D9	65	50	FB	4D	2E	83	E8	65	3C	1D
	94	36	83	E8	E8	32	A8	59	04	A5	E7	A0
	B0	98	5D	06	D1	DF	20	F2	1B	94	A6	BB
	A8	E8	32	08	2E	2F	CF	СВ	6E	7A	98	9E
	7E	BB	41	73	7A	9E	5D	06	A5	E7	20	76
	D9	4C	07	85	E7	A0	B0	1B	94	6E	C3	D9
	E5	76	D9	4D	0F	D3	D3	6F	37	88	5C	1E
	A7	E7	E9	B7	1B	44	7F	83	E8	E8	32	A8
	59	04	B5	C3	EE	BA	39	3C	A6	D7	E5	65
	B9	0B	44	45	97	41	69	32	BB	0C	6A	BF
	C9	65	10	BD	8C	A7	83	E6	E8	30	9B	0D
	12	97	41	E4	F4	1C	CE	0E	E7	CB	64	50
	DA	0D	0A	83	DA	61	B7	BB	2C	07	D1	D1
	61	3A	A8	EC	9E	D7	E5	E5	39	88	8E	0E
	D3	41	EE	32								

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.7.1

Logically:

Command details

Command number:

Command type: SET UP IDLE MODE TEXT

Command q ualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	00
----------	----	----	----	----	----	----	----	----	----	----	----	----

27.22.4.22.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.7.

27.22.4.22.2 SET UP IDLE MODE TEXT (Icon support)

27.22.4.22.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.2.2 Conformance requirement

27.22.4.22.2.3 Test purpose

To verify that the ME text and / or icon passed to the ME is displayed by the ME as an idle mode text.

To verify that the icon identifier provided with the text string can replace the text string or accompany it.

To verify that if both an alpha identifier or text string, and an icon are provided with a proactive command, and both are requested to be displayed, but the ME is not able to display both together on the screen, then the alpha identifier or text string takes precedence over the icon.

To verify that if the SIM provides an icon identifier with a proactive command, then the ME shall inform the SIM if the icon could not be displayed by sending the general result "Command performed successfully, but requested icon could not be displayed".

To verify that if the ME receives an icon identifier with a proactive command, and either an empty, or no alpha identifier / text string is given by the SIM, then the ME shall reject the command with general result "Command data not understood by ME".

27.22.4.22.2.4 Method of test

27.22.4.22.2.4.1 Initial conditions

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

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

### 27.22.4.22.2.4.2 Procedure

### Expected Sequence 2.1A (SET UP IDLE MODE TEXT, Icon is self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Icon is self-explanatory]
		PENDING: SET UP IDLE MODE	·
		TEXT 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 2.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[command performed successfully]
		IDLE MODE TEXT 2.1.1A	
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
6			Only if idle screen not already available
7	$ME \to USER$	Display the icon	

#### PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.1.1

# Logically:

Command details

Command number:

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>

BER-TLV:	D0	19	81	03	01	28	00	82	02	81	82	8D
	0A	04	49	64	6C	65	20	74	65	78	74	9E
	02	00	01									

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.1.1A

Logically:

Command details

Command number:

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
D	<b>O</b> .	00					~_				<b>.</b>	

# Expected Sequence 2.1B (SET UP IDLE MODE TEXT, Icon is self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Icon is self-explanatory]
		PENDING: SET UP IDLE MODE	
		TEXT 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 2.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command performed successfully, but
		IDLE MODE TEXT 2.1.1B	requested icon could not be displayed]
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
6	$USER \to ME$	Select idle screen	Only if idle screen not already available
7	$ME \rightarrow USER$	Display "Idle text" without the icon	

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.1.1B

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

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

Coding:

DED TILL	- 4	00	~ 4	20	~~	0.0	00	0.0	0.4	00	~ 4	O 4
BER-TLV:	1 81		I ()1	1 78	00				81		l 01	()4
		l UJ					1 02			00		

# Expected Sequence 2.2A (SET UP IDLE MODE TEXT, Icon is not self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Icon is not self-explanatory]
		PENDING: SET UP IDLE MODE	
		TEXT 2.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 2.2.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[command performed successfully]
		IDLE MODE TEXT 2.2.1A	
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
6	· · · · · · · · · · · · · · · · ·		Only if idle screen not already available
7	$ME \rightarrow USER$	Display icon #1 and "Idle text"	

### PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.2.1

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME
Text String: "Idle text"

Icon identifier

Icon qualifier: icon is not self-explanatory
Icon identifier: <record 1 in EF IMG>

Coding:

BER-TLV:	D0	19	81	03	01	28	00	82	02	81	82	8D
	0A	04	49	64	6C	65	20	74	65	78	74	9E
	02	01	01									

### TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.2.1A

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	00	
----------	----	----	----	----	----	----	----	----	----	----	----	----	--

# Expected Sequence 2.2B (SET UP IDLE MODE TEXT, Icon is not self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	[Icon is not self-explanatory]
		PENDING: SET UP IDLE MODE	
		TEXT 2.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 2.2.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command performed successfully, but
		IDLE MODE TEXT 2.2.1B	requested icon could not be displayed]
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
6		Select idle screen	Only if idle screen not already available
7	$ME \rightarrow USER$	Display "Idle text" without the icon	

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.2.1B

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

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

Coding:

BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	04

# Expected Sequence 2.3A (SET UP IDLE MODE TEXT, Icon is self-explanatory, colour icon, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Icon is self-explanatory]
		PENDING: SET UP IDLE MODE	
		TEXT 2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 2.3.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[command performed successfully]
		IDLE MODE TEXT 2.3.1A	
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
6	$USER \to ME$	Select idle screen	Only if idle screen not already available
7	$ME \rightarrow USER$	Display the icon	

PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.3.1

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME
Text String: "Idle text"

Icon identifier

Icon qualifier: icon is self-explanatory
Icon identifier: <record 2 in EF IMG>

Coding:

BER-TLV:	D0	19	81	03	01	28	00	82	02	81	82	8D
	0A	04	49	64	6C	65	20	74	65	78	74	9E
	02	00	02									

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.3.1A

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	00

# Expected Sequence 2.3B (SET UP IDLE MODE TEXT, Icon is self-explanatory, colour icon, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	[Icon is self-explanatory]
		PENDING: SET UP IDLE MODE	
		TEXT 2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 2.3.1	
4	$ME \rightarrow SIM$		[requested icon could not be displayed]
		IDLE MODE TEXT 2.3.1B	
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
6	$USER \to ME$	Select idle screen	Only if idle screen not already available
7	$ME \to USER$	Display 'Idle text' without the icon	

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.3.1B

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

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

Coding:

BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	04	l
----------	----	----	----	----	----	----	----	----	----	----	----	----	---

# Expected Sequence 2.4 (SET UP IDLE MODE TEXT, Icon is not self-explanatory, empty text string)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Icon is not self-explanatory, empty text string]
		PENDING: SET UP IDLE MODE	
		TEXT 2.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 2.4.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		IDLE MODE TEXT 2.4.1	
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	

# PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.4.1

Logically:

Command details

Command number:

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

Text string

Contents: null data object

Icon identifier

Icon qualifier: icon is not self-explanatory
Icon identifier: <record 1 in EF IMG>

Coding:

BER-TLV:	D0	0F	81	03	01	28	00	82	02	81	82	8D
	00	9E	02	01	01							

### TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.4.1

Logically:

Command details

Command number:

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command data not understood by ME

Coding:

BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	32

27.22.4.22.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1A to 2.4.

# 27.22.4.22.3 SET UP IDLE MODE TEXT (UCS2 support)

27.22.4.22.3.1 Definition and applicability

See clause 3.2.2.

### 27.22.4.22.3.2 Conformance requirement

The ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in:

- ISO/IEC 10646 [17].

### 27.22.4.22.3.3 Test purpose

To verify that the UCS2 coded text string is displayed by the ME as an idle mode text.

27.22.4.22.3.4 Method of test

#### 27.22.4.22.3.4.1 Initial conditions

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

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

### 27.22.4.22.3.4.2 Procedure

### Expected Sequence 3.1 (SET UP IDLE MODE TEXT, UCS2 alphabet text)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	["Hello" in Russian]
		PENDING: SET UP IDLE MODE	
		TEXT 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 3.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		IDLE MODE TEXT 3.1.1	
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
6	$USER \to ME$	Select idle screen	Only if idle screen not already available
7	$ME \rightarrow USER$	Display " ЗДРАВСТВУЙТЕ"	["Hello" in Russian]

#### PROACTIVE COMMAND: SET UP IDLE MODE TEXT 3.1.1

# Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

**Text String** 

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

BER-TLV:	D0	24	81	03	01	28	00	82	02	81	82	8D
	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: SET UP IDLE MODE TEXT 3.1.1

Logically:

Command details

Command number:

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	00

# 27.22.4.22.3.5 Test requirement

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

# 27.22.4.23 RUN AT COMMAND

# 27.22.4.23.1 RUN AT COMMAND (normal)

### 27.22.4.23.1.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.23.1.2 Conformance requirement

The ME shall support the Proactive SIM: RUN AT COMMAND facility as defined in:

- TS 11.14 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 12.6, clause 12.7, clause 12.2, clause 12.40, clause 12.31 and clause 12.41.
- TS 27.007 [18].

# 27.22.4.23.1.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the SIM.

### 27.22.4.23.1.4 Method of test

### 27.22.4.23.1.4.1 Initial conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

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

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

# 27.22.4.23.1.4.2 Procedure

# Expected Sequence 1.1(RUN AT COMMAND, no alpha identifier presented, request IMSI)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[no alpha identifier, request IMSI]
		AT COMMAND 1.1.1	
4	ME (→ User)	The ME may give information to	
		the user concerning what is	
		happening	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command performed successfully, AT
		COMMAND 1.1.1	Response containing IMSI]

### PROACTIVE SIM COMMAND: RUN AT COMMAND 1.1.1

# Logically:

Command details

Command number:

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

AT Command

AT Command string: "AT+CIMI"

# Coding:

BER-TLV:	D0	12	81	03	01	34	00	82	02	81	82	A8
	07	41	54	2B	43	49	4D	49				

# TERMINAL RESPONSE: RUN AT COMMAND 1.1.1

# Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

AT Response

AT Response string: IMSI

# Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00	
	A9	80	09	10	10	10	32	54	76	98			

# Expected Sequence 1.2 (RUN AT COMMAND, null data alpha identifier presented, request IMSI)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		1.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: RUN	[null data alpha identifier, request IMSI]
		AT COMMAND 1.2.1	
4	ME	The ME should not give any	
		information to user on the fact that	
		the ME is performing an AT	
		command	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command performed successfully, AT
		COMMAND 1.1.1	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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		1.3.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[alpha identifier, request IMSI]
		AT COMMAND 1.3.1	
4	$ME \rightarrow USER$	Display "Run AT Command"	
5	$ME \to SIM$	TERMINAL RESPONSE: RUN AT	[Command performed successfully, AT
		COMMAND 1.1.1	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

"Run AT Command"

AT Command

AT Command string: "AT+CIMI"

Coding:

BER-TLV:	D0	22	81	03	01	34	00	82	02	81	82	85
	0E	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	A8	07	41	54	2B	43	49	4D	49

### 27.22.4.23.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

# 27.22.4.23.2 RUN AT COMMAND (Icon support)

27.22.4.23.2.1 Definition and applicability

See clause 3.2.2.

### 27.22.4.23.2.2 Conformance requirement

The ME shall support the Proactive SIM: RUN AT COMMAND facility as defined in:

- TS 11.14 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 12.6, clause 12.7, clause 12.2, clause 12.40, clause 12.31 and clause 12.41.
- TS 27.007 [18].

# 27.22.4.23.2.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the SIM.

In addition to verify that if an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

### 27.22.4.23.2.4 Method of test

### 27.22.4.23.2.4.1 Initial conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

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

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

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

### 27.22.4.23.2.4.2 Procedure

# Expected Sequence 2.1A (RUN AT COMMAND, basic icon self explanatory, request IMSI, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[BASIC-ICON, self-explanatory, request IMSI]
		AT COMMAND 2.1.1	
4	$ME \rightarrow USER$	Display BASIC ICON without the	
		alpha identifier	
5	$ME \rightarrow SIM$		[Command performed successfully, AT
		COMMAND 2.1.1A	response containing IMSI]

### PROACTIVE COMMAND: RUN AT COMMAND 2.1.1

### Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha Identifier

Alpha identifier: "Basic Icon"

AT Command

AT Command string: "AT+CIMI"

Icon identifier:

 $\begin{array}{ll} \text{Icon qualifier:} & \text{icon is self-explanatory} \\ \text{Icon identifier:} & \text{record 1 in } EF_{\text{(IMG)}} \\ \end{array}$ 

# Coding:

BER-TLV:	D0	22	81	03	01	34	00	82	02	81	82	85
	0A	42	61	73	69	63	20	49	63	6F	6E	A8
	07	41	54	2B	43	49	4D	49	9E	02	00	01

### TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A

# Logically:

Command details

Command number:

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

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00
	A9	80	09	10	10	10	32	54	76	98		

Expected Sequence 2.1B (RUN AT COMMAND, basic icon self explanatory, request IMSI, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: RUN	[BASIC-ICON, self-explanatory, request IMSI]
		AT COMMAND 2.1.1	
4	$ME \rightarrow USER$	Display 'Basic Icon' without the	
		BASIC-ICON	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command performed but requested icon
		COMMAND 2.1.1B	could not be displayed, AT response
			containing IMSI]

TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

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

AT Response

AT Response string: IMSI

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	04
	A9	80	09	10	10	10	32	54	76	98		

Expected Sequence 2.2A (RUN AT COMMAND, colour icon self explanatory, request IMSI, successful)

Step	Direction	MESSAGE / Action	Comments			
1	$SIM \rightarrow ME$	PROACTIVE COMMAND				
		PENDING: RUN AT COMMAND				
		2.2.1				
2	$ME \rightarrow SIM$	FETCH				
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[COLOUR-ICON, self-explanatory, request			
		AT COMMAND 2.2.1	IMSI]			
4	$ME \rightarrow USER$	Display COLOUR-ICON without				
		the alpha identifier				
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command performed successfully, AT			
		COMMAND 2.1.1A	response containing IMSI]			
1						

PROACTIVE COMMAND: RUN AT COMMAND 2.2.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha Identifier

Alpha identifier: "Colour Icon"

AT Command

AT Command string: "AT+CIMI"

Icon identifier:

 $\begin{array}{ll} \hbox{Icon qualifier:} & \hbox{icon is self-explanatory} \\ \hbox{Icon identifier:} & \hbox{record 2 in } EF_{(IMG)} \\ \end{array}$ 

Coding:

BER-TLV:	D0	23	81	03	01	34	00	82	02	81	82	A8
	0B	43	6F	6C	6F	75	72	20	49	63	6F	6E
\ <u>-</u>	A8	07	41	54	2B	43	49	4D	49	9E	02	00
\ <u>-</u>	02											

# Expected Sequence 2.2B (RUN AT COMMAND, colour icon self explanatory, request IMSI, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: RUN	[COLOUR-ICON, self-explanatory, request
		AT COMMAND 2.2.1	IMSI]
4	$ME \rightarrow USER$	Display 'Colour Icon' without the	
		COLOUR-ICON	
5	$ME \rightarrow SIM$		[Command performed but requested icon
		COMMAND 2.1.1B	could not be displayed, AT response
			containing IMSI]

# Expected Sequence 2.3A (RUN AT COMMAND, basic icon non self-explanatory, request IMSI, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[BASIC-ICON, non self-explanatory, request
		AT COMMAND 2.3.1	IMSI]
4	$ME \to USER$	Display "Basic Icon" and BASIC-	
		ICON	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command performed successfully, AT
		COMMAND 2.1.1A	response containing IMSI]

### PROACTIVE COMMAND: RUN AT COMMAND 2.3.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: ME

Alpha Identifier

Alpha identifier: "Basic Icon"

AT Command

AT Command string: "AT+CIMI"

Icon identifier

Icon qualifier: icon is non self-explanatory

Icon identifier: record 1 in  $EF_{(IMG)}$ 

Coding:

BER-TLV:	D0	22	81	03	01	34	00	82	02	81	82	85
	0A	42	61	73	69	63	20	49	63	6F	6E	A8
	07	41	54	2B	43	49	4D	49	9E	02	01	01

# Expected Sequence 2.3B (RUN AT COMMAND, basic icon non self-explanatory, request IMSI, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[BASIC-ICON, non self-explanatory, request
		AT COMMAND 2.3.1	IMSI]
4	$ME \rightarrow USER$	Display "Basic Icon" without	
		BASIC-ICON	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command performed but requested icon
		COMMAND 2.1.1B	could not be displayed, AT response
			containing IMSI]

## Expected Sequence 2.4A (RUN AT COMMAND, colour icon non self-explanatory, request IMSI, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[COLOUR-ICON, non self-explanatory,
		AT COMMAND 2.4.1	request IMSI]
4	$ME \rightarrow USER$	Display "Colour Icon" and	
		COLOUR-ICON	
5	$ME \rightarrow SIM$		[Command performed successfully, AT
		COMMAND 2.1.1A	response containing IMSI]

PROACTIVE COMMAND: RUN AT COMMAND 2.4.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

Alpha Identifier

Alpha identifier: "Colour Icon"

AT Command

AT Command string: "AT+CIMI"

Icon identifier:

Icon qualifier: icon is self-explanatory Icon identifier: record 2 in  $EF_{(IMG)}$ 

Coding:

BER-TLV:	D0	23	81	03	01	34	00	82	02	81	82	85
-	0B	43	6F	6C	6F	75	72	20	49	63	6F	6E
	A8	07	41	54	2B	43	49	4D	49	9E	02	01
	02											

# Expected Sequence 2.4B (RUN AT COMMAND, colour icon non self-explanatory, request IMSI, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[COLOUR-ICON, non self-explanatory,
		AT COMMAND 2.4.1	request IMSI]
4	$ME \rightarrow USER$	Display "Colour Icon" without	
		COLOUR-ICON	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command performed but requested icon
		COMMAND 2.1.1B	could not be displayed, AT response
			containing IMSI]

## Expected Sequence 2.5 (RUN AT COMMAND, basic icon non self-explanatory, no alpha identifier presented)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: RUN	[BASIC-ICON, non self-explanatory]
		AT COMMAND 2.5.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command data not understood by ME]
		COMMAND 2.5.1	

# PROACTIVE COMMAND: RUN AT COMMAND 2.5.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

AT Command

AT Command string: "AT+CIMI"

Icon identifier

Icon qualifier: icon is non self-explanatory

Icon identifier: record 1 in  $EF_{(IMG)}$ 

Coding:

BER-TLV:	D0	16	81	03	01	34	00	82	02	81	82	A8
	07	41	54	2B	43	49	4D	49	9E	02	01	01

TERMINAL RESPONSE: RUN AT COMMAND 2.5.1

Logically:

Command details

Command number:

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Result

General Result: Command data not understood by ME

#### Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	32

#### 27.22.4.23.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.5.

#### 27.22.4.24 SEND DTMF

#### 27.22.4.24.1 SEND DTMF (Normal)

#### 27.22.4.24.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.24.1.2 Conformance requirement

The ME shall support the Proactive SIM: Send DTMF facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 12.12.2, clause 5.2, clause 12.6, clause 12.7, clause 12.2 and clause 12.44.

#### 27.22.4.24.1.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive SIM command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the SIM using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive SIM command.

To verify that if an alpha identifier is provided by the SIM and is a null data object the ME does not give any information to the user on the fact that the ME is performing a SEND DTMF command.

## 27.22.4.24.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

#### 27.22.4.24.1.4. 2 Procedure

# **Expected Sequence 1.1 (SEND DTMF, normal)**

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	$User \rightarrow ME$	Set up a call to "+0123456789"	
2	$ME \rightarrow SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
		simulator.	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND	
5	ME → SIM	PENDING: SEND DTMF 1.1.1	
6		PROACTIVE COMMAND: SEND	
0	$SIM \rightarrow ME$	DTMF 1.1.1	
7	ME VIISED	May give information to the user	
,	IVIL -> OOLK	concerning what is happening.	
		geneening mat is nappeining.	
		Do not locally generate audible	
		DTMF tones and play them to the	
		user.	
8	$ME \rightarrow SS$	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	$ME \to SS$	Start DTMF 1.2	["2"]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		DTMF 1.1.1	
12	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
40	l	ENDED	
13	User $\rightarrow$ ME	End the call	

## PROACTIVE COMMAND: SEND DTMF 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

DTMF String: "1" pause "2"

Coding:

BER-TLV:	D0	0D	81	03	01	14	00	82	02	81	83	AC
	02	C1	F2									

Start DTMF 1.1

Logically:

DTMF String: "1"

Start DTMF 1.2

Logically:

DTMF String: "2"

TERMINAL RESPONSE: SEND DTMF 1.1.1

Logically:

Command details

Command number:

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

# Expected Sequence 1.2 (SEND DTMF, containing alpha identifier)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \to SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \to ME$	The ME receives the CONNECT	
		message from the system	
	0114 145	simulator.	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND	
5	$ME \rightarrow SIM$	PENDING: SEND DTMF 1.2.1	
6	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	
0	SIIVI → IVIE	DTMF 1.2.1	
7	$ME \rightarrow USER$	Display "Send DTMF"	Alpha identifier
	WE 7 COLIC	Jopina	,
		Do not locally generate audible	
		DTMF tones and play them to the	
		user.	
8	$ME \to SS$	Start DTMF 1.1	["1"]
9	$ME \to SS$	Start DTMF 1.2	["2"]
10	$ME \to SS$	Start DTMF 1.3	["3"]
11	$ME \to SS$	Start DTMF 1.4	["4"]
12	$ME \to SS$	Start DTMF 1.5	["5"]
13	$ME \to SS$	Start DTMF 1.6	["6"]
14	$ME \to SS$	Start DTMF 1.7	["7"]
15	$ME \to SS$	Start DTMF 1.8	["8"]
16	$ME \to SS$	Start DTMF 1.9	["9"]
17	$ME \to SS$	Start DTMF 1.10	["0"]
18	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
10	OIM ME	DTMF 1.1.1	
19	$SIM \rightarrow ME$	PROACTIVE SIM SESSION ENDED	
20	User $\rightarrow$ ME	End the call	

## PROACTIVE COMMAND: SEND DTMF 1.2.1

## Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Send DTMF"
DTMF String: "1234567890"

Coding:

BER-TLV:	D0	1B	81	03	01	14	00	82	02	81	83	85
	09	53	65	6E	64	20	44	54	4D	46	AC	05
	21	43	65	87	09							

Start DTMF 1.3

Logically:

DTMF String: "3"

Start DTMF 1.4

Logically:

DTMF String: "4"

Start DTMF 1.5

Logically:

DTMF String: "5"

Start DTMF 1.6

Logically:

DTMF String: "6"

Start DTMF 1.7

Logically:

DTMF String: "7"

Start DTMF 1.8

Logically:

DTMF String: "8"

Start DTMF 1.9

Logically:

DTMF String: "9"

Start DTMF 1.10

Logically:

DTMF String: "0"

# Expected Sequence 1.3 (SEND DTMF, containing alpha identifier with null data object)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \rightarrow SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
4	$SIM \rightarrow MF$	simulator. PROACTIVE COMMAND	
4	SIIVI → IVIE	PENDING: SEND DTMF 1.3.1	
5	$ME \rightarrow SIM$	FETCH	
6	SIM → ME	PROACTIVE COMMAND: SEND	Alpha identifier with null data object
	0 / <u></u>	DTMF 1.3.1	
7	$ME \rightarrow USER$	Do not give any information to the	
		user on the fact that the ME is	
		performing a SEND DTMF	
		command.	
		Do not locally generate audible	
		DTMF tones and play them to the	
		user.	
8	$ME \rightarrow SS$	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 30 seconds ±20%
10	$ME \to SS$	Start DTMF 1.2	["2"]
11	$ME \to SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		DTMF 1.1.1	
12	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
4.0	l	ENDED	
13	User → ME	End the call	

## PROACTIVE COMMAND: SEND DTMF 1.3.1

## Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "" (null data object)

DTMF String: "1" pause "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	$SIM \rightarrow ME$	PROACTIVE COMMAND	[Mobile is not in a speech call]
		PENDING: SEND DTMF 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	
		DTMF 1.1.1	
4	$ME \to SIM$	TERMINAL RESPONSE: SEND	[ME currently unable to process command,
		DTMF 1.4.1	not in speech call]
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	

TERMINAL RESPONSE: SEND DTMF 1.4.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: ME currently unable to process command

Additional information: Not in speech call

#### Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	02	20
	07											

#### 27.22.4.24.1.5 Test requirement

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

#### 27.22.4.24.2 SEND DTMF (Display of icons)

#### 27.22.4.24.2.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.24.2.2 Conformance requirement

The ME shall support the Proactive SIM: Send DTMF facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 12.12.2, clause 5.2, clause 12.6, clause 12.7, clause 12.2, clause 12.44, clause 12.31 and clause 6.5.4.

## 27.22.4.24.2.3 Test purpose

To verify that after a call has been successfully established the ME send the DTMF string contained in the SEND DTMF proactive SIM command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME do not locally generate audible DTMF tones and play them to the user.

To verify that the ME displays the text contained in the SEND DTMF proactive SIM command.

To verify that the ME displays the icons which are referred to in the contents of the SEND DTMF proactive SIM command.

#### 27.22.4.24.2.4 Method of test

#### 27.22.4.24.2.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

The elementary files are coded as Toolkit default.

