Source: T3

Title: CRs to TS 31.122: USIM Conformance test specification

Document for: Approval

This document contains the following change request:

Spec	CR	Rev	Phase	Subject	Cat	new ver.	Doc-2nd-Level
31.122	016	-	R99	CR to 31.122 Rel 99: Editorial Corrections	D	3.7.0	T3-031005

CR-Form-v7

CHANGE REQUEST

⌘ **31.122 CR 016** ⌘**rev** **-** ⌘ Current version: **3.6.0** ⌘

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

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network ☐

Title: ⌘	CR to 31.122 Rel 99: Editorial Corrections
Source: ⌘	T3
Work item code: ⌘ TEI	**Date:** ⌘ 20/11/2003

Category: ⌘ **D** **Release:** ⌘ R99

Use <u>one</u> of the following categories:
F (correction)
A (corresponds to a correction in an earlier release)
B (addition of feature),
C (functional modification of feature)
D (editorial modification)
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use <u>one</u> of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change: ⌘	Version 3.6.0 of 31.122 contains a number of editorial errors.
Summary of change:⌘	Refer to table on page 2
Consequences if not approved: ⌘	Unclear test specification

Clauses affected: ⌘	Refer to table on page 2

	Y	N	
Other specs affected: ⌘		X	Other core specifications ⌘
		X	Test specifications
		X	O&M Specifications

Other comments: ⌘

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request

Table of Clauses Affected and Description of Changes

Clauses Affected	Description of Change
5.1	In the last sentence of clause 5.1 the reference to figure 1 is incorrect, it should be figure 2.
5.2	In the last sentence of clause 5.2 the test group "COM" has been omitted from the list of test groups and the reference to figure 2 should be corrected to figure 3. Additionally the figures referred to at the end of the sentence should be listed – 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14.
5.3	In the last sentence of clause 5.3 the test groups "UCMD" and "UCH" should be added to the list of test groups and "COM" should be removed. Additionally the reference to figure 3 should be corrected to figure 4 and the figures referred to at the end of the sentence should be listed – 15, 16, 17 and 18.
6.1.1.2	The reference to TS 102.221 contains a redundancy and should be corrected to read subclause 4.1.
6.1.1.3	As the references to the test specifications for the various ISO/IEC 7816 specifications are not specific they should be removed.
6.1.2.2	The reference to TS 102.221 contains a redundancy and should be changed to read, "clause 4 and more specifically subclause 4.2."
6.1.2.3	As the reference to the test specifications for the various ISO/IEC 7816 specifications is not specific it should be removed.
6.2.1.2.2	The reference to TS 102.221 contains a redundancy and should be changed to "subclause 5.1.1, 5.2.1 and 5.3.1".
6.2.1.3.2	The reference to TS 102.221 contains a redundancy and should be changed to "subclause 5.1.1, 5.2.1 and 5.3.1".
6.2.4.2.2	The reference to TS 102.221 contains a mistake and should be changed to read "subclause 5.1.4, etc.. not 5.2.4 etc…".
6.3.2.1.2	The reference to TS 102.221 contains a redundancy and should be updated to read "subclause 6.3".
6.3.3.2	CR1 should be reworded to match the wording in TS 102.221 – "in order to use transmission parameters other than the default values".
6.3.4.2	The reference should be updated to match changes in TS 102.221 – it should refer to subclause 6.5 only.
6.3.5.2	The reference should be updated to match changes in TS 102.221 – should be refer to subclause 6.6 instead of subclause 6.7.
6.3.6.2	The reference should be updated to match changes in TS 102.221 – should be refer to subclause 6.7 instead of subclause 6.8.
6.3.7.2	The reference should be updated to match changes in TS 102.221 – should be refer to subclause 6.8 instead of subclause 6.9.
6.3.8.2	The reference should be updated to match changes in TS 102.221 – should be refer to subclause 6.9 instead of subclause 6.10.

| 6.4.2.2.2	The reference to TS 102.221 contains a redundancy and should be updated to read "clause 7 and more specifically subclause 7.2.2.1, 7.2.2.3 and 7.2.2.4".
6.5.4.1.2	CR6 is not in line with the rest of the CRs and should be reformatted accordingly.
6.5.6.2	In CR4 '7F4X' is listed twice. One occurrence should be removed.
6.5.6.2	In CR2 '7F31', '5F50' and '5F3A' should be added to match TS 102.221.
6.5.6.2	In CR3 '5F50' and '5F3A' should be removed from the list of Elementary File IDs they are DFs.
6.6.3.4	The title 'Test Procedures' should not be plural.
6.8.1.1.4	The test procedure steps are no longer lettered making it difficult to follow the test and reference a particular step. The test steps should be lettered.
6.8.1.2.4	The test procedure steps are no longer lettered making it difficult to follow the test and reference a particular step. The test steps should be lettered.
6.8.1.7.4	The test procedure steps are no longer lettered making it difficult to follow the test and reference a particular step. The test steps should be lettered.
6.8.1.8.4	The test procedure steps are no longer lettered making it difficult to follow the test and reference a particular step. The test steps should be lettered.
6.8.1.9.4	The test procedure steps are no longer lettered making it difficult to follow the test and reference a particular step. The test steps should be lettered.
6.8.1.10.4	The test procedure steps are no longer lettered making it difficult to follow the test and reference a particular step. The test steps should be lettered.
6.8.1.11.4	The test procedure steps are no longer lettered making it difficult to follow the test and reference a particular step. The test steps should be lettered.
6.8.1.12.2	The test procedure steps are no longer lettered making it difficult to follow the test and reference a particular step. The test steps should be lettered.
6.8.1.13.4	The test procedure steps are no longer lettered making it difficult to follow the test and reference a particular step. The test steps should be lettered.
6.8.1.14.4	The test procedure steps are no longer lettered making it difficult to follow the test and reference a particular step. The test steps should be lettered.
6.8.1.15.4	The test procedure steps are no longer lettered making it difficult to follow the test and reference a particular step. The test steps should be lettered.
7.2.4	The test procedure steps are no longer lettered making it difficult to follow the test and reference a particular step. The test steps should be lettered.
7.3.1.4	The test procedure steps are no longer lettered making it difficult to follow the test and reference a particular step. The test steps should be lettered.

5.1 Test groups under USIM
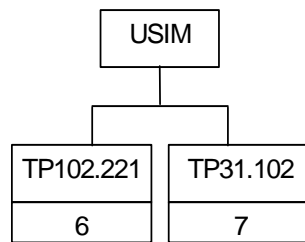
Figure 2: Top Level Test Group Hierarchy

The mnemonics chosen for this test group are as follows:

- TP102.221: Test Procedure - TS 102 221 [1]

- TP31.102: Test Procedure - 3GPP TS 31.102 [3]

The Test Groups "TP102.221 " and "TP31.102", shown in figure 2+, are broken down further, as shown in the following figures 3 and 4.
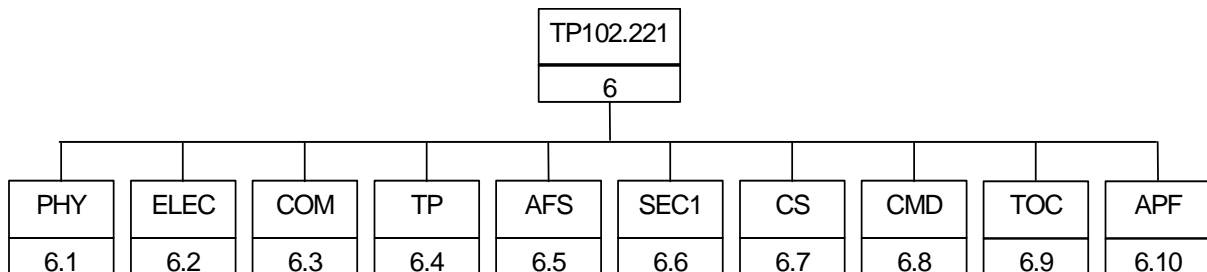
5.2 Test groups under TP102.221

Figure 3: Breakdown of "TP102.221" Test Group

The mnemonics chosen for this test group are as follows:

- PHY: Physical characteristics - TS 102 221 [1], clause 4

- ELEC: Electrical specifications of the UICC - Terminal interface - TS 102 221 [1], clause 5

- COM: Initial communication establishment procedure - TS 102 221 [1], clause 6

- TP: Transmission protocols - TS 102 221 [1], clause 7

- AFS: Application and File structure - TS 102 221 [1], clause 8

- SEC1: Security features - TS 102 221 [1], clause 9

- CS: Structure of commands and responses - TS 102 221 [1], clause 10

- CMD: Commands - TS 102 221 [1], clause 11

- TOC: Transmission Oriented Commands - TS 102 221 [1], clause 12

- APF: Application independent files - TS 102 221 [1], clause 13

The Test Groups "PHY", "ELEC", "COM", "TP", "AFS", "SEC1", "CS", "CMD", "TOC" and "APF", shown in figure 32, are broken down further, as shown in figures 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14 the following diagrams.
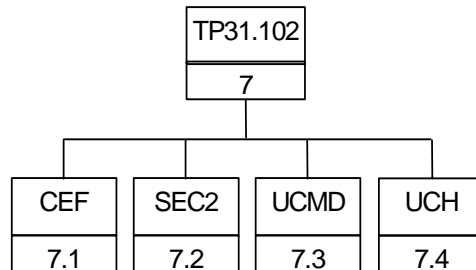
5.3 Test groups under TP31.102

Figure 4: Breakdown of "TP31.102" Test Group

The mnemonics chosen for this test group are as follows:

- CEF: Contents of the Elementary Files- 3GPP TS 31.102 [3], clause 4

- SEC2: Security Features supported by USIM - Terminal interface - 3GPP TS 31.102 [3], clause 6

- UMCD: USIM commands- 3GPP TS 31.102 [3], clause 7

- UCH: UICC Characteristics- 3GPP TS 31.102 [3], clause 8

The Test Groups "CEF", "SEC2", "UCMD" and "COMUCH", shown in figure 34, are broken down further, as shown in the following figures 15, 16, 17 and 18.

