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Smart Cards;
Test specification for the Remote APDU structure for UICC based applications;
UICC features
(Release 15)

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Contents

Intell	ectual Property Rights	10
Forev	word	10
Moda	al verbs terminology	11
Introd	duction	11
1	Scope	12
2	References	12
2.1	Normative references	
2.2	Informative references	
3	Definition of terms, symbols, abbreviations and formats	14
3.1	Terms	14
3.2	Symbols	14
3.3	Abbreviations	15
3.4	Formats	16
3.4.1	Format of the table of optional features	16
3.4.2	Format of the applicability table	16
3.4.3	Status and Notations	16
3.4.4	Format of the conformance requirements tables	17
4	Test Environment	18
4.1	Test Applicability	18
4.1.1	Table of optional features	18
4.1.2	Applicability table	18
4.2	Test environment description	
4.3	Tests format	
4.3.1	Initial Conditions	
4.3.2	Test procedure	
4.4	General initial conditions	
4.4.1	Common rules	
4.4.2	File system and files content	
4.4.3	AID and TAR coding	
4.5	Test equipment / OTA server	
4.5.1	Test equipment / OTA server requirements	
4.5.2	Default conditions for DUT operation	
4.5.3	Java Card TM Software Development Kit	
4.5.4	Exercising RFM application	
4.5.5	Test Applications	
5	Conformance Requirements	29
5.1	Overview of remote management	
5.2	Remote APDU format	
5.3	Security parameters assigned to applications	35
5.4	Remote File Management (RFM)	
5.5	Remote Application Management (RAM)	
5.6	Additional command for push	
5.7	Confidential application management	
6	Test Cases	55
6.1	Overview of remote management	
6.2	Remote APDU format	
6.2.1	Compact Remote Application data format	
6.2.2	Expanded Remote Application data format	
6.2.2.		
6.2.2.		
6.2.2.		

6.2.2.2	Test case 2: A command session containing multiple commands with C-APDU TLV Structure	
	with definite length coding - Bad Format	
6.2.2.2.1	Initial Conditions	
6.2.2.2.2	Test Procedure	
6.2.2.3	Test case 3: A command session with C-APDU TLV Structure with indefinite length coding	58
6.2.2.3.1	Initial Conditions	58
6.2.2.3.2	Test Procedure	58
6.2.2.4	Test case 4: A command session with C-APDU TLV Structure with indefinite length coding -	
	Bad Format	50
6.2.2.4.1	Initial Conditions	
6.2.2.4.2	Test Procedure	
6.2.2.5	Test case 5: A command session with Immediate Action TLV Structure with definite length	
0.2.2.3	coding - Normal Format	60
6.2.2.5.1	Initial Conditions	
6.2.2.5.1	Test Procedure	
	Test case 6: A command session with Immediate Action TLV Structure with definite length	00
6.2.2.6		~1
60061	coding - Referenced Format	
6.2.2.6.1	Initial Conditions	
6.2.2.6.2	Test Procedure	61
6.2.2.7	Test case 7: A command session with Immediate Action TLV Structure with definite length	
	coding - Immediate Action Error	
6.2.2.7.1	Initial Conditions	
6.2.2.7.2	Test Procedure	62
6.2.2.8	Test case 8: A command session with Immediate Action TLV Structure with indefinite length	
	coding - Normal Format	63
6.2.2.8.1	Initial Conditions	63
6.2.2.8.2	Test Procedure	63
6.2.2.9	Test case 9: A command session with Immediate Action TLV Structure with indefinite length	
	coding - Referenced Format	63
6.2.2.9.1	Initial Conditions	63
6.2.2.9.2	Test Procedure	63
6.2.2.10	Test case 10: A command session with Immediate Action TLV Structure with indefinite length	
	coding - Immediate Action Error	64
6.2.2.10.1	Initial Conditions	
6.2.2.10.2	Test Procedure	
6.2.2.11	Test case 11: A command session with Error Action TLV Structure with definite length coding -	
	normal format.	65
6.2.2.11.1	Initial Conditions	
6.2.2.11.2	Test Procedure	
6.2.2.12	Test case 12: A command session with Error Action TLV Structure with definite length coding -	0.
0.2.2.12	Referenced format	65
6.2.2.12.1	Initial Conditions	
6.2.2.12.1	Test Procedure	
6.2.2.13		0.