#### 27.22.4.24.2.4.2 Procedure

# Expected Sequence 2.1A (SEND DTMF, BASIC ICON self explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	$User \rightarrow ME$	Set up a call to "+0123456789"	
2	$ME \rightarrow SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
		simulator.	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND	
5	ME CIM	PENDING: SEND DTMF 2.1.1	
	$ME \rightarrow SIM$		[DAGIO 100N] 16 1
6	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DTMF 2.1.1	[BASIC-ICON, self-explanatory]
7	ME LIGED	Display the BASIC-ICON	
<b>'</b>	IVIE → USEK	Display the BASIC-ICON	
		Do not locally generate audible	
		DTMF tones and play them to the	
		user.	
8	$ME \to SS$	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	$ME \rightarrow SS$	Start DTMF 1.2	["2"]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		DTMF 2.1.1A	
12	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
13	User $\rightarrow$ ME	End the call	

## PROACTIVE COMMAND: SEND DTMF 2.1.1

## Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "Basic Icon"

DTMF String: "1" pause "2"

Icon identifier

Icon qualifier: icon is self-explanatory Icon identifier: record 1 in  $EF_{(IMG)}$ 

#### Coding:

BER-TLV:	D0	1D	81	03	01	14	00	82	02	81	83	85
·	0A	42	61	73	69	63	20	49	63	6F	6E	AC
	02	C1	F2	9E	02	00	01					

## DTMF Request 2.1.1

Logically:

DTMF String: \$DTMF\_2.1\$ = "C1 F2" (given as example)

TERMINAL RESPONSE: SEND DTMF 2.1.1A

Logically:

Command details

Command number:

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

# Expected Sequence 2.1B (SEND DTMF, BASIC ICON self explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	$User \rightarrow ME$	Set up a call to "+0123456789"	
2	$ME \to SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \to ME$	The ME receives the CONNECT	
		message from the system	
		simulator.	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND	
_		PENDING: SEND DTMF 2.1.1	
5	$ME \rightarrow SIM$	FETCH	(DAGIG IGGN
6	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, self-explanatory]
7	ME HOED	DTMF 2.1.1	
/	ME → USER	Display "Basic Icon" without the	
		icon	
		Do not locally generate audible	
		DTMF tones and play them to the	
		user.	
8	$ME \to SS$	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20 %
10	$ME \to SS$	Start DTMF 1.2	["2"]
11	$ME \to SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully, but
		DTMF 2.1.1B	requested icon could not be displayed]
12	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
13	User $\rightarrow$ ME	End the call	

TERMINAL RESPONSE: SEND DTMF 2.1.1B

Logically:

Command details

Command number:

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:

# Expected Sequence 2.2A (SEND DTMF, COLOUR-ICON self explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \to SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
4	0114 145	simulator.	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND DTMF 2.2.1	
5	ME → SIM	FETCH	
6	SIM → ME	. = . *	[COLOUR-ICON]
0	SIIVI → IVIE	DTMF 2.2.1	[COLOGIV-ICON]
7	ME - LISER	Display the COLOUR-ICON	
	INIE 7 OOEIK		
		Do not locally generate audible	
		DTMF tones and play them to the	
		user.	
8	$ME \to SS$	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	$ME \rightarrow SS$	Start DTMF 1.2	["2"]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		DTMF 2.1.1A	
12	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
40		ENDED	
13	User $\rightarrow$ ME	End the call	

## PROACTIVE COMMAND: SEND DTMF 2.2.1

## Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "Colour Icon"

DTMF String: "1" pause "2"

Icon identifier:

 $\begin{array}{ll} \text{Icon qualifier:} & \text{icon is self-explanatory} \\ \text{Icon identifier:} & \text{record 2 in } EF_{\text{(IMG)}} \\ \end{array}$ 

## Coding:

BER-TLV:	D0	1E	81	03	01	14	00	82	02	81	83	85
·	0B	43	6F	6C	6F	75	72	20	49	63	6F	6E
	AC	02	C1	F2	9E	02	00	02				

# Expected Sequence 2.2B (SEND DTMF, COLOUR-ICON self explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \rightarrow SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
	0114 145	simulator.	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND DTMF 2.2.1	
5	$ME \rightarrow SIM$	FETCH	
6	WE / CHM	1 - 1 - 1 - 1	ICOLOUB ICONI
О	$SIM \rightarrow ME$	DTMF 2.2.1	[COLOUR-ICON]
7	ME LISER	Display "Colour Icon" without the	
,	IVIL -> OOLIK	licon	
		Do not locally generate audible	
		DTMF tones and play them to the	
		user.	
8	$ME \to SS$	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	$ME \to SS$	Start DTMF 1.2	["2"]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully, but
		DTMF 2.1.1B	requested icon could not be displayed]
12	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
40		ENDED	
13	User → ME	End the call	

# Expected Sequence 2.3A (SEND DTMF, Alpha identifier & BASIC-ICON, not self-explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	$User \rightarrow ME$	Set up a call to "+0123456789"	
2	$ME \to SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
4	$SIM \rightarrow ME$	simulator. PROACTIVE COMMAND	
4	SIIVI → IVIE	PENDING: SEND DTMF 2.3.1	
5	$ME \rightarrow SIM$	FETCH	
6	SIM → ME	PROACTIVE COMMAND: SEND	[Alpha identifier & BASIC-ICON, not self-
	0 / <u></u>	DTMF 2.3.1	explanatory]
7	$ME \rightarrow USER$	Display 'Send DTMF' and the	' ' '
		BASIC-ICON	
		Do not locally generate audible DTMF tones and play them to the	
		user.	
8	$ME \rightarrow SS$	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20 %
10	$ME \to SS$	Start DTMF 1.2	["2"]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		DTMF 2.1.1A	
12	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
12		ENDED	
13	User $\rightarrow$ ME	End the call	

PROACTIVE COMMAND: SEND DTMF 2.3.1

# Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "Send DTMF"

DTMF String: "1" pause "2"

Icon identifier:

Icon qualifier: icon is not self-explanatory

Icon identifier: record 1 in  $EF_{(IMG)}$ 

Coding:

BER-TLV:	D0	1C	81	03	01	14	00	82	02	81	83	85
	09	53	65	6E	64	20	44	54	4D	46	AC	02
	C1	F2	9E	02	01	01						

# Expected Sequence 2.3B (SEND DTMF, Alpha identifier & BASIC-ICON, not self-explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \rightarrow SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
4	$SIM \rightarrow ME$	simulator. PROACTIVE COMMAND	
4	SIIVI → IVIE	PENDING: SEND DTMF 2.3.1	
5	$ME \rightarrow SIM$	FETCH	
6	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[Alpha identifier & BASIC-ICON, not self-
		DTMF 2.3.1	explanatory]
7	$ME \rightarrow USER$	Display "Send DTMF" without the	
		icon	
		_ ,, ,, ,, ,,,	
		Do not locally generate audible	
		DTMF tones and play them to the user.	
8	$ME \rightarrow SS$	Start DTMF 1.1	["1"]
9	ME → 33	Otal Divil 1.1	No DTMF sending for 3 seconds ±20%
10	ME → SS	Start DTMF 1.2	["2"]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully, but
		DTMF 2.1.1B	requested icon could not be displayed]
12	$SIM \to ME$	PROACTIVE SIM SESSION	
1		ENDED	
13	User $\rightarrow$ ME	End the call	

#### 27.22.4.24.2.5 Test requirement

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

27.22.4.24.3 SEND DTMF (UCS2 support)

27.22.4.24.3.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.24.3.2 Conformance requirement

The ME shall support the Proactive SIM: Send DTMF facility as defined in:

- TS 11.14 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 12.12.2, clause 5.2, clause 12.6, clause 12.7, clause 12.2 and clause 12.44.

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

- ISO/IEC 10646. [17].

#### 27.22.4.24.3.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND DTMF proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

#### 27.22.4.24.3.4 Method of test

#### 27.22.4.24.3.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table.

The elementary files are coded as SIM Application Toolkit default.

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

#### 27.22.4.24.3.4.2 Procedure

#### Expected Sequence 3.1 (SEND DTMF, successful, UCS2 text)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \to SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
_	0114 145	simulator.	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND	
5	ME CIM	PENDING: SEND DTMF 3.1.1  FETCH	
_	1112 / 01111		
6	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	
		DTMF 3.1.1	
7	$ME \rightarrow USER$	' ' ' '	["Hello" in Russian]
8	$ME \to SS$	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	$ME \to SS$	Start DTMF 1.2	["2"]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		DTMF 3.1.1	
12	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
13	$User \to ME$	End the call	

# PROACTIVE COMMAND: SEND DTMF 3.1.1

#### Logically:

Command details

Command number:

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

Alpha Identifier

Text: "ЗДРАВСТВУЙТЕ"

DTMF String: "1" pause "2"

Coding:

BER-TLV:	D0	28	81	03	01	14	00	82	02	81	83	85
	19	80	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15	AC	02	C1	F2						

TERMINAL RESPONSE: SEND DTMF 3.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successful

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00
	<b>.</b>		• .			~-	~-	~-	• .		•	

# 27.22.4.12.2.5 Test requirement

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

## 27.22.4.25 LANGUAGE NOTIFICATION

## 27.22.4.25.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.25.2 Conformance Requirement

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

- TS 11.14 [15] clause 6.4.25 and clause 6.6.25.

## 27.22.4.25.3 Test purpose

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

## 27.22.4.25.4 Method of Test

#### 27.22.4.25.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

#### 27.22.4.25.4.2 Procedure

#### **Expected Sequence 1.1 (LANGUAGE NOTIFICATION)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: LANGUAGE	
		NOTIFICATION 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	Language specified in the command is
		LANGUAGE NOTIFICATION 1.1.1	different from the one set on the mobile.
4	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		LANGUAGE NOTIFICATION 1.1.1	
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	Language of ME may have been replaced by
		ENDED	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)  $\rightarrow$  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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: LANGUAGE	
		NOTIFICATION 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	Language specified in the command is
		LANGUAGE NOTIFICATION 1.1.1	different from the one set on the mobile.
4	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		LANGUAGE NOTIFICATION 1.1.1	
5	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: LANGUAGE	
		NOTIFICATION 1.2.1	
6	$ME \rightarrow SIM$	FETCH	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		LANGUAGE NOTIFICATION 1.2.1	
8	$ME \rightarrow SIM$		[Command performed successfully]
		LANGUAGE NOTIFICATION 1.2.1	
9	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	Check that initial language is set.
		ENDED	

PROACTIVE COMMAND: LANGUAGE NOTIFICATION 1.2.1

Logically:

Command details

Command number: 1

Command type: LANGUAGE NOTIFICATION

Command qualifier: "00" (non specific language notification)

Device identities

Source device: SIM
Destination device: ME

Coding:

TERMINAL RESPONSE: LANGUAGE NOTIFICATION 1.2.1

Logically:

Command details

Command number:

Command type: LANGUAGE NOTIFICATION

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

# 27.22.4.25.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 and 1.2.

#### 27.22.4.26 LAUNCH BROWSER

#### 27.22.4.26.1 LAUNCH BROWSER (No session already launched)

#### 27.22.4.26.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.26.1.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in:

- TS 11.14 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 12.6, clause 12.7, clause 12.48, clause 13.2, clause 12.2, clause 12.47, clause 12.49, clause 12.50, clause 12.15 and clause 12.31.

#### 27.22.4.26.1.3 Test purpose

To verify that when the ME is in idle state, it launches properly the browser session required in LAUNCH BROWSER, and returns a successful result in the TERMINAL RESPONSE command.

#### 27.22.4.26.1.4 Method of test

#### 27.22.4.26.1.4.1 Initial conditions

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

The elementary files are coded as SIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default browser parameters (IP address, gateway/proxy identity, called number, URL ...) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default browser parameters.

The mobile is in idle mode.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class:	02
Delay Class:	04
Reliability Class:	05
Peak throughput class:	05
Mean throughput class:	31
Packet data protocol:	02 (IP)

#### **GPRS** Parameters

Network access name:	TestGp.rs
User login:	UserLog
User password:	UserPwd

#### SIM/ME interface transport level

Transport format:	UDP
Port number:	44444

Data destination address 01.01.01.01

#### 27.22.4.26.1.4.2 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	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: LAUNCH BROWSER	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[connect to the default URL, "launch browser,
		LAUNCH BROWSER 1.1.1	if not already launched", no null alpha id.]
4	$ME \rightarrow USER$	ME displays the alpha identifier	
5	$USER \to ME$	The user may have to confirm the	[option: user confirmation]
		launch browser.	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: LAUNCH	[Command performed successfully]
		BROWSER 1.1.1	
7	ME→SS	The ME attempts to launch the	
		session with the default browser	
		parameters and the default URL.	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
9	USER $\rightarrow$ ME	The user verifies that the default	
		browser session is properly	
		established.	
		Then he/she ends the navigation.	
		The ME returns in idle mode.	

#### PROACTIVE COMMAND: LAUNCH BROWSER 1.1.1

## Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: SIM
Destination device: ME
URL empty

Alpha Identifier "Default URL"

#### Coding:

BER-TLV:	D0	18	81	03	01	15	00	82	02	81	82	31
	00	05	0B	44	65	66	61	75	6C	74	20	55
	52	4C										

## TERMINAL RESPONSE: LAUNCH BROWSER 1.1.1

#### Logically:

Command details

Command number:

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

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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	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: LAUNCH BROWSER	
_		1.2.1	
2	/ 0	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[connect to defined URL, "launch browser, if
		LAUNCH BROWSER 1.2.1	not already launched, alpha identifier length=0]
4	$ME \to USER$	No information should be	
		displayed.	
5	$USER \to ME$	1	[option: user confirmation]
		launch browser.	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: LAUNCH	[Command performed successfully]
_		BROWSER 1.2.1	
7	ME→SS	The ME attempts to connect the	
		URL specified in the LAUNCH	
		BROWSER command.	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
9	HOED ME	ENDED	
9	$USER \to ME$	The user verifies that the URL is	
		properly connected.	
		Then he/she ends the navigation.	
		The ME returns in idle mode.	

#### PROACTIVE COMMAND: LAUNCH BROWSER 1.2.1

#### Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: SIM Destination device: ME

URL <a href="http://xxx.yyy.zzz">http://xxx.yyy.zzz</a> (Note: this URL shall be different from the default URL, but it

can be reached from the gateway defined by default in the browser parameters of the

mobile)

Alpha Identifier empty

Coding:

BER-TLV:	D0	1F	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	00			

#### TERMINAL RESPONSE: LAUNCH BROWSER 1.2.1

## Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME Destination device: SIM Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03	01 15		02 82 81	83 01 00
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## 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	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: LAUNCH BROWSER	
		1.3.1	
2	L / O	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[connect to the default URL, "launch browser,
		LAUNCH BROWSER 1.3.1	if not already launched, browser identity]
4	$ME \rightarrow USER$	ME may display a default message	
_		of its own.	
5	$USER \to ME$	1.	[option: user confirmation]
		browser.	10
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: LAUNCH	[Command performed successfully]
7	ME .CC	BROWSER 1.3.1 The ME attempts to connect the	
<b>'</b>	ME→SS	default URL.	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
	SIIVI → IVIL	ENDED	
9	$USER \to ME$	The user verifies that the default	
	OOLIK 7 MIL	browser session is properly	
		established.	
		Then he/she ends the navigation.	
		The ME returns in idle mode.	

## PROACTIVE COMMAND: LAUNCH BROWSER 1.3.1

## Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: SIM
Destination device: ME
Browser Identity default
URL empty

Coding::

BER-TLV:	D0	0E	81	03	01	15	00	82	02	81	82	30
·	01	00	31	00								

# TERMINAL RESPONSE: LAUNCH BROWSER 1.3.1

# Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

|--|

# Expected Sequence 1.4 (LAUNCH BROWSER, only GPRS bearer specified and gateway/proxy identity, GPRS supported by SS)

Step	Direction	MESSAGE / Action	Comments
0	ME		[the ME is in idle mode], GPRS supported by SS, GPRS supported by the ME and activated, the terminal might need to be configured with an entry linking the Gateway/Proxy Identity in the proactive command with the corresponding connectivity parameters in the mobile]
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.4.1	,
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	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	$ME \to USER$	ME may display a default message	
5	$USER \to ME$	The user may confirm the launch browser.	[option: user confirmation]
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: LAUNCH BROWSER 1.4.1	[Command performed successfully]
7	ME→SS	The ME attempts to connect the default URL using the requested bearer and proxy identity	
8	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
9	$USER \to ME$	The user verifies that the browser session is properly established with the required bearer. Then he/she ends the navigation. The ME returns in idle mode.	

## PROACTIVE COMMAND: LAUNCH BROWSER 1.4.1

## Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: SIM
Destination device: ME
URL empty
Bearer GPRS

Gateway/Proxy id

DCSunpacked, 8 bits data

Text string abc.def.ghi.jkl (different from the default IP address)

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#### Coding::

BER-TLV:	D0	20	81	03	01	15	00	82	02	81	82	31
_	00	32	01	03	0D	10	04	61	62	63	2E	64
	65	66	2E	67	68	69	2E	6A	6B	6C		

TERMINAL RESPONSE: LAUNCH BROWSER 1.4.1

Logically:

Command details

Command number:

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 15 00 82 02 82 81 83 01 00

**Expected Sequence 1.5 Void** 

27.22.4.26.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.4

27.22.4.26.2 LAUNCH BROWSER (Interaction with current session)

27.22.4.26.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.2.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in:

- TS 11.14 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 12.6, clause 12.7, clause 12.48, clause 13.2, clause 12.2, clause 12.47, optional clause 12.49, optional clause 12.50, clause 12.15 and clause 12.31.

27.22.4.26.2.3 Test purpose

To verify that when the ME is already busy in a browser session, it launches properly the browser session required in LAUNCH BROWSER, and returns a successful result in the TERMINAL RESPONSE.

27.22.4.26.2.4 Method of test

27.22.4.26.2.4.1 Initial conditions

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

The elementary files are coded as SIM Application Toolkit default.

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

A valid access to a Wap gateway is required. The default browser parameters (IP address, gateway/proxy identity, called number...) of the tested mobile shall be properly filled to access that gateway.

The mobile is busy in a browser session, the user navigates in pages different from the URL defined by default in browser parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

#### 27.22.4.26.2.4.2 Procedure

#### Expected Sequence 2.1 (LAUNCH BROWSER, use the existing browser, connect to the default URL)

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a browser	[Browser is in use, the current session is not
		session (not default URL).	secured]
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: LAUNCH BROWSER	
		2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[connect to the default URL, "use the existing
		LAUNCH BROWSER 2.1.1	browser", no null alpha id.]
4	$ME \rightarrow USER$	ME displays the alpha identifier	
5	$USER \to ME$	The user confirms the launch	[user confirmation]
		browser.	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: LAUNCH	[Command performed successfully]
		BROWSER 2.1.1	
7	$ME \rightarrow SS$	The ME does not close the existing	
		session and attempts to connect	
		the default URL.	
8	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
9	$USER \to ME$	The user verifies that the default	
		URL is connected; and the	
		previous URL can be retrieved.	
		Then he/she ends the navigation	
		with the default URL.	

#### PROACTIVE COMMAND: LAUNCH BROWSER 2.1.1

#### Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: SIM
Destination device: ME
URL empty

Alpha Identifier "Default URL"

#### Coding:

BER-TLV:	D0	18	81	03	01	15	02	82	02	81	82	31
	00	05	0B	44	65	66	61	75	6C	74	20	55
	52	4C										

#### TERMINAL RESPONSE: LAUNCH BROWSER 2.1.1

#### Logically:

Command details

Command number:

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
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Expected Sequence 2.2 (LAUNCH BROWSER, close the existing browser session and launch new browser session, connect to the default URL)

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a browser	[Browser is in use, the current session is not
		session (not default URL)	secured]
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: LAUNCH BROWSER	
2	ME  o SIM	2.2.1 FETCH	
3	L / O	PROACTIVE COMMAND:	[connect to the default URL, "close the
3	SIIVI → IVIE	LAUNCH BROWSER 2.2.1	existing browser session and launch new
		LACTOR BROWGER 2.2.1	browser session", no null alpha id.]
4	$ME \rightarrow USER$	ME displays the alpha identifier	3.5.1.5.1. 5.5.5.1. , 1.10 1.1a.1 a.p.1.a.1a.1
5	$USER \to ME$	The user confirms the launch	[user confirmation]
		browser.	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: LAUNCH	[Command performed successfully]
_		BROWSER 2.2.1	
7	ME→SS		[The UE has the option of maintaining the
		session and attempts to launch the session with the default browser	currently active PDP Context]
		parameters and the default URL.	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
	Olivi 7 IVIL	ENDED	
9	$USER \to ME$	The user verifies that the default	
		URL is connected.	
		Then he/she ends 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	75	6C	74	20	55
	52	<b>1</b> C										

TERMINAL RESPONSE: LAUNCH BROWSER 2.2.1

Logically:

Command details

Command number: 1

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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:

#### Expected Sequence 2.3 (LAUNCH BROWSER, if not already launched)

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a browser	[Browser is in use, the current session is not
		session (not default URL)	secured]
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: LAUNCH BROWSER	
		2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[connect to the default URL, "launch browser,
		LAUNCH BROWSER 2.3.1	if not already launched]
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: LAUNCH	[ME unable to process command - browser
		BROWSER 2.3.1	unavailable]
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
6	USER $\rightarrow$ ME	The user verifies that the default	
		URL has not been connected.	
		Then he/she ends the navigation.	
		The ME returns in idle mode.	

#### PROACTIVE COMMAND: LAUNCH BROWSER 2.3.1

#### Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: SIM
Destination device: ME
URL empty

Coding:

BER-TLV:	D0	0B	81	03	01	15	00	82	02	81	82	31
	00											

#### TERMINAL RESPONSE: LAUNCH BROWSER 2.3.1

#### Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME Destination device: SIM

Result

General Result: Launch browser generic error code

Additional data Browser unavailable

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	02	26
	02											

#### 27.22.4.26.2.5 Test Requirement

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

## 27.22.4.26.3 LAUNCH BROWSER (UCS2 support)

27.22.4.26.3.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.26.3.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in:

- TS 11.14 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 12.6, clause 12.7, clause 12.48, clause 13.2, clause 12.2, clause 12.47, optional clause 12.49, optional clause 12.50, clause 12.15 and clause 12.31.

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

- ISO/IEC 10646 [17].

#### 27.22.4.26.2.3 Test purpose

To verify that the ME performs a proper user confirmation with an USC2 alpha identifier, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.26.3.4 Method of test

#### 27.22.4.26.3.4.1 Initial conditions

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

The elementary files are coded as SIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default browser parameters (IP address, gateway/proxy identity, called number, URL ...) of the tested mobile shall be properly filled to access one of the gateways ("default gateway").

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default browser parameters.

The mobile is busy in a browser session, the user navigates in pages different from the URL defined by default in browser parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

#### 27.22.4.26.3.4.2 Procedure

# Expected Sequence 3.1 (LAUNCH BROWSER, use the existing browser, connect to the default URL)

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a browser	[Browser is in use, the current session is not
1	$SIM \rightarrow ME$	session (not default URL) PROACTIVE COMMAND PENDING: LAUNCH BROWSER 3.1.1	secured]]
2	$ME \to SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: LAUNCH BROWSER 3.1.1	[connect to the default URL, "use the existing browser", alpha id. In UCS2]
4	$ME \rightarrow USER$	ME displays the alpha identifier "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]
5	$USER \to ME$	The user confirms the launch browser.	[user confirmation]
6	$ME \rightarrow SIM$	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	$SIM \to ME$	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:	BER-TLV:	81	03	01		02		02		81	83	1 ()1	00
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#### 27.22.4.26.3.5 Test Requirement

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

#### 27.22.4.26.4 LAUNCH BROWSER (icons support)

27.22.4.26.4.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.26.4.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in:

- TS 11.14 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 12.6, clause 12.7, clause 12.48, clause 13.2, clause 12.2, clause 12.47, optional clause 12.49, optional clause 12.50, clause 12.15 and clause 12.31.

#### 27.22.4.26.4.3 Test purpose

To verify that the ME performs a proper user confirmation with an icon identifier, launches the browser session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.26.4.4 Method of test

#### 27.22.4.26.4.4.1 Initial conditions

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

The elementary files are coded as SIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default browser parameters (IP address, gateway/proxy identity, called number, URL ...) of the tested mobile shall be properly filled to access one of the gateways ("default gateway").

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default browser parameters.

The mobile is busy in a browser session, the user navigates in pages different from the URL defined by default in browser parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

#### 27.22.4.26.4.4.2 Procedure

# Expected Sequence 4.1A (LAUNCH BROWSER, use the existing browser, icon not self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Browser is in use, the current session is not
		PENDING: LAUNCH BROWSER	secured]]
		4.1.1	
2	/	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[connect to the default URL, "use the existing
		LAUNCH BROWSER 4.1.1	browser", no null alpha id.]
4	$ME \rightarrow USER$	ME displays the alpha identifier	["Not self explan."]
_		and the icon	
5	$USER \to ME$	The user confirms the launch	[user confirmation]
		browser.	10 1 ( 1 )
6	$ME \rightarrow SIM$		[Command performed successfully]
		BROWSER 4.1.1 A	
7	ME→SS	The ME does not close the existing	
<b>'</b>	WIL→SS	session and attempts to connect	
		the default URL.	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
	OIIVI 7 IVIL	ENDED	
9	USER $\rightarrow$ 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	$SIM \to ME$	PROACTIVE COMMAND	[Browser is in use, the current session is not
		PENDING: LAUNCH BROWSER	secured]]
_		4.1.1	
2	/	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[connect to the default URL, "use the existing
		LAUNCH BROWSER 4.1.1	browser", no null alpha id.]
4	$ME \rightarrow USER$	ME displays the alpha identifier	["Not self explan."]
		Without the icon	
5	$USER \to ME$	The user confirms the launch	[user confirmation]
		browser.	
6	$ME \rightarrow SIM$		[Command performed successfully but
_		BROWSER 4.1.1 B	requested icon could not be displayed]
7	ME→SS	The ME does not close the existing	
		session and attempts to connect	
8	0114 145	the default URL.	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
9	USER → ME	The user verifies that the default	
9	USER → IVIE	URL is connected; and the	
		previous URL can be retrieved.	
		Then he/she ends the navigation	
		with the default URL.	
		with the delauit ORL.	

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:	01	03	01	15	02	92	02	92	01	02	01	04
DEK-ILV.	01	US	UI	10	02	02	02	02	01	೦೦	UI	U <del>4</del>

# Expected Sequence 4.2A (LAUNCH BROWSER, use the existing browser, icon self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Browser is in use, the current session is not
		PENDING: LAUNCH BROWSER	secured]]
		4.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[connect to the default URL, "use the existing
		LAUNCH BROWSER 4.2.1	browser", alpha id. In UCS2]
4	$ME \to USER$	ME displays only the icon	["Self explan."]
5	$USER \to ME$	The user confirms the launch	[user confirmation]
		browser.	
6	$ME \to SIM$		[Command performed successfully]
		BROWSER 4.2.1 A	
7	$ME { ightarrow} SS$	The ME does not close the existing	
		session and attempts to connect	
		the default URL.	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
9	$USER \to ME$	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:

 $\begin{array}{ll} Icon \ qualifier: & self-explanatory \\ Icon \ identifier: & record \ 1 \ in \ EF_{(IMG)} \\ \end{array}$ 

# Coding:

BER-TLV:	D0	1D	81	03	01	15	02	82	02	81	82	31
	00	05	0C	53	65	6C	66	20	65	78	70	6C
	61	6E	2E	1E	02	00	01					

#### TERMINAL RESPONSE: LAUNCH BROWSER 4.2.1 A

## Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	00

# Expected Sequence 4.2B (LAUNCH BROWSER, use the existing browser, icon self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: LAUNCH BROWSER	[Browser is in use, the current session is not secured]]
		4.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[connect to the default URL, "use the existing
		LAUNCH BROWSER 4.2.1	browser", alpha id. In UCS2]
4	$ME \rightarrow USER$	ME displays only the alpha identifier	["Self explan."]
5	$USER \to ME$	The user confirms the launch browser.	[user confirmation]
6	$ME \to SIM$	TERMINAL RESPONSE: LAUNCH BROWSER 4.2.1 B	[Command performed successfully]
			[Command performed successfully but
			requested icon could not be displayed]
7	$ME { ightarrow} SS$	The ME does not close the existing	
		session and attempts to connect	
	0114 145	the default URL.	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
9	$USER \to ME$	The user verifies that the default	
	OOLIK 7 WIL	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:

Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: ME
Destination device: SIM

Result

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

Coding:

BER-TLV: 81 03 01 15 02 82 02 82 81 83 01 04

27.22.4.26.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.1A to 4.2B.

#### 27.22.4.27 OPEN CHANNEL

27.22.4.27.1 Void

27.22.4.27.2 Open Channel (related to GPRS)

27.22.4.27.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.27.2.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 11.14 [15].

#### 27.22.4.27.2.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (OK); or
- TERMINAL RESPONSE (Command performed with modification); or
- TERMINAL RESPONSE (User did not accept the proactive command);
- TERMINAL RESPONSE (ME currently unable to process command);

to the SIM after the ME receives the OPEN CHANNEL proactive command. The TERMINAL RESPONSE sent back to the SIM is the result of the ME and the network capabilities against requested parameters by the SIM.

27.22.4.27.2.4 Method of test

27.22.4.27.2.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator. The elementary files are coded as Toolkit default.

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

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/6.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

#### **GPRS** Parameters

Network access name: TestGp.rs User login: UserLog User password: UserPwd SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Prior to test case execution the apparatus supplier shall have provided the "Preferred buffer size supported by the terminal for Open Channel command" as requested in table A.2/5.

Pre-condition for successful execution of expected sequence 2.1:

If the terminal does not support the execution of an Open Channel (GPRS) command when no Network Access Name TLV is present in the proactive command and when no default Access Point Name is set in the terminal configuration (s.a. table A.1/30), then "TestGp.rs" shall be set and activated as default Access Point Name in the terminal configuration prior to execution of the proactive command in expected sequence 2.1.