6.1.1.2 Conformance requirement

CR1: Format and layout of the ID-1 UICC shall be in accordance with ISO/IEC 7816-1 [4] and ISO/IEC 7816-2 [5], unless otherwise specified.

CR2: Any embossing on the card shall be in accordance with ISO/IEC 7811-1 [12] and ISO/IEC 7811-3 [13] (conditional).

CR3: The contacts shall be located on the front (embossed face) of the card.

Reference: TS 102 221 [1], clause 4 and subclause 4.1.

Test Group Reference (TGR): TGR_USIM_TP102.221_PHY_ID1

Test Procedure Reference (TPR): TPR_USIM_TP102.221_PHY_ID1

6.1.1.3 Test purpose

To verify that the UICC conforms to the above requirements.

NOTE 1: The testing of CR1 is outside the scope of the present document. ~~Please refer to the TS for ISO/IEC 7816-1 [4] and ISO/IEC 7816-2 [5].~~

NOTE 2: The testing of CR2 is outside the scope of the present document. ~~Please refer to the TS for ISO/IEC 7811-1 [12] and ISO/IEC 7811-3 [13].~~

6.1.2.2   Conformance requirement

CR1: Format and layout of the plug-in card shall be in accordance with ISO/IEC 7816-1 [4] and ISO/IEC 7816-2 [5], unless otherwise specified.

CR2: The dimensions of the plug-in UICC shall be in accordance with figure 4.1 of TS 102 221 [1].

Reference: TS 102 221 [1], clause 4 and more specifically subclause 4.2.

Test Group Reference (TGR): TGR_USIM_TP102.221_PHY_PIC

Test Procedure Reference (TPR): TPR_USIM_TP102.221_PHY_PIC

6.1.2.3   Test purpose

To verify that the UICC conforms to the above requirements.

NOTE: The testing of CR1 is outside the scope of the present document. ~~Please refer to the TS for ISO/IEC 7816-1 [4] and ISO/IEC 7816-2 [5].~~

6.2.1.2.2   Conformance requirement

CR1: The idle current consumption of the UICC shall not exceed I_{max} at 1 MHz, +25 °C and Vcc_{max}.

Table 2: Current consumption in idle mode

Operating Conditions	Imax /µA in idle state clk frequency 1 MHz	Vcc_{max}/V maximum voltage on VCC during testing
Class A Operating Conditions	200	5,5
Class B Operating Conditions	200	3,3
Class C Operating Conditions	200	1,98

Reference: TS 102 221 [1], ~~clause 5,~~ subclauses 5.1.1. 5.2.1, and 5.3.1

Test Group Reference (TGR): TGR_USIM_TP102.221_ELEC_VCC_ICL

Test Procedure Reference (TPR): TPR_USIM_TP102.221_ELEC_VCC_ICL

6.2.1.3.2   Conformance requirement

CR1 The clk stop mode current consumption of the UICC shall not exceed I_{max} if clk stop mode is delivered by the UICC.

Table 3: Current consumption in clk stop mode

	Imax /µA in clk-stop mode	Vcc_{max}/V maximum voltage on VCC during testing
Class A Operating Conditions	200	5,5
Class B Operating Conditions	100	3,3
Class C Operating Conditions	100	1,98

Reference: TS 102 221 [1], clause 5 and more specifically subclauses 5.1.1, 5.2.1, and 5.3.1.

Test Group Reference (TGR): TGR_USIM_TP102.221_ELEC_VCC_CL

Test Procedure Reference (TPR): TPR_USIM_TP102.221_ELEC_VCC_CL

6.2.4.2.2 Conformance requirement

CR1: The UICC shall operate within the following limits for CLK:

Table 6: Electrical characteristics of CLK with current limits under normal operating conditions

Operating Conditions	V_{OL} min/V	V_{OL} max/V	I_{OL} max/µA	V_{OH} min/V	V_{OH} max/V	I_{OH} max/µA	t_R & t_F max	fmax/MHz
Class A Operating Conditions	-0,3	0,5	-200	$0,7 \times Vcc$	$Vcc + 0,3$	+20	9 % with a max. of 0,5 µs	5
Class B Operating Conditions	-0,3	$0,2 \times Vcc$	-20	$0,7 \times Vcc$	$Vcc + 0,3$	+20	50 ns	5
Class C Operating Conditions	-0,3	$0,2 \times Vcc$	-20	$0,8 \times Vcc$	$Vcc + 0,3$	+20	50 ns	5

Reference: TS 102 221 [1], subclauses 5.12.4, 5.2.3 and 5.3.3.

Test Group Reference (TGR): TGR_USIM_TP102.221_ELEC_VC

Test Procedure Reference (TPR): TPR_USIM_TP102.221_ELEC_VC

6.3.2.1.2 Conformance requirement

CR1: The ATR shall be in accordance with ISO/IEC 7816-3 [6].

CR2: T = 15 parameters shall be present in the ATR.

CR3: The category indicator in the historical bytes shall be '80'.

CR4: The first information sent by the card in the historical byte shall be the "card service data" data object.

CR5: The second information sent by the card in the historical shall be the "card capabilities" data object.

CR6:   The information carried by the historical bytes of the UICC shall follow clause 8 of ISO/IEC 7816-4 [7].

Reference: TS 102 221 [1], subclause 6.3 ~~and 6.3.1~~

Test Group Reference (TGR): TGR_USIM_TP102.221_COM_ATRC_MC

Test Procedure Reference (TPR): TPR_USIM_TP102.221_COM_ATRC_MC

6.3.3.2   Conformance requirement

CR1   The UICC shall support the PPS procedure in order to use ~~other~~ transmission parameters other than the default values.

CR2   The UICC shall respond to a PPS-Request from the ME with a PPS-Response.

6.3.4.2   Conformance requirement

CR1   After a cold reset, the UICC shall enter the negotiable mode and the security status shall be reset.

CR2   After a warm reset, the UICC shall enter either the negotiable mode or the specific mode and the security status shall be reset.

Reference: TS 102 221 [1], subclauses 6.5 ~~and 6.6~~.

6.3.5.2   Conformance requirement

CR1:   The UICC shall support the clock stop procedure.

Reference: TS 102 221 [1], subclause 6.6~~7~~.

6.3.6.2   Conformance requirement

CR1   The bit/character duration and sampling time specified in ISO/IEC 7816-3 [6], subclause 6.3.2 are valid for all communications.

Reference: TS 102 221 [1], subclause 6.7~~8~~.

6.3.7.2   Conformance requirement

CR1   Error detection and character repetition specified in ISO/IEC 7816-3 [6], subclause 6.3.3 is mandatory for the UICC for all communications using T = 0.

Reference: TS 102 221 [1], subclause 6.8~~9~~.

6.3.8.2 Conformance requirement

CR1: UICCs that are used in applications where the supply voltage class detection is based on the STATUS response shall support this procedure in addition to the supply voltage class indication in the ATR.

Reference: TS 102 221 [1], subclause 6.9~~10~~.

6.4.2.2.2 Conformance requirement

CR1: The T = 0 protocol is mandatory for the UICC.

[…]

CR14: When the transmitter detects an error, the character shall be sent again after a minimum delay of 2 etus.

Reference: TS 102 221 [1], subclause clause 7 and more specifically~~,~~ subclause 7.2.2.1, 7.2.2.3 and 7.2.2.4.

Test Group Reference (TGR): TGR_USIM_TP102.221_TP_DLL_TP0

6.5.4.1.2 Conformance requirement

CR1: Selection of an ADF, DF or MF shall set the current Directory on the UICC.

CR2: After a selection of an ADF, DF or MF, there shall be no current EF.

CR3: After a selection of an EF, the current EF shall be set to this EF and the current

Directory shall remain the ADF, DF or MF which is the parent of this EF.

CR4: Any application specific command shall only be operable if it is specific to the current Directory.

CR5: It shall be possible to select the following from the last selected file:

- any file which is an immediate child of the current Directory;

- any DF which is an immediate child of the parent of the current DF;

- the parent of the current Directory;

- the current DF or ADF;

- the MF.

  NOTE: Reselection of the last selected file shall be allowed.

CR6: It shall be possible to select any of the "valid selections" in Table 8.1, subclause 8.4.1 of TS 102 221 [1] for each of the "last selected file" entries.

Reference: TS 102 221 [1], subclause 8.4.1.

6.5.6.2 Conformance requirement

CR1: The following Application Dedicated File IDs shall be reserved for operational use by UICC:

- '7F FF'.

CR2: The following Dedicated File IDs shall be reserved for operational use by UICC:

- '5F50', '5F3A', '7F 10', '7F 2X', '7F 80' and '7F 90'.