0.2.2.13	Test case 13: A command session with Error Action TLV Structure with indefinite length coding	-
600101	- Normal format	
6.2.2.13.1	Initial Conditions	
6.2.2.13.2	Test Procedure	66
6.2.2.14	Test case 14: A command session with Error Action TLV Structure with indefinite length coding	
	- Referenced format	
6.2.2.14.1	Initial Conditions	
6.2.2.14.2	Test Procedure	66
6.2.2.15	Test case 15: A command session with Script Chaining TLV Structure with definite length	
	coding	67
6.2.2.15.1	Initial Conditions	67
6.2.2.15.2	Test Procedure	67
6.2.2.16	Test case 16: A command session with Script Chaining TLV Structure with definite length	
	coding (Script Chaining Error)	67
6.2.2.16.1	Initial Conditions	
6.2.2.16.2	Test Procedure	
6.2.2.17	Test case 17: A command session with Script Chaining TLV Structure with indefinite length	
	coding	68
6.2.2.17.1	Initial Conditions	68

6.2.2.17.2		68
6.2.2.18	Test case 18: A command session with Script Chaining TLV Structure with indefinite length	
	coding (Script Chaining Error)	69
6.2.2.18.1		
6.2.2.18.2	Test Procedure	69
6.3	Security parameters assigned to applications	
6.3.1	Minimum Security Level (MSL)	
6.3.2	Access domain	
6.4	Remote File Management (RFM)	
6.4.1	UICC Shared File System Remote File Management	
6.4.1.1	Test case 1: A command session with a single SELECT command. Check access to the file tree	
6.4.1.1.1	Initial Conditions	
6.4.1.1.2		
· · · · · · · · · · · · · · · · · · ·	Test Procedure	/(
6.4.1.2	Test case 2: A command session with multiple commands (SELECT, UPDATE BINARY,	
	READ BINARY)	
6.4.1.2.1	Initial Conditions	
6.4.1.2.2	Test Procedure	71
6.4.1.3	Test case 3: A command session with multiple commands (SEARCH RECORD, UPDATE	
	RECORD, INCREASE, READ RECORD)	
6.4.1.3.1	Initial Conditions	71
6.4.1.3.2	Test Procedure	
6.4.1.4	Test case 4: A command session with multiple commands (SET DATA, RETRIEVE DATA)	72
6.4.1.4.1	Initial Conditions	72
6.4.1.4.2	Test Procedure	
6.4.1.5	Test case 5: A command session with multiple commands (ACTIVATE FILE, DEACTIVATE	
	FILE)	72
6.4.1.5.1	Initial Conditions	
6.4.1.5.2	Test Procedure	
6.4.1.6	Test case 6: A command session with multiple commands (VERIFY PIN, CHANGE PIN)	
6.4.1.6.1	Initial Conditions	
6.4.1.6.2	Test Procedure	
6.4.1.7	Test riocedule Test case 7: A command session with multiple commands (DISABLE PIN, ENABLE PIN)	
	Initial Conditions	
6.4.1.7.1		
6.4.1.7.2	Test Procedure	
6.4.1.8	Test case 8: A command session with multiple commands (UNBLOCK PIN)	
6.4.1.8.1	Initial Conditions	
6.4.1.8.2	Test Procedure	72
6.4.1.9	Test case 9: A command session with multiple commands (CREATE FILE, RESIZE FILE,	
	DELETE FILE)	