#### 27.22.4.27.2.4.2 Procedure

Expected Sequence 2.1 (OPEN CHANNEL, immediate link establishment, GPRS, no local address, no alpha identifier, no network access name)

Step	Direction	MESSAGE / Action	Comments				
1	$USER \to$	Set and activate APN "TestGp.rs" in the	[see initial conditions]				
	ME	terminal configuration if required					
2	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:					
		OPEN CHANNEL 2.1.1					
3	$ME \rightarrow SIM$	FETCH					
4	$SIM \rightarrow ME$	PROACTIVE COMMAND : OPEN					
		CHANNEL 2.1.1					
5	$ME \rightarrow user$	The ME may display channel opening					
		information					
6	$ME \rightarrow SS$	PDP context activation request					
7	$SS \rightarrow ME$	PDP context activation accept					
8	$ME \rightarrow SIM$	TERMINAL RESPONSE : OPEN	[Command performed successfully]				
		CHANNEL 2.1.1 A					
		or					
		TERMINAL RESPONSE : OPEN					
		CHANNEL 2.1.1B					

PROACTIVE COMMAND: OPEN CHANNEL 2.1.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02

Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	36	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	1F	02	39	02	05	78
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 2.1.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	02	04	05	05	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 2.1.1B

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 00
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

# Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	05	05	1F
	02	39	02	05	78							

# Expected Sequence 2.2 (OPEN CHANNEL, immediate link establishment GPRS, no alpha identifier, with network access name)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: OPEN	
		CHANNEL 2.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND : OPEN CHANNEL 2.2.1	
4	$ME \rightarrow user$	The ME may display channel opening information	
5	$ME \rightarrow SS$	PDP context activation request	
6	$SS \rightarrow ME$	PDP context activation accept	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE : OPEN CHANNEL 2.2.1A	[Command performed successfully]
		or	
		TERMINAL RESPONSE : OPEN CHANNEL 2.2.1B	

#### PROACTIVE COMMAND: OPEN CHANNEL 2.2.1

## Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400 Network access name: TestGp.rs

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

#### Coding:

BER-TLV:	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	1F	02	39	02	05	78
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 2.2.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Bearer Description:

Bearer Type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size 1400

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	02	04	05	05	1F
	02	39	02	05	78							

TERMINAL RESPONSE: OPEN CHANNEL 2.2.1B

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer Description:

Bearer Type: GPRS

Bearer parameter:

Precedence Class: 00
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size 1400

## Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	05	05	1F
	02	39	02	05	78						_	

# Expected Sequence 2.3 (OPEN CHANNEL, immediate link establishment, GPRS, with alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: OPEN	
		CHANNEL 2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND : OPEN CHANNEL 2.3.1	
4	$ME \rightarrow user$	Confirmation phase with alpha ID	'Open ID'
5	$user \to ME$	The user confirms	
6	$ME \rightarrow SS$	PDP context activation request	
7	$SS \rightarrow ME$	PDP context activation accept	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE : OPEN CHANNEL 2.1.1A	[Command performed successfully]
		or	
		TERMINAL RESPONSE : OPEN CHANNEL 2.1.1B	

#### PROACTIVE COMMAND: OPEN CHANNEL 2.3.1

# Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME
Alpha Identifier Open ID

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400 Network access name: TestGp.rs

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

BER-TLV:	D0	4B	81	03	01	40	01	82	02	81	82	05
	07	4F	70	65	6E	20	49	44	35	07	02	02
	04	05	05	1F	02	39	02	05	78	47	0A	06
	54	65	73	74	47	70	02	72	73	0D	08	F4
	55	73	65	72	4C	6F	67	0D	08	F4	55	73
	65	72	50	77	64	3C	03	01	AD	9C	3E	05
	21	01	01	01	01							

# Expected Sequence 2.4 (OPEN CHANNEL, immediate link establishment, GPRS, with null alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL	
		2.4.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND : OPEN	
		CHANNEL 2.4.1	
4	$\text{ME} \to \text{user}$	Confirmation phase	[The ME should not give any information]
5	$\text{user} \to \text{ME}$	The user confirms	[Only if the ME asks for user confirmation]
6	$ME \to SS$	PDP context activation request	
7	$SS \to ME$	PDP context activation accept	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE : OPEN	[Command performed successfully]
		CHANNEL 2.1.1A	
		or	
		TERMINAL RESPONSE : OPEN	
		CHANNEL 2.1.1B	

PROACTIVE COMMAND: OPEN CHANNEL 2.4.1

## Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Alpha Identifier Null

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400 Network access name: . TestGp.rs

Other Address

Length: 00

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

BER-TLV:	D0	46	81	03	01	40	01	82	02	81	82	05
	00	35	07	02	02	04	05	05	1F	02	39	02
	05	78	47	0A	06	54	65	73	74	47	70	02
	72	73	3E	00	0D	08	F4	55	73	65	72	4C
	6F	67	0D	08	F4	55	73	65	72	50	77	64
	3C	03	01	AD	9C	3E	05	21	01	01	01	01

# Expected Sequence 2.5 (OPEN CHANNEL, immediate link establishment, GPRS, command performed with modifications (buffer size) )

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL	
		2.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND : OPEN	
		CHANNEL 2.5.1	
4	$ME \rightarrow user$	The ME may display channel	
		opening information	
5	$ME \rightarrow SS$	PDP context activation request	
6	$SS \to ME$	PDP context activation accept	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE : OPEN	[Command performed with modification]
		CHANNEL 2.5.1A	
		or	
		TERMINAL RESPONSE : OPEN	
		CHANNEL 2.5.1B	

#### PROACTIVE COMMAND: OPEN CHANNEL 2.5.1

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 65535 Network access name: TestGp.rs

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

BER-TLV:	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	1F	02	39	02	FF	FF
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	80
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

# TERMINAL RESPONSE: OPEN CHANNEL 2.5.1A

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed with modifications (07)

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: The buffer size TLV shall be attached and contain the value stated in table A.2/5

"Preferred buffer size supported by the terminal for Open Channel command".

#### Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	07
	38	02	81	00	35	07	02	02	04	05	05	1F
	02	Note 1										

Note1: The buffer size TLV shall be attached and contain the value stated in table A.2/5 "Preferred buffer size supported by the terminal for Open Channel command".

## TERMINAL RESPONSE: OPEN CHANNEL 2.5.1B

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed with modifications (07)

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 00
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: The buffer size TLV shall be attached and contain the value stated in table A.2/5

"Preferred buffer size supported by the terminal for Open Channel command".

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	07
	38	02	81	00	35	07	02	00	04	05	05	1F
	02	Note 1										

Note1: The buffer size TLV shall be attached and contain the value stated in table A.2/5 "Preferred buffer size supported by the terminal for Open Channel command".

# **Expected Sequence 2.6 Void**

Expected Sequence 2.7A (OPEN CHANNEL, immediate link establishment, GPRS, open command with alpha identifier, User did not accept the proactive command)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL	
		2.7.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND : OPEN	
		CHANNEL 2.7.1	
4	$ME \rightarrow user$	Confirmation phase with alpha ID	[The ME shall display 'Open ID']
5	$user \to ME$	The user rejects	
6	$ME \rightarrow SS$	No PDP context activation request	
		is sent to the SS	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE : OPEN	[User did not accept the proactive command]
		CHANNEL 2.7.1A	
		or	
		TERMINAL RESPONSE : OPEN	
		CHANNEL 2.7.1B	

Expected Sequence 2.7B (OPEN CHANNEL, immediate link establishment, GPRS, open command with alpha identifier, User did not accept the proactive command)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL	
		2.7.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND : OPEN CHANNEL 2.7.1	
4	$ME \rightarrow SS$	PDP context activation request	
5	$SS \to ME$	PDP context activation accept	
6	$\text{ME} \to \text{user}$	Confirmation phase with alpha ID	[The ME shall display 'Open ID']
7	$user \to ME$	The user rejects	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE : OPEN	[User did not accept the proactive command]
		CHANNEL 2.7.1A	
		or	
		TERMINAL RESPONSE : OPEN	
		CHANNEL 2.7.1B	

PROACTIVE COMMAND: OPEN CHANNEL 2.7.1

Logically:

Command details

Command number:

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME
Alpha Identifier "Open ID"

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Network access name: TestGp.rs

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP Port number: 44444

Data destination address 01.01.01.01

Coding:

BER-TLV	D0	4B	81	03	01	40	01	82	02	81	82	05
	07	4F	70	65	6E	20	49	44	35	07	02	02
	04	05	05	1F	02	39	02	05	78	47	0A	06
	54	65	73	74	47	70	02	72	73	0D	08	F4
	55	73	65	72	4C	6F	67	0D	08	F4	55	73
	65	72	50	77	64	3C	03	01	AD	9C	3E	05
	21	01	01	01	01							

## TERMINAL RESPONSE: OPEN CHANNEL 2.7.1A

# Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: User did not accept the proactive command

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: Because the value depends in this case on the terminal's implementation, it shall be

ignored.

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	22
	35	07	02	02	04	05	05	1F	02	Note 1		

Note1: The buffer size TLV shall be present and because the value depends in this case on the terminal's

implementation, the value shall be ignored.

TERMINAL RESPONSE: OPEN CHANNEL 2.7.1B

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: User did not accept the proactive command

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 00
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: Because the value depends in this case on the terminal's implementation, it shall be

ignored.

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	22
	35	07	02	00	04	05	05	1F	02	Note 1		

Note1: The buffer size TLV shall be present and because the value depends in this case on the terminal's implementation, the value shall be ignored.

# Expected Sequence 2.8 (OPEN CHANNEL, immediate link establishment, GPRS, ME busy on call)

Step	Direction	MESSAGE / Action	Comments
1	User →	Set up a call	
	ME		
2	$ME \rightarrow SS$	SETUP CALL	
3	$SS \rightarrow ME$	CONNECTED	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL	
		2.8.1	
5	$ME \rightarrow SIM$	FETCH	
6	$SIM \rightarrow ME$	PROACTIVE COMMAND : OPEN	
		CHANNEL 2.8.1	
7a	$ME \rightarrow SS$	No PDP context activation request	
		sent to the SS	
7b	$ME \rightarrow SIM$	TERMINAL RESPONSE : OPEN	[ME busy on call]
		CHANNEL 2.8.1A	
		or	
		TERMINAL RESPONSE : OPEN	
		CHANNEL 2.8.1B	

PROACTIVE COMMAND: OPEN CHANNEL 2.8.1

Logically:

Command details

Command number:

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400 Network access name: TestGp.rs

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

Coding:

BER-TLV	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	1F	02	39	02	05	78
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 2.8.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: ME currently unable to process command

Additional info: ME busy on call

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: Because the value depends in this case on the terminal's implementation, it shall be

ignored.

# Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	02	20
	02	35	07	02	02	04	05	05	1F	02	Note 1	

Note1: The buffer size TLV shall be present and because the value depends in this case on the terminal's

implementation, the value shall be ignored.

#### TERMINAL RESPONSE: OPEN CHANNEL 2.8.1B

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: ME currently unable to process command

Additional info: ME busy on call

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 00
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: Because the value depends in this case on the terminal's implementation, it shall be

ignored.

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	02	20
	02	35	07	02	00	04	05	05	1F	02	Note 1	

Note1: The buffer size TLV shall be present and because the value depends in this case on the terminal's implementation, the value shall be ignored.

## 27.22.4.27.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.8.

#### 27.22.4.28 CLOSE CHANNEL

# 27.22.4.28.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.28.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 11.14 [15].

# 27.22.4.28.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (Command Performed Successfully); or
- TERMINAL RESPONSE (Bearer Independent Protocol Error);

to the SIM after the ME receives the CLOSE CHANNEL proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

#### 27.22.4.28.4 Method of Test

#### 27.22.4.28.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator. The elementary files are coded as Toolkit default.

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

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME"s default channel identifier as declared in table A.2/6.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class: 02 Delay Class: 04 Reliability Class: 05 Peak throughput class: 05 Mean throughput class: 31 Packet data protocol: 02 (IP)

## **GPRS** Parameters

Network access name: TestGp.rs

User login: UserLog User password: UserPwd

# SIM/ME interface transport level

Transport format: UDP Port number: 44444

Data destination address 01.01.01.01

## 27.22.4.28.4.2 Procedure

# Expected sequence 1.1 (CLOSE CHANNEL, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		OPEN CHANNEL 1.1.1	
4	$ME \rightarrow$	The ME may display channel	
_	USER	opening information	
5 6		PDP context activation request PDP context activation accept	
7		TERMINAL RESPONSE: OPEN	[Command performed successfully]
,	IVIL -> SIIVI	CHANNEL 1.1.1A	[Command performed successfully]
		or	
		TERMINAL RESPONSE: OPEN	
		CHANNEL 1.1.1B	
8	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: CLOSE CHANNEL	
		1.1.1	
9	$ME \rightarrow SIM$	1	
10		PROACTIVE COMMAND: CLOSE	
		CHANNEL 1.1.1	
11		PDP context deactivation request	
12		PDP context deactivation accept	
13	$ME \rightarrow SIM$	TERMINAL RESPONSE CLOSE CHANNEL 1.1.1	[Command performed successfully]

# PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

# Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02 Delay Class: 04 Reliability Class: 05 Peak throughput class: 05 Mean throughput class: 31 Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000 Network access name: TestGp.rs

Text String: UserLog (User login) Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP 44444 Port number: 01.01.01.01 Data destination address

### Coding:

BER-TLV	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	1F	02	39	02	03	E8
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

#### TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

# Logically:

Command details

Command number:

Command type: **OPEN CHANNEL** 

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

**GPRS** Bearer type:

Bearer parameter:

Precedence Class: 02 Delay Class: Reliability Class: 05 Peak throughput class: 05 Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

## Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
_	38	02	81	00	35	07	02	02	04	05	05	1F
	02	39	02	03	E8							

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 00
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

#### Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	05	05	1F
	02	39	02	03	E8							

## PROACTIVE COMMAND: CLOSE CHANNEL 1.1.1

# Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 1

Coding:

BER-TLV:	D0	09	81	03	01	41	00	82	02	81	21
----------	----	----	----	----	----	----	----	----	----	----	----

# TERMINAL RESPONSE: CLOSE CHANNEL 1.1.1

## Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

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Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00

# Expected sequence 1.2 (CLOSE CHANNEL, with an invalid channel identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	$\begin{array}{c} ME \to \\ USER \end{array}$	The ME may display channel opening information	
5	$ME \to SS$	PDP context activation request	
6	$SS \to ME$	PDP context activation accept	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A	[Command performed successfully]
8	$SIM \rightarrow ME$	or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.2.1	
9	$ME \rightarrow SIM$	FETCH	
10	$SIM \rightarrow ME$	PROACTIVE COMMAND: CLOSE CHANNEL 1.2.1	
11	$ME \rightarrow SIM$	TERMINAL RESPONSE CLOSE CHANNEL 1.2.1	[Invalid channel number]

PROACTIVE COMMAND: CLOSE CHANNEL 1.2.1

Logically:

Command details

Command number:

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 2

Coding:

BER-TLV:	D0	09	81	03	01	41	00	82	02	81	22
----------	----	----	----	----	----	----	----	----	----	----	----

TERMINAL RESPONSE: CLOSE CHANNEL 1.2.1

Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Bearer Independent Protocol error Additional Result: Channel identifier not valid

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	02	3A
	03											

# Expected sequence 1.3 (CLOSE CHANNEL, on an already closed channel)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$		See initial conditions
		OPEN CHANNEL 1.1.1	
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	$\begin{array}{c} ME \to \\ USER \end{array}$	The ME may display channel opening information	
5	$ME \rightarrow SS$	PDP context activation request	
6	$SS \rightarrow ME$	PDP context activation accept	
7	ME → SIM	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	[Command performed successfully]
8	$SIM \to ME$	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.1.1	
9	$ME \rightarrow SIM$		
10	$SIM \rightarrow ME$	PROACTIVE COMMAND: CLOSE CHANNEL 1.1.1	
11	$ME \rightarrow SS$	PDP context deactivation request	
12	$SS \rightarrow ME$	PDP context deactivation accept	
13	$ME \rightarrow SIM$	TERMINAL RESPONSE CLOSE CHANNEL 1.1.1	[Command performed successfully]
14	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.3.1	
15	$ME \rightarrow SIM$	FETCH	
16	$SIM \rightarrow ME$	PROACTIVE COMMAND: CLOSE CHANNEL 1.3.1	
17	ME → SIM	TERMINAL RESPONSE CLOSE CHANNEL 1.3.1A or TERMINAL RESPONSE CLOSE	[Channel closed] [Channel identifier invalid]
		CHANNEL 1.3.1B	[2

PROACTIVE COMMAND: CLOSE CHANNEL 1.3.1

Logically:

Command details

Command number:

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 1

Coding:

BER-TLV:	D0	09	81	03	01	41	00	82	02	81	21

TERMINAL RESPONSE: CLOSE CHANNEL 1.3.1A

Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Bearer Independent Protocol error

Additional Result: Channel closed

## Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	02	3A
	02											

#### TERMINAL RESPONSE: CLOSE CHANNEL 1.3.1B

# Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Bearer Independent Protocol error

Additional Result: Channel identifier invalid

## Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	02	3A
	03											

# 27.22.4.28.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

# 27.22.4.29 RECEIVE DATA

# 27.22.4.29.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.29.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 11.14 [15].

# 27.22.4.29.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (Command Performed Successfully); or
- TERMINAL RESPONSE (ME currently unable to process command); or
- TERMINAL RESPONSE (Bearer Independent Protocol Error);

to the SIM after the ME receives the RECEIVE DATA proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

#### 27.22.4.29.4 Method of test

#### 27.22.4.29.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator. The elementary files are coded as Toolkit default.

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

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME"s default channel identifier as declared in table A.2/6.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

# **GPRS** Parameters

Network access name: TestGp.rs User login: UserLog User password: UserPwd

#### SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

# 27.22.4.29.4.2 Procedure

Expected sequence 1.1 (RECEIVE DATA, already opened channel)

Step	Direction	MESSAGE / Action	Comments
1		PROACTIVE COMMAND: SET UP EVENT LIST	
2		1.1.1 PENDING	
3		PROACTIVE COMMAND: SET UP EVENT LIST	
3	$SIM \rightarrow ME$	1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP EVENT LIST	
5	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
6	$ME \rightarrow SIM$	FETCH	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN CHANNEL	
8	ME → USER	1.1.1 The ME may display channel opening information	
9		PDP context activation request	
10	$SS \rightarrow ME$	PDP context activation accept	
11	ME → SIM	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1 A or	[Command performed successfully]
		TERMINAL RESPONSE: OPEN CHANNEL	
12	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND DATA 1.1.1	
13	···-	FETCH	
14	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA	
15	ME  o SS	(immediate) 1.1.1 Transfer of 8 Bytes of data to the SS through	[To retrieve ME's port number]
16	$ME \rightarrow SIM$	channel 1 TERMINAL RESPONSE: SEND DATA	[Command performed successfully]
17	$SS \rightarrow ME$	(immediate) 1.1.1 Transfer of 1000 Bytes of data to the ME through channel 1 using the ME's port number, which was	
18	$ME \rightarrow SIM$	retrieved in step 15 ENVELOPE: EVENT DOWNLOAD - Data available 1.1.1	(1000 Bytes of data in the ME buffer)
19	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.1	
20	$ME \rightarrow SIM$	FETCH	
21	$SIM \rightarrow ME$	PROACTIVE COMMAND: RECEIVE DATA 1.1.1	[200 Bytes]
22	$ME \rightarrow SIM$	TERMINAL RESPONSE: RECEIVE DATA 1.1.1	
23	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: RECEIVE	
		DATA 1.1.2	
24		FETCH	
25			[200 Bytes]
26		TERMINAL RESPONSE: RECEIVE DATA 1.1.2	
27	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: RECEIVE	
00		DATA 1.1.3	
28		FETCH	[200 B. 455]
29			[200 Bytes]
30	$ME \rightarrow SIM$	TERMINAL RESPONSE: RECEIVE DATA 1.1.3	
31	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: RECEIVE	
32	$ME \rightarrow SIM$	DATA 1.1.4 FETCH	
33		PROACTIVE COMMAND: RECEIVE DATA 1.1.4	[200 Bytes]
	-	TERMINAL RESPONSE: RECEIVE DATA 1.1.4	[200 Bytes]
34 35	$ME \rightarrow SIM$	PROACTIVE COMMAND PENDING: RECEIVE	
33	$SIM \rightarrow ME$	DATA 1.1.5	
36	$ME \rightarrow SIM$		
37			[200 Bytes]
38		TERMINAL RESPONSE: RECEIVE DATA 1.1.5	[
	INIT -> OIIAI		<u> </u>

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

Event list Data available

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	09										

#### TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01		82 02 82	81 83	01 00
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# PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000 Network access name: TestGp.rs

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level Transport format: UDP

Port number: 44444
Data destination address 01.01.01.01

## Coding:

BER-TLV	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	1F	02	39	02	03	E8
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	02	04	05	05	1F
	02	39	02	03	E8							

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 00 Delay Class: 04 Reliability Class: 05 Peak throughput class: 05 Mean throughput class: 31 Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
_	38	02	81	00	35	07	02	00	04	05	05	1F
	02	39	02	03	E8							

# PROACTIVE COMMAND: SEND DATA 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	21	B6
	08	00	01	02	03	04	05	06	07			

## TERMINAL RESPONSE: SEND DATA 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

# ENVELOPE: EVENT DOWNLOAD - Data available 1.1.1

Logically:

Event list

Event: Data available

Device identities

Source device: ME Destination device: SIM

Channel status

Channel status: Channel 1 open, link established

Channel Data Length

Channel data length: FF (more than 255 bytes are available)

Coding:

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	FF								

# PROACTIVE COMMAND: RECEIVE DATA 1.1.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	01	42	00	82	02	81	21	B7
	01	C8										

#### PROACTIVE COMMAND: RECEIVE DATA 1.1.2

Logically:

Command details

Command number: 2

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	02	42	00	82	02	81	21	B7
	01	C8										

# PROACTIVE COMMAND: RECEIVE DATA 1.1.3

Logically:

Command details

Command number: 3

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

# Coding:

BER-TLV:	D0	0C	81	03	03	42	00	82	02	81	21	B7
	01	C8										

#### PROACTIVE COMMAND: RECEIVE DATA 1.1.4

Logically:

Command details

Command number: 4

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

## Coding:

BER-TLV:	D0	0C	81	03	04	42	00	82	02	81	21	B7
	01	C8										

# PROACTIVE COMMAND: RECEIVE DATA 1.1.5

Logically:

Command details

Command number: 5

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

# Coding:

BER-TLV:	D0	0C	81	03	05	42	00	82	02	81	21	B7	
_	01	C8											

## TERMINAL RESPONSE: RECEIVE DATA 1.1.1

Logically:

Command details

Command number:

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully Channel Data : 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

## Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02		C7	B7	01	FF	

#### TERMINAL RESPONSE: RECEIVE DATA 1.1.2

Logically:

Command details

Command number: 2

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)

Channel data length: FF

Coding:

BER-TLV:	81	03	02	42	00	82	02	82	81	83	01	00
	B6	81	C8	C8	C9	CA		FF	00	01	02	
	8F	B7	01	FF								

## TERMINAL RESPONSE: RECEIVE DATA 1.1.3

Logically:

Command details

Command number: 3

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully Channel Data : 90.91 ... FF 00.01 - 57 (200 Bytes of data)

Channel data length: FF

Coding:

BER-TLV:	81	03	03	42	00	82	02	82	81	83	01	00
	B6	81	C8	90	91	92	:	FF	00	01	02	
	57	B7	01	FF								

#### TERMINAL RESPONSE: RECEIVE DATA 1.1.4

Logically:

Command details

Command number: 4

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel Data : 58 59 .. FF 00 01 .. 1F (200 Bytes of data)

Channel data length: C8

Coding:

BER-TLV:	81	03	04	42	00	82	02	82	81	83	01	00
	B6	81	C8	58	59	5A		FF	00	01	02	
	1F	B7	01	C8								

TERMINAL RESPONSE: RECEIVE DATA 1.1.5

Logically:

Command details

Command number: 5

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully Channel Data: 20 21 .. E7 (200 Bytes of data)

Channel data length: 00

Coding:

BER-TLV:	81	03	05	42	00	82	02	82	81	83	01	00
	B6	81	C8	20	21	22		E7	B7	01	00	

#### 27.22.4.29.5 Test requirement

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

## 27.22.4.30 SEND DATA

# 27.22.4.30.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.30.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 11.14 [15].

# 27.22.4.30.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (Command Performed Successfully); or
- TERMINAL RESPONSE (ME currently unable to process command); or
- TERMINAL RESPONSE (Bearer Independent Protocol Error);
- TERMINAL RESPONSE (Proactive SIM session terminated by the user);

to the SIM after the ME receives the SEND DATA proactive command. The TERMINAL RESPONSE sent back to the SIM is the result of the ME and the network capabilities against requested parameters by the SIM.

## 27.22.4.30.4 Method of test

#### 27.22.4.30.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator. The elementary files are coded as Toolkit default.