CR3: The following Elementary File IDs shall be reserved for operational use by UICC:

- '6F 2X', '6F 3X', '6F 4X' in '7F 10' and '7F 2X';

- ~~'5F50' and '5F 3A';~~

- '4F YX', where Y ranges from '2' to 'F' in all 2nd level DFs;

- '2F05', '2F06' and '2F 1X' in the MF '3F 00';

- '2F00', '2F01' in the MF '3F00'.

CR4: The following Dedicated File IDs shall be reserved for administrative use by UICC:

- '7F 4X', ~~'7F 4X',~~ '5F1X' and '5F2X'.

CR5: The following Elementary File IDs shall be reserved for administrative use by UICC:

- '6F XX" in the DFs "7F 4X"; "4F XX" in the DFs "5F 1X", "5F2X";

- '6F 1X' in the DFs '7F 10', '7F 20', '7F 21';

- '4F 1X' in all 2nd level DFs;

- '2F EX' in the MF '3F 00'.

Reference: TS 102 221 [1], subclause 8.6.

6.6.3.4   Method of test

NOTE: The following test procedures shall be applicable only to a multi-verification capable UICC.

Initial conditions

The UICC shall be connected to a ME simulator.

SE01 shall be active.

Test procedure~~s~~

a) For a multi-verification capable UICC

6.8.1.1.4   Method of test

Initial conditions

The UICC shall be connected to a ME simulator.

Test procedure

a) The ME simulator shall reset the UICC.

b) The ME simulator shall send a SELECT command to the UICC to select DF$_{TELECOM}$.

- The status returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR2a].

- The FCP shall contain the following tags [CR11]:

  - Tag '82' (File Descriptor)

  The first byte shall be '38' or '78' (indicating a DF or ADF);

  - Tag '83' (File Identifier)

  The value shall be '7F 10' (indicating $DF_{TELECOM}$);

  - Tag '8A' (Life Cycle Status Integer);

  - Tag 'C6' (PIN Status Template DO)

  It shall contain tag '90' (PS_DO).

The FCP shall contain exactly one of the following tags:

  - Tag '8C' (Compact format);

  - Tag 'AB' (Expanded format);

  - Tag '8B' (Referenced to Expanded Format).

  - The TLV DOs with the above Tags shall be provided in FCP in order given in the table 11.3 of subclause 11.1.1.3 of the TS 102 221 [1] [CR10].

c) The ME simulator shall send a SELECT command to the UICC to select the MF.

The status returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR2a].

The FCP shall contain the following tags [CR3]:

  - Tag '82' (File Descriptor)

    The first byte shall be '38' or '78' (indicating a DF or ADF);

  - Tag '83' (File Identifier)

    The value shall be '3F 00' (indicating MF);

  - Tag 'A5' (Proprietary information)

    It shall contain tag '80' (UICC characteristics);

  - Tag '8A' (Life Cycle Status Integer);

  - Tag 'C6' (PIN Status Template DO)

  It shall contain tag '90' (PS_DO).

The FCP shall contain exactly one of the following tags:

  - Tag '8C' (Compact format);

  - Tag 'AB' (Expanded format);

  - Tag '8B' (Referenced to Expanded Format).

  The TLV DOs with the above Tags shall be provided in FCP in order given in the Table 11.3 of subclause 11.1.1.3 of the TS 102 221 [1] [CR10].

d) The ME simulator shall send a SELECT command to the UICC to select EF_{DIR}.

The status returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR2a].

The FCP shall contain the following tags [CR5]:

- Tag '82' (File Descriptor)

The first byte shall be '02' or '42' (indicating a linear fixed EF);

The length shall be '05' (i.e. containing record length etc);

- Tag '83' (File Identifier)

The value shall be '2F 00' (indicating EF_{DIR});

- Tag '8A' (Life Cycle Status Integer);

- Tag '80' (File size).

The FCP shall contain exactly one of the following tags:

- Tag '8C' (Compact format);

- Tag 'AB' (Expanded format);

- Tag '8B' (Referenced to Expanded Format).

  The TLV DOs with the above Tags shall be provided in FCP in order given in the table 11.4 of subclause 11.1.1.3 of the TS 102 221 [1] [CR10].

e) The ME simulator shall send a READ RECORD command using CURRENT mode to the UICC.

  The UICC shall return an error code appropriate to the command (e.g. SW1 = '6A', SW2 = '83' - Record not found) [CR6].

f) The ME simulator shall send a SELECT command with P2 = '0C' to the UICC to select the MF.

  The response from the UICC shall be only SW1 = '90', SW2 = '00' - normal ending of the command [CR7].

g) The ME simulator shall send a SELECT command to the UICC to select the EF_{ARR} under $DF_{TELECOM}$ by path selection

  The response from the UICC shall be only SW1 = '90', SW2 = '00' - normal ending of the command.

  The TLV DO with Tag '83' in the FCP shall indicate the current EF is EF_{ARR} [CR2c].

h) The ME simulator shall send a SELECT command to the UICC to select the parent DF.

  The response from the UICC shall be only SW1 = '90', SW2 = '00' - normal ending of the command.

  The TLV DO with Tag '83' in the FCP shall indicate the current DF is MF [CR2d].

i) The ME simulator shall send a SELECT command with AID to the UICC to select and activate the USIM application.

  The status returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR2b].

  The FCP shall contain the following tags [CR4]:

- - Tag '82' (File Descriptor)

- The first byte shall be '38' or '78' (indicating a DF or ADF);

- - Tag '84' (DF name - AID)

- The value shall be the AID of the USIM application;

- - Tag '8A' (Life Cycle Status Integer);

- - Tag 'C6' (PIN Status Template DO)

- It shall contain tag '90' (PS_DO).

The FCP shall contain exactly one of the following tags:

- Tag '8C' (Compact format);

- Tag 'AB' (Expanded format);

- Tag '8B' (Referenced to Expanded Format).

    The TLV DOs with the above Tags shall be provided in FCP in order given in the Table 11.4 of subclause 11.1.1.3 of the TS 102 221 [1] [CR10].

j)   The ME simulator shall send a SELECT command to the UICC to select DF$_{TELECOM}$.

k)   The ME simulator shall send a SELECT command with P1 = '00' and data field equals to '7FFF' to the UICC to select the ADF of the current USIM application.

    The status returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR9].

The FCP returned shall be as same as those returned in step i) above [CR4].

l)   The ME simulator shall send a SELECT command with P1 = '00' and data field equals to '3F00' to the UICC to select the MF.

The status returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR8].

The FCP returned shall be as same as those returned in step c) above [CR3].

m)   The ME simulator shall send a SELECT command with P1 = '00', P2 = '0C' and with empty data field to the UICC to select the MF.

The response from the UICC shall be only SW1 = '90', SW2 = '00' - normal ending of the command [CR7, CR8].

6.8.1.2.4   Method of test

Initial conditions

The UICC shall be connected to a ME simulator.

Test procedure

a)   The ME simulator shall reset the UICC.

b)   The ME simulator shall send a STATUS command with P2 = '00' to the UICC.

    The FCP shall contain the following tags [CR1]:

- Tag '82' (File Descriptor)

The first byte shall be '38' or '78' (indicating a DF);

- Tag '83' (File Identifier)

The value shall be '3F 00' (indicating MF);

- Tag 'A5' (Proprietary information)

It shall contain tag '80' (UICC characteristics);

- Tag '8A' (Life Cycle Status Integer);

- Tag 'C6' (PIN Status Template DO)

It shall contain tag '90' (PS_DO).

The FCP shall contain exactly one of the following tags:

- Tag '8C' (Compact format);

- Tag 'AB' (Expanded format);

- Tag '8B' (Referenced to Expanded Format).

c) The ME simulator shall send a SELECT command to select DF$_{TELECOM}$.

d) The ME simulator shall send a STATUS command with P2 = '00' to the UICC.

The FCP shall contain the following tags [CR1]:

- Tag '82' (File Descriptor)

The first byte shall be '38' or '78' (indicating a DF);

- Tag '83' (File Identifier)

The value shall be '7F 10' (indicating DF$_{TELECOM}$);

- Tag '8A' (Life Cycle Status Integer);

- Tag 'C6' (PIN Status Template DO)

It shall contain tag '90' (PS_DO).

The FCP shall contain exactly one of the following tags:

- Tag '8C' (Compact format);

- Tag 'AB' (Expanded format);

- Tag '8B' (Referenced to Expanded Format).

e) The ME simulator shall send a STATUS command with P2 = '01' to the UICC.

The UICC shall return an error code appropriate to the command [CR2].

f) The ME simulator shall send a SELECT command to the UICC to select and activate the USIM application.

g) The ME simulator shall send a STATUS command with P2 = '00' to the UICC.

The FCP shall contain the following tags [CR1]:

- Tag '82' (File Descriptor)

The first byte shall be '38' or '78' (indicating an ADF);

- Tag '84' (DF name - AID)

The value shall be the AID of the USIM application;

- Tag '8A' (Life Cycle Status Integer);

- Tag 'C6' (PIN Status Template DO)

It shall contain tag '90' (PS_DO).

The FCP shall contain exactly one of the following tags:

- Tag '8C' (Compact format);

- Tag 'AB' (Expanded format);

- Tag '8B' (Referenced to Expanded Format).

h) The ME simulator shall send a SELECT command to the UICC to select the DF$_{PHONEBOOK}$.

i) The ME simulator shall send a STATUS command with P2 = '00' to the UICC.