6.4.1.9.1	Initial Conditions	
6.4.1.9.2	Test Procedure	
6.4.2	ADF Remote File Management	
6.4.2.1	Test case 1: A command session with a single SELECT command. Check access to the file tree	75
6.4.2.1.1	Initial Conditions	75
6.4.2.1.2	Test Procedure	75
6.4.2.2	Test case 2: A command session with multiple commands (SELECT, UPDATE BINARY,	
	READ BINARY)	75
6.4.2.2.1	Initial Conditions	75
6.4.2.2.2	Test Procedure	7 <i>e</i>
6.4.2.3	Test case 3: A command session with multiple commands (SEARCH RECORD, UPDATE	
***********	RECORD, INCREASE, READ RECORD)	76
6.4.2.3.1	Initial Conditions	
6.4.2.3.2	Test Procedure	
6.4.2.4	Test case 4: A command session with multiple commands (SET DATA, RETRIEVE DATA)	
6.4.2.4.1	Initial Conditions	
6.4.2.4.1		
	Test Procedure	/
6.4.2.5	Test case 5: A command session with multiple commands (ACTIVATE FILE, DEACTIVATE	7.
(1251	FILE)	
6.4.2.5.1	Initial Conditions	
6.4.2.5.2	Test Procedure	
6.4.2.6	Test case 6: A command session with multiple commands (VERIFY PIN, CHANGE PIN)	
6.4.2.6.1	Initial Conditions	77

6.4.2.6.2	Test Procedure	77
6.4.2.7	Test case 7: A command session with multiple commands (DISABLE PIN, ENABLE PIN)	78
6.4.2.7.1	Initial Conditions	78
6.4.2.7.2	Test Procedure	78
6.4.2.8	Test case 8: A command session with multiple commands (UNBLOCK PIN)	
6.4.2.8.1	Initial Conditions	
6.4.2.8.2	Test Procedure	
6.4.2.9	Test case 9: A command session with multiple commands (CREATE FILE, RESIZE FILE,	/ (
0.7.2.7	DELETE FILE)	70
6.4.2.9.1	Initial Conditions	
6.4.2.9.2	Test Procedure	
6.4.3	RFM implementation over HTTPS	
6.5	Remote Application Management (RAM)	
6.5.1	DELETE	
6.5.1.1	Test case 1: DELETE command	
6.5.1.1.1	Initial Conditions	
6.5.1.1.2	Test Procedure	80
6.5.2	SET STATUS	80
6.5.2.1	Test case 1: SET STATUS command within a command session	80
6.5.2.1.1	Initial Conditions	80
6.5.2.1.2	Test Procedure	81
6.5.3	INSTALL	
6.5.3.1	INSTALL[for load]	
6.5.3.1.1	Test case 1: INSTALL[for load] as a single command in the session	
6.5.3.1.2	Test case 2: INSTALL[for load] with memory management parameters	
6.5.3.2	INSTALL[for install]	
6.5.3.2.1	Test case 1: INSTALL[for install] with SIM File Access and Toolkit Application Specific	62
0.3.3.2.1	Parameters	0.7
(5222		02
6.5.3.2.2	Test case 2: INSTALL[for install] with UICC System Specific Parameters and SIM File	0.0
	Access and Toolkit Application Specific Parameters	83
6.5.3.2.3	Test case 3: INSTALL[for install] with UICC System Specific Parameter "UICC Toolkit	0.0
	Application specific parameters field"	83
6.5.3.2.4	Test case 4: INSTALL[for install] with UICC System Specific Parameter "UICC Access	_
	Application specific parameters field"	84
6.5.3.2.5	Test case 5: INSTALL[for install] with UICC System Specific Parameter "UICC	
	Administrative Access Application specific parameters field"	84
6.5.3.2.6	Test case 6: INSTALL[for install] with UICC System Specific Parameter "UICC Access	
	Application specific parameters field" and "UICC Administrative Access Application	
	specific parameters field" for the same ADF	85
6.5.3.2.7	Test case 7: INSTALL[for install] with UICC System Specific Parameter "UICC Access	
	Application specific parameters field" and "UICC Administrative Access Application	
	specific parameters field" for the same UICC file system	85
6.5.3.2.8	Test case 8: INSTALL[for install] with the maximum number of timers required for SIM	
0.0.0.2.0	Toolkit Application Specific Parameters set too high ('09')	86
6.5.3.2.9	Test case 9: INSTALL[for install] with the maximum number of timers required for UICC	
0.3.3.2.7	Toolkit Application Specific Parameters set too high ('09')	86
6.5.3.2.10		00
0.3.3.2.10		0-
C 5 2 2 1 1	Toolkit Application Specific Parameters set too high ('08')	0
6.5.3.2.11		0.7
< 7 0 0 10	UICC Toolkit Application Specific Parameters set too high ('08')	8
6.5.3.2.12		0.0
	Toolkit Application Specific Parameters set too high ('09')	88
6.5.3.2.13	1	
	Application Specific Parameters set to '128'	88
6.5.3.2.14		
	Application Specific Parameters set to '128'	89
6.5.3.2.15		
	Application different from zero	89
6.5.3.2.16	**	
	Application different from zero	90
6.5.3.2.17		
	Application different from SPI1	9(

6.5.3.2.18	Test case 18: INSTALL[for install] with Minimum Security Level field of UICC Toolkit	
	Application different from SPI1	91
6.5.3.2.19	Test case 19: INSTALL[for install] SIM Toolkit Applications with Access Domain	
	Parameter equal to '00' and 'FF'	92
6.5.3.2.20	Test case 20: INSTALL[for install] UICC Toolkit Applications with Access Domain	
	Parameter equal to '00' and 'FF'	92
6.5.3.2.21	Test case 21: INSTALL[for install] SIM Toolkit Application with Access Domain Parameter	0.0
<i> </i>	equal to '00' and access condition set to 'NEVER'	9:
6.5.3.2.22	Test case 22: INSTALL[for install] UICC Toolkit Application with Access Domain	0.
(= 2 2 2 2	Parameter equal to '00' and access condition set to 'NEVER'	94
6.5.3.2.23	Test case 23: INSTALL[for install] SIM Toolkit Application with Access Domain Parameter not supported	0.6
6.5.3.2.24	Test case 24: INSTALL[for install] UICC Toolkit Application with Access Domain	92
0.3.3.2.24	Parameter not supported	0.5
6.5.3.2.25	Test case 25: INSTALL[for install] UICC Toolkit Application with Access Domain) .
0.3.3.2.23	Parameter equal to '02'	96
6.5.3.2.26	Test case 26: INSTALL[for install] SIM Toolkit Applications with Access Domain)(
0.0.0.2.20	Parameter equal to '00' - independency from the CHV status at UICC-Terminal interface	96
6.5.3.2.27	Test case 27: INSTALL[for install] UICC Toolkit Applications with Access Domain	,
	Parameter equal to '00' - independency from the PIN status at UICC-Terminal interface	97
6.5.3.2.28	Test case 28: INSTALL[for install] of SIM Toolkit Applications with different Priority levels.	
6.5.3.2.29	Test case 29: INSTALL[for install] of UICC Toolkit Applications with different Priority	
	levels	98
6.5.3.2.30	Test case 30: INSTALL[for install] SIM Toolkit Applets with same Priority levels	99
6.5.3.2.31	Test case 31: INSTALL[for install] UICC Toolkit Applets with same Priority levels	99
6.5.3.2.32	Test case 32: INSTALL[for install] two SIM Toolkit Applications with identical TAR value	.100
6.5.3.2.33	Test case 33: INSTALL[for install] two UICC Toolkit Application with identical TAR value	.100
6.5.3.2.34	Test case 34: INSTALL[for install] SIM Toolkit Application with multiple TAR values	.101
6.5.3.2.35	Test case 35: INSTALL[for install] UICC Toolkit Application with multiple TAR values	102
6.5.3.2.36	Test case 36: INSTALL[for install] SIM Toolkit Application without TAR value in the	
	Install parameters, the AID contains TAR value	.102
6.5.3.2.37	Test case 37: INSTALL[for install] UICC Toolkit Application without TAR value in the	
<i>c</i> 7 2 2 2 2	Install parameters, the AID contains TAR value	.103
6.5.3.2.38	Test case 38: INSTALL[for install] for contactless application with Reader mode protocol	100
C = 2 2 20	data type A	.103
6.5.3.2.39	Test case 39: INSTALL[for install] for contactless application with Reader mode protocol	100
6.5.3.2.40	data type B Test case 40: INSTALL[for install] for contactless application with Card Emulation mode	
6.5.3.2.41	Test case 41: INSTALL[for install] with UICC System Specific Parameter "UICC Toolkit	.104
0.3.3.2.41	Application specific parameters field" and "UICC Toolkit parameters DAP" - DAP is	
	calculated with DES	10/
6.5.3.2.42	Test case 42: INSTALL[for install] with UICC System Specific Parameter "UICC Toolkit	.10
0.5.5.2.12	Application specific parameters field" and "UICC Toolkit parameters DAP" - DAP is	
	calculated with AES	.105
6.5.3.2.43	Test case 43: INSTALL[for install] UICC Toolkit Applications with Access Domain DAP	
	using DES algorithm	106