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

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/6.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

#### **GPRS** Parameters

Network access name: TestGp.rs User login: UserLog User password: UserPwd

## SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

## 27.22.4.30.4.2 Procedure

Expected sequence 1.1 (SEND DATA, immediate mode)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL 1.1.1	See initial conditions
2	$ME \rightarrow SIM$	_	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL 1.1.1	
4	ME  o	The ME may display channel	
	USER	opening information	
5	$ME \to SS$	PDP context activation request	
6		PDP context activation accept	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN	[Command performed successfully]
		CHANNEL 1.1.1A	
		or	
		TERMINAL RESPONSE: OPEN	
		CHANNEL 1.1.1B	
8	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND DATA 1.1.1	
9	$ME \rightarrow SIM$		
10	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	
		DATA (immediate) 1.1.1	
11	$ME \rightarrow SS$	Transfer of 8 Bytes of data to the	
		SS through channel 1	
12	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		DATA (immediate) 1.1.1	

## PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

# Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000 Network access name: TestGp.rs

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

## Coding:

BER-TLV	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	1F	02	39	02	03	E8
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	02	04	05	05	1F
	02	39	02	03	E8							

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number:

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 00 Delay Class: 04 Reliability Class: 05 Peak throughput class: 05 Mean throughput class: 31 Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	05	05	1F
	02	39	02	03	E8							

#### PROACTIVE COMMAND: SEND DATA 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	21	B6
	08	00	01	02	03	04	05	06	07			

## TERMINAL RESPONSE: SEND DATA 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

## **Expected sequence 1.2 (SEND DATA, Store mode)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		OPEN CHANNEL 1.1.1	See initial conditions
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$		
		CHANNEL 1.1.1	
4	$ME \rightarrow$	The ME may display channel opening	
_	USER	information	
5		PDP context activation request	
6	$SS \rightarrow ME$	PDP context activation accept	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN	[Command performed successfully]
		CHANNEL 1.1.1A	
		Or TEDMINAL DESPONSE: ODEN	
		TERMINAL RESPONSE: OPEN ICHANNEL 1.1.1B	
8	$SIM \rightarrow ME$		
· ·	SIIVI → IVIL	SEND DATA 1.2.1	
9	$ME \rightarrow SIM$		
10		PROACTIVE COMMAND: SEND	Send 500 Bytes of data (200 + 200 + 100)
	O 7	DATA (store mode) 1.2.1	
11	$ME \rightarrow SIM$	TERMINAL RESPÓNSE: SEND	[Command performed successfully]
		DATA (store mode) 1.2.1	
12	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		SEND DATA 1.2.2	
13	$ME \rightarrow SIM$		
14	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[200 Bytes]
		DATA (store mode) 1.2.2	
15	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
40		DATA (store mode) 1.2.2	
16	$SIM \rightarrow ME$		
17	ME CIM	SEND DATA 1.2.3	
17 18	$ME \rightarrow SIM$	PROACTIVE COMMAND: SEND	[100 Putos]
10	SIIVI → IVIE	DATA (Immediate mode) 1.2.3	[100 Bytes]
19	$ME \rightarrow SS$	Transfer of 500 Bytes of data to the	
13	IVIL -7 00	SS through channel 1	
20	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
	2 / 5/10/1	DATA (Immediate mode) 1.2.3	

# PROACTIVE COMMAND: SEND DATA 1.2.1

# Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. C7 (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	00	01		C7					

TERMINAL RESPONSE: SEND DATA 1.2.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

#### PROACTIVE COMMAND: SEND DATA 1.2.2

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data : C8 C9 .. FF 00 01 .. 8F (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
'	B6	81	C8	C8	C9		FF	00	01		8F	

# TERMINAL RESPONSE: SEND DATA 1.2.2

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

#### PROACTIVE COMMAND: SEND DATA 1.2.3

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Immediate mode

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: 90 91 .. F3 (100 Bytes of data)

Coding:

BER-TLV:	D0	6F	81	03	01	43	01	82	02	81	21	B6
	64	90	91		F3							

TERMINAL RESPONSE: SEND DATA 1.2.3

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Immediate mode

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
·	B7	01	FF									

Expected sequence 1.3 (SEND DATA, Store mode, Tx buffer fully used)

SIM → ME PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1  ME → SIM → ME PROACTIVE COMMAND: OPEN CHANNEL 1.1.1  ME → SSM PROACTIVE COMMAND: OPEN CHANNEL 1.1.1  ME → SS ME POP context activation accept TERMINAL RESPONSE: OPEN CHANNEL 1.1.1  SIM → ME 1.1.1  SIM → ME PROACTIVE COMMAND PENDING: SEND DATA (store mode) 1.3.1  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2  ME → SIM FETCH  SIM → ME PROACTIVE COMMAND PENDING: SEND DATA (store mode) 1.3.2  ME → SIM FETCH  SIM → ME PROACTIVE COMMAND PENDING: SEND DATA (store mode) 1.3.2  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.5  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.5  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.5  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.5  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.5  ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3	Step	Direction	MESSAGE / Action	Comments
ME → SIM → ME	1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: OPEN	See initial conditions
SIM → ME   PROACTIVE COMMAND: OPEN CHANNEL   1.1				
1.1.1 The ME may display channel opening information PDP context activation accept PDF context activation accept TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B PROACTIVE COMMAND: SEND DATA (store mode) 1.3.1 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2 PROACTIVE COMMAND: SEND DATA (store mode) 1.3.2 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.5 TERMINAL RESPONSE: SEND DAT		,		
USER ME → SS SS → ME PDP context activation request PDP context activation accept TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B SIM → ME PROACTIVE COMMAND PENDING: SEND DATA 1.3.1 ME → SIM PROACTIVE COMMAND: SEND DATA (store mode) 1.3.1 ME → SIM → ME PROACTIVE COMMAND: SEND DATA (store mode) 1.3.2 ME → SIM → ME PROACTIVE COMMAND: SEND DATA (store mode) 1.3.2 ME → SIM SIM → ME PROACTIVE COMMAND: SEND DATA (store mode) 1.3.2 ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2 ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2 ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2 ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2 ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2 ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3 ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3 ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3 ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3 ME → SIM TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.5 TERMI	3	$SIM \rightarrow ME$		
5 ME → SS S → ME PDP context activation request PDP context activation accept PDP context activation accept NE → SIM FETCH SIM → SIM TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B SIM → ME PROACTIVE COMMAND PENDING: SEND DATA 1.3.1 PETCH PROACTIVE COMMAND: SEND DATA (store mode) 1.3.1 SIM → ME PROACTIVE COMMAND PENDING: SEND DATA (store mode) 1.3.1 SIM → ME PROACTIVE COMMAND PENDING: SEND DATA (store mode) 1.3.2 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.5 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.5 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4 TERMINAL RESPONSE: SEND DATA (store mode) 1.3.5 TERMINAL RE	4			
SS → ME	_			
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(immediate) 1.3.5  27 ME → SS Transfer of 1000 Bytes of data to the SS through channel 1  28 ME → SIM TERMINAL RESPONSE: SEND DATA [Command performed successfully]				[200 Bytes]
through channel 1  28 ME → SIM TERMINAL RESPONSE: SEND DATA [Command performed successfully]		JIM 7 IVIL	(immediate) 1.3.5	[[255 27656]
28 ME → SIM TERMINAL RESPONSE: SEND DATA [Command performed successfully]	27	$ME \to SS$		
	00	NAT CINA		[Command performed consent that
	28	IME → SIM	(immediate) 1.3.5	[Command performed successfully]

# PROACTIVE COMMAND: SEND DATA 1.3.1

# Logically:

Command details

Command number: 1

Command type: SEND DATA Command qualifier: Store mode

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	00	01	02		C7				

TERMINAL RESPONSE: SEND DATA 1.3.1

Logically:

Command details

Command number:

Command type:

SEND DATA Command qualifier: Store mode

Device identities

ME Source device: Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

#### PROACTIVE COMMAND: SEND DATA 1.3.2

Logically:

Command details

Command number:

SEND DATA Command type: Command qualifier: Store mode

Device identities

Source device: SIM Destination device: Channel 1

Channel Data

Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	C8	C9	CA		FF	00	02		8F

TERMINAL RESPONSE: SEND DATA 1.3.2

Logically:

Command details

Command number: 1

SEND DATA Command type: Command qualifier: Store mode

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

More than 255 bytes of space available in the Tx buffer Channel data length:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

#### PROACTIVE COMMAND: SEND DATA 1.3.3

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: 90 91 .. FF 00 01 .. 57 (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
_	B6	81	C8	90	91		FF	00	01		57	

#### TERMINAL RESPONSE: SEND DATA 1.3.3

Logically:

Command details

Command number:

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

#### PROACTIVE COMMAND: SEND DATA 1.3.4

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	58	59		FF	00	01		1F	

TERMINAL RESPONSE: SEND DATA 1.3.4

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: 200 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	C8									

#### PROACTIVE COMMAND: SEND DATA 1.3.5

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: 20 21 .. E7 (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	01	82	02	81	21
	B6	81	C8	20	21		E7					

TERMINAL RESPONSE: SEND DATA 1.3.5

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
•	B7	01	FF									

Expected sequence 1.4 (SEND DATA, 2 consecutive SEND DATA Store mode)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: OPEN	See initial conditions
		CHANNEL 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
4	$\begin{array}{c} ME \to \\ USER \end{array}$	The ME may display channel opening information	
5	$ME \rightarrow SS$	PDP context activation request	
6	$SS \to ME$	PDP context activation accept	
7	$ME \to SIM$	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or	[Command performed successfully]
		TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	
8	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND DATA 1.3.1	
9	$ME \to SIM$	FETCH	
10	$SIM \to ME$	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.1	Send 1000 Bytes of data by packets of 200 Bytes
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.1	[Command performed successfully]
12	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND DATA 1.3.2	
13	$ME \rightarrow SIM$	FETCH	
14	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.2	[200 Bytes]
15	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2	[Command performed successfully]
16	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND DATA 1.3.3	
17	/ 0	FETCH	1000 B 1
18	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.3	[200 Bytes]
19	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3	[Command performed successfully]
20	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND DATA 1.3.4	
21		FETCH	
22	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA	[200 Bytes]
23	$ME \rightarrow SIM$	(store mode) 1.3.4 TERMINAL RESPONSE: SEND DATA	[Command performed successfully]
24	$SIM \to ME$	(store mode) 1.3.4 PROACTIVE COMMAND PENDING: SEND DATA 1.3.5	
25	$ME \rightarrow SIM$	FETCH	
26	SIM → ME	PROACTIVE COMMAND: SEND DATA (immediate) 1.3.5	
27	$ME \to SS$	Transfer of 1000 Bytes of data to the SS through channel 1	
28	$ME \to SIM$	TERMINAL RESPONSE: SEND DATA (immediate) 1.3.5	[Command performed successfully]
29	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND DATA 1.3.1	
30	$ME \rightarrow SIM$	FETCH	
31	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.1	Send 1000 Bytes of data by packets of 200 Bytes
32	$ME \to SIM$	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.1	[Command performed successfully]
33	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND DATA 1.3.2	
34	$ME \to SIM$	FETCH	
35	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.2	[200 Bytes]

36	$ME \to SIM$	TERMINAL RESPONSE: SEND DATA	[Command performed successfully]
37	$SIM \rightarrow ME$	(store mode) 1.3.2 PROACTIVE COMMAND PENDING: SEND DATA 1.3.3	
38	$ME \rightarrow SIM$	FETCH	
39	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.3	[200 Bytes]
40	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3	[Command performed successfully]
41	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND DATA 1.3.4	
42	$ME \rightarrow SIM$	FETCH	
43	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.4	[200 Bytes]
44	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4	[Command performed successfully]
45	$SIM \rightarrow ME$	PROACTIVÉ COMMAND PENDING: SEND DATA 1.3.5	
46	$ME \rightarrow SIM$	FETCH	
47	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA (immediate) 1.3.5	
48	$ME \rightarrow SS$	Transfer of 1000 Bytes of data to the SS through channel 1	
49	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA (immediate) 1.3.5	[Command performed successfully]

# Expected sequence 1.5 (SEND DATA, immediate mode with a bad channel identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	See initial conditions
		PENDING: OPEN CHANNEL 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL 1.1.1	
4	ME  o	The ME may display channel	
	USER	opening information	
5	$ME \rightarrow SS$	PDP context activation request	
6	$SS \rightarrow ME$	PDP context activation accept	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN	[Command performed successfully]
		CHANNEL 1.1.1A	
		or	
		TERMINAL RESPONSE: OPEN	
		CHANNEL 1.1.1B	
8	$SIM \rightarrow ME$	PROACTIVE COMMAND	
_		PENDING: SEND DATA 1.5.1	
9	$ME \rightarrow SIM$		
10	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	
		DATA (immediate) 1.5.1	
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Invalid channel number]
		DATA (immediate) 1.5.1	

# PROACTIVE COMMAND: SEND DATA 1.5.1

# Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: SIM
Destination device: Channel 2

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	22	B6
	08	00	01	02	03	04	05	06	07			

TERMINAL RESPONSE: SEND DATA 1.5.1

Logically:

Command details

Command number:

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Bearer Independent Protocol error (3A)

Additional Result: Channel identifier not valid (03)

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	02	3A
	03											

#### **Expected sequence 1.6 Void**

#### 27.22.4.30.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.5.

#### 27.22.4.31 GET CHANNEL STATUS

#### 27.22.4.31.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.31.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 11.14 [15].

#### 27.22.4.31.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (Command Performed Successfully) to the SIM after the ME receives the GET STATUS proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

# 27.22.4.31.4 Method of test

#### 27.22.4.31.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator. The elementary files are coded as Toolkit default.

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

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The

corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME"s default channel identifier as declared in table A.2/6.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

#### **GPRS** Parameters

Network access name: TestGp.rs

User login: UserLog User password: UserPwd

#### SIM/ME interface transport level

Transport format: UDP Port number: 44444

Data destination address 01.01.01.01

#### 27.22.4.31.4.2 Procedure

#### Expected sequence 1.1 (GET STATUS, without any BIP channel opened)

For that test, no channel has been opened.

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET CHANNEL	
		STATUS 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	
		STATUS 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE GET	[Command performed successfully]
		STATUS 1.1.1 A	
		Or	
		TERMINAL RESPONSE: GET	
		STATUS 1.1.1B	
		Or	
		TERMINAL RESPONSE: GET	
		STATUS 1.1.1C	

#### PROACTIVE COMMAND: GET STATUS 1.1.1

#### Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: SIM Destination device: ME

BER-TLV:	D0	09	81	03	01	44	00	82	02	81	82

### TERMINAL RESPONSE: GET STATUS 1.1.1A

Logically:

Command details

Command number:

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00

#### TERMINAL RESPONSE: GET STATUS 1.1.1B

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status

Channel status: No Channel available, link not established or PDP context not activated

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
	B8	02	00	00								

#### TERMINAL RESPONSE: GET STATUS 1.1.1C

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status

Channel 1 status: Channel identifier 1, Link not established or PDP context not activated

Channel 2 status: Channel identifier 2, Link not established or PDP context not activated

.

.

Channel n status: Channel identifier n, Link not established or PDP context not activated

The number of channel status data objects shall be same as the number of channels(n) supported by the ME Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
	Note1											

Note1: The Terminal Response shall contain as many channel status TLVs as channels are supported by the ME. Each channel status TLV coding shall indicate the corresponding channel identifier and shall state "Link not established or PDP context not activated". As an example, if the mobile supports two channels then the corresponding channel status data objects coding would be: 'B8 02 01 00 B8 02 02 00'.

#### Expected sequence 1.2 (GET STATUS, with a BIP channel currently opened)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	See initial conditions
		PENDING: OPEN CHANNEL	
		1.1.1	
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL 1.1.1	
4	$ME \rightarrow SS$	PDP context activation request	
5		PDP context activation accept	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN	[Command performed successfully]
		CHANNEL 1.1.1A	
		or	
		TERMINAL RESPONSE: OPEN	
_		CHANNEL 1.1.1B	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET CHANNEL	
		STATUS 1.2.1	
8	$ME \rightarrow SIM$		
9	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	
40	NAT CINA	STATUS 1.2.1	
10	INIE → SIINI	TERMINAL RESPONSE GET STATUS 1.2.1 A	[Command performed successfully]
		Or	
		TERMINAL RESPONSE: GET	
		STATUS 1.2.1B	
		01/100 1.2.10	

#### PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000 Network access name: TestGp.rs

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

#### Coding:

BER-TLV	D0	42	81	03	01	40	01	82	02	81	82	35
_	07	02	02	04	05	05	1F	02	39	02	03	E8
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

#### Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	02	04	05	05	1F
	02	39	02	03	E8							

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number:

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 00
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
-	38	02	81	00	35	07	02	00	04	05	05	1F
	02	39	02	03	E8							

#### PROACTIVE COMMAND: GET STATUS 1.2.1

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	44	00	82	02	81	82
----------	----	----	----	----	----	----	----	----	----	----	----

TERMINAL RESPONSE: GET STATUS 1.2.1A

Logically:

Command details

Command number:

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status

Channel status: Channel 1 open, link established or PDP context activated

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
•	B8	02	81	00								

TERMINAL RESPONSE: GET STATUS 1.2.1B

#### Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status

Channel 1 status: Channel identifier 1 open, Link established or PDP context activated

Channel 2 status: Channel identifier 2, Link not established or PDP context not activated

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Channel n status: Channel identifier n, Link not established or PDP context not activated

The number of channel status data objects shall be same as the number of channels(n) supported by the ME

# Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
<u> </u>	Note											
	1											

Note1: The Terminal Response shall contain as many channel status TLVs as channels are supported by the ME. The channel status TLV coding of the opened channel shall state "Link established or PDP context activated". Each other channel status TLV coding shall indicate the corresponding channel identifier and shall state "Link is not established or PDP context not activated". As an example, if the mobile supports two channels and channel 1 is opened then the corresponding channel status data objects coding would be: 'B8 02 81 00 B8 02 02 00'.

Expected sequence 1.3 (GET STATUS, after a link dropped)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SET UP	
		EVENT LIST 1.1.1	
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP EVENT LIST	
		1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP EVENT LIST	[Command performed successfully]
	OINA NAT	1.1.1	O imisi-l malisi-m-
5	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
6	$ME \rightarrow SIM$		
7		PROACTIVE COMMAND: OPEN CHANNEL	
'	SIIVI → IVIE	1.1.1	
8	$ME \rightarrow SS$	PDP context activation request	
9		PDP context activation accept	
10		TERMINAL RESPONSE: OPEN CHANNEL	[Command performed successfully]
	, / O	1.1.1A	[[,,,,,,,,
		or	
		TERMINAL RESPONSE: OPEN CHANNEL	
		1.1.1B	
11	$SS \rightarrow ME$	DROP LINK	
12	$ME \rightarrow SIM$	ENVELOPE EVENT DOWNLOAD: CHANNEL	[Link dropped]
40	0114 145	STATUS 1.3.1	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: GET ISTATUS 1.3.1	
14	$ME \rightarrow SIM$		
15		PROACTIVE COMMAND: GET STATUS 1.3.1	
16	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET STATUS 1.3.1A	[Command performed successfully]
	INIE 7 OIN	Or	[command ponomica caccecanally]
		TERMINAL RESPONSE: GET STATUS 1.3.1B	
		Or	
		TERMINAL RESPONSE: GET STATUS 1.3.1C	
		Or	
		TERMINAL RESPONSE: GET STATUS 1.3.1D	
		Or	
		TERMINAL RESPONSE: GET STATUS 1.3.1E	

TERMINAL RESPONSE: GET STATUS 1.3.1A

Same as TERMINAL RESPONSE: GET STATUS 1.1.1A

TERMINAL RESPONSE: GET STATUS 1.3.1B

Same as TERMINAL RESPONSE: GET STATUS 1.1.1B

TERMINAL RESPONSE: GET STATUS 1.3.1C

Same as TERMINAL RESPONSE: GET STATUS 1.1.1C

TERMINAL RESPONSE: GET STATUS 1.3.1D

Logically:

Command details

Command number:

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM Result

General Result: Command performed successfully

Channel status

Channel status: Channel 1, link dropped

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
	B8	02	01	05								

TERMINAL RESPONSE: GET STATUS 1.3.1E

Logically:

Command details

Command number:

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status

Channel 1 status: Channel identifier 1, link dropped

Channel 2 status: Channel identifier 2, Link not established or PDP context not activated

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Channel n status: Channel identifier n, Link not established or PDP context not activated

The number of channel status data objects shall be same as the number of channels(n) supported by the ME

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
	B8	02	01	05	Note1							

Note1:

The Terminal Response shall contain as many channel status TLVs as channels are supported by the ME. Each channel status TLV coding except that one for which the link was dropped by the SS shall indicate the corresponding channel identifier and shall state "Link not established or PDP context not activated". As an example, if the mobile supports two channels then the corresponding channel status data objects coding would be: 'B8 02 01 05 B8 02 02 00'.

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Channel Status

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82
	99	01	0A								

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier:

90'

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

#### ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.3.1

Logically:

Event list

Event list: Channel Status

Device identities

Source device: ME Destination device: SIM

Channel status

Channel status: Channel 1, link dropped

Coding:

BER-TLV:	D6	0B	99	01	0A	82	02	82	81	B8	02	01
	05											

PROACTIVE COMMAND: GET STATUS 1.3.1

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV: D0 09	81 03	01 44 (	00 82	02 81	82
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27.22.4.31.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

# 27.22.5 Data Download to SIM

#### 27.22.5.1 SMS-PP Data Download

#### 27.22.5.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.5.1.2 Conformance requirement

The ME shall support the Proactive SIM: SMS-PP Data Download facility as defined in the following technical specifications:

- TS 11.14 [15] clause 4.3, clause 5, clause 7.1, clause 12.1, clause 12.7 and clause 12.13.

# 27.22.5.1.3 Test purpose

To verify that the ME transparently passes the "data download via SMS Point-to-point" messages to the SIM.

To verify that the ME returns the RP-ACK message back to the system Simulator, if the SIM responds with '90 00' or '91 XX'.

To verify that the ME returns the response data from the SIM back to the system Simulator in the TP-User-Data element of the RP-ACK message, if the SIM responds with '9F XX'.

# 27.22.5.1.4 Method of Test

#### 27.22.5.1.4.1 Initial conditions

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

The elementary files are coded as Toolkit default.

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

27.22.5.1.4.2 Procedure

# **Expected Sequence 1.1 Void**

# Expected Sequence 1.2 (SMS-PP Data Download, General Data Coding, GET RESPONSE, Acknowledgement)

Step	Direction	MESSAGE / Action	Comments
1	$SS \to ME$	SMS-PP Data Download Message 1.2.1	
2	$ME \to USER$	The ME shall not display the message or alert the user of a short message waiting.	
3	$ME \to SIM$	ENVELOPE: SMS-PP DOWNLOAD 1.2.2	
4	$SIM \to ME$	RESPONSE DATA AVAILABLE	[SW1 / SW2 of '9F 0B']
5	$ME \to SIM$	GET RESPONSE	
6	$SIM \to ME$	SMS-PP Data Download SIM Acknowledgement 1.2.4	
7	$ME \rightarrow SS$	SMS-PP Data Download SIM Acknowledgement 1.2.4 in the TP-User-Data element of the RP- ACK message. The values of protocol identifier and data coding scheme in RP-ACK shall be as in the original message.	

# Expected Sequence 1.3 (SMS-PP Data Download, General Data Coding, FETCH, MORE TIME)

Step	Direction	MESSAGE / Action	Comments
1	$SS \rightarrow ME$	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	$ME \rightarrow SIM$	ENVELOPE: SMS-PP DOWNLOAD 1.3.2	[SW1 / SW2 of '91 0B']
4	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: MORE TIME 1.3.4	
5	$ME \to SS$	RP-ACK	
6	$ME \rightarrow SIM$	FETCH	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND: MORE TIME 1.3.4	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: MORE TIME 1.3.5	
9	$SIM \rightarrow ME$	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:

R-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

522

Coding:

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

#### Expected Sequence 1.4 (SMS-PP Data Download, General Data Coding)

Step	Direction	MESSAGE / Action	Comments
1	$SS \to ME$	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	$ME \to SIM$	ENVELOPE: SMS-PP DOWNLOAD 1.4.2	
4	$SIM \to ME$	SW1 / SW2 of '90 00'	
5	$ME \to SS$	RP-ACK	

SMS-PP (Data Download) Message 1.2.1 / 1.3.1 / 1.4.1

Logically:

SMS TPDU

TP-MTI SMS-DELIVER

TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME

TP-OA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "1234"

TP-PID SIM Data download

TP-DCS

Coding Group General Data Coding Compression Text is uncompressed

Message Class Class 2 SIM Specific Message

Alphabet 8 bit data

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

TP-UDL 13

TP-UD "Short Message"

Coding:

Coding	04	04	91	21	43	7F	16	89	10	10	00	00
	00	00	0D	53	68	6F	72	74	20	4D	65	73
	73	61	67	65								

ENVELOPE: SMS-PP DOWNLOAD 1.2.2 / 1.3.2 / 1.4.2,

Logically:

SMS-PP Download

Device identities

Source device: Network

Destination device: SIM

Address

TON International number

NPI "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-DELIVER

TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME

TP-OA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "1234"

TP-PID SIM Data download

**TP-DCS** 

Coding Group General Data Coding
Compression Text is uncompressed

Message Class Class 2 SIM Specific Message

Alphabet 8 bit data

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

TP-UDL 13

TP-UD "Short Message"

#### Coding:

BER-TLV:	D1	2D	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1C	04	04	91	21	43
	7F	16	89	10	10	00	00	00	00	0D	53	68
	6F	72	74	20	4D	65	73	73	61	67	65	

#### **Expected Sequence 1.5 Void**

# Expected Sequence 1.6 (SMS-PP Data Download, with Data Coding / Message Class)

Step	Direction	MESSAGE / Action	Comments
1	$SS \rightarrow ME$	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	$ME \rightarrow SIM$	ENVELOPE: SMS-PP	
		DOWNLOAD 1.6.2	
4	$SIM \rightarrow ME$	SW1 / SW2 of '90 00'	
5	$ME \to SS$	RP-ACK	

# SMS-PP (Data Download) Message 1.6.1

#### Logically:

SMS TPDU

TP-MTI SMS-DELIVER

TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME

TP-OA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "1234"

TP-PID SIM Data download

TP-DCS

Coding Group Data Coding / Message Class

Message Coding 8 bit data

Message Class Class 2 SIM Specific Message

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

TP-UDL 13

TP-UD "Short Message"

Coding:

Coding	04	04	91	21	43	7F	F6	89	10	10	00	00
	00	00	0D	53	68	6F	72	74	20	4D	65	73
	73	61	67	65								

**ENVELOPE: SMS-PP DOWNLOAD 1.6.2** 

Logically:

SMS-PP Download

Device identities

Source device: Network
Destination device: SIM

Address

TON International number

NPI "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-DELIVER

TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME

TP-OA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "1234"

TP-PID SIM Data download

TP-DCS

Coding Group Data Coding / Message Class

Message Coding 8 bit data

Message Class Class 2 SIM Specific Message

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

TP-UDL 13

TP-UD "Short Message"

Coding:

BER-TLV:	D1	2D	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1C	04	04	91	21	43
	7F	F6	89	10	10	00	00	00	00	0D	53	68
	6F	72	74	20	4D	65	73	73	61	67	65	

#### SMS-PP Data Download SIM Acknowledgement 1.2.4

Coding:

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

# 27.22.5.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.2 to 1.6.

# 27.22.5.2 SMS-CB Data Download

# 27.22.5.2.1 Definition and applicability

See clause 3.2.2.

# 27.22.5.2.2 Conformance requirement

The ME shall support the Proactive SIM: SMS-CB Data Download facility as defined in:

- TS 11.14 [15] clause 4.3, clause 5, clause 7.2, clause 12.5 and clause 12.7.

# 27.22.5.2.3 Test purpose

To verify that the ME transparently passes the "data download via SMS Cell Broadcast" messages to the SIM, which contain a message identifier found in EF<sub>CBMID</sub>.

#### 27.22.5.2.4 Method of Test

#### 27.22.5.2.4.1 Initial conditions

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

The elementary files are coded as Toolkit default with the following exeception:

EF LP shall contain an entry indicating "English".

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

#### 27.22.5.2.4.2 Procedure

# Expected Sequence 1.1 (SMS-CB (Data Download), ENVELOPE(SMS-CB DOWNLOAD), ME does not display message)

Step	Direction	MESSAGE / Action	Comments
1	$SS \rightarrow ME$	SMS-CB (DATA DOWNLOAD)	Message identifier '10 01'
		1.1	
2	$ME \rightarrow SIM$	ENVELOPE (SMS-CB	
		DOWNLOAD) 1.1	
3	$SIM \rightarrow ME$	SW1, SW2 '90 00'	

#### SMS-CB (Data Download) Message 1.1

## Logically:

#### Message Content

Serial Number

Geographical scope: Cell wide, normal display mode

Message code: 1
Update number: 1
Message Identifier: "1001"

Data coding Scheme

Message Coding: English, language using the GSM 7 bit default alphabet

Page Parameter

Total number of pages: 1 Page number: 1

Content of message: "Cell Broadcast "...

Coding	C0	11	10	01	01	11	C3	32	9B	0D	12	CA
	DF	61	F2	38	3C	A7	83	40	20	10	08	04
	02	81	40	20	10	08	04	02	81	40	20	10
	08	04	02	81	40	20	10	08	04	02	81	40
	20	10	08	04	02	81	40	20	10	08	04	02
	81	40	20	10	08	04	02	81	40	20	10	80
	04	02	81	40	20	10	08	04	02	81	40	20
	10	08	04	02								

ENVELOPE: SMS-CB DOWNLOAD 1.1

Logically:

Cell Broadcast Download

Device identities

Source device: Network Destination device: SIM

Cell Broadcast page

Serial Number

Geographical scope: Cell wide, normal display mode

Message code: 1 Update number: 1 Message Identifier: "1001" Data coding Scheme

Message Coding: English, language using the GSM 7 bit default alphabet

Page Parameter
Number of pages: 1
Page number: 1

Content of message: "Cell Broadcast " ...