The FCP shall contain the following tags [CR1]:

- Tag '82' (File Descriptor)

The first byte shall be '38' or '78' (indicating a DF);

- Tag '8A' (Life Cycle Status Integer);
- Tag 'C6' (PIN Status Template DO)

It shall contain tag '90' (PS_DO).

The FCP shall contain exactly one of the following tags:

- Tag '8C' (Compact format);
- Tag 'AB' (Expanded format);
- Tag '8B' (Referenced to Expanded Format).

j) The ME simulator shall send a STATUS command with P2 = '01' to the UICC.

The following shall be true of the response data [CR2]:

Value of tag '84' shall be the AID of the USIM application.

k) The ME simulator shall send a STATUS command with P2 = '0C' to the UICC.

The following shall be true of the response data [CR3]:

The response data from the UICC shall be only SW1 = '90', SW2 = '00' - normal ending of the command [CR3].

l) The ME simulator shall send a SELECT command to select DF$_{TELECOM}$.

m) The ME simulator shall send a STATUS command with P2 = '00' to the UICC.

The FCP shall contain the following tags [CR1]:

- Tag '82' (File Descriptor)

The first byte shall be '38' or '78' (indicating a DF);

- Tag '83' (File Identifier)

The value shall be '7F 10' (indicating DF$_{TELECOM}$);

- Tag '8A' (Life Cycle Status Integer);
- Tag 'C6' (PIN Status Template DO)

It shall contain tag '90' (PS_DO).

The FCP shall contain exactly one of the following tags:

- Tag '8C' (Compact format);
- Tag 'AB' (Expanded format);
- Tag '8B' (Referenced to Expanded Format).

n) The ME simulator shall send a STATUS command with P2 = '01' to the UICC.

The following shall be true of the response data [CR2]:

Value of tag '84' shall be the AID of the USIM application.

6.8.1.7.4 Method of test

NOTE 1: CR7 can not be tested for T = 0 protocol as the Le byte is not transmitted to the UICC. It is dependent on the design of the transport layer of a ME whether to pass all the response data bytes from the UICC to its application layer according to the Le byte. (CR7 is tested in test procedure 4)

NOTE 2: When EF_{SMS} does not support the SFI, any other linear fixed EF in ADF_{USIM} supporting SFI and capable of storing at least 20 bytes of data shall be chosen for test procedure 3 (SFI).

NOTE 3: When EF_{SMS} is not supported by the USIM application, any other linear fixed EF capable of storing at least 20 bytes of data may be used.

Initial conditions

1) The UICC shall be connected to a ME simulator.

2) The records in EF_{SMS} shall contain the following data for the first 20 bytes:

```
1st record  'A0 A1 A2 B0 B1 B2 A0 A1 A2 A0 A1 A2 FF A0 A1 A2 A3 A4 A5 A6'
2nd record  'B0 B1 B2 A0 A1 A2 A0 A1 A2 B0 B1 B2 FF B0 B1 B2 B3 B4 B5 B6'
3rd record  'B0 B1 B2 A0 A1 A2 B0 B1 B2 A0 A1 A2 FF C0 C1 C2 C3 C4 C5 C6'
4th record  'A0 A1 A2 B0 B1 B2 B0 B1 B2 B0 B1 B2 FF D0 D1 D2 D3 D4 D5 D6'
```

3) The data for the remainder of these four records and for all other records shall be 'FF'.

Test procedure 1 (simple search)

a) The ME simulator shall reset the UICC.

b) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

c) The ME simulator shall send a SELECT command to the UICC to select EF_{SMS}.

d) The ME simulator shall send a SEARCH RECORD command using the record number '01', the "simple forward search from record indicated in P1" mode and search pattern 'A0 A1 A2 B0' with Le = '00' to the UICC.

   - The status condition returned by the UICC shall be SW1 = '69', SW2 = '82' - security status not satisfied [CR2].

e) The ME simulator shall send a VERIFY PIN command with PIN to the UICC.

f) The ME simulator shall send a SEARCH RECORD command using the record number '01', the "simple forward search from record indicated in P1" mode and search pattern 'A0 A1 A2 B0' with Le = '00' to the UICC.

   - The UICC shall return '01 02 03 04' indicating that first, second, third and fourth record have been found [CR3a, CR8a].

   - The status condition returned by the UICC shall be SW1='90', SW2='00' - normal ending of the command [CR1, CR2, CR5].

g) The ME simulator shall send a SEARCH RECORD command using the record number '02', the "simple backward search from record indicated in P1" mode and search pattern 'A0 A1 A2 B0' with Le = '00' to the UICC.

   - The response data shall be '02 01' indicating that the first and second record have been found [CR3a, CR8b].

   - The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

h) The ME simulator shall send a READ RECORD command using CURRENT mode to the UICC.

   - The record data returned shall be that of the second record in EF_{SMS} [CR4].

i) The ME simulator shall send a SEARCH RECORD command using the record number '01', the "simple forward search from record indicated in P1" mode and search pattern 'A0 A2 A3 A4' with Le = '00' to the UICC.

  - No data shall be returned by the UICC as this search pattern can not be found in any of the records [CR7a].

j) The ME simulator shall send a READ RECORD command using CURRENT mode to the UICC.

  - The record data returned shall be that of the second record in EF_{SMS} [CR13].

k) The ME simulator shall send a SELECT command to the UICC to select EF_{SMS}.

l) The ME simulator shall send a SEARCH RECORD command using the record number '00' (current record), the "simple forward search from record indicated in P1" mode, search pattern 'A0 A1 A2 B0' with Le = '00' to the UICC.

  - The UICC shall return an error code appropriate to the command, as no current record exists.

m) The ME simulator shall send a READ RECORD command using NEXT mode to the UICC.

n) The ME simulator shall send a SEARCH RECORD command using the record number '00' (current record), the "simple forward search from record indicated in P1" mode, search pattern 'A0 A1 A2 B0' with Le = '00' to the UICC.

  - The response data shall be '01 02 03 04' indicating that the first, second, third and fourth record have been found [CR3a, CR8a].

  - The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

o) The ME simulator shall send a SELECT command to the UICC to select EF_{SMS}.

p) The ME simulator shall send a SEARCH RECORD command using the record number '00' (current record), the "simple backward search from record indicated in P1" mode, search pattern 'A0 A1 A2 B0' with Le = '00' to the UICC.

  - The UICC shall return an error code appropriate to the command, as no current record exists.

q) The ME simulator shall send a READ RECORD command using PREVIOUS mode to the UICC.

r) The ME simulator shall send a SEARCH RECORD command using the record number '00' (current record), the "simple backward search from record indicated in P1" mode, search pattern 'A0 A1 A2 B0' with Le = '00' to the UICC.

  - The response data shall be '04 03 02 01' indicating that the first, second, third and fourth record have been found [CR3a, CR8b].

  - The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

Test procedure 2 (enhanced search)

a) The ME simulator shall reset the UICC.

b) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

c) The ME simulator shall send a SELECT command to the UICC to select EF_{SMS}.

d) The ME simulator shall send a VERIFY PIN command with PIN to the UICC.

e) The ME simulator shall send a SEARCH RECORD command using the record number = '01', the "enhanced forward search from record indicated in P1" mode, search pattern 'A0 A1 A2 B0' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '03' indicating that the search shall start from that offset.

  - The data returned shall be '02 03' indicating that the second and third records have been found [CR3b, CR9b].

  - The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

f) The ME simulator shall send a SEARCH RECORD command using the record number = '02', the "enhanced backward search from record indicated in P1" mode, search pattern 'A0 A1 A2 B0' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '03' indicating that the search shall start from that offset.

- The response data shall be '02' indicating that the second record has been found [CR3b, CR9b].

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

g) The ME simulator shall send a SEARCH RECORD command using the P1 = '00', the "enhanced forward search from next record" mode, search pattern 'A1 A2' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '07' indicating that the search shall start from that offset.

- The response data shall be '03' indicating that the third record has been found [CR3b, CR9c].

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

h) The ME simulator shall send a SEARCH RECORD command using the P1 = '01', the "enhanced forward search from next record" mode, search pattern 'A1 A2' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '07' indicating that the search shall start from that offset.

The UICC shall return an error code appropriate to the command [CR10].

i) The ME simulator shall send a SEARCH RECORD command using the P1 = '04', the "enhanced backward search from previous record" mode, search pattern 'A1 A2' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '07' indicating that the search shall start from that offset.

The UICC shall return an error code appropriate to the command [CR10].

j) The ME simulator shall send a SEARCH RECORD command using the P1 = '00', the "enhanced backward search from previous record" mode, search pattern 'B1 B2' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '07' indicating that the search shall start from that offset.

- The response data shall be '02' indicating that the second record has been found [CR3b, CR9d].

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

k) The ME simulator shall send a SEARCH RECORD command using the record number = '03', the "enhanced forward search from record indicated in P1" mode, search pattern 'B1 B2 A0' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '1' and the second byte shall be set to 'B0' indicating that the search shall start after the first occurrence of the value.

- The response data shall be '03' indicating that the third record has been found [CR3c, CR9a].

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

l) The ME simulator shall send a SEARCH RECORD command using the record number = '02', the "enhanced backward search from record indicated in P1" mode, search pattern 'B1 B2 A0' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '1' and the second byte shall be set to 'B0' indicating that the search shall start after the first occurrence of the value.