### Coding:

BER-TLV:	D2	5E	82	02	83	81	8C	58	C0	11	10	01
	01	11	C3	32	9B	0D	12	CA	DF	61	F2	38
	3C	A7	83	40	20	10	80	04	02	81	40	20
	10	08	04	02	81	40	20	10	08	04	02	81
	40	20	10	08	04	02	81	40	20	10	08	04
	02	81	40	20	10	08	04	02	81	40	20	10
	08	04	02	81	40	20	10	08	04	02	81	40
	20	10	08	04	02	81	40	20	10	08	04	02

Expected Sequence 1.2 (SMS-CB(DATA DOWNLOAD), ENVELOPE(SMS-CB DATA DOWNLOAD), FETCH, MORE TIME, ME does not display message)

Step	Direction	MESSAGE / Action	Comments
1	$SS \to ME$	SMS-CB (DATA DOWNLOAD)	Message identifier '10 01'
		1.1	
2	$ME \rightarrow SIM$	ENVELOPE (SMS-CB	
		DOWNLOAD) 1.1	
3	$SIM \to ME$	PROACTIVE COMMAND	SW1/SW2 '91 0B'
		PENDING: MORE TIME 1.1	
4	$ME \rightarrow SIM$	FETCH 1.1	
5	$SIM \to ME$	PROACTIVE COMMAND:MORE	
		TIME 1.1	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: MORE	
		TIME 1.1	
7	$SIM \to ME$	SW1/SW2 '90 00'	SIM session ended

PROACTIVE COMMAND: MORE TIME 1.1

Logically:

Command details

Command number:

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	$SS \to ME$	SMS-CB (DATA DOWNLOAD) 1.2	Message identifier '03 E7'
2a	ME → USER	ME may display the message	
2b	$ME \rightarrow SIM$	ME shall not download the CB	
		message to the SIM using	
		ENVELOPE (SMS-CB download)	
3	USER → ME	The user shall use a MMI dependent	[only if message has not been displayed in
		procedure to initiate the display of	step 2a]
		the received CB message	
4	ME → USER	ME displays the message	[only if message has not been displayed in
		· -	step 2a]

#### SMS-CB (Data Download) Message 1.2

Logically:

Message Content

Serial Number

Geographical scope: Cell wide, normal display mode

Message code: 1
Update number: 1
Message Identifier: "03E7"

Data coding Scheme

Message Coding: English, language using the GSM 7 bit default alphabet

Page Parameter

Total number of pages: 1
Page number: 1

Content of message: "Cell Broadcast".

Coding	C0	11	03	E7	01	11	C3	32	9B	0D	12	CA
•	DF	61	F2	38	3C	A7	83	40	20	10	08	04
	02	81	40	20	10	08	04	02	81	40	20	10
	08	04	02	81	40	20	10	08	04	02	81	40
	20	10	08	04	02	81	40	20	10	08	04	02
	81	40	20	10	08	04	02	81	40	20	10	08
	04	02	81	40	20	10	08	04	02	81	40	20
	10	08	04	02								

### 27.22.5.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

# 27.22.6 CALL CONTROL BY SIM

# 27.22.6.1 Procedure for Mobile Originated calls

# 27.22.6.1.1 Definition and applicability

See clause 3.2.2.

# 27.22.6.1.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in:

- TS 11.14 [15] clause 9.1.1.

#### 27.22.6.1.3 Test purpose

To verify that for all call set-up attempts , even those resulting from a SET UP CALL proactive SIM command, the ME shall first pass the call set-up details (dialled digits and associated parameters) to the SIM, using the ENVELOPE (CALL CONTROL).

To verify that if the SIM responds with '90 00', the ME shall set up the call with the dialled digits and other parameters as sent to the SIM.

To verify that if the SIM responds with '9F XX', the ME shall use the GET RESPONSE command to get the response data. The response data from the SIM shall indicate to the ME whether to set up the call as proposed, not set up the call, set up a call using the data supplied by the SIM.

To verify that, in the case where the initial call set-up request results from a proactive SET UP CALL, if the call control result is "not allowed" or "allowed with modifications", the ME shall inform the SIM using TERMINAL RESPONSE "interaction with call control by SIM or MO short message control by SIM, action not allowed".

To verify that it is possible for the SIM to request the ME to set up an emergency call by supplying the number "112" as the response data.

#### 27.22.6.1.4 Method of tests

#### 27.22.6.1.4.1 Initial conditions

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

The GSM parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;

- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

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

The elementary files are coded as SIM Application Toolkit default with the following exception:

The call control service is allocated and activated in the SIM Service Table.

#### 27.22.6.1.4.2 Procedure

#### Expected Sequence 1.1 (CALL CONTROL BY SIM, set up call attempt by user, the SIM responds with '90 00')

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to	
		"+01234567890123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM parameters]
		1.1.1A	
		Or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		1.1.1B	parameters]
3	$SIM \rightarrow ME$	90 00	
4	$ME \to SS$	The ME sets up the call without	[Set up call to "+01234567890123456789"
		modification	

### ENVELOPE CALL CONTROL 1.1.1A

# Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	F1	10	00	01	00	01	Note 4					

#### ENVELOPE CALL CONTROL 1.1.1B

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

# Expected Sequence 1.2 (CALL CONTROL BY SIM, set up call attempt by user, allowed without modification)

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to	
		"+01234567890123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.2.1 A	[Option A shall apply for GSM parameters]
		or ENVELOPE CALL CONTROL 1.2.1B	[Option B shall apply for PCS1900 parameters]
3	$SIM \rightarrow ME$	9F 02	
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \rightarrow ME$	CALL CONTROL RESULT 1.2.1	[Call control result: "Allowed, no modification"]
6	$ME \rightarrow SS$	The ME sets up the call without modification	[Set up call to "+01234567890123456789"]

#### **ENVELOPE CALL CONTROL 1.2.1A**

#### Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

## Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	F1	10	00	01	00	01	Note 4					

#### **ENVELOPE CALL CONTROL 1.2.1B**

# Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

#### CALL CONTROL RESULT 1.2.1

Logically:

Call control result : '00' = Allowed, no modification

Coding:

BER-TLV: 00 00

 $\ \, \textbf{Expected Sequence 1.3A (CALL CONTROL BY SIM , set up call attempt resulting from a set up call proactive command, allowed without modification) } \\$ 

Step	Direction	Message / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET	[This test applies to MEs asking for user
		UP CALL 1.3.1 PENDING	confirmation before sending the
			ENVELOPE CALL CONTROL command]
2	ME→SIM	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP CALL 1.3.1	[Set up call to "+012340123456"]
4	ME  o	ME displays "+012340123456"	
	USER	during user confirmation phase.	
5	$\begin{array}{c} USER \to \\ ME \end{array}$	The user confirms the call set up	[user confirmation]
6	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		1.3.1A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		1.3.1B	parameters]
7	$SIM \rightarrow ME$		
8	$ME \rightarrow SIM$	GET RESPONSE	
9	$SIM \rightarrow ME$	CALL CONTROL RESULT 1.3.1	[Call control result: "Allowed, no modification"]
10	$ME \rightarrow SS$	The ME sets up the call without modification	[Set up call to "+012340123456"]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP CALL 1.3.1	[command performed successfully]

Expected Sequence 1.3 B (CALL CONTROL BY SIM , set up call attempt resulting from a set up call proactive command, allowed without modification)

Step	Direction	Message / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET	[This test applies to MEs asking for user
		UP CALL 1.3.1 PENDING	confirmation after sending the
			ENVELOPE CALL CONTROL command]
2	ME→SIM	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP CALL 1.3.1	[Set up call to "+012340123456"]
4	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		1.3.1A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		1.3.1B	parameters]
5	$SIM \rightarrow ME$		
6	$ME \rightarrow SIM$	GET RESPONSE	
7	$SIM \rightarrow ME$	CALL CONTROL RESULT 1.3.1	[Call control result: "Allowed, no modification"]
8	ME  o	ME displays "+012340123456"	
	USER	during user confirmation phase.	
9	$USER \to$	The user confirms the call set up	[user confirmation]
	ME		-
10	$ME \rightarrow SS$	The ME sets up the call without modification	[Set up call to "+012340123456"]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP CALL 1.3.1	[command performed successfully]

PROACTIVE COMMAND: SET UP CALL 1.3.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: Only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "+012340123456"

Address

TON: International

NPI: "ISDN / telephone numbering plan"

Dialling number string "012340123456"

#### Coding:

BER-TLV:	D0	21	81	03	01	10	00	82	02	81	83
	05	0D	2B	30	31	32	33	34	30	31	32
	33	34	35	36	86	07	91	10	32	04	21
	43	65									

#### **ENVELOPE CALL CONTROL 1.3.1A**

#### Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012340123456"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

# Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	07	00	F1	10
	00	01	00	01	Note 4						

# ENVELOPE CALL CONTROL 1.3.1B

#### Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012340123456"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

#### Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	07	00	11	10
	00	01	00	01	Note 4						

Note 1: Length of BER-TLV is '16' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

#### CALL CONTROL RESULT 1.3.1

Logically:

Call control result : '00' = Allowed, no modification

Coding:

BER-TLV: 00 00

TERMINAL RESPONSE: SET UP CALL 1.3.1

Logically:

Command details

Command number:

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	$User \rightarrow ME$	Set up a call to	
		"+01234567890123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.4.1 A or	[Option A shall apply for GSM parameters]
		ENVELOPE CALL CONTROL 1.4.1B	[Option B shall apply for PCS1900 parameters]
3	$SIM \rightarrow ME$	9F 02	
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \rightarrow ME$	CALL CONTROL RESULT 1.4.1	[Call control result: "not Allowed"]
6	$ME \rightarrow SS$	The ME does not set up the call	

#### ENVELOPE CALL CONTROL 1.4.1A

#### Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "+01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	F1	10	00	01	00	01	Note 4					

#### ENVELOPE CALL CONTROL 1.4.1B

#### Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "+01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

# Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

# CALL CONTROL RESULT 1.4.1

Logically:

Call control result: '01' = not Allowed

Coding:

BER-TLV: 01 00

# Expected Sequence 1.5A (CALL CONTROL BY SIM , set up call attempt resulting from a set up call proactive command, not allowed)

Step	Direction	Message / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP CALL 1.5.1 PENDING	[This test applies to MEs asking for user confirmation before sending the ENVELOPE CALL CONTROL command]
2	ME→SIM	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL 1.5.1	[Set up call to "+012340123456"
4	$ME \rightarrow USER$	ME displays "+012340123456" during user confirmation phase.	
5	$USER \to ME$	The user confirms the call set up	[user confirmation]
6	ME → SIM	ENVELOPE CALL CONTROL 1.5.1A or ENVELOPE CALL CONTROL	[Option A shall apply for GSM parameters] [Option B shall apply for PCS1900
		1.5.1B	parameters]
7	$SIM \rightarrow ME$	9F 02	
8	$ME \rightarrow SIM$	GET RESPONSE	
9	$SIM \rightarrow ME$	CALL CONTROL RESULT 1.5.1	[Call control result: "Not Allowed"]
10	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP CALL 1.5.1	[Permanent Problem - Interaction with Call Control by SIM]
11	$ME \rightarrow SS$	The ME does not set up the call	

# Expected Sequence 1.5 B (CALL CONTROL BY SIM , set up call attempt resulting from a set up call proactive command, not allowed)

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND: SET	[This test applies to MEs asking for user
		UP CALL 1.5.1 PENDING	confirmation after sending the
			ENVELOPE CALL CONTROL command]
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET	[Set up call to "+012340123456"
		UP CALL 1.5.1	
4	$ME \to SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		1.5.1A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		1.5.1B	parameters]
5	$SIM \to ME$	9F 02	
6	$ME \rightarrow SIM$	GET RESPONSE	
7	$SIM \to ME$	CALL CONTROL RESULT 1.5.1	[Call control result: "Not Allowed"]
			[No user confirmation phase because
			Call Control has disallowed the request]
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Permanent Problem - Interaction with
		CALL 1.5.1	Call Control by SIM]
9	$ME \to SS$	The ME does not set up the call	

#### PROACTIVE COMMAND: SET UP CALL 1.5.1

# Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: Only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "+012340123456"

Address

TON: International

NPI: "ISDN / telephone numbering plan"

Dialling number string "012340123456"

# Coding:

BER-TLV:	D0	21	81	03	01	10	00	82	02	81	83
	05	0D	2B	30	31	32	33	34	30	31	32
	33	34	35	36	86	07	91	10	32	04	21
	43	65									

#### **ENVELOPE CALL CONTROL 1.5.1A**

## Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012340123456"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	07	00	F1	10
	00	01	00	01	Note 4						

#### ENVELOPE CALL CONTROL 1.5.1B

#### Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012340123456"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

#### Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	07	00	11	10
	00	01	00	01	Note 4						

Note 1: Length of BER-TLV is '16' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets

#### CALL CONTROL RESULT 1.5.1

Logically:

Call control result: '01' = not Allowed

Coding:

BER-TLV: 01 00

TERMINAL RESPONSE: SET UP CALL 1.5.1

Logically:

Command details

Command number:

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	$User \to ME$	Set up a call to "+01234567890123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.6.1 A or	[Option A shall apply for GSM parameters]
		ENVELOPE CALL CONTROL 1.6.1B	[Option B shall apply for PCS1900 parameters]
3	$SIM \rightarrow ME$	9F 08	
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 1.6.1	[Call control result: "Allowed with modifications", ]
6	$ME \to SS$	The ME sets up the call to "+010203"	

#### **ENVELOPE CALL CONTROL 1.6.1A**

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	F1	10	00	01	00	01	Note 4					

#### **ENVELOPE CALL CONTROL 1.6.1B**

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

# CALL CONTROL RESULT 1.6.1

Logically:

Call control result: '02' = Allowed with modifications

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "010203"

Coding:

BER-TLV:	02	06	86	04	91	10	20	30

Expected Sequence 1.7A (CALL CONTROL BY SIM, set up call attempt resulting from a set up call proactive command, allowed with modifications)

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL 1.7.1 PENDING	[This test applies to MEs asking for user confirmation before sending the ENVELOPE CALL CONTROL command]
2	ME→SIM	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL 1.7.1	[Set up call to "+012340123456"]
4	$ME \to USER$	ME displays "+012340123456" during user confirmation phase.	
5	$USER \to ME$	The user confirms the call set up	[user confirmation]
6	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.7.1A or ENVELOPE CALL CONTROL 1.7.1B	[Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters]
7	$SIM \to ME$	9F 0B	
8	$ME \rightarrow SIM$	GET RESPONSE	
9	$SIM \to ME$	CALL CONTROL RESULT 1.7.1	[Call control result: "Allowed with modifications"]
10	$ME \to SS$	The ME sets up the call to "+0111111111111"	
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP CALL 1.7.1	[command performed successfully]

 $Expected \ Sequence \ 1.7 \ B \ (CALL \ CONTROL \ BY \ SIM, set \ up \ call \ attempt \ resulting \ from \ a \ set \ up \ call \ proactive \ command, \ allowed \ with \ modifications)$ 

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL 1.7.1 PENDING	[This test applies to MEs asking for user confirmation after sending the ENVELOPE CALL CONTROL command]
2	ME→SIM	FETCH	LIVELOI E CALL CONTROL Command
3	SIM → ME	PROACTIVE COMMAND: SET UP CALL 1.7.1	[Set up call to "+012340123456"]
4	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.7.1A or	[Option A shall apply for GSM parameters]
		ENVELOPE CALL CONTROL 1.7.1B	[Option B shall apply for PCS1900 parameters]
5	$SIM \to ME$	9F 0B	
6	$ME \to SIM$	GET RESPONSE	
7	$SIM \rightarrow ME$	CALL CONTROL RESULT 1.7.1	[Call control result: "Allowed with modifications"]
8	$ME \to USER$	ME displays "+012340123456" during user confirmation phase.	
9	$USER \rightarrow ME$	The user confirms the call set up	[user confirmation]
10	$ME \rightarrow SS$	The ME sets up the call to "+0111111111111"	[call is set up to modified address]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP CALL 1.7.1	[command performed successfully]

PROACTIVE COMMAND: SET UP CALL 1.7.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: Only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: '+012340123456"

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012340123456"

Coding:

BER-TLV:	D0	21	81	03	01	10	00	82	02	81	83
	05	0D	2B	30	31	32	33	34	30	31	32
	33	34	35	36	86	07	91	10	32	04	21
	43	65									

#### **ENVELOPE CALL CONTROL 1.7.1A**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012340123456"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	07	00	F1	10
	00	01	00	01	Note 4						

#### **ENVELOPE CALL CONTROL 1.7.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012340123456"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	07	00	11	10
	00	01	00	01	Note 4						

Note 1: Length of BER-TLV is '16' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

#### **CALL CONTROL RESULT 1.7.1**

Logically:

Call control result: '02' = Allowed with modifications

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01111111111"

Coding:

BER-TLV: 02 09 86 07 91 10 11 11 11 11 11												
	BER-TLV:	l 02	09	86	111/	l 01	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	$User \to ME$	Set up a call to	
		"+01234567890123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.8.1A	[Option A shall apply for GSM
			parameters]
		or	
		ENVELOPE CALL CONTROL 1.8.1B	[Option B shall apply for PCS1900
			parameters
3	$SIM \to ME$	9F 07	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \rightarrow ME$	CALL CONTROL RESULT 1.8.1	[Call control result: "Allowed with
			modifications"]
6	$ME \rightarrow SS$	The ME sets up an emergency call;	

#### **ENVELOPE CALL CONTROL 1.8.1A**

### Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

#### Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	F1	10	00	01	00	01	Note 4					

## **ENVELOPE CALL CONTROL 1.8.1B**

#### Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

#### CALL CONTROL RESULT 1.8.1

Logically:

Call control result Allowed, with modification

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Address value "112"

Coding:

BER-TLV:	02	05	86	03	81	11	F2

# Expected Sequence 1.9 (CALL CONTROL BY SIM , set up call attempt by user, allowed with modifications: number in $\mathrm{EF}_{\mathrm{ECC}})$

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to	
		"+01234567890123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		1.9.1A	parameters]
		or	
		ENVELOPE CALL CONTROL 1.9.1B	[Option B shall apply for PCS1900
			parameters]
3	$SIM \to ME$	9F 07	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 1.9.1	[Call control result: "Allowed with
			modifications"]
6	$ME \rightarrow SS$	The ME sets up call with the dialled	
		digits "1020". The ME does not set	
		up an emergency call, but stes up a	
		normal call	

ENVELOPE CALL CONTROL 1.9.1A

#### Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	F1	10	00	01	00	01	Note 4					

#### **ENVELOPE CALL CONTROL 1.9.1B**

### Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

#### CALL CONTROL RESULT 1.9.1

Logically:

Call control result Allowed, with modification

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Address value "1020"

Coding:

BER-TLV: 02 05 86 03 81 01 02

# Expected Sequence 1.10 (CALL CONTROL BY SIM , set up call attempt by user to an emergency call)

Step	Direction	Message / Action	Comments
1	$User \rightarrow ME$	Set up a call to "112"	
2	$ME \rightarrow SIM$	The ME does not send any ENVELOPE CALL CONTROL	
3	$ME \rightarrow SS$	The ME sets up an emergency call	

# Expected Sequence 1.11 (CALL CONTROL BY SIM , set up call through call register, the SIM responds with '90 00')

Pre-condition: the ME has a mean to register the last dialled number(s), and the ME will store dialled numbers allowed by call control in its register.

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.1.1A	[Option A shall apply for GSM parameters]
		or	
		ENVELOPE CALL CONTROL 1.1.1B	[Option B shall apply for PCS1900 parameters]
3	$SIM \rightarrow ME$	90 00	
4	$ME \to SS$	The ME sets up the call without modification	[Set up call to "+01234567890123456789"]
5	$USER \to ME$	End Call.	
6	$USER \to ME$	Recall the last dialled number	
7	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.1.1A	[Option A shall apply for GSM parameters]
		or	
		ENVELOPE CALL CONTROL 1.1.1B	[Option B shall apply for PCS1900 parameters]
8	$SIM \to ME$	90 00	
9	$ME \to SS$	The ME sets up the call without modification	[Set up call to "+01234567890123456789"]
10	$USER \to ME$	End Call.	

# $\ \, Expected \ \, Sequence \ \, 1.12 \ (CALL \ CONTROL \ BY \ SIM \ , set \ up \ call \ through \ call \ register, \ allowed \ without \ modification)$

Pre-condition: the ME has a mean to register the last dialled number(s), and the ME will store dialled numbers allowed by call control in its register.

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$\text{ME} \to \text{SIM}$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		1.2.1A or	parameters]
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900 parameters]
3	$SIM \to ME$	9F 02	parameterej
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 1.2.1	[Call control result: "Allowed, no modification"]
6	$ME \to SS$	The ME sets up the call without modification	[Set up call to "+01234567890123456789"]
7	$User \to ME$	End the call then call the last dialled number	
8	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.2.1A	[Option A shall apply for GSM parameters]
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900 parameters]
9	$SIM \to ME$	9F 02	[Call control result: "Allowed, no modification"]
10	$ME \to SIM$	GET RESPONSE	
11	$SIM \to ME$	CALL CONTROL RESULT 1.2.1	
12	$ME \to SS$	The ME sets up the call without modification	[Set up call to "+01234567890123456789"]

# Expected Sequence 1.13 (CALL CONTROL BY SIM , set up call through call register, not allowed)

Pre-condition: the ME has a mean to register the last dialled number(s), and the ME will store dialled numbers not allowed by call control in its register.

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.4.1A or	[Option A shall apply for GSM parameters]
		ENVELOPE CALL CONTROL 1.4.1B	[Option B shall apply for PCS1900 parameters]
3	$SIM \to ME$	9F 02	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 1.4.1	[Call control result: "not Allowed"]
6	$ME \to SS$	The ME does not set up the call	
7	$User \to ME$	The user calls the last dialled number	
8	$ME \to SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		1.4.1A	parameters]
		or ENVELOPE CALL CONTROL	Option B shall apply for PCS1900
		1.4.1B	parameters
9	$SIM \to ME$	9F 02	j
10	$ME \to SIM$	GET RESPONSE	
11	$SIM \to ME$	CALL CONTROL RESULT 1.4.1	[Call control result: "not Allowed"]
12	$ME \to SS$	The ME does not set up the call	

# Expected Sequence 1.14 (CALL CONTROL BY SIM , set up call through call register, allowed with modifications)

Pre-condition: the ME has a mean to register the last dialled number(s), and the ME will store dialled numbers allowed with modification by call control in its register.

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.6.1A	[Option A shall apply for GSM parameters]
		or ENVELOPE CALL CONTROL 1.6.1B	[Option B shall apply for PCS1900 parameters]
3	$SIM \rightarrow ME$	9F 08	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 1.6.1	[Call control result: "Allowed with modifications"]
6	$ME \to SS$	The ME sets up the call to "+010203"	
7	$User \to ME$	End the call and then set up a call to "+01234567890123456789"	
8	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.6.1A or	[Option A shall apply for GSM parameters]
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900 parameters]
9	$SIM \rightarrow ME$	9F 08	
10	$ME \rightarrow SIM$	GET RESPONSE	
11	$SIM \to ME$	CALL CONTROL RESULT 1.6.1	[Call control result: "Allowed with modifications"]
12	$ME \to SS$	The ME sets up the call to "+010203"	-

# 27.22.6.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.14.

# 27.22.6.2 Procedure for Supplementary (SS) Services

# 27.22.6.2.1 Definition and applicability

See clause 3.2.2.

# 27.22.6.2.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in the following technical specifications:

- TS 11.14 [15] clause 9.1.2.

# 27.22.6.2.3 Test purpose

To verify that the ME first pass the supplementary service control string corresponding to the supplementary service operation to the SIM, using the ENVELOPE (CALL CONTROL) command.

To verify that, if the SIM responds with '90 00', the ME shall send the supplementary service operation with the information as sent to the SIM.

To verify that, if the SIM responds with '9F XX', the ME shall use the GET RESPONSE command to get the response data. The response data from the SIM shall indicate to the ME whether to send the supplementary service operation as proposed, not send the SS operation, or instead send the SS operation using the data supplied by the SIM.

#### 27.22.6.2.4 Method of tests

#### 27.22.6.2.4.1 Initial conditions

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

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

The elementary files are coded as SIM Application Toolkit default with the following exception:

The call control service is allocated and activated in the SIM Service Table.

The GSM parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

#### 27.22.6.2.4.2 Procedure

Expected Sequence 2.1 (CALL CONTROL BY SIM, send SS, the SIM responds with '90 00')

Step	Direction	Message / Action	Comments
1	$User \to ME$	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	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		2.1.1A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		2.1.1B	parameters]
3	$SIM \rightarrow ME$	90 00	
4	$ME \to SS$	REGISTER 2.1A	[The ME sends the supplementary
		or	service operation with the information as
		REGISTER 2.1B	sent to the SIM]
5	$SS \to ME$	RELEASE COMPLETE (SS	
		RETURN RESULT) 2.1	

## ENVELOPE CALL CONTROL 2.1.1A

#### Logically:

Device identities

Source device: ME Destination device: SIM

SS String

TON/NPI: "FF"
Dialling number string "\*21\*\*10#"

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	14	82	02	82	81	89	05	FF	2A	A1	1A
	B0	13	07	00	F1	10	00	01	00	01		

#### **ENVELOPE CALL CONTROL 2.1.1B**

Logically:

Device identities

Source device: ME
Destination device: SIM

SS String

TON/NPI: "FF"
Dialling number string "\*21\*\*10#"

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	14	82	02	82	81	89	05	FF	2A	A1	1A
	B0	13	07	00	11	10	00	01	00	01		

# **REGISTER 2.1A**

Logically (only SS argument):

#### **ACTIVATE SS ARGUMENT**

SS-Code:

- Call Forwarding Unconditional

TeleserviceCode

- All Tele Services

Coding:

Coding 30 06 04 01 21 83 01 00
--------------------------------

## **REGISTER 2.1B**

Logically (only SS argument):

#### **ACTIVATE SS ARGUMENT**

SS-Code:

- Call Forwarding Unconditional

Teleser vice Code

- All Tele Services
- longFTN Supported

# Coding:

Codina	30	08	04	Ω1	21	83	Ω1	00	84	00	
County	50	00	U-T	O I	<u> </u>	00	U I	00	0-	00	

# RELEASE COMPLETE (SS RETURN RESULT) 2.1

Logically (only from operation code):

# ACTIVATE SS RETURN RESULT

Forwarding Info

SS-Code

- Call Forwarding Unconditional

Forward Feature List

ForwardingFeature

TeleserviceCode

- All Tele Services

SS-Status

state ind.: operativeprovision ind.: provisionedregistration ind.: registered

- activation ind.: active

# Coding:

Coding	0C	A0	0D	04	01	21	30	80	30	06	83	01
	00	84	01	07								

# Expected Sequence 2.2 (CALL CONTROL BY SIM , send SS, allowed without modifications)

Step	Direction	Message / Action	Comments
1	$User \to ME$	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	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		2.2.1A	parameters]
		or	ro ::
		ENVELOPE CALL CONTROL 2.2.1B	[Option B shall apply for PCS1900
3	$SIM \rightarrow ME$	9F 02	parameters]
4	• · · · · · · · · · · · · · · · · · · ·	GET RESPONSE	
4	IVIE → SIIVI	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 2.2.1	[Call control result: "Allowed without modifications"]
6	$ME \to SS$	REGISTER 2.1A	The ME sends the supplementary service
		or	operation with the information as sent to
		REGISTER 2.1B	the SIM
7	$SS \to ME$	RELEASE COMPLETE (SS	
		RETURN RESULT) 2.1	

## **ENVELOPE CALL CONTROL 2.2.1A**

Logically:

Device identities

Source device: ME
Destination device: SIM

SS String

TON/NPI: "FF"
Dialling number string "\*21\*\*10#"

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	14	82	02	82	81	89	05	FF	2A	A1	1A
	B0	13	07	00	F1	10	00	01	00	01		

# **ENVELOPE CALL CONTROL 2.2.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

SS String

TON/NPI: "FF"
Dialling number string "\*21\*\*10#"

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	14	82	02	82	81	89	05	FF	2A	A1	1A
	B0	13	07	00	11	10	00	01	00	01		

#### CALL CONTROL RESULT 2.2.1

Logically:

Call control result Allowed, no modifications

Coding:

BER-TLV: 00 00

# Expected Sequence 2.3 (CALL CONTROL BY SIM, send SS, not allowed)

Step	Direction	Message / Action	Comments
1	$User \to ME$	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	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		2.3.1A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		2.3.1B	parameters]
3	$SIM \to ME$	9F 02	
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \rightarrow ME$	CALL CONTROL RESULT 2.3.1	[Call control result: "Not Allowed"]
6	$ME \to SS$	The ME does not send the	
		supplementary service operation	

## **ENVELOPE CALL CONTROL 2.3.1A**

Logically:

Device identities

Source device: ME Destination device: SIM

SS String

TON/NPI: "FF"
Dialling number string "\*21#"

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	12	82	02	82	81	89	03	FF	2A	B1	13
	07	00	F1	10	00	01	00	01				

# **ENVELOPE CALL CONTROL 2.3.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

SS String

TON/NPI: "FF"
Dialling number string "\*21#"

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	12	82	02	82	81	89	03	FF	2A	B1	13	
	07	00	11	10	00	01	00	01					ĺ

# CALL CONTROL RESULT 2.3.1

Logically:

Call control result Not Allowed

Coding:

BER-TLV: 01 00

# Expected Sequence 2.4 (CALL CONTROL BY SIM , send SS, allowed with modifications)

Step	Direction	Message / Action	Comments
1	$User \to ME$	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	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 2.4.1A	[Option A shall apply for GSM parameters]
		or	parameters
		ENVELOPE CALL CONTROL	Option B shall apply for PCS1900
		2.4.1B	parameters]
3	$SIM \rightarrow ME$	9F 07	parametere;
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 2.4.1	[Call control result: "Allowed with
			modifications"]
6	$ME \rightarrow SS$	REGISTER 2.4A	[The ME sends the supplementary
		or	service operation with the information as
		REGISTER 2.4B	sent by the SIM]
7	$SS \rightarrow ME$	RELEASE COMPLETE (SS	
		RETURN RESULT) 2.4	

#### **ENVELOPE CALL CONTROL 2.4.1A**

# Logically:

Device identities

Source device: ME Destination device: SIM

SS String

TON/NPI: "FF"
Dialling number string "\*21#"

Location Information

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	12	82	02	82	81	89	03	FF	2A	B1	13
	07	00	F1	10	00	01	00	01				

## **ENVELOPE CALL CONTROL 2.4.1B**

# Logically:

Device identities

Source device: ME Destination device: SIM

SS String

TON/NPI: "FF"
Dialling number string "\*21#"

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	12	82	02	82	81	89	03	FF	2A	B1	13
	07	00	11	10	00	01	00	01				

#### **CALL CONTROL RESULT 2.4.1**

Logically:

Call control result Allowed, with modifications

SS String

TON/NPI "FF" SS String "\*#21#"

Coding:

Coding 02	06	89	04	FF	BA	12	FB	l
-----------	----	----	----	----	----	----	----	---

#### **REGISTER 2.4A**

Logically (only SS argument):

# INTERROGATE SS ARGUMENT

SS-Code

- Call Forwarding Unconditional

Coding:

## **REGISTER 2.4B**

Logically (only SS argument):

# INTERROGATE SS ARGUMENT

SS-Code

- Call Forwarding Unconditional - longFTN Supported

Coding:

Codina	30	05	04	01	21	84	00

# RELEASE COMPLETE (SS RETURN RESULT) 2.4

Logically (only from operation code):

# INTERROGATE SS RESULT

Call Forwarding Unconditional

SS-Status

- state ind .: operative

provision ind.: provisionedregistration ind.: registeredactivation ind.: not active

Coding:

Coding	80	01	06			

# 27.22.6.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.4.

# 27.22.6.3 Interaction with Fixed Dialling Number (FDN)

# 27.22.6.3.1 Definition and applicability

See clause 3.2.2.