- The response data shall be '02 01' indicating that the first and second record has been found [CR3c, CR9b].

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

m) The ME simulator shall send a SEARCH RECORD command using the P1 = '00', the "enhanced forward search from next record" mode, search pattern 'B0 B1' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '1' and the second byte shall be set to 'A2' indicating that the search shall start after the first occurrence of the value.

- The response data shall be '03 04' indicating that the third and fourth record have been found [CR3c, CR9c].

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

n) The ME simulator shall send a SEARCH RECORD command using the P1 = '00', the "enhanced backward search from previous record" mode, search pattern 'B0 B1' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '1' and the second byte shall be set to 'A2' indicating that the search shall start after the first occurrence of the value.

- The response data shall be '02 01' indicating that the first and second record have been found [CR3c, CR9d].

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00'" - normal ending of the command.

o) The ME simulator shall send a SEARCH RECORD command using the P1 = '00', the "enhanced forward search from next record" mode, search pattern 'FF B0' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '1' and the second byte shall be set to 'FF' indicating that the search shall start after the first occurrence of the value.

   No data shall be returned by the UICC as this search pattern can not be found in any of the records [CR7a].

p) The ME simulator shall send a SELECT command to the UICC to select EF$_{SMS}$.

q) The ME simulator shall send a SEARCH RECORD command using the P1 = '00', the "enhanced forward search from record indicated in P1" mode, search pattern 'A0 A1 A2' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '00' indicating that the search shall start from that offset.

   -   The UICC shall return an error code appropriate to the command, as no current record exists.

r) The ME simulator shall send a SEARCH RECORD command using the P1 = '00', the "enhanced forward search from next record" mode, search pattern 'A0 A1 A2' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '00' indicating that the search shall start from that offset.

   -   The response data shall be '01 02 03 04' indicating that the first, second, third and fourth record have been found [CR 11].

   -   The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

s) The ME simulator shall send a SEARCH RECORD command using the P1 = '00', the "enhanced forward search from next record" mode, search pattern 'A0 A1 A2' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '00' indicating that the search shall start from that offset.

   -   The response data shall be '02 03 04' indicating that the second, third and fourth record have been found [CR4, CR9c].

   -   The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

t) The ME simulator shall send a SELECT command to the UICC to select EF$_{SMS}$.

u) The ME simulator shall send a SEARCH RECORD command using the P1 = '00', the "enhanced backward search from record indicated in P1" mode, search pattern 'A0 A1 A2' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '00' indicating that the search shall start from that offset.

   -   The UICC shall return an error code appropriate to the command, as no current record exists.

v) The ME simulator shall send a SEARCH RECORD command using the P1 = '00', the "enhanced backward search from previous record" mode, search pattern 'A0 A1 A2' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '00' indicating that the search shall start from that offset.

   -   The response data shall be '04 03 02 01' indicating that the first, second, third and fourth record have been found [CR12].

   -   The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

w) The ME simulator shall send a SEARCH RECORD command using the P1 = '00', the "enhanced backward search from previous record" mode, search pattern 'A0 A1 A2' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '00' indicating that the search shall start from that offset.

   -   The response data shall be '03 02 01' indicating that the first, second and third record have been found [CR4, CR9d].

   -   The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

x) The ME simulator shall send a SEARCH RECORD command using the P1 = '01', the "enhanced forward search from next record" mode, search pattern 'A0 A1 A2' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '00' indicating that the search shall start from that offset.

- The UICC shall return an error code appropriate to the command [CR 10].

y) The ME simulator shall send a SEARCH RECORD command using the P1 = '01', the "enhanced backward search from previous record" mode, search pattern 'A0 A1 A2' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '00' indicating that the search shall start from that offset.

  - The UICC shall return an error code appropriate to the command [CR 10].

z) The ME simulator shall send a SEARCH RECORD command using the record number = '01', the "enhanced forward search from record indicated in P1" mode and search pattern 'A0 A2 A3 A4' with Le = '00' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '03' indicating that the search shall start from that offset.

  - No data shall be returned by the UICC as this search pattern can not be found in any of the records [CR7a].

aa) The ME simulator shall send a READ RECORD command using CURRENT mode to the UICC.

  - The record data returned shall be that of the third record in EF$_{SMS}$ [CR13].

Test procedure 3 (SFI)

a) The ME simulator shall reset the UICC.

b) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

c) The ME simulator shall send a VERIFY PIN command with PIN to the UICC.

d) The ME simulator shall send a SEARCH RECORD command using the SFI of EF$_{SMS}$, the record number = '01', the "simple forward search from record indicated in P1" mode and search pattern 'A0 A1 A2' with Le = '00' to the UICC.

  - The data returned shall be '01 02 03 04' indicating that the first, second, third and fourth records have been found.

  - The status condition returned shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR14].

e) ──The ME simulator shall send a SEARCH RECORD command using the SFI of EF$_{SMS}$, the record number = '01', the "simple forward search from record indicated in P1" mode and search pattern 'A0 A2 A3' with Le = '00' to the UICC.

  - No data shall be returned by the UICC as this search pattern can not be found in any of the records.

f) The ME simulator shall send a READ RECORD command using NEXT mode to the UICC.

  - The record data returned shall be that of the first record in EF$_{SMS}$ [CR15].

Test procedure 4 (Only applicable for T=1 protocol)

a) The ME simulator shall reset the UICC.

b) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

c) The ME simulator shall send a SELECT command to the UICC to select EF$_{SMS}$.

d) The ME simulator shall send a VERIFY PIN command with PIN to the UICC.

e) The ME simulator shall send a SEARCH RECORD command using the record number = '01', the "simple forward search from record indicated in P1" mode and search pattern 'A0 A1 A2 B0' with an empty Le to the UICC.

The UICC shall not return any response data bytes [CR7a].

The status condition returned by the UICC shall be SW1='90', SW2='00' - normal ending of the command.

f) The ME simulator shall send a SEARCH RECORD command using the record number = '01', the "simple forward search from record indicated in P1" mode and search pattern 'A0 A2 A3 A4' with Le = '01' to the UICC.

No data shall be returned by the UICC as this search pattern can not be found in any of the records [CR7a].

g) The ME simulator shall send a SEARCH RECORD command using the record number = '01', the "simple forward search from record indicated in P1" mode and search pattern 'A0 A1 A2 B0' with Le = '01' to the UICC.

The data returned shall be '01' indicating that the first record has been found [CR7b].

The status condition returned by the UICC shall be SW1='90', SW2='00' - normal ending of the command.

h) The ME simulator shall send a SEARCH RECORD command using the record number = '01', the "simple forward search from record indicated in P1" mode and search pattern 'A0 A1 A2 B0' with Le = '04' to the UICC.

The data returned shall be '01 02 03 04' indicating that the first, second, third and fourth record have been found [CR7b].

The status condition returned by the UICC shall be SW1='90', SW2='00' - normal ending of the command.

i) The ME simulator shall send a SEARCH RECORD command using the record number = '01', the "enhanced forward search from record indicated in P1" mode, search pattern 'A0 A1 A2 B0' with Le = '04' to the UICC. The bit 4 of the first byte in the search indication shall be set to '0' and the second byte shall be set to '03' indicating that the search shall start from that offset.

The data returned shall be ' 02 03' indicating that the second and third record have been found [CR7b].

6.8.1.8.4 Method of test

NOTE 1: When EF $_{ACM}$ is not supported by the USIM application, any other cyclic EF which have the INCREASE access condition assigned may be used. In such case, the length of the value to be sent with an INCREASE command shall be equal to the record length of that EF.

Initial conditions

The UICC shall be connected to a ME simulator.

Each record in EF$_{ACM}$ shall contain the data '00 00 01'.

Test procedure

a) The ME simulator shall reset the UICC.

b) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

c) The ME simulator shall send a SELECT command to the UICC to select EF$_{ACM}$.

d) The ME simulator shall send an INCREASE command with value '00 00 02' to the UICC.

- The status condition returned by the UICC shall be SW1 = '69', SW2 = '82' - security status not satisfied [CR3].

e) The ME simulator shall send a VERIFY PIN command with PIN to the UICC.

f) The ME simulator shall send an INCREASE command with value '00 00 03' to the UICC.

- The response data shall be '00 00 04 00 00 03' [CR1, CR4, CR5].

g) The ME simulator shall send an INCREASE command with value '01 02 00' to the UICC.

- The response data shall be '01 02 04 01 02 00' [CR1].

h) The ME simulator shall send a READ RECORD command using ABSOLUTE mode with record 1 to the UICC.

- The data read shall be '01 02 04' [CR2].

i) The ME simulator shall send an INCREASE command with value 'FF 00 00' to the UICC.

- The status condition returned by the UICC shall be SW1 = '98', SW2 = '50' - INCREASE cannot be performed, maximum value reached [CR6].

j)   The ME simulator shall send an INCREASE command with value '00 FF FD' to the UICC.

  -   The response data shall be '02 02 01 00 FF FD' [CR5].

k)   The ME simulator shall send a SELECT command to the UICC to select EF$_{ICI}$.

l)   The ME simulator shall send an INCREASE command with value '01 02 00' to the UICC.

  -   The UICC shall return an error code appropriate to the command [CR7].

6.8.1.9.4   Method of test

Initial conditions

The UICC shall be connected to a ME simulator.

Test procedure

a)   The ME simulator shall reset the UICC.

b)   The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

c)   The ME simulator shall send a SELECT command to the UICC to select EF$_{IMSI}$.

d)   The ME simulator shall send a READ BINARY command using a length of 2 bytes to the UICC.

  -   The status condition returned by the UICC shall be SW1 = '69', SW2 = '82' - access condition not fulfilled [CR4].

e)   The ME simulator shall send a VERIFY PIN command with PIN to the UICC.

  -   The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR1, CR2].

f)   The ME simulator shall send a READ BINARY command using a length of 2 bytes to the UICC.

  -   The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR4].

g)   The ME simulator shall send a VERIFY PIN command with incorrect PIN to the UICC.

  -   The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C2' - unsuccessful PIN verification, 2 attempts left [CR6, CR8b].

h)   The ME simulator shall send a VERIFY PIN command with PIN to the UICC.

i)   The ME simulator shall send a VERIFY PIN command with an empty data field to the UICC.

  -   The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C3' - unsuccessful PIN verification, 3 attempts left [CR5, CR8a].

j)   The ME simulator shall send a VERIFY PIN command with incorrect PIN to the UICC.

  -   The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C2' - unsuccessful PIN verification, 2 attempt left [CR8b].

k)   The ME simulator shall send a VERIFY PIN command with incorrect PIN to the UICC.

  -   The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C1' - unsuccessful PIN verification, 1 attempt left [CR8b].

l)   The ME simulator shall reset the UICC and select USIM application.

m) The ME simulator shall send a VERIFY PIN command with incorrect PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C0' - unsuccessful PIN verification, no attempts left [CR7, CR8b].

n) The ME simulator shall send a VERIFY PIN command with incorrect PIN to the UICC.

The status condition returned by the UICC shall be SW1 = '69', SW2 = '83' - unsuccessful PIN verification, no attempts left [CR7].

o) The ME simulator shall send a VERIFY PIN command with PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '69', SW2 = '83' - PIN blocked [CR3b, CR7].

p) The ME simulator shall reset the UICC and select and activate USIM application.

q) The ME simulator shall send a VERIFY PIN command with PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '69', SW2 = '83' - PIN blocked [CR3b, CR7].

r) The ME simulator shall send a SELECT command to the UICC to select EF_{IMSI}.

s) The ME simulator shall send a READ BINARY command using a length of 2 bytes to the UICC.

- The status condition returned by the UICC shall be SW1 = '69', SW2 = '82' - security status not satisfied [CR7].

t) The ME simulator shall send an UNBLOCK PIN command to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR9].

u) The ME simulator shall send a VERIFY PIN command with an empty data field to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C3' - unsuccessful PIN verification, 3 attempts left [CR1 of subclause 6.8.1.13.2].

v) The ME simulator shall send a DISABLE PIN command to the UICC.

w) The ME simulator shall reset the UICC.

x) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

y) The ME simulator shall send a SELECT command to the UICC to select EF_{IMSI}.

z) The ME simulator shall send a READ BINARY command using a length of 2 bytes to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR4].

aa) The ME simulator shall send a VERIFY PIN command with PIN to the UICC.

- The UICC shall return an error code appropriate to the command [CR3a].

bb) The ME simulator shall send an ENABLE PIN command with PIN to the UICC.

6.8.1.10.4 Method of test

Initial conditions

The UICC shall be connected to a ME simulator.

PIN of the UICC shall be set to '00000000'.

Test procedure

a) The ME simulator shall reset the UICC.

b) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

c) The ME simulator shall send a CHANGE PIN command with an incorrect old PIN and new PIN of '33333333' to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C2' - unsuccessful PIN verification, 2 attempts left [CR5].

d) The ME simulator shall send a CHANGE PIN command with a correct old PIN and new PIN of '33333333' to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR1, CR2, CR3].

e) The ME simulator shall send a VERIFY PIN command with an empty data field to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C3' - unsuccessful PIN verification, 3 attempts left [CR4].

f) The ME simulator shall send a VERIFY PIN command with a new PIN of '33333333' to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR1, CR4].

g) The ME simulator shall send a CHANGE PIN command with an incorrect old PIN and new PIN of '55555555' to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C2' - unsuccessful PIN verification, 2 attempts left [CR5].

h) The ME simulator shall send a CHANGE PIN command with an incorrect old PIN and new PIN of '55555555' to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C1' - unsuccessful PIN verification, 1 attempt left [CR5].

i) The ME simulator shall reset the UICC.

j) The ME simulator shall send a CHANGE PIN command with an incorrect old PIN and new PIN of '55555555' to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C0' - unsuccessful PIN verification, no attempt left [CR5].

k) The ME simulator shall send a VERIFY PIN command with incorrect PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '69', SW2 = '83' - PIN blocked [CR6]..

l) The ME simulator shall reset the UICC.

m) The ME simulator shall send a CHANGE PIN command with an old PIN of '33333333' and new PIN of '55555555' to the UICC.

- The status condition returned by the UICC shall be SW1 = '69', SW2 = '83' - PIN blocked [CR2b].

n) The ME simulator shall send an UNBLOCK PIN command with Unblock PIN and a new PIN of '55555555' to the UICC.

o) ——The ME simulator shall send a VERIFY PIN command with an empty data field to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C3' -unsuccessful PIN verification, 3 attempts left [CR1 of subclause 6.8.1.13.2].

p) The ME simulator shall send a VERIFY PIN command with a new PIN of '55555555' to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR3].

q) The ME simulator shall send a DISABLE PIN command to the UICC.

r) The ME simulator shall reset the UICC.

s) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

t) The ME simulator shall send a CHANGE PIN command with an old PIN '55555555' and new PIN of '77777777' to the UICC.

- The UICC shall return an error code appropriate to the command [CR2a].

u) The ME simulator shall send an ENABLE PIN command to the *UICC* with PIN '55555555'.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

v) The ME simulator shall send a CHANGE PIN command with an old PIN '55555555' and new PIN of '00000000' to the UICC.

6.8.1.11.4 Method of test

Initial conditions

The UICC shall be connected to a ME simulator.

Test procedure

a) The ME simulator shall reset the UICC.

b) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

c) The ME simulator shall send a SELECT command to the UICC to select EF$_{IMSI}$.

d) The ME simulator shall send a READ BINARY command using a length of 2 bytes to the UICC.

- The status condition returned by the UICC shall be SW1 = '69', SW2 = '82' - access condition not fulfilled.

e) The ME simulator shall send a DISABLE PIN command with incorrect PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C2' - unsuccessful PIN verification, 2 attempts left [CR11].

f) The ME simulator shall send a READ BINARY command using a length of 2 bytes to the UICC.

- The status condition returned by the UICC shall be SW1 = '69', SW2 = '82' - access condition not fulfilled [CR11].

g) The ME simulator shall send a STATUS command to the UICC.

- The following shall be true of the response data [CR11]:

- TLV DO with tag '90' in tag 'C6' in tag '62' shall be '80' indicating that PIN is still enabled.

h) The ME simulator shall send a VERIFY PIN command with an empty data field to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C2' - unsuccessful PIN verification, 2 attempts left [CR11].

i) The ME simulator shall send a DISABLE PIN command with PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR6].

j) The ME simulator shall send a STATUS command to the UICC.

-   The following shall be true of the response data [CR10]:

-   TLV DO with tag '90' in the PS template DO of the response data shall indicate that PIN is disabled.

k) The ME simulator shall send a VERIFY PIN command with an empty data field to the UICC.

-   The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C3' - unsuccessful PIN verification, 3 attempts left [CR10].

l) The ME simulator shall reset the UICC.

m) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

n) The ME simulator shall send a SELECT command to the UICC to select EF$_{IMSI}$.

o) The ME simulator shall send a READ BINARY command using a length of 2 bytes to the UICC.

-   The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR1].

p) The ME simulator shall send an ENABLE PIN command with PIN to the UICC.

-   The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

q) The ME simulator shall send a DISABLE PIN command with incorrect PIN to the UICC.

-   The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C2' - unsuccessful PIN verification, 2 attempt left.

r) The ME simulator shall send a DISABLE PIN command with incorrect PIN to the UICC.

-   The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C1' - unsuccessful PIN verification, 1 attempt left.

s) s) The ME simulator shall reset the UICC.

t) t) The ME simulator shall send a DISABLE PIN command with incorrect PIN to the UICC.

-   The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C0' - unsuccessful PIN verification, no attempt left [CR12].

u) u) The ME simulator shall send a VERIFY PIN command with incorrect PIN to the UICC.

-   The status condition returned by the UICC shall be SW1 = '69', SW2 = '83' - unsuccessful PIN verification, no attempt left [CR7, CR8b].

v) v) The ME simulator shall reset the UICC.

w) w) The ME simulator shall send a DISABLE PIN command with PIN to the UICC.

-   The status condition returned by the UICC shall be SW1 = '69', SW2 = '83' - PIN blocked [CR9].

x) x) The ME simulator shall send an UNBLOCK PIN command with Unblock PIN to the UICC.

-   The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

y) y) The ME simulator shall send a VERIFY PIN command with an empty data field to the UICC.

-   The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C3' - unsuccessful PIN verification, 3 attempts left [CR1 of subclause 6.8.1.13.2].

z) z) The ME simulator shall send a DISABLE PIN command with PIN to the UICC.