# 27.22.6.3.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in:

- TS 11.14 [15] clause 9.1.4.

#### 27.22.6.3.3 Test purpose

To verify that the ME checks that the number entered through the MMI is on the FDN list.

To verify that, if the MMI input does not pass the FDN check, the call shall not be set up.

To verify that, if the MMI input does pass the FDN check, the ME shall pass the dialled digits and other parameters to the SIM, using the ENVELOPE (CALL CONTROL) command.

To verify that, if the SIM responds with "allowed, no modification", the ME shall set up the call as proposed.

To verify that, if the SIM responds with "not allowed", the ME shall not set up the call.

To verify that, if the SIM responds with "allowed with modifications", the ME shall set up the call in accordance with the response from the SIM. If the modifications involve changing the dialled digits, the ME shall not re-check this modified number against the FDN list.

### 27.22.6.3.4 Method of tests

#### 27.22.6.3.4.1 Initial conditions

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

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

The elementary files are coded as SIM Application Toolkit default with the following exceptions:

The call control service is allocated and activated in the SIM Service Table.

Fixed Dialling Number service is enabled.

The GSM parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;

- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

#### 27.22.6.3.4.2 Procedure

# Expected Sequence 3.1 (CALL CONTROL BY SIM , set up a call not in $\text{EF}_{\text{FDN}}$ )

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user sets up a call to "4321"	
2	$ME \to SIM$	The ME does not send the ENVELOPE (CALL CONTROL)	
		command to the SIM.	
3	$ME \to SS$	The ME does not set up the call.	

#### Expected Sequence 3.2 (CALL CONTROL BY SIM, set up a call in EF<sub>FDN</sub>, the SIM responds with '90 00')

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user sets up a call to "123"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		3.2.1A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		3.2.1B	parameters]
3	$SIM \rightarrow ME$	90 00	
4	$ME \rightarrow SS$	The ME sets up the call without	[Set up call to "123"]
		modification	

#### **ENVELOPE CALL CONTROL 3.2.1A**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "123"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	F3	Note 2
	Note 3	13	07	00	F1	10	00	01	00	01	Note 4	

#### **ENVELOPE CALL CONTROL 3.2.1B**

Logically:

Device identities

Source device: ME

Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "123" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	F3	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

#### Expected Sequence 3.3 (CALL CONTROL BY SIM, set up a call in EF<sub>EDN</sub>, Allowed without modifications)

Step	Direction	Message / Action	Comments
1	$User \rightarrow ME$	The user sets up a call to "9876"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 3.3.1A	[Option A shall apply for GSM parameters]
		or ENVELOPE CALL CONTROL 3.3.1B	[Option B shall apply for PCS1900 parameters]
3	$SIM \rightarrow ME$	9F 02	
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \rightarrow ME$	CALL CONTROL RESULT 3.3.1	[Call control result: "Allowed without modifications"]
6	$ME \rightarrow SS$	The ME sets up the call without modification	[Set up call to "9876"]

## **ENVELOPE CALL CONTROL 3.3.1A**

# Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)

Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note 3	13	07	00	F1	10	00	01	00	01	Note 4	

#### ENVELOPE CALL CONTROL 3.3.1B

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001) Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets

#### **CALL CONTROL RESULT 3.3.1**

Logically:

Coding:

BER-TLV: 00 00

# Expected Sequence 3.4 (CALL CONTROL BY SIM , set up a call in $EF_{FDN}$ , Not Allowed)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user sets up a call to "9876"	
2	$ME \to SIM$	ENVELOPE CALL CONTROL 3.4.1A	[Option A shall apply for GSM parameters]
		or	
			[Option B shall apply for PCS1900
		3.4.1B	parameters]
3	$SIM \rightarrow ME$	9F 02	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 3.4.1	[Call control result: "Not Allowed"]
6	$ME \to SS$	The ME does not set up the call	

#### **ENVELOPE CALL CONTROL 3.4.1A**

#### Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note 3	13	07	00	F1	10	00	01	00	01	Note 4	

## **ENVELOPE CALL CONTROL 3.4.1B**

# Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

#### Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

#### **CALL CONTROL RESULT 3.4.1**

Logically:

Call control result Not Allowed

Coding:

BER-TLV: 01 00

### Expected Sequence 3.5 (CALL CONTROL BY SIM, set up a call in EF<sub>FDN</sub>, Allowed with modifications)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user sets up a call to "9876"	
2	$ME \to SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		3.5.1A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		3.5.1B	parameters]
3	$SIM \rightarrow ME$	9F 07	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 3.5.1	[Call control result: "Allowed with
			modifications"]
6	$ME \to SS$	The ME sets up the call with data sent by the SIM	[Set up call to "3333"]

#### **ENVELOPE CALL CONTROL 3.5.1A**

#### Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

#### Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note3	13	07	00	F1	10	00	01	00	01	Note 4	

#### **ENVELOPE CALL CONTROL 3.5.1B**

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

#### CALL CONTROL RESULT 3.5.1

Logically:

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Address value "3333"

Coding:

BER-TLV:	02	05	86	03	81	33	33

#### 27.22.6.3.5 Test requirement

The ME shall operate in the manner defined in expected sequences 3.1 to 3.5.

# 27.22.6.4 Support of Barred Dialling Number (BDN) service

# 27.22.6.4.1 Definition and applicability

See clause 3.2.2.

## 27.22.6.4.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in:

- TS 11.14 [15] clause 9.1.5.

## 27.22.6.4.3 Test purpose

To verify that, if Barred Dialling Number service is enabled, the ME checks the number entered through the MMI against  $EF_{BDN}$ .

To verify that, if the SIM responds with "not allowed", the ME does not set up the call.

To verify that, if the SIM responds with "allowed, no modification", the ME shall set up the call (or the supplementary service operation) as proposed.

To verify that, if the SIM responds with "allowed with modifications", the ME sets up the call in accordance with the response from the SIM. If the modifications involve changing the dialled number the ME does not re-check this modified number against the FDN list when FDN is enabled.

#### 27.22.6.4.4 Method of tests

#### 27.22.6.4.4.1 Initial conditions

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

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

The elementary files are coded as SIM Application Toolkit default with the following exceptions:

The call control service is allocated and activated in the SIM Service Table.

Barred Dialling Number service is enabled.

Prior to the execution of expected sequence 4.4 the FDN service shall be enabled.

The GSM parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

#### 27.22.6.4.4.2 Procedure

# Expected Sequence 4.1 (CALL CONTROL BY SIM , set up a call in $\text{EF}_{\text{BDN}})$

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user sets up a call to "321"	
2	$ME \to SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		4.1.1A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		4.1.1B	parameters]
3	$SIM \rightarrow ME$	9F 02	
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 4.1.1	[Call control result: "Not Allowed"]
6	$ME \to SS$	The ME does not set up the call	

#### **ENVELOPE CALL CONTROL 4.1.1A**

#### Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "321"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	23	F1	Note 2
•	Note 3	13	07	00	F1	10	00	01	00	01	Note 4	

# **ENVELOPE CALL CONTROL 4.1.1B**

#### Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "321" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	23	F1	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

#### CALL CONTROL RESULT 4.1.1

Logically:

Call control result Not Allowed

Coding:

BER-TLV: 01 00

#### Expected Sequence 4.2 (CALL CONTROL BY SIM, set up a call not in EF<sub>BDN</sub>, Allowed without modifications)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user sets up a call to "1234"	
2	$ME \to SIM$	4.2.1A	[Option A shall apply for GSM parameters]
		or ENVELOPE CALL CONTROL 4.2.1B	[Option B shall apply for PCS1900 parameters]
3	$SIM \rightarrow ME$	9F 02	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \to ME$		[Call control result: "Allowed without modifications"]
6	$ME \to SS$	The ME sets up the call without modification	[Set up call to "1234"]

# ENVELOPE CALL CONTROL 4.2.1A

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "1234" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

#### Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	43	Note 2
	Note 3	13	07	00	F1	10	00	01	00	01	Note 4	

#### **ENVELOPE CALL CONTROL 4.2.1B**

# Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "1234" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

#### Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	43	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

## CALL CONTROL RESULT 4.2.1

Logically:

Call control result Allowed, no modifications

Coding:

BER-TLV: 00 00

# Expected Sequence 4.3 (CALL CONTROL BY SIM , set up a call not in $EF_{BDN}$ , Allowed with modifications)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user sets up a call to "1111"	
2	$ME \to SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		4.3.1A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		4.3.1B	parameters]
3	$SIM \rightarrow ME$	9F 07	
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 4.3.1	[Call control result: "Allowed with
			modifications"]
6	$ME \rightarrow SS$	The ME sets up the call with data	[Set up call to "2222"]
		sent by the SIM	

# **ENVELOPE CALL CONTROL 4.3.1A**

#### Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "1111" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Cubaddaaaa

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	11	11	Note 2
	Note 3	13	07	00	F1	10	00	01	00	01	Note 4	

#### **ENVELOPE CALL CONTROL 4.3.1B**

## Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "1111" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

#### Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	11	11	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

#### CALL CONTROL RESULT 4.3.1

Logically:

Call control result Allowed with modifications

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Address value "2222"

Coding:

BER-TLV:	02	05	86	03	81	22	22

# Expected Sequence 4.4 (CALL CONTROL BY SIM , FDN and BDN enabled, set up a call in $EF_{FDN}$ , Allowed with modifications)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user sets up a call to "123"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 4.4.1A Or	[Option A shall apply for GSM parameters]
		ENVELOPE CALL CONTROL 4.4.1B	[Option B shall apply for PCS1900 parameters]
3	$SIM \to ME$	9F 0A	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 4.4.1	[Call control result: "Allowed with modifications"]
6	$ME \rightarrow SS$	The ME sets up the call with data sent by the SIM	[Set up call to "987654321"the ME does not re-check this modified number against the FDN list]

#### **ENVELOPE CALL CONTROL 4.4.1A**

## Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "123" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	F3	Note 2
•	Note 3	13	07	00	F1	10	00	01	00	01	Note 4	

#### **ENVELOPE CALL CONTROL 4.4.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "123" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	F3	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

## CALL CONTROL RESULT 4.4.1

Logically:

Call control result Allowed with modifications

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Address value "987654321"

Coding:

BER-TLV:	23   F1	45 23	67	89	81	06	86	08	02	BER-TLV:
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# 27.22.6.4.5 Test requirement

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

# 27.22.7 EVENT DOWNLOAD

# 27.22.7.1 MT Call Event

# 27.22.7.1.1 MT Call Event (normal)

#### 27.22.7.1.1.1 Definition and applicability

See clause 3.2.2.

# 27.22.7.1.1.2 Conformance requirement

The ME shall support the EVENT: MT Call event as defined in:

- TS 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.1 and clause 12.25.

#### 27.22.7.1.1.3 Test purpose

To verify that the ME informs the SIM that an Event: MT Call has occurred using the ENVELOPE (EVENT DOWNLOAD - MT Call) command.

#### 27.22.7.1.1.4 Method of test

#### 27.22.7.1.1.4.1 Initial conditions

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

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

#### 27.22.7.1.1.4.2 Procedure

# **Expected Sequence 1.1 (EVENT DOWNLOAD -MT Call event)**

Step	Direction	Message / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP EVENT LIST	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		EVENT LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		EVENT LIST 1.1.1	
5	$SS \to ME$	CALL SET UP without CLI	[MT Call Set Up Without CLI]
6	$ME \rightarrow SIM$	ENVELOPE: EVENT DOWNLOAD	
		- MT Call 1.1.1	
7	$SS \to ME$	CALL DISCONNECT	
8	$SS \to ME$		[MT Call Set Up With CLI]
9	$ME \rightarrow SIM$	ENVELOPE: EVENT DOWNLOAD	
		- MT Call 1.1.2	
10	$SS \rightarrow ME$	CALL DISCONNECT	

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

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:

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	1
----------	----	----	----	----	----	----	----	----	----	----	----	----	---

# **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	1
----------	----	----	----	----	----	----	----	----	----	----	----	----	---

#### **EVENT DOWNLOAD - MT CALL 1.1.2**

Logically:

Event list: MT call event

Device identities

Source device: Network
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7) Ti flag: 0 (bit 8)

Address:

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876"

Coding:

BER-TLV:	D6	0F	19	01	00	82	02	83	81	1C	01	00
	86	03	81	89	67							

# 27.22.7.1.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

# 27.22.7.2 Call Connected Event

# 27.22.7.2.1 Call Connected Event (MT and MO call)

# 27.22.7.2.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.7.2.1.2 Conformance requirement

The ME shall support the EVENT: Call Connected event as defined in:

- TS 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.2 and clause 12.25.

# 27.22.7.2.1.3 Test purpose

To verify that the ME informs the SIM that an Event: Call Connected has occurred using the ENVELOPE (EVENT DOWNLOAD -Call Connected) command.

#### 27.22.7.2.1.4 Method of test

#### 27.22.7.2.1.4.1 Initial conditions

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

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

#### 27.22.7.2.1.4.2 Procedure

## **Expected Sequence 1.1 (EVENT DOWNLOAD -CALL CONNECTED)**

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP EVENT LIST	
		1.1.1	
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	[EVENT: Call Connected active]
		EVENT LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		EVENT LIST 1.1.1	
5	$SS \to ME$	SETUP	[MT Call] Ti = 0
6	$USER \to$	Accept Call Set Up	
	ME		
7	/	CONNECT	
8	$ME \rightarrow SIM$	ENVELOPE: EVENT DOWNLOAD	
		- Call Connected 1.1.1	
9	00 /	DISCONNECT	
10	00-11	Initiate Call to "123"	
	ME		
11	$ME \to SS$		[MO Call] Ti = 0
12	$SS \to ME$	CONNECT	
13	$ME \rightarrow SIM$	ENVELOPE: EVENT DOWNLOAD	
		- Call Connected 1.1.2	
14	$USER \to$	End Call	
	ME		
15	$ME \rightarrow SS$	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

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:

#### EVENT DOWNLOAD - CALL CONNECTED 1.1.2

Logically:

Event list: Call connected

Device identities

Source device: Network
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7) Ti flag: 1 (bit 8)

Coding:

BER-TLV:	D6	0A	19	01	01	82	02	83	81	1C	01	80

## 27.22.7.2.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

## 27.22.7.2.2 Call Connected Event (ME supporting SET UP CALL)

27.22.7.2.2.1 Definition and applicability

See clause 3.2.2.

#### 27.22.7.2.2.2 Conformance requirement

Additionally the ME shall support the SET UP CALL Proactive SIM Command as defined in:

- TS 11.14 [15] clause 11.2.2, clause 6.4.13 and clause 6.6.12.

## 27.22.7.2.2.3 Test purpose

To verify that the ME informs the SIM that an Event: Call Connected has occurred using the ENVELOPE (EVENT DOWNLOAD -Call Connected) command.

27.22.7.2.2.4 Method of test

27.22.7.2.2.4.1 Initial conditions

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

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

#### 27.22.7.2.4.2 Procedure

## Expected Sequence 2.1 (EVENT DOWNLOAD -CALL CONNECTED, ME supporting SET UP CALL)

Step	Direction	Message / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP EVENT LIST	
		2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3		PROACTIVE COMMAND: SET UP EVENT LIST 2.1.1	[EVENT: Call Connected active]
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP EVENT LIST 2.1.1	
5	$SIM \to ME$	PROACTIVE COMMAND PENDING	
6	$ME \rightarrow SIM$	FETCH	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP CALL 2.1.1	[SAT Call]
8	ME	ME displays "+012340123456"	ME BEHAVIOUR: SET UP CALL
	→ USER	during the user confirmation phase.	
9	$\begin{array}{c} USER \to \\ ME \end{array}$	Confirm call set up	
10	$ME \rightarrow SS$	SETUP	Ti=0
11		CONNECT	
12		TERMINAL RESPONSE: SET UP CALL 2.1.1	
13	$ME \rightarrow SIM$	ENVELOPE: CALL CONNECTED 2.1.1	

#### PROACTIVE COMMAND: SET UP EVENT LIST 2.1.1

Logically:

Command details

Command number:

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	l
	01	01											l

## 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	1
-------------	----	----	----	----	----	----	----	----	----	----	----	---

#### PROACTIVE COMMAND: SET UP CALL 2.1.1

#### Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: Only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "+012340123456"

Address

TON: International

NPI: "ISDN / telephone numbering plan"

Dialling number string "012340123456"

Coding:

BER-TLV:	D0	21	81	03	01	10	00	82	02	81	83
	05	0D	2B	30	31	32	33	34	30	31	32
	33	34	35	36	86	07	91	10	32	04	21
	43	65									

## TERMINAL RESPONSE: SET UP CALL 2.1.1

#### Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: Only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

## EVENT DOWNLOAD - CALL CONNECTED 2.1.1

### Logically:

Event list: Call connected

Device identities

Source device: Network
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7)

Ti flag: 1 (bit 8)

Coding:

BER-TLV: D6 0A 19 01 01 82 02 83 81 1C 01 80

27.22.7.2.2.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

27.22.7.3 Call Disconnected Event

27.22.7.3.1 Call Disconnected Event

27.22.7.3.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.3.1.2 Conformance requirement

The ME shall support the EVENT: Call Disconnected event as defined in:

- TS 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.3 and clause 12.25.

27.22.7.3.1.3 Test purpose

To verify that the ME informs the SIM that an Event: Call Disconnected has occurred using the ENVELOPE (EVENT DOWNLOAD -Call Disconnected) command.

27.22.7.3.1.4 Method of test

27.22.7.3.1.4.1 Initial conditions

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

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

## 27.22.7.3.1.4.2 Procedure

## ${\bf Expected \ Sequence \ 1.1 \ (EVENT \ DOWNLOAD \ -CALL \ DISCONNECTED)}$

Step	Direction	Message / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP EVENT LIST	
		1.1.1	
2	$ME \to SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	[EVENT: Call Disconnected active]
		EVENT LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
5	CC ME	EVENT LIST 1.1.1 SETUP	[ incoming call ] Ti=0
6		Accept Call Set Up	[ incoming can ] ri=0
O	ME	Accept Call Set Op	
7		RELEASE	[MT RELEASE]
8		ENVELOPE: CALL	
O		DISCONNECTED 1.1.1	
9	$SS \rightarrow ME$	SETUP	[ incoming call ] Ti=0
10		Accept Call Set Up	
	ME	·	
11		RELEASE COMPLETE	[MT RELEASE COMPLETE]
12	$ME \rightarrow SIM$	ENVELOPE: CALL	
		DISCONNECTED 1.1.1	
13		SETUP	[ incoming call ] Ti=0
14		Accept Call Set Up	
	ME		
15		End Call	
16	ME ME . CC	DISCONNECT	IMO DISCONNECTI
16 17		DISCONNECT ENVELOPE: CALL	[MO DISCONNECT]
17	IVIE -> SIIVI	DISCONNECTED 1.1.2A	
		or	
		ENVELOPE: CALL	
		DISCONNECTED 1.1.2B	
		or	
		ENVELOPE: CALL	
		DISCONNECTED 1.1.2C	
18		SETUP	[ incoming call ] Ti=0
19		Accept Call Set Up	
20	ME SC ME	DISCONNECT	[MT DISCONNECT + CAUSE: normal call
20	$SS \rightarrow ME$	DISCONNECT	clearing ]
21	ME→ SIM	ENVELOPE: CALL	
		DISCONNECTED 1.1.3A	
		or	
		ENVELOPE: CALL	
		DISCONNECTED 1.1.3B	
22	$SS \to ME$	SETUP	Ti=0
23		Accept Call Set Up	
	ME		
24	SS	TX POWER to XX	[RADIO LINK FAILURE]
25	$ME \rightarrow SIM$	ENVELOPE: CALL	
		DISCONNECTED 1.1.4A or 1.1.4B	

## PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

## Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM

Destination device: ME

Event list

Event 1: Call Disconnected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	02										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

#### EVENT DOWNLOAD - CALL DISCONNECTED 1.1.1

Logically:

Event list: Call Disconnected

Device identities

Source device: Network
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7) Ti flag: 0 (bit 8)

Cause:

Coding:

BER-TLV:   D6	0A	19	01	02	82	02	83	81	1C	01	00

#### EVENT DOWNLOAD - CALL DISCONNECTED 1.1.2A

Logically:

Event list: Call Disconnected

Device identities

Source device: ME Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7) Ti flag: 1 (bit 8)

Coding:

BER-TLV:	D6	0A	19	01	02	82	02	82	81	1C	01	80

EVENT DOWNLOAD - CALL DISCONNECTED 1.1.2B

Logically:

Event list: Call Disconnected

Device identities

Source device: ME
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7) Ti flag: 1 (bit 8)

Cause: normal call clearing

#### Coding:

BER-TLV:	D6	0E	19	01	02	82	02	82	81	1C	01	80
	9A	02	60	90								

#### EVENT DOWNLOAD - CALL DISCONNECTED 1.1.2C

Logically:

Event list: Call Disconnected

Device identities

Source device: ME
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7)
Ti flag: 1 (bit 8)

Cause: normal call clearing

Coding:

BER-TLV:	D6	0E	19	01	02	82	02	82	81	1C	01	80
	9A	02	E0	90								

#### EVENT DOWNLOAD - CALL DISCONNECTED 1.1.3A

Logically:

Event list: Call Disconnected

Device identities

Source device: Network
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7)
Ti flag: 0 (bit 8)

Cause: normal call clearing

Coding:

BER-TLV:	D6	0E	19	01	02	82	02	83	81	1C	01	00
	9A	02	60	90								

#### EVENT DOWNLOAD - CALL DISCONNECTED 1.1.3B

Logically:

Event list: Call Disconnected

Device identities

Source device: Network
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7) Ti flag: 0 (bit 8)

Cause: normal call clearing

BER-TLV:	D6	0E	19	01	02	82	02	83	81	1C	01	00
	9A	02	E0	90								

#### EVENT DOWNLOAD - CALL DISCONNECTED 1.1.4A

Logically:

Event list: Call Disconnected

Device identities

Source device: ME Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7)
Ti flag: 1 (bit 8)

Cause: radio link failure

Coding:

BER-TLV:	D6	0C	19	01	02	82	02	82	81	1C	01	80
	9A	00										

#### EVENT DOWNLOAD - CALL DISCONNECTED 1.1.4B

Logically:

Event list: Call Disconnected

Device identities

Source device: ME Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7)
Ti flag: 0 (bit 8)

Cause: radio link failure

Coding:

BER-TLV:	D6	0C	19	01	02	82	02	82	81	1C	01	00
	9A	00										

#### 27.22.7.3.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

## 27.22.7.4 Location Status Event

## 27.22.7.4.1 Location Status Event (normal)

## 27.22.7.4.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.7.4.1.2 Conformance requirement

The ME shall support the EVENT: Location Status event as defined in:

- TS 11.14 [15] clause 11.4 and clause 6.4.16.

#### 27.22.7.4.1.3 Test purpose

To verify that the ME informs the SIM that an Event: MM\_IDLE state has occurred using the ENVELOPE (EVENT DOWNLOAD - Location Status) command.

#### 27.22.7.4.1.4 Method of test

#### 27.22.7.4.1.4.1 Initial conditions

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

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

The GSM parameters of the system simulator are:

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

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

Two cells are defined. Cell 1 has location area code 1 and cell 2 has location area code 2.

MS is in service on Cell 1.

#### 27.22.7.4.1.4.2 Procedure

## **Expected Sequence 1.1(EVENT DOWNLOAD -LOCATION STATUS)**

Step	Direction	Message / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP EVENT LIST	
		1.1.1	
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	
		EVENT LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
5	SS	EVENT LIST 1.1.1	
5	55	Cell 1 is switched off	
6	ME -> SIM	ENVELOPE: EVENT DOWNLOAD	
	IVIL -> OIIVI	- Location Status 1.1.1	
7	SS	Cell 2 is switched on after Location	
		Status 'No service' has been	
		received in step 6	
8	ME	ME performs cell reselection to cell	
		2	
9		Location Updating Request	
10		Location updating accept	
11	$ME \rightarrow SIM$		[Option A shall apply for GSM parameters]
		- Location Status 1.1.2A	
		or	IOntion Dahallannkutan BOO4000
		ENVELOPE: EVENT DOWNLOAD - Location Status 1.1.2B	[Option B shall apply for PCS1900
		- Lucation Status 1.1.20	parameters]
			[Note: The inclusion of the location
			information is optional: (If location status
			indicates normal status)
			,

## PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Location status

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	03										

## TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME Destination device: SIM Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

#### **EVENT DOWNLOAD - LOCATION STATUS 1.1.1**

Logically:

Event list: Location status

Device identities

Source device: ME
Destination device: SIM
Location status: No service

Coding:

BER-TL	<b>/</b> :	D6	0A	19	01	03	82	02	82	81	1B	01	02	]
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#### **EVENT DOWNLOAD - LOCATION STATUS 1.1.2A**

Logically:

Event list: Location status

Device identities

Source device: ME Destination device: SIM

Location status: normal service

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0002) Cell ID Cell Identity Value (0002)

Coding:

BER-TLV:	D6	13	19	01	03	82	02	82	81	1B	01	00
	13	07	00	F1	10	00	02	00	02			

## **EVENT DOWNLOAD - LOCATION STATUS 1.1.2B**

Logically:

Event list: Location status

Device identities

Source device: ME Destination device: SIM

Location status: normal service

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0002)
Cell ID Cell Identity Value (0002)

Coding:

BER-TLV:	D6	13	19	01	03	82	02	82	81	1B	01	00
	13	07	00	11	10	00	02	00	02			

27.22.7.4.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

27.22.7.5 User Activity Event

27.22.7.5.1 User Activity Event (normal)

27.22.7.5.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.5.1.2 Conformance Requirement

The ME shall support the EVENT DOWNLOAD -USER ACTIVITY as defined in:

- TS 11.14 [15] clause 5.2, clause 6.4.16, clause 6.8, clause 6.6.16, clause 6.11, clause 11.5, clause 12.6 and clause 12.25.