-   The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR6].

aa) The ME simulator shall send a DISABLE PIN command with PIN to the UICC.

- The UICC shall return an error code appropriate to the command [CR9].

bb) The ME simulator shall send an ENABLE PIN command with PIN to the UICC.

6.8.1.12.4 Method of test

Initial conditions

1) The UICC shall be connected to a ME simulator.

Test procedure

a) The ME simulator shall reset the UICC.

b) ~~b)~~ The ME simulator shall send a DISABLE PIN command with PIN to the UICC.

c) The ME simulator shall reset the UICC.

d) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

e) The ME simulator shall send a SELECT command to the UICC to select EF$_{IMSI}$.

f) The ME simulator shall send a READ BINARY command using a length of 2 bytes to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

g) The ME simulator shall send an ENABLE PIN command with incorrect PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C2' - unsuccessful PIN verification, 2 attempts left [CR4].

h) The ME simulator shall send a READ BINARY command using a length of 2 bytes to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR1].

i) The ME simulator shall send a STATUS command to the UICC.

- The following shall be true of the response data [CR4]:

- TLV DO with tag '90' in the PS template DO of the response data shall indicate that PIN is still disabled.

j) The ME simulator shall send an ENABLE PIN command with incorrect PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C1' - unsuccessful PIN verification, 1 attempt left.

k) The ME simulator shall send an ENABLE PIN command with PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR2, CR7].

l) The ME simulator shall send a STATUS command to the UICC.

- The following shall be true of the response data [CR4]:

- TLV DO with tag '90' in the PS template DO of the response data shall indicate that PIN is now enabled.

m) The ME simulator shall send a VERIFY PIN command with an empty data field to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C3' - unsuccessful PIN verification, 3 attempts left [CR3].

n) The ME simulator shall reset the UICC.

o) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

p) The ME simulator shall send a SELECT command to the UICC to select EF$_{IMSI}$.

q) The ME simulator shall send a READ BINARY command using a length of 2 bytes to the UICC.

- The status condition returned by the UICC shall be SW1 = '69', SW2 = '82' - access condition not fulfilled [CR1].

r) The ME simulator shall send a DISABLE PIN command with PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command

s) The ME simulator shall send an ENABLE PIN command with incorrect PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C2' - unsuccessful PIN verification, 2 attempt left.

t) The ME simulator shall send an ENABLE PIN command with incorrect PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C1' - unsuccessful PIN verification, 1 attempt left.

u) The ME simulator shall reset the UICC.

v) The ME simulator shall send an ENABLE PIN command with incorrect PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C0' - unsuccessful PIN verification, no attempt left [CR5].

w) The ME simulator shall send an ENABLE PIN command with incorrect PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '69', SW2 = '83' - PIN blocked [CR5].

x) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

y) The ME simulator shall send a SELECT command to the UICC to select EF$_{IMSI}$.

z) The ME simulator shall send a STATUS command to the UICC.

- If TLV DO with tag '90' in the PS template DO of the response data indicates that PIN is enabled, then aa1) to aa3) shall be carried out.

- If TLV DO with tag '90' in the PS template DO of the response data indicates that PIN is disabled, then aa4) to aa6) shall be carried out.

aa1)The ME simulator shall send a READ BINARY command using a length of 2 bytes to the UICC.

The status condition returned by the UICC shall be SW1 = '69', SW2 = '82' - security status not satisfied [CR6].

bbaa2)The ME simulator shall send a VERIFY PIN command with PIN to the UICC.

The status condition returned by the UICC shall be SW1 = '69', SW2 = '83' - PIN blocked.

aa3cc) The ME simulator shall send a UNBLOCK PIN command with Unblock PIN to the UICC.

The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

aa4dd)The ME simulator shall send a READ BINARY command using a length of 2 bytes to the UICC.

The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR9].

aa5ee)The ME simulator shall send an ENABLE PIN command with PIN to the UICC.

The status condition returned by the UICC shall be SW1 = '69', SW2 = '83' - PIN blocked [CR2].

aa6ff)The ME simulator shall send a UNBLOCK PIN command with Unblock PIN to the UICC.

The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

gg~~bb~~) The ME simulator shall reset the UICC.

hh~~cc~~) The ME simulator shall send a STATUS command to the UICC.

The following shall be true of the response data [CR5]:

- The TLV DO with tag '90' in the PS template DO of the response data shall indicate that PIN is enabled.

ii~~dd~~) The ME simulator shall send an ENABLE PIN command with PIN to the UICC.

The UICC shall return an error or warning code appropriate to the command [CR2].

6.8.1.13.4 Method of test

Initial conditions

The UICC shall be connected to a ME simulator.

Test procedure 1

a) The ME simulator shall reset the UICC.

b) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

c) The ME simulator shall send an UNBLOCK PIN command with incorrect Unblock PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C9' - unsuccessful Unblock PIN verification, 9 attempts left [CR10].

d) The ME simulator shall send a STATUS command to the UICC.

- The following shall be true of the response data [CR6, CR8]:

- TLV DO with tag '90' in the PS template DO of the response data shall indicate that PIN is enabled.

e) The ME simulator shall send a VERIFY PIN command with an empty data field to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C3' - unsuccessful PIN verification, 3 attempts left.

f) The ME simulator shall send an UNBLOCK PIN command with an empty data field to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C9' - unsuccessful PIN verification, 9 attempts left [CR9].

g) The ME simulator shall send a DISABLE PIN command with PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

h) The ME simulator shall send an UNBLOCK PIN command with incorrect Unblock PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C8' - unsuccessful Unblock PIN verification, 8 attempts left.

i) The ME simulator shall send a STATUS command to the UICC.

The following shall be true of the response data [CR6, CR8]:

- TLV DO with tag '90' in the PS template DO of the response data shall indicate that PIN is disabled.

j) The ME simulator shall send an ENABLE PIN command with PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

k)   The ME simulator shall send a VERIFY PIN command with incorrect PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C2' - unsuccessful PIN verification, 2 attempts left.

l)   The ME simulator shall send an UNBLOCK PIN command with Unblock PIN and new PIN '33333333' to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR2].

m) m) The ME simulator shall send a STATUS command to the UICC.

- The following shall be true of the response data [CR4, CR5]:

- TLV DO with tag '90' in the PS template DO of the response data shall indicate that PIN is enabled.

n) n)The ME simulator shall send a VERIFY PIN command with an empty data field to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C3' - unsuccessful PIN verification, 3 attempts left [CR4].

o) o)The ME simulator shall send a VERIFY PIN command with the new PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR1].

p) p)The ME simulator shall send an UNBLOCK PIN command with an empty data field to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'CA' - unsuccessful PIN verification, 10 attempts left [CR4].

q) q)   The ME simulator shall send a VERIFY PIN command with incorrect PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C2' - unsuccessful PIN verification, 2 attempt left.

r) r)   The ME simulator shall send a VERIFY PIN command with incorrect PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C1' - unsuccessful PIN verification, 1 attempt left.

s) s)   The ME simulator shall send a VERIFY PIN command with incorrect PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C0' - unsuccessful PIN verification, no attempt left.

t)   The ME simulator shall send a VERIFY PIN command with incorrect PIN to the UICC.

- The status condition returned by the UICC shall be SW1 = '69', SW2 = '83' - unsuccessful PIN verification, no attempt left.

u)   The ME simulator shall send an UNBLOCK PIN command with Unblock PIN and new PIN '00000000' to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR3].

v)   The ME simulator shall send a VERIFY PIN command with an empty data field to the UICC.

- The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C3' - unsuccessful PIN verification, 3 attempts left [CR3].

Test procedure 2 - * Destructive test *****

a) The ME simulator shall reset the UICC.

b) The ME simulator shall send 9 UNBLOCK PIN command with incorrect Unblock PIN to the UICC.

   The status condition returned by the UICC each time shall be SW1 = '63', SW2 = 'CX' - unsuccessful Unblock PIN verification 'X' retries remaining. After 9 times of unsuccessful Unblock PIN verification, the SW shall be SW1 = '63', SW2 = 'C1', at least one attempt left [CR6, CR10].

c) The ME simulator shall reset the UICC.

d) The ME simulator shall send an UNBLOCK PIN command with incorrect Unblock PIN to the UICC.

   The status condition returned by the UICC shall be SW1 = '63', SW2 = 'C0' - unsuccessful Unblock PIN verification, no attempt left [CR7].

e) The ME simulator shall send an UNBLOCK PIN command with Unblock PIN to the UICC.

   The status condition returned by the UICC shall be SW1 = '69', SW2 = '83' - Unblock PIN blocked [CR7].

6.8.1.14.4 Method of test

NOTE 1: Deactivation requires the verification of ADM, and the respective requirements for their fulfilment are the responsibility of the appropriate administrative authority. Therefore, the following test procedure shall be understood as an example.

NOTE 2: When EF_{CCP2} under ADF_{USIM} is not supported by the UICC, any supported linear fixed EF in the USIM application may be chosen.

Initial conditions

The UICC shall be connected to a ME simulator.

Test procedure

a) The ME simulator shall reset the UICC.

b) The ME simulator shall send a SELECT command to the UICC to select and activate the USIM application.

c) The ME simulator shall send a DEACTIVATE FILE command using "file ID selection" to the UICC to deactivate EF_{CCP2}.

   - The status condition returned by the UICC shall be SW1 = '69', SW2 = '82' - access condition not fulfilled [CR4].

d) The ME simulator shall send a VERIFY PIN command with PIN to the UICC.

e) The ME simulator shall send a READ RECORD command to the UICC to read record 1.

The status condition returned by the UICC shall be SW1 = '69', SW2 = '86' - command not allowed (no EF selected) [CR6].

f) The ME simulator shall reset the UICC.

g) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

h) The ME simulator shall gain the security access condition(s) specified for both DEACTIVATE and ACTIVATE on EF_{CCP2}. (This procedure is dependent on the respective requirements of appropriate administrative authority and may require several steps).

i) The ME simulator shall send a SELECT command to the UICC to select EF_{CCP2}.

   - The following shall be true of the response data:

   - The value of Life Cycle Status Integer of the response data shall indicate that the EF is activated.

j) The ME simulator shall send a DEACTIVATE FILE command using "file ID selection" to the UICC to deactivate EF$_{CCP2}$.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR2a, CR3, CR4].

k) The ME simulator shall send a VERIFY PIN command with PIN to the UICC.

l) The ME simulator shall send an UPDATE RECORD command to the UICC to update record 1.

- The UICC shall return an error code appropriate to the command [CR5, CR7].

m) The ME simulator shall send a SELECT command to the UICC to select EF$_{CCP2}$.

- The value of Life Cycle Status Integer of the response data shall indicate that the EF is deactivated.

- The status condition returned by the UICC shall be SW1 = '62', SW2 = '83' - selected file invalidated.

n) The ME simulator shall send an UPDATE RECORD command to the UICC to update record 1.

The UICC shall return an error code appropriate to the command [CR7].

o) The ME simulator shall send an ACTIVATE FILE command to the UICC to select and activate EF$_{CCP2}$.

p) The ME simulator shall reset the UICC.

q) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

r) The ME simulator shall gain the security access condition(s) specified for both DEACTIVATE and ACTIVATE on EF$_{CCP2}$. (This procedure is dependent on the respective requirements of appropriate administrative authority and may require several steps.)

s) The ME simulator shall send a DEACTIVATE command using "path selection from MF" to the UICC to deactivate EF$_{CCP2}$.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

t) The ME simulator shall send a SELECT command to the UICC to select the EF$_{CCP2}$.

- The value of Life Cycle Status Integer of the response data shall indicate that the EF is deactivated [CR2b].

- The status condition returned by the UICC shall be SW1 = '62', SW2 = '83' - selected file invalidated.

u) The ME simulator shall send an ACTIVATE FILE command to the UICC to select and activate EF$_{CCP2}$.

v) The ME simulator shall reset the UICC.

w) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

x) The ME simulator shall gain the security access condition(s) specified for both DEACTIVATE and ACTIVATE on EF$_{CCP2}$. (This procedure is dependent on the respective requirements of appropriate administrative authority and may require several steps.)

y) The ME simulator shall send a DEACTIVATE FILE command using "path selection from current DF" to the UICC to deactivate EF$_{CCP2}$.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

z) The ME simulator shall send a SELECT command to the UICC to select EF$_{CCP2}$.

- The value of Life Cycle Status Integer of the response data shall indicate that the EF is deactivated [CR2b].

- The status condition returned by the UICC shall be SW1 = '62', SW2 = '83' - selected file invalidated.

aa) The ME simulator shall send an ACTIVATE FILE command to the UICC to select and activate EF$_{CCP2}$.

bb) The ME simulator shall reset the UICC.

cc) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

dd) The ME simulator shall gain the security access condition(s) specified for both DEACTIVATE and ACTIVATE on EF_{CCP2}. (This procedure is dependent on the respective requirements of appropriate administrative authority and may require several steps.)

ee) The ME simulator shall send a SELECT command to the UICC to select EF_{CCP2}.

ff) The ME simulator shall send a DEACTIVATE FILE command with P1 = P2 = '00' and with the empty data field to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR8].

gg) The ME simulator shall send a SELECT command to the UICC to select EF_{CCP2}.

- The value of Life Cycle Status Integer of the response data shall indicate that the EF is deactivated [CR8].

- The status condition returned by the UICC shall be SW1 = '62', SW2 = '83' - selected file invalidated.

hh) The ME simulator shall send an ACTIVATE FILE command to the UICC to select and activate EF_{CCP2}.

6.8.1.15.4 Method of test

NOTE 1: Activation requires the verification of ADM, and the respective requirements for their fulfilment are the responsibility of the appropriate administrative authority. Therefore, the following test procedure shall be understood as an example.

NOTE 2: When EF_{CCP2} under ADF_{USIM} is not supported by the UICC, any supported linear fixed EF in the USIM application may be chosen.

Initial conditions

The UICC shall be connected to a ME simulator.

Test procedure

a) The ME simulator shall reset the UICC.

b) The ME simulator shall send a SELECT command to the UICC to select and activate the USIM application.

c) ──The ME simulator shall gain the security access condition(s) specified for both DEACTIVATE and ACTIVATE on EF_{CCP2}. (This procedure is dependent on the respective requirements of appropriate administrative authority and may require several steps.)

d) ──The ME simulator shall send a SELECT command to the UICC to select EF_{CCP2}.

e) ──The ME simulator shall send a DEACTIVATE FILE command to the UICC to deactivate EF_{CCP2}.

f) The ME simulator shall reset the UICC.

g) The ME simulator shall send a SELECT command to the UICC to select and activate the USIM application.

h) ──The ME simulator shall send an ACTIVATE FILE command using "file ID selection" to the UICC to select and activate EF_{CCP2}.

- The status condition returned by the UICC shall be SW1 = '69', SW2 = '82' - access condition not fulfilled [CR4].

i) The ME simulator shall send a VERIFY PIN command with PIN to the UICC.

j) The ME simulator shall send a READ RECORD command to the UICC to read record 1.

The status condition returned by the UICC shall be SW1 = '69', SW2 = '86' - command not allowed (no EF selected) [CR6].

k) The ME simulator shall reset the UICC.

l)   The ME simulator shall send a SELECT command to the UICC to select and activate the USIM application.

m) The ME simulator shall gain the security access condition(s) specified for both DEACTIVATE and ACTIVATE on EF$_{CCP2}$. (This procedure is dependent on the respective requirements of appropriate administrative authority and may require several steps.)

n) The ME simulator shall send a SELECT command to the UICC to select EF$_{CCP2}$.

- The value of Life Cycle Status Integer of the response data shall indicate that the EF is deactivated.

- The status condition returned by the UICC shall be SW1 = '62', SW2 = '83' - selected file invalidated.

o) The ME simulator shall send an ACTIVATE FILE command using "file ID selection" to the UICC to select and activate EF$_{CCP2}$.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR1, CR2a, CR3, CR4].

p) The ME simulator shall send a VERIFY PIN command with PIN to the UICC.

q) The ME simulator shall send a READ RECORD command to the UICC.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR5].

r)   The ME simulator shall send a SELECT command to the UICC to select EF$_{CCP2}$.

- The value of Life Cycle Status Integer of the response data shall indicate that the EF is activated.

s) The ME simulator shall send a DEACTIVATE FILE command to the UICC to deactivate EF$_{CCP2}$.

t)   The ME simulator shall reset the UICC.

u) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

v) The ME simulator shall gain the security access condition(s) specified for both DEACTIVATE and ACTIVATE on EF$_{CCP2}$. (This procedure is dependent on the respective requirements of appropriate administrative authority and may require several steps.)

w) The ME simulator shall send an ACTIVATE command using "path selection from MF" to the UICC to select and activate EF$_{CCP2}$.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

x) The ME simulator shall send a SELECT command to the UICC to select EF$_{CCP2}$.

- The value of Life Cycle Status Integer of the response data shall indicate that the EF is activated.

y) The ME simulator shall send a DEACTIVATE FILE command to the UICC to deactivate EF$_{CCP2}$.

z) The ME simulator shall reset the UICC.

aa) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

bb) The ME simulator shall gain the security access condition(s) specified for both DEACTIVATE and ACTIVATE on EF$_{CCP2}$. (This procedure is dependent on the respective requirements of appropriate administrative authority and may require several steps.)

cc) The ME simulator shall send an ACTIVATE FILE command using "path selection from current DF" to the UICC to select and activate EF$_{CCP2}$.

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.

dd) The ME simulator shall send a SELECT command to the UICC to select EF_{CCP2}.

- The value of Life Cycle Status Integer of the response data shall indicate that the EF is activated.

ee) The ME simulator shall send a DEACTIVATE FILE command to the UICC to deactivate EF_{CCP2}.

ff) The ME simulator shall reset the UICC.

gg) The ME simulator shall send a SELECT command to the UICC to select and activate USIM application.

hh) The ME simulator shall gain the security access condition(s) specified for both DEACTIVATE and ACTIVATE on EF_{CCP2}. (This procedure is dependent on the respective requirements of appropriate administrative authority and may require several steps.)

ii) The ME simulator shall send a SELECT command to the UICC to select EF_{CCP2}.

jj) The ME simulator shall send an ACTIVATE FILE command with P1 = P2 = '00' and with the empty data field to the UICC.

The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command [CR7].

kk) The ME simulator shall send a SELECT command to the UICC to select EF_{CCP2}.

- The value of Life Cycle Status Integer of the response data shall indicate that the EF is activated [CR7].

- The status condition returned by the UICC shall be SW1 = '90', SW2 = '00' - normal ending of the command.