27.22.7.5.1.3 Test purpose

To verify that the ME performed correctly the procedure of USER ACTIVITY EVENT.

27.22.7.5.1.4 Method of Test

27.22.7.5.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

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

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

27.22.7.5.1.4.2 Procedure

## **Expected Sequence 1.1 (EVENT DOWNLOAD -USER ACTIVITY)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[set up event list: event User Activity]
		PENDING: SET UP EVENT LIST	·
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET	[set up event list: event User Activity]
		UP EVENT LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET	[command performed successfully]
		UP EVENT LIST 1.1.1	
5		press any key	
6	$ME \rightarrow SIM$	ENVELOPE EVENT	
		DOWNLOAD -USER ACTIVITY	
		1.1.1	
7	$USER \to ME$	press any key	check if no envelope Event Download-User
			activity sending to the SIM (this event is
			reported once)

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

Event list User Activity

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
_	01	04										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

_													
Ī	BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

**EVENT DOWNLOAD -USER ACTIVITY 1.1.1** 

Logically:

Event list User Activity

Device identities

Source device: ME
Destination device: SIM

Coding:

BER-TLV: D6 07 19 01 04 82	02	82	81
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27.22.7.5.1.5 Test requirement

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

27.22.7.6 Idle screen available event

27.22.7.6.1 Idle Screen Available (normal)

27.22.7.6.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.6.1.2 Conformance requirement

The ME shall support the EVENT: IDLE SCREEN AVAILABLE event as defined in:

- TS 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.1 and clause 12.25.

#### 27.22.7.6.1.3 Test purpose

To verify that the ME informs the SIM that an Event: Idle Screen Available has occurred using the ENVELOPE (EVENT DOWNLOAD - IDLE SCREEN AVAILABLE) command.

27.22.7.6.1.4 Method of test

27.22.7.6.1.4.1 Initial conditions

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

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

#### 27.22.7.6.1.4.2 Procedure

## Expected Sequence 1.1 (EVENT DOWNLOAD - IDLE SCREEN AVAILABLE)

Step	Direction	MESSAGE / Action	Comments
1	$USER \to ME$	Select screen other than the ME	
		idle screen	
2	$SIM \rightarrow ME$	PROACTIVE COMMAND	[set up event list: idle screen available]
		PENDING: SET UP EVENT LIST	
		1.1.1	
3	1112 / 01111	FETCH	
4	$SIM \rightarrow ME$		[set up event list: idle screen available]
		EVENT LIST 1.1.1	
5	$ME \rightarrow SIM$		[command performed successfully]
_		EVENT LIST 1.1.1	
6		Select ME idle screen	
7	$ME \rightarrow SIM$	ENVELOPE: IDLE SCREEN	
_		AVAILABLE 1.1.1	
8	$USER \to ME$	Select screen other than the ME	
_		idle screen	
9	$USER \to ME$	Select ME idle screen	
10	$ME \rightarrow SIM$	ENVELOPE: IDLE SCREEN	
		AVAILABLE shall not be sent to	
		the SIM	

#### PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: idle screen available

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	05										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

#### EVENT DOWNLOAD - IDLE SCREEN AVAILABLE 1.1.1

Logically:

Event list Idle screen available

Device identities

Source device: Display Destination device: SIM

Coding:

BER-TLV:	D6	07	19	01	05	82	02	02	81

## 27.22.7.6.1.5 Test requirement

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

## 27.22.7.7 Card reader status event

## 27.22.7.7.1 Card Reader Status (normal)

## 27.22.7.7.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.7.7.1.2 Conformance requirement

The ME shall support the EVENT: Call Card Reader Status event as defined in:

- TS 11.14 [15] clause 4.7, clause 4.9, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.7, clause 12.25, clause 12.33, annex G, annex H, clause 12.25 and clause 12.7.

#### 27.22.7.7.1.3 Test purpose

To verify that the ME informs the SIM that an Event: Card Reader Status has changed using the ENVELOPE (EVENT DOWNLOAD - Card Reader Status) command.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

27.22.7.7.1.4 Method of test

27.22.7.7.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

#### 27.22.7.7.1.4.2 Procedure

# Expected Sequence 1.1 (EVENT DOWNLOAD, Card reader status, Card reader 1, card reader attached, no card inserted)

Step	Direction	Message / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP EVENT LIST	
_		1.1.1	
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[EVENT: Card Reader Status]
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[Successfully]
5	User → ME	Insert a card in Reader	
6	$ME \rightarrow SIM$	ENVELOPE: CARD READER STATUS 1.1.1a	
7 8		or ENVELOPE: CARD READER STATUS 1.1.1b Or ENVELOPE: CARD READER STATUS 1.1.1c Or ENVELOPE: CARD READER STATUS 1.1.1d Remove the card from Reader 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 1.1.2c 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

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82
	99	01	06								

#### TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

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	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	92	02	92	01	۸۸	Ω1	70
DEK-ILV.	סט ו	UA	99	UI	סט ו	02	02	02	01	A0	UI	79

#### ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1b

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: Yes
Card reader ID-1 size: No
Card present in reader: Yes
Card powered: No

BER-TLV:	D6	0A	99	01	06	82	02	82	81	A0	01	59

#### ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1c

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: No
Card reader present: Yes
Card reader ID-1 size: Yes
Card present in reader: Yes
Card powered: No

Coding:

#### ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1d

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: No
Card reader present: Yes
Card reader ID-1 size: No
Card present in reader: Yes
Card powered: No

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 51

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2a

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: Yes
Card reader ID-1 size: Yes
Card present in reader: No
Card powered: No

BER-TLV:	D6	0A	99	01	06	82	02	82	81	A0	01	39
		<i></i>		• .			~-		<b>.</b>		• .	

#### 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-1	LV: [	D6	0A	99	01	06	82	02	82	81	A0	01	19	
-------	-------	----	----	----	----	----	----	----	----	----	----	----	----	--

#### ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2c

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME
Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: No
Card reader present: Yes
Card reader ID-1 size: Yes
Card present in reader: No
Card powered: No

Coding:

[												
BER-TLV:	D6	0A	99	01	06	82	02	82	81	A0	01	31

#### ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2d

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: No
Card reader present: Yes
Card reader ID-1 size: No
Card present in reader: No
Card powered: No

BER-TLV:	D6	0A	99	01	06	82	02	82	81	Α0	01	11

#### 27.22.7.7.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

## 27.22.7.7.2 Card Reader Status(detachable card reader)

27.22.7.7.2.1 Definition and applicability

See clause 3.2.2.

#### 27.22.7.7.2.2 Conformance requirement

The ME shall support the EVENT: Call Card Reader Status event as defined in:

- TS 11.14 [15] clause 4.7, clause 4.9, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.7, clause 12.25, clause 12.33, annex G, annex H, clause 12.25 and clause 12.7.

#### 27.22.7.7.2.3 Test purpose

To verify that the ME informs the SIM that an Event: Card Reader Status has changed using the ENVELOPE (EVENT DOWNLOAD - Card Reader Status) command.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen as an example.

## 27.22.7.7.2.4 Method of test

#### 27.22.7.7.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

#### 27.22.7.7.2.4.2 Procedure

Expected Sequence 2.1 (EVENT DOWNLOAD, Detachable reader, Card reader 1, detachable card reader not attached, no card inserted)

Step	Direction	Message / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP EVENT LIST	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	[SET UP EVENT: Card Reader Status]
		EVENT LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Successfully]
		EVENT LIST 1.1.1	
5		Attach the Card Reader to ME	
6	$ME \rightarrow SIM$	ENVELOPE: CARD READER	
		STATUS 2.1.1a	
		Or	
		ENVELOPE: CARD READER	
		STATUS 2.1.1b	
7		Detach the Card Reader from ME	
8	$ME \rightarrow SIM$	ENVELOPE: CARD READER	
		STATUS 2.1.2a	
		Or	
		ENVELOPE: CARD READER	
		STATUS 2.1.2b	

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.1a

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME
Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: Yes
Card reader ID-1 size: Yes
Card present in reader: No
Card powered: No

Coding:

BER-TLV: D6 OA 99 O1 O6 82 O2 82 81 AO O1 3	1 39	01	A0	81	02	1 02	82	06	01	99	0A	D6	BER-TLV:
---	------	----	----	----	----	------	----	----	----	----	----	----	----------

#### 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

BER-TLV:	D6	0A	99	01	06	82	02	82	81	A0	01	19	

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.2a

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: No
Card reader ID-1 size: Yes
Card present in reader: No
Card powered: No

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 29

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.2b

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: No
Card reader ID-1 size: No
Card present in reader: No
Card powered: No

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 09

27.22.7.7.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 2.1'.

27.22.7.8 Language selection event

27.22.7.8.1 Language selection event (normal)

27.22.7.8.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.7.8.1.2 Conformance requirement

The ME shall support the EVENT: LANGUAGE SELECTION event as defined in:

- TS 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.8 and clause 12.25.

#### 27.22.7.8.1.3 Test purpose

To verify that the ME informs the SIM that an Event: Language selection has occurred using the ENVELOPE (EVENT DOWNLOAD - LANGUAGE SELECTION ) command.

27.22.7.8.1.4 Method of test

27.22.7.8.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

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	$SIM \rightarrow ME$	PROACTIVE COMMAND	[set up event list: language selection]
		PENDING: SET UP EVENT LIST	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	[set up event list: language selection]
		EVENT LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[command performed successfully]
		EVENT LIST 1.1.1	
5	$USER \to ME$	Change the language to German.	
6	$ME \rightarrow SIM$	ENVELOPE: LANGUAGE	
		SELECTION 1.1.1	

#### PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

## Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: language selection

#### Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	07										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

#### Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

#### **EVENT DOWNLOAD - LANGUAGE SELECTION 1.1.1**

Logically:

Event list Language selection

Device identities

Source device: ME Destination device: SIM

Language

Language 'de'→64 65 (German)

#### Coding:

BER-TLV:	D6	0B	19	01	07	82	02	82	81	2D	02	64
	65											

## 27.22.7.8.1.5 Test requirement

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

#### 27.22.7.9 Browser termination event

## 27.22.7.9.1 Browser termination (normal)

#### 27.22.7.9.1.1 Definition and applicability

This test is only applicable to ME's that support the EVENT: browser termination event driven information.

## 27.22.7.9.1.2 Conformance requirement

The ME shall support the EVENT: Browser termination event as defined in:

- TS 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.9, clause 12.25, clause 12.51, annex G and clause 12.7.

## 27.22.7.9.1.3 Test purpose

To verify that the ME informs the SIM of an Event: Browser termination using the ENVELOPE (EVENT DOWNLOAD - Browser Termination) command.

This test applies for MEs which have a browser.

27.22.7.9.1.4 Method of test

27.22.7.9.1.4.1 Initial conditions

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

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

A valid access to a Wap gateway is required. The default browser parameters (IP address, gateway/proxy identity, called number...) of the tested mobile shall be properly filled to access that gateway.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

#### 27.22.7.9.1.4.2 Procedure

## **Expected Sequence 1.1 (EVENT DOWNLOAD - Browser termination)**

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		EVENT LIST 1.1.1 PENDING	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	[EVENT: Browser termination Status]
		EVENT LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Successfully]
		EVENT LIST 1.1.1	
5	User→ME	Launch the browser with URL	
		selected by the user.	
6	$ME { ightarrow} SS$	The ME attempts to launch the	
		session with the default browser	
		parameters and the URL selected	
		by the user.	
7		Stop the session and the browser.	
8	$ME \rightarrow SIM$	ENVELOPE: BROWSER	
		TERMINATION 1.1.1	

#### PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

## Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Browser termination

#### Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82
	99	01	80								

## 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:

#### 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	80	82	02	82	81	B4	01	00

#### 27.22.7.9.1.5 Test requirement

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

#### 27.22.7.10 Data available event

## 27.22.7.10.1 Definition and applicability

See clause 3.2.2.

## 27.22.7.10.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 11.14 [15].

Additionally the ME shall support ENVELOPE (EVENT DOWNLOAD - Data available).

## 27.22.7.10.3 Test purpose

To verify that the ME shall send an ENVELOPE (EVENT DOWNLOAD - Data available) to the SIM after the ME receives a packet of data from the server by the BIP channel previously opened.

#### 27.22.7.10.4 Method of test

#### 27.22.7.10.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure. The SIM must have sent the SET UP EVENT LIST to the ME to supply a set of events (event Data available).

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME"s default channel identifier as declared in table A.2/6.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

#### **GPRS** Parameters

Network access name: TestGp.rs

User login: UserLog User password: UserPwd

#### SIM/ME interface transport level

Transport format: UDP Port number: 44444

Data destination address 01.01.01.01

#### 27.22.7.10.4.2 Procedure

Expected sequence 1.1 (EVENT DOWNLOAD - Data available)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING:	See initial conditions
		OPEN CHANNEL 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: OPEN	[Command performed successfully]
		CHANNEL 1.1.1	
4	$ME \to USER$	The ME may display channel opening	
		information	
5	$ME \rightarrow SS$	PDP context activation request	
6	$SS \rightarrow ME$	PDP context activation accept	
7	$ME \to SIM$	TERMINAL RESPONSE: OPEN	
		CHANNEL 1.1.1A	
		or	
		TERMINAL RESPONSE: OPEN	
		CHANNEL 1.1.1B	
8	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		SEND DATA 1.1.1	
9	$ME \rightarrow SIM$	FETCH	
10	$SIM \to ME$	PROACTIVE COMMAND: SEND DATA	
		(immediate) 1.1.1	
11	$ME \to SS$	Transfer of 8 Bytes of data to the SS	[To retrieve ME's port number]
		through channel 1	
12	$ME \to SIM$	TERMINAL RESPONSE: SEND DATA	[Command performed successfully]
		(immediate) 1.1.1	
13	$SS \to ME$	Data sent through the BIP channel	
		using the ME's port number, which was	
		retrieved in step 11	
14	$ME \rightarrow SIM$	ENVELOPE 1.1.1 (Event-Data	
		Available)	

#### PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

## Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000 Network access name: TestGp.rs

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

BER-TLV	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	1F	02	39	02	03	E8
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	02	04	05	05	1F
	02	39	02	0.3	F8							

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number:

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 00 Delay Class: 04 Reliability Class: 05 Peak throughput class: 05 Mean throughput class: 31 Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	05	05	1F
	02	39	02	03	E8							

#### PROACTIVE COMMAND: SEND DATA 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	21	B6
	08	00	01	02	03	04	05	06	07			

#### TERMINAL RESPONSE: SEND DATA 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	FF									

## ENVELOPE: EVENT DOWNLOAD - Data available 1.1.1

Logically:

Event list

Event: Data available

Device identities

Source device: ME Destination device: SIM

Channel status

Channel status: Channel 1 open, link established

Channel Data Length

Channel data length: 8 Bytes available in Rx buffer

Coding:

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	08								

#### 27.22.7.10.1.5 Test requirement

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

#### 27.22.7.11 Channel Status event

#### 27.22.7.11.1 Definition and applicability

See clause 3.2.2.

## 27.22.7.11.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 11.14 [15].

Additionally the ME shall support ENVELOPE (EVENT DOWNLOAD - Channel Status).

### 27.22.7.11.3 Test purpose

To verify that the ME shall send an ENVELOPE (EVENT DOWNLOAD - Channel Status) to the SIM after the link dropped between the NETWORK and the ME.

#### 27.22.7.11.4 Method of test

## 27.22.7.11.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator. The elementary files are coded as Toolkit default.

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

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/6.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

#### **GPRS** Parameters

Network access name: TestGp.rs

User login: UserLog User password: UserPwd

SIM/ME interface transport level

Transport format: UDP Port number: 44444

Data destination address 01.01.01.01

## 27.22.7.11.4.2 Procedure

## **Expected sequence 1.1 (EVENT DOWNLOAD - Channel Status on a link dropped)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING:	
		SET UP EVENT LIST 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[EVENT: channel status]
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[command performed successfully]
5	$SIM \to ME$	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1	See initial conditions
6	$ME \to SIM$	FETCH	
7	$SIM \to ME$	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1	
8	$ME \rightarrow USER$	The ME may display channel opening information	
9	$ME \to SS$	PDP context activation request	
10	$SS \to ME$	PDP context activation accept	
11	ME  o SIM	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or	[Command performed successfully]
		TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	
12	$SS \to ME$	Link dropped	
13	$ME \rightarrow SIM$	ENVELOPE 1.1.1 (Event-Channel Status)	

#### PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Channel Status

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82
·	99	01	0A								

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

#### PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000 Network access name: TestGp.rs

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

#### Coding:

BER-TLV

D0	42	81	03	01	40	01	82	02	81	82	35
07	02	02	04	05	05	1F	02	39	02	03	E8
47	0A	06	54	65	73	74	47	70	02	72	73
0D	08	F4	55	73	65	72	4C	6F	67	0D	08
F4	55	73	65	72	50	77	64	3C	03	01	AD
9C	3E	05	21	01	01	01	01				

## TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

## Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

#### Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
·	38	02	81	00	35	07	02	02	04	05	05	1F
	02	39	02	03	E8							

#### TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

## Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 00
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 31
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

## Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	00	04	05	05	1F
	02	39	02	03	E8							

ENVELOPE: EVENT DOWNLOAD - Channel Status 1.1.1

Logically:

Event list

Event: Channel Status

Device identities

Source device: ME
Destination device: SIM

Channel status

Channel status: Channel 1, link dropped

Coding:

BER-TLV:	D6	0B	99	01	0A	82	02	82	81	B8	02	01
	05											

#### 27.22.7.11.1.5 Test requirement

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

## 27.22.8 MO SHORT MESSAGE CONTROL BY SIM

## 27.22.8.1 Definition and applicability

See clause 3.2.2.

## 27.22.8.2 Conformance requirement

The ME shall support the MO SEND SHORT MESSAGE CONTROL facility as defined in:

- TS 11.14 [15] clause 9.2.

The ME shall also support the SEND SMS facitily as specified in

- TS 11.14 [15] clause 6.4.10

## 27.22.8.3 Test purpose

To verify that for all SMS sending attempts, even those resulting from a SEND SHORT MESSAGE proactive SIM command, the ME shall first pass the RP\_destination\_address of the service center and the TP\_Destination\_Address to the SIM, using the ENVELOPE (MO Short Message CONTROL).

To verify that if the SIM responds with '90 00', the ME shall send the SMS with the address unchanged.

To verify that if the SIM responds with '93 00', the ME shall not send the SMS and may retry the command.

To verify that if the SIM responds with '9F XX', the ME shall use the GET RESPONSE command to get the response data. The response data from the SIM shall indicate to the ME whether to send the SM as proposed, not send the SM, send the SM using the data supplied by the SIM.

To verify that, in the case where the initial SM request results from a proactive SEND SHORT MESSAGE, if the MO SMS CONTROL result is "not allowed" or "allowed with modifications", the ME shall inform the SIM using TERMINAL RESPONSE "interaction with call control by SIM or MO short message control by SIM, action not allowed".

## 27.22.8.4 Method of tests

## 27.22.8.4.1 Initial conditions

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

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

The MO SMS control service is enabled.

The SMS service center address in the ME shall be set to '+112233445566778' prior to the execution of the tests.

The GSM parameters of the system simulator are:

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

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

#### 27.22.8.4.2 Procedure

#### Expected Sequence 1.1 (MO SM CONTROL BY SIM, with Proactive command, Allowed, no modification')

Step	Direction	Message / Action	Comments
1	SIM -> ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1	
4	ME -> USER	Display "Send SM"	[Alpha Identifier]
5	ME -> SIM	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A Or	[Option A shall apply for GSM parameters]
		ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option B shall apply for PCS1900 parameters]
6	SIM -> ME	9F 02	
7	ME -> SIM	GET RESPONSE	
8	SIM -> ME	MO SMS CONTROL RESULT 1.1.1	[ 'Allowed, no modification']
9	ME -> SS	Send SMS-PP Message 1.1	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.1 without modification]
10	SS -> ME	SMS RP-ACK	
11	ME -> SIM	TERMINAL RESPONSE: SEND SHORT MESSAGE 1.1.1	

#### PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1

#### Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Send SM"

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

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

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00'

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

**TP-DCS** 

Message coding 8-bit data Message class class 0 TP-UDL 12

TP-UD "Test Message"

#### Coding:

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

#### SMS-PP (SEND SHORT MESSAGE) Message 1.1

#### Logically:

#### **SMS RPDU**

RP-Originator Address not used RP-Destination SMSC Address

TON International number

NPI "ISDN / telephone numbering plan"

Address value "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

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

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "01"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data
Message class class 0
TP-UDL 12

TP-UD "Test Message"

#### Coding:

Coding	00	09	91	11	22	33	44	55	66	77	F8	18
	01	01	09	91	10	32	54	76	F8	40	F4	OC
	54	65	73	74	20	4D	65	73	73	61	67	65

#### ENVELOPE MO SHORT MESSAGE CONTROL 1.1.1A

Logically:

Device identities

Source device: ME
Destination device: SIM

**RP** Destination Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string '112233445566778'

TP Destination Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string '012345678'

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D5	20	02	02	82	81	06	09	91	11	22
	33	44	55	66	77	F8	06	06	91	10	32
	54	76	F8	13	07	00	F1	10	00	01	00
	01										

#### ENVELOPE MO SHORT MESSAGE CONTROL 1.1.1B

Logically:

Device identities

Source device: ME Destination device: SIM

**RP** Destination Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string '112233445566778'

TP Destination Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string '012345678'

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D5	20	02	02	82	81	06	09	91	11	22
	33	44	55	66	77	F8	06	06	91	10	32
	54	76	F8	13	07	00	11	10	00	01	00
	01										_

#### MO SHORT MESSAGE CONTROL RESULT 1.1.1

Logically:

MO Short Message control result : '00' = Allowed, no modification

Coding:

BER-TLV: 00 00

TERMINAL RESPONSE: SEND SHORT MESSAGE 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

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

Expected Sequence 1.2 (MO SM CONTROL BY SIM, with user SMS, Allowed, no modification')

Step	Direction	Message / Action	Comments
1	USER -> ME	The user makes a SMS with the user data 'Test Message' and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as defined in SMS-PP (SEND SHORT MESSAGE) Message 1.2.
2	ME -> SIM	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters]
3	SIM -> ME	9F 02	-
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	MO SHORT MESSAGE CONTROL RESULT 1.1.1	[ 'Allowed, no modification']
6	ME -> SS	Send SMS-PP Message 1.2	[The ME sends the SM containing SMS- PP (SEND SHORT MESSAGE) Message 1.2 without modification]
7	SS -> ME	SMS RP-ACK	

SMS-PP (SEND SHORT MESSAGE) Message 1.2

Logically:

SMS RPDU

RP-Originator Address not used RP-Destination SMSC Address

TON International number

NPI "ISDN / telephone numbering plan"

Address value "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD value shall not be verified TP-VPF value shall not be verified TP-RP value shall not be verified TP-UDHI value shall not be verified

TP-SRR value shall not be verified

TP-MR "01"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

Coding:

Coding	00	09	91	11	22	33	44	55	66	77	F8	Note 1
	Note 2	01	09	91	10	32	54	76	F8	Note 3		
			,	,							,	

Note 1: Octet shall not be verified.

Note 2: Only the TP-MTI bits shall be verified.

Note 3: The remaining octets shall not be verified.

#### Expected Sequence 1.3 (MO SM CONTROL BY SIM , with Proactive command, Not allowed')

Step	Direction	Message / Action	Comments
1	SIM -> ME	PROACTIVE COMMAND PENDING: SEND SHORT	
		MESSAGE 1.1.1	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1	
4	ME -> USER	Display "Send SM"	[The display of the Alpha Identifier shall not be verified]
5	ME -> SIM	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A	[Option A shall apply for GSM
		or	parameters]
		ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1B	
			[Option B shall apply for
			PCS1900 parameters]
6	SIM -> ME	9F 02	
7	ME -> SIM	GET RESPONSE	
8	SIM -> ME	MO SHORT MESSAGE CONTROL RESULT 1.3.1	[ 'not Allowed']
9	ME -> SIM	TERMINAL RESPONSE: SEND SHORT MESSAGE 1.3.1	[ Permanent Problem - Interaction
			with Call Control or MO short
			message control by SIM ]
10	ME→ SS	The ME does not send the Short Message	

MO SHORT MESSAGE CONTROL RESULT 1.3.1

Logically:

MO Short Message control result : '01' = Not Allowed

Coding:

BER-TLV: 01 00

TERMINAL RESPONSE: SEND SHORT MESSAGE 1.3.1

Logically:

Command details

Command number: 01

Command Type: SEND SHORT MESSAGE Command qualifier: packing not required

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Interaction with call control or MO-SM by SIM permanent

problem

Additional information: Action not allowed

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	02	39
· <u> </u>	01											

#### Expected Sequence 1.4 (MO SM CONTROL BY SIM , with user SMS, Not allowed')

Step	Direction	Message / Action	Comments
1	USER -> ME	The user makes a SMS with the user data 'Test Message' and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as defined in SMS-PP (SEND SHORT MESSAGE) Message 1.2.
2	ME -> SIM	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters]
3	SIM -> ME	9F 02	-
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	MO SM CONTROL RESULT 1.3.1	[ 'Not allowed']
6	ME → SS	The ME does not send the Short Message	

#### Expected Sequence 1.5 (MO SM CONTROL BY SIM, with Proactive command, Allowed with modifications')

Step	Direction	Message / Action	Comments
1	SIM -> ME	PROACTIVE COMMAND PENDING: SEND SHORT	
		MESSAGE 1.1.1	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SEND SHORT MESSAGE	Send SMS to '+012345678'
		1.1.1	
4	ME -> USER	Display "Send SM"	[Alpha Identifier]
5	ME -> SIM	ENVELOPE: MO SHORT MESSAGE CONTROL	[Option A shall apply for GSM parameters]
		1.1.1A	
		or	
		ENVELOPE: MO SHORT MESSAGE CONTROL	[Option B shall apply for PCS1900
	0114	1.1.1B	parameters]
6	SIM -> ME	9F 15	
7	ME -> SIM	GET RESPONSE	
	0114		
8	SIM -> ME	MO SM CONTROL RESULT 1.5.1	['Allowed with modifications']
9	ME -> SS	Send SMS-PP Message 1.5	[The ME sends the SM containing SMS-
			PP (SEND SHORT MESSAGE) Message
			1.5 with the data provided by the SIM to
			the changed Service Center Address
			'+112233445566779' ]
10	SS -> ME	SMS RP-ACK	
11	ME -> SIM	TERMINAL RESPONSE: SEND SHORT MESSAGE	
		1.5.1	

#### MO SHORT MESSAGE CONTROL RESULT 1.5.1

Logically:

MO Short Message control result : '02' = Allowed with modifications

RP Destination\_Address of the Service Center TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string: '112233445566779'

**TP Destination Address** 

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string: '012345679'

Coding:

BER-TLV:	02	13	86	09	91	11	22	33	44	55	66
	77	F9	86	06	91	10	32	54	76	F9	

#### SMS-PP (SEND SHORT MESSAGE) Message 1.5

Logically:

**SMS RPDU** 

RP-Originator Address not used RP-Destination SMSC Address

TON International number

NPI "ISDN / telephone numbering plan"

Address value "112233445566779"

**SMS TPDU** 

TP-MTI SMS-SUBMIT

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

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "01"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345679"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data
Message class class 0
TP-UDL 12

TP-UD "Test Message"

Coding:

Coding:	00	09	91	11	22	33	44	55	66	77	F9	18
	01	01	09	91	10	32	54	76	F9	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

#### TERMINAL RESPONSE: SEND SHORT MESSAGE 1.5.1

Logically:

Command details

Command number: 01

Command Type: SEND SHORT MESSAGE Command qualifier: packing not required

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

#### Expected Sequence 1.6 (MO SM CONTROL BY SIM, with user SMS, Allowed with modifications')

Step	Direction	Message / Action	Comments
1	USER -> ME	The user makes a SMS with the user data 'Test Message' and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as defined in SMS-PP (SEND SHORT MESSAGE) Message 1.2.
2	ME -> SIM	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters]
3	SIM -> ME	9F XX	,
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	MO SM CONTROL RESULT 1.5.1	[ 'Allowed with modifications']
6	ME-> SS	Send SMS-PP Message 1.6	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.6 with the data provided by the SIM] to the changed Service Center Address '+112233445566779'
7	SS -> ME	SMS RP-ACK	

#### SMS-PP (SEND SHORT MESSAGE) Message 1.6

#### Logically:

SMS RPDU

RP-Originator Address not used RP-Destination SMSC Address

TON International number

NPI "ISDN / telephone numbering plan"

Address value "112233445566779"

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD value shall not be verified TP-VPF value shall not be verified TP-RP value shall not be verified TP-UDHI value shall not be verified TP-SRR value shall not be verified

TP-MR "01"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345679"

#### Coding:

Coding	00	09	91	11	22	33	44	55	66	77	F9	Note 1
	Note 2	01	09	91	10	32	54	76	F9	Note 3		

Note 1: Octet shall not be verified

Note 2: Only the TP-MTI bits shall be verified

Note 3: The remaining octets shall not be verified

## Expected Sequence 1.7 (MO SM CONTROL BY SIM , with Proactive command, the SIM responds with '90 00', Allowed, no modification) $\frac{1}{2}$

Step	Direction	Message / Action	Comments
1	SIM -> ME	PROACTIVE COMMAND PENDING: SEND	
		SHORT MESSAGE 1.1.1	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1	Send SMS to '+012345678'
4	ME -> USER	Display "Send SM"	[Alpha Identifier]
5	ME -> SIM	ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1A or	[Option A shall apply for GSM parameters]
		ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1B	[Option B shall apply for PCS1900 parameters]
6	SIM -> ME	90 00	
7	ME ->SS	Send SMS-PP	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.1 without modification]
8	SS -> ME	SMS RP-ACK	
9	ME -> SIM	TERMINAL RESPONSE: SEND SHORT MESSAGE 1.1.1	

## Expected Sequence 1.8 (MO SM CONTROL BY SIM , Send Short Message attempt by user, the SIM responds with '90 00', Allowed, no modification)

Step	Direction	Message / Action	Comments
1	$User \to ME$		[The data entered and the ME settings
		Message' and sends it to +012345678.	shall lead to the same SMS-TPDU as
			defined in SMS-PP (SEND SHORT
			MESSAGE) Message 1.2.
2	$ME \to SIM$		[Option A shall apply for GSM parameters]
		1.1.1 A	
		or	
		ENVELOPE : MO SHORT MESSAGE CONTROL	[Option B shall apply for PCS1900
		1.1.1B	parameters]
3	$SIM \to ME$	90 00	
4	$ME \to SS$	Send SMS-PP	[The ME sends the SM containing SMS-
			PP (SEND SHORT MESSAGE) Message
			1.2 without modification]
5	SS -> ME	SMS RP-ACK	

#### **Expected Sequence 1.9 Void**

### 27.22.8.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.9.

Annex A: Void

Annex B: Void

Annex C: Void

### Annex D (normative): Details of Test-SIM (TestSIM)

The TestSIM shall be able to present the following data:

#### ANSWER TO RESET

#### Logically:

TS (Initial character): '3B'

T0 (Format character): '86' (Following interface characters: TD(1), number of historical characters: 6)

TD1: '00' (Following interface characters: none, Transfer protocol: T=0)

T1: T2: 99 T3: 00 T4: 12 T5: C1 00 T6:

#### Coding:

BER-TLV:	3B	86	00	91	99	00	12	C1	00

- 1. For a successful outcome of the command "Select MasterFile" the TestSIM shall send SW1/SW2 "9F 1B".
- 2. For a successful outcome of the command "Get Response with Length 1B" on the MasterFile the TestSIM shall respond:

RFU: '00 00' Not allocated memory: '653 bytes' File ID: Master File MF

Type of file:

RFU: 00 00 22 FF 01' Length of following data: 14 bytes'

File characteristics:

Not allowed Clock Stop: Min. frequence for GSM algorithm: 13/8 MHz

3V Technology SIM Technology identification:

disabled CHV1: DFs in current directory:

EFs in current directory: 8 Number of CHV and admin. Codes: 3 00 RFU byte 18:

CHV1 status:

3 False representations remaining: RFU-bits 7-5: 000 Secret code: Initialized

Unlock CHV1 status:

False representations remaining: 10 RFU-bits 7-5: 000 Secret code: Initialized

CHV2 status:

3 False representations remaining: 000 RFU-bits 7-5: Initialized Secret code:

Unlock CHV2 status:

False representations remaining: 10 RFU-bits 7-5: 000 Secret code: Initialized

RFU bytes 23:

Reserved for admin. management: 00 83 00 FF

Status Words

SW1 / SW2: Normal ending of command

#### Coding:

Coding	00	00	02	8D	3F	00	01	00	00	22	FF	01
	0E	9B	02	80	03	00	83	8A	83	8A	00	00
	83	00	FF	90	00							

1. For a successful outcome of the command "Select GSM" the TestSIM shall send SW1/SW2 "9F 1B".

2. For a successful outcome of the command "Select PLMN" the TestSIM shall send SW1/SW2 "9F 0F".

3. EF<sub>PLMN</sub> Information:

RFU-Bytes 1-2: 00 00 File size: 102 bytes File ID: 6F30

Type of File: Elementary file

Byte 8

RFU: 00

Access Condition:

UPDATE: CHV1
READ/SEEK: CHV1
RFU-bits 4-1: 1111
INCREASE: NEVER
INVALIDATE: NEVER
REHABILITATE: NEVER

File Status:

Invalidation status: File not invalidated

Readable/updateable: Not readable/updatable when invalidated

RFU-bits 8-4, 2: 0000 0 Length of following data: 2 bytes Structure: Transparent

Length of record: 00

The initial coding of the  $EF_{PLMN}$  shall be FF FF ... FF (logically: Empty).

# Annex E (normative): Details of terminal profile support

**Table E.1: TERMINAL PROFILE support** 

Item	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
1	Profile Download	TS 11.14, 5	R96	М		PD_Pro_Dvnl
2	SMS-PP data download	TS 11.14, 5	R96	М		PD_SMS_PP
3	Cell Broadcast data download	TS 11.14, 5	R96	М		PD_CB
4	Menu selection	TS 11.14, 5	R96	C228 AND C229		PD_Menu_sel
5	'9EXX' response code for SIM data download error	TS 11.14, 5	R97	C224		PD_9EXX
6	Timer expiration	TS 11.14, 5	R98	М		PD_TExpir
7	USSD string data object supported in Call Control	TS 11.14, 5	R98	М		PD_CC_USSD_Str
8	Envelope Call Control always sent to the SIM during automatic redial mode	TS 11.14, 5	R99	C225 AND C231		PD_CC_Auto_Redial
9	Command result	TS 11.14, 5	R96	М		PD_Cmd_Res
10	Call Control by SIM	TS 11.14, 5	R96	C231		PD_CC
11	Cell identity included in Call Control by SIM	TS 11.14, 5	R97	C231		PD_CC_Cell_ld
12	MO short message control by SIM	TS 11.14, 5	R98	М		PD_MO_SMS_CC
13	Handling of the alpha identifier	TS 11.14, 5	R97	М		PD_Alpha _Id
14	UCS2 Entry supported	TS 11.14, 5	R97	C203 AND C229		PD_UCS2_entry
15	UCS2 Display supported	TS 11.14, 5	R97	C204 AND C228		PD_UCS2_Display
16	Display of the extension text	TS 11.14, 5	R98	C205 AND C228		PD_Disp_Ext_Text
17	DISPLAY TEXT	TS 11.14, 5	R96	C228		PD_Display_Text
18	GET INKEY	TS 11.14, 5	R96	C228 AND C229		PD_Get_Inkey
19	GET INPUT	TS 11.14, 5	R96	C228 AND C229		PD_Get_Input
20	MORE TIME	TS 11.14, 5	R96	М		PD_More_Time
21	PLAY TONE	TS 11.14, 5	R96	C230		PD_Play_Tone
22	POLL INTERVAL	TS 11.14, 5	R96	М		PD_Poll_interval
23	POLLING OFF	TS 11.14, 5	R96	М		PD_Polling_Off
24	REFRESH	TS 11.14, 5	R96	М		PD_Refresh
25	SELECT ITEM	TS 11.14, 5	R96	C228 AND C229	_	PD_Select_Item
26	SEND SHORT MESSAGE	TS 11.14, 5	R96	М		PD_Send_SMS
27	SEND SS	TS 11.14, 5	R96	М		PD_Send_SS
28	SEND USSD	TS 11.14, 5	R98	М		PD_Send_USSD
29	SET UP CALL	TS 11.14, 5	R96	C228 AND C229 AND C231		PD_SetUp_Call

Item	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
30	SET UP MENU	TS 11.14, 5	R96	C228		PD_SetUp_Menu
				AND		
				C229		
31	PROVIDE LOCAL	TS 11.14, 5	R96	M		PD_Provide_Local
	INFORMATION (LOCI &					
22	PROVIDE LOCAL	TC 44 44 5	D07	N 4		DD Dravida Lacal
32	INFORMATION (NMR)	TS 11.14, 5	R97	М		PD_Provide_Local_ NMR
33	SET UP EVENT LIST	TS 11.14, 5	R98	М		PD_Setup_Evt_List
34	Event: MT call	TS 11.14, 5	R98	C231		PD_MT_Call
35	Event: Call connected	TS 11.14, 5	R98	C231		PD_Call_Conn
36	Event: Call disconnected	TS 11.14, 5	R98	C231		PD_Call_Disc
37	Event: Location status	TS 11.14, 5	R98	M		PD_Loc_Status
38	Event: User activity	TS 11.14, 5	R98	C229		PD_User_Act
39	Event: Idle screen available	TS 11.14, 5	R98	C228		PD_ldle_Scr_Avail
40	Event: Card reader status	TS 11.14, 5	R98	C206		PD_Evt_Rdr_Status
41	Event: Language selection	TS 11.14, 5	R99	C232		PD_Lang_Select
42	Event: Browser Termination	TS 11.14, 5	R99	C212		PD_Browser_Term
				AND		
				C228		
				AND		
40	F . D . "	TO 44 44 5	Doo	C229		DD D ( A ')
43	Event: Data available	TS 11.14, 5	R99	C223		PD_Data_Avail
44	Event: Channel status RFU	TS 11.14, 5	R99	C223		PD_Evt_Ch_Status
45 46	RFU	TS 11.14, 5 TS 11.14, 5	R96 R96	X		PD_RFU_45 PD_RFU_46
47	RFU	TS 11.14, 5	R96	X		PD_RFU_46 PD_RFU_47
48	RFU	TS 11.14, 5	R96	X		PD_RFU_48
49	POWER ON CARD	TS 11.14, 5	R98	C206		PD_C_On
50	POWER OFF CARD	TS 11.14, 5	R98	C206		PD_C_Off
51	PERFORM CARD APDU	TS 11.14, 5	R98	C206		PD_C_OII
52	GET READER STATUS	TS 11.14, 5	R98	C206		PD_Get_Rdr_Status
02	(Card reader status)	10 11.11,0	1.00	0200		D_cot_rtal_ctatac
53	GET READER STATUS	TS 11.14, 5	R99	C208		PD_Get_Rdr_ld
	(Card reader identifier)	,				
54	RFU	TS 11.14, 5	R96	Х		PD_RFU_54
55	RFU	TS 11.14, 5	R96	Х		PD_RFU_55
56	RFU	TS 11.14, 5	R96	X		PD_RFU_56
57	TIMER MANAGEMENT	TS 11.14, 5	R98	М		PD_Timer_Mgt_Start
	(start, stop)					_Stop
58	TIMER MANAGEMENT	TS 11.14, 5	R98	М		PD_Timer_Val
	(get current value)	TO 11 11 F				DD D ::
59	PROVIDE LOCAL	TS 11.14, 5	R98	M		PD_Provide_Local_
	INFORMATION (date, time and time zone)					D_Time
60	Binary choice in GET	TS 11.14, 5	R98	C229		PD_Bin_Get_Inkey
60	INKEY	13 11.14, 3	Kao	6229		PD_biii_Get_iiikey
61	SET UP IDLE MODE TEXT	TS 11.14, 5	R98	C228		PD_Stup_Id_Mod_T
	SEL SI ISEE MODE TEXT		1.00	0220		xt
62	RUN AT COMMAND (i.e.	TS 11.14, 5	R98	C209		PD_Run_AT
-	class "b" is supported)					
63	2nd alpha identifier in SET	TS 11.14, 5	R98	C226		PD_SetUp_Call_Sec
	UP CALL			AND		_Alpha_Id
				C228		
				AND		
				C229		
				AND		
64	2nd capability configuration	TS 11.14, 5	R98	C231 C210		DD Can Conf Boro
04	parameter	13 11.14, 5	1,90	AND		PD_Cap_Conf_Para m
	Parameter			C231		'''
65	Sustained DISPLAY TEXT	TS 11.14, 5	R98	C211		PD_Sustained_Displ
-	2.2	, 0	1.55	AND		_Txt
				C228		_
	SEND DTMF command	TS 11.14, 5	R98	C231		PD_Send_DTMF

Item	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
67	PROVIDE LOCAL	TS 11.14, 5	R98	М		PD_Provide_Local_B
	INFORMATION - BCCH	,				CCH_List
68	PROVIDE LOCAL INFORMATION (language)	TS 11.14, 5	R99	М		PD_Provide_Local_L S
69	PROVIDE LOCAL INFORMATION (Timing Advance)	TS 11.14, 5	R99	М		PD_Provide_Local_T A
70	LANGUAGE NOTIFICATION	TS 11.14, 5	R99	C232		PD_Lang_Notif
71	LAUNCH BROWSER	TS 11.14, 5	R99	C212 AND C228 AND C229		PD_Launch_Brws
72	RFU	TS 11.14, 5	R96	Χ		PD_RFU_72
73	Soft keys support for SELECT ITEM	TS 11.14, 5	R99	C213		PD_Softkey_Select_I tem
74	Soft Keys support for SET UP MENU	TS 11.14, 5	R99	C213		PD_Softkey_SetUp _Menu
75	RFU	TS 11.14, 5	R96	Х		PD_RFU_75
76	RFU	TS 11.14, 5	R96	X		PD_RFU_76
77	RFU	TS 11.14, 5	R96	Х		PD_RFU_77
78	RFU	TS 11.14, 5	R96	Х		PD_RFU_78
79	RFU	TS 11.14, 5	R96	Х		PD_RFU_79
80	RFU	TS 11.14, 5	R96	Х		PD_RFU_80
81	Maximum number of soft keys available ('FF' = RFU)	TS 11.14, 5	R99	C214		PD_Max_SoftKey
82	Maximum number of soft keys available ('FF' = RFU)	TS 11.14, 5	R99	C214		PD_Max_SoftKey
83	Maximum number of soft keys available ('FF' = RFU)	TS 11.14, 5	R99	C214		PD_Max_SoftKey
84	Maximum number of soft keys available ('FF' = RFU)	TS 11.14, 5	R99	C214		PD_Max_SoftKey
85	Maximum number of soft keys available ('FF' = RFU)	TS 11.14, 5	R99	C214		PD_Max_SoftKey
86	Maximum number of soft keys available ('FF' = RFU)	TS 11.14, 5	R99	C214		PD_Max_SoftKey
87	Maximum number of soft keys available ('FF' = RFU)	TS 11.14, 5	R99	C214		PD_Max_SoftKey
88		TS 11.14, 5	R99	C214		PD_Max_SoftKey
89	OPEN CHANNEL	TS 11.14, 5	R99	C223		PD_Open_Ch
90	CLOSE CHANNEL	TS 11.14, 5	R99	C223		PD_Close_Ch
91	RECEIVE DATA	TS 11.14, 5	R99	C223		PD_Rx_Data
92	SEND DATA	TS 11.14, 5	R99	C223		PD_Send_Data
93	GET CHANNEL STATUS	TS 11.14, 5	R99	C223		PD Get Ch Status
94	RFU	TS 11.14, 5	R96	X		PD_RFU_94
95	RFU	TS 11.14, 5	R96	X		PD_RFU_95
96	RFU	TS 11.14, 5	R96	X		PD_RFU_96
97	CSD supported by ME	TS 11.14, 5	R99	C207		PD_CSD
98	GPRS supported by ME	TS 11.14, 5	R99	C222		PD_GPRS
99	RFU	TS 11.14, 5	R96	X		PD_RFU_99
100	RFU	TS 11.14, 5	R96	X		PD_RFU_100
101	RFU	TS 11.14, 5	R96	X		PD_RFU_101
102	Number of channels supported by ME	TS 11.14, 5	R99	C227		PD_Nb_Channel
103	Number of channels supported by ME	TS 11.14, 5	R99	C227		PD_Nb_Channel
104	Number of channels	TS 11.14, 5	R99	C227		PD_Nb_Channel
105	Supported by ME  Number of characters	TS 11.14, 5	R99	C234		PD_Nb_Char
106	Supported down the ME Number of characters	TS 11.14, 5	R99	C234		PD_Nb_Char
	supported down the ME					

Item	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
107	Number of characters	TS 11.14, 5	R99	C234		PD_Nb_Char
	supported down the ME					
108	Number of characters supported down the ME	TS 11.14, 5	R99	C234		PD_Nb_Char
109	Number of characters supported down the ME	TS 11.14, 5	R99	C234		PD_Nb_Char
110	No display capability (i.e class "ND" is indicated)	ETSI TS 102 230, cl. 5.2	Rel-8	C228		PD_Type_ND
111	No keypad available (i.e. class "NK" is indicated)	ETSI TS 102 230, cl. 5.2	Rel-8	C229		PD_Type_NK
112	Screen Sizing Parameters	TS 11.14, 5	R99	C216		PD_Screen_Siz
113	Number of characters supported across the ME display	TS 11.14, 5	R99	C234		PD_Nb_Char_Disp
114	Number of characters supported across the ME display	TS 11.14, 5	R99	C234		PD_Nb_Char_Disp
115	Number of characters supported across the ME display	TS 11.14, 5	R99	C234		PD_Nb_Char_Disp
116	Number of characters supported across the ME display	TS 11.14, 5	R99	C234		PD_Nb_Char_Disp
117	Number of characters supported across the ME display	TS 11.14, 5	R99	C234		PD_Nb_Char_Disp
118	Number of characters supported across the ME display	TS 11.14, 5	R99	C234		PD_Nb_Char_Disp
119	Number of characters supported across the ME display	TS 11.14, 5	R99	C234		PD_Nb_Char_Disp
120	Variable size fonts Supported	TS 11.14, 5	R99	C233		PD_Var_Font
121	Display can be resized	TS 11.14, 5	R99	C218		PD_Disp_Resiz
122	Text Wrapping supported	TS 11.14, 5	R99	C233		PD_Txt_Wrap
123	Text Scrolling supported	TS 11.14, 5	R99	C233		PD_Txt_Scroll
124	RFU	TS 11.14, 5	R96	X		PD_RFU_124
125	RFU	TS 11.14, 5	R96	X		PD_RFU_125
126	Width reduction when in a menu	TS 11.14, 5	R99	C217		PD_Width_Reduc
127	Width reduction when in a menu	TS 11.14, 5	R99	C217		PD_Width_Reduc
128	Width reduction when in a menu	TS 11.14, 5	R99	C217		PD_Width_Reduc
129	TCP	TS 11.14, 5	R99	C220		PD_TCP
130	UDP	TS 11.14, 5	R99	C221		PD_UDP
131	RFU	TS 11.14, 5	R96	X		PD_RFU_131
132	RFU	TS 11.14, 5	R96	X		PD_RFU_132
133	RFU	TS 11.14, 5	R96	X		PD_RFU_133
134	RFU	TS 11.14, 5	R96	X		PD_RFU_134
135	RFU	TS 11.14, 5	R96	X		PD_RFU_135
136	RFU	TS 11.14, 5	R96	X		PD_RFU_136
137	RFU	TS 11.14, 5	R96	X		PD_RFU_137
138	RFU	TS 11.14, 5	R96	X		PD_RFU_138
139 140	RFU RFU	TS 11.14, 5 TS 11.14, 5	R96 R96	X		PD_RFU_139 PD_RFU_140
140	RFU	TS 11.14, 5	R96	X		PD_RFU_140 PD_RFU_141
141	RFU	TS 11.14, 5	R96	X		PD_RFU_141 PD_RFU_142
174	RFU	TS 11.14, 5	R96	X		PD_RFU_143
1/12	1131 33	10   11.1 <del>4</del> , 0				
143		TS 11 14 5	Rae	Y		PI) REII 144
144	RFU	TS 11.14, 5	R96	X		PD_RFU_144
		TS 11.14, 5 TS 11.14, 5 TS 11.14, 5	R96 R99 R99	TBD TBD		PD_RFU_144

Item	Terminal Profile	Ref.	Release	Status	Support	Mnemonic	
148	Protocol Version	TS 11.14, 5	R99	TBD			
149	RFU	TS 11.14, 5	R96	Х		PD_RFU_149	
150	RFU	TS 11.14, 5	R96	Х		PD_RFU_150	
151	RFU	TS 11.14, 5	R96	Х		PD_RFU_151	
152	RFU	TS 11.14, 5	R96	Х		PD_RFU_152	
C201	Void		l .	Vc	oid	•	
C202	Void			Vc	oid		
C203	IF A.1/3 THEN M			O_	_Ucs2_Entry	y	
C204	IF A.1/15 THEN M			O_	_Ucs2_Disp		
C205	IF A.1/4 THEN M				_Ext_Str		
C206	IF A.1/7 THEN M				_Dual_Slot		
C207	IF A.1/12 THEN M				_BIP_CSD		
C208	IF (A.1/7 AND A.1/8	B) THEN M				AND O_Detach_Rdr	
C209	IF A.1/9 THEN M			_	_Run_At		
C210	IF A.1/1 THEN M				_Cap_Conf		
C211	IF A.1/2 THEN M				_sust_text		
C212	IF A.1/10 THEN M			· O_			
C213		for at least one of the	e bits 1 - 2	of O_	_Softkey		
C214	byte 10	ar at least one but n	at far all af	tha O	Cofflens (no	romotoro)	
0214	bits 1 - 8 of byte 11	or at least one, but n	ot for all of	the O_	_Sourcey (pa	arameters)	
C215	Void			Vc	vid		
C216	IF A.1/13 THEN M				Scr Siz		
C217		alues "0" / "1" allow	ed.		_Scr_Siz (pa	arameters)	
C218	IF A.1/14 THEN M	raides o / 1 allow	ou .		Scr_Resiz	aramotors)	
C219		IF C218 THEN bit values "0" / "1" allowed O_Scr_Resiz (parameters)					
C220	IF A.1/18 THEN M						
C221	IF A.1/17 THEN M						
C222	IF A.1/21 THEN M	——————————————————————————————————————					
C223	IF (C207 OR C222)	IF (C207 OR C222) THEN M O_BIP_CSD OR O_B					
C224	IF A.1/27 THEN M			O_	_9EXX		
C225	IF A.1/28 THEN M				_CC_Auto_F		
C226	IF A.1/29 THEN M					I_Sec_Alpha_ld	
C227		) THEN M for at leas	t one of the	e O_	_BIP_CSD (	OR O_BIP_GPRS	
	bits 6 - 8 of byte 13						
C228	IF A.1/45 THEN M				_No_Type_I		
C229	IF A.1/46 THEN M				_No_Type_I		
C230	IF A.1/47 THEN M				_No_Type_N		
C231	IF A.1/48 THEN M				No_Type_N		
C232 C233	IF A.1/49 THEN M IF A.1/50 THEN O				No_Type_N		
C233		values "0" / "1" allov	vod El SE i		No_Type_N		
0234	IF A. I/ST THEN DIL	values 0 / 1 all0V	veu ELSE (	J.1 U_	_ivo_iype_l	טוי	
O.1	Allowed: Bit value =	="0" or bit not presen	ıt				

Comments:
This static requirement for the TERMINAL PROFILE is specifying the bit coding of this command. In the support column a "Yes" (or "Y" or "y") means bit coding "1" and a "No" (or "N" or "n") and "X" means bit coding "0" in the command.

## Annex F (informative): Change History

TSG#	WG TD#	CR	Rev	Subject	New Ver
SMG#	=	-	-	Approved as release 1996 at SMG#30	5.0.0
30					
		A001	-	Corrections to SIM Application Toolkit Test Specification	5.1.0
		1000	-	Version update to 5.1.1 for Publication	5.1.1
		A002	-	Editorial and coding corrections	5.2.0
		A003 A004	-	Correction of wrong coding for SIM Application Toolkit test 27.22.4.2 Corrections for Test Case 27.22.5.1 (SMS-PP Data Download)	5.3.0 5.3.0
		A004		Correction of wrong coding for SIM Application Toolkit 27.22	5.4.0
		A006		Corrections for Test Case 27.22.4.7 (REFRESH)	5.5.0
		A007	_	Corrections for Test Case 27.22.5.2 (SMS-CB Data Download)	5.5.0
		A008	-	Upgrade of the MS SAT test specification to Release 99	8.1.0
		A010r	-	Addition of Terminal Profile information, suppression of PLAY TONE	
		1		Test sequence 1.2	
		A011	-	References to 11.10-1 replaced. Reference to 11.10-2 removed.	8.3.0
		A012	-	Corrections to Send Short Message, Sequence 1.4	8.4.0
		A013	-	Redial in Set Up Call	8.4.0
		A014	-	Correction to Terminal Response: Set Up Call 1.7.1	8.4.0
		A015	-	Select Item: Support of "No response from user"	8.4.0
		A016	-	Correction of Emergency Call test cases	8.4.0
		A017	-	Essential corrections to default values for SIM Application Toolkit	
		A018		testing Clarification on comprehension required flag usage	8.5.0
		A019	-	Essential corrections to Display text test cases	0.5.0
		A020		Essential corrections to Display text test cases  Essential corrections to Get Inkey test cases	
		A021	_	Essential corrections to Get Input test cases	8.5.0
		A022	_	Essential corrections to Set Up Menu test cases	0.0.0
		A023	_	Essential corrections to Play Tone test cases	
		A024	-	Essential corrections to Poll Intervall test case	
		A025	-	Essential corrections to Polling off test case	8.5.0
		A026	-	Essential corrections to Provide Local Information test cases	8.5.0
		A027	-	Essential corrections to Send Short message test cases	8.5.0
		A028	-	Essential corrections to Language Notification test cases	8.5.0
		A029	-	Essential corrections to Send SS test cases	
		A030	-	Essential corrections to Set Up Call test cases	8.5.0
		A031	-	Essential corrections to Send USSD test cases	
		A032	-	Essential correction to Set Up Idle Mode Text test cases	8.5.0
		A033	-	Essential corrections to Power Off Card test case	
		A034	-	Essential corrections to Perform Card APDU test cases	
		A035	-	Essential correction to Get Reader Status test cases	
-		A036	-	Essential corrections to Send DTMF test cases Essential corrections to CALL CONTROL BY SIM test cases	0.5.0
		A037 A038	_	Essential corrections to CALL CONTROL BY SIM lest cases  Essential corrections to CALL CONTROL BY SIM (Interaction with	8.5.0 8.5.0
		7030	Ī	FDN/ BDN) test cases	0.5.0
		A039	_	Essential corrections to Select Item test cases	
		A040	-	Essential corrections to card reader status event download test	
				cases	
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