6.5.3.2.44	Test case 44: INSTALL[for install] UICC Toolkit Applications with Access Domain DAP	
	using AES algorithm	106
6.5.4	LOAD	107
6.5.4.1	Test case 1: LOAD with DES for DAP verification	.107
6.5.5	PUT KEY	.107
6.5.5.1	Test case 1: PUT KEY - create new 3DES 2 keys	
6.5.5.1.1	Initial Conditions	.107
6.5.5.1.2	Test Procedure	
6.5.5.2	Test case 2: PUT KEY - create new 3DES 3 keys	
6.5.5.2.1	Initial Conditions	
6.5.5.2.2	Test Procedure	
6.5.5.3	Test case 3: PUT KEY - add and replace DES keys	
6.5.5.3.1	Initial Conditions	
6.5.5.3.2	Test Procedure	
6.5.5.4	Test case 4: PUT KEY - create new 16 bytes AES keys	
6.5.5.4.1	Initial Conditions	108

6.5.5.4.2	Test Procedure	
6.5.5.5	Test case 5: PUT KEY - create new 24 bytes AES keys	
6.5.5.5.1	Initial Conditions	109
6.5.5.5.2	Test Procedure	109
6.5.5.6	Test case 6: PUT KEY - create new 32 bytes AES keys	109
6.5.5.6.1	Initial Conditions	109
6.5.5.6.2	Test Procedure	109
6.5.6	GET STATUS	110
6.5.6.1	Test case 1: GET STATUS with different P1 values	110
6.5.6.1.1	Initial Conditions	
6.5.6.1.2	Test Procedure	
6.5.6.2	Test case 2: GET STATUS with optional P1 values	
6.5.6.2.1	Initial Conditions	
6.5.6.2.2	Test Procedure	
6.5.6.3	Test case 3: GET STATUS returns Menu Entries in the LOCKED state	
6.5.6.3.1	Initial Conditions	
6.5.6.3.2	Test Procedure	
6.5.7	GET DATA	
6.5.7.1	Test case 1: GET DATA with different P1 values	
6.5.7.1.1	Initial Conditions	
6.5.7.1.2	Test Procedure	
6.5.8	STORE DATA	
6.5.8.1	Test case 1: STORE DATA	
6.5.8.1.1	Initial Conditions	
6.5.8.1.2	Test Procedure	
6.5.8.2	Test case 2: STORE DATA with a Forbidden Load File List	
6.5.8.2.1	Initial Conditions	
6.5.8.2.2	Test Procedure	
6.5.9	RAM implementation over HTTPS	
6.6	Additional command for push	
6.6.1	BIP	
6.6.2	CAT_TP	
6.6.2.1	Test case 1: Send Secured Data (READ BINARY) using Expanded and Compact format with the	
0.0.2.1	different TAR value	
6.6.2.1.1	Initial Conditions	
6.6.2.1.2	Test Procedure	
6.6.2.2	Test case 2: Send Secured Data (READ BINARY) using Expanded and Compact format with the	
0.0.2.2	same TAR value	
6.6.2.2.1	Initial Conditions	
6.6.2.2.2	Test Procedure	
6.6.2.3	Test case 3: PUSH Command, PoR required - No Error.	
6.6.2.3.1	Initial Conditions	
6.6.2.3.2	Test Procedure	
6.7	Confidential application management	
0.7	Comitacinata appirataon management	
Annex A	(normative): BER-TLV tags	115
A.1 Bl	ER-TLV tags	115
	3 (normative): Default file system and files content	
B.1 D	F _{TEST} (UICC Access Tests DF)	
B.1.1	DF	
B.1.1.1	DF identifier	
B.1.1.2	EF _{ARR}	116
B.1.2	EF _{TNR} (Transparent Never Read)	116
B.1.3	EF _{TARU} (Transparent Always Read and Update)	116
B.1.4	Void	117
B.1.5	EF _{TPRU} (Transparent PIN Read and Update)	
B.1.6	EF _{LF4R4b}	
B.1.7	EF _{BER-TLV}	118
B.1.8	FFCVADAL	118

B.2	DF _{TESTB} (Tests DF un	nder ADF_1)	118
B.2.1			
B.2.1			
B.2.1 B.2.2		ent Always Read and Update B)	
B.3	•		
B.3.1		unagement Actions)	
Anno	ex C (normative):	Secure data coding and command structure	121
C.1	, ,		
C.2	Remote APDU Form	nat	123
C.2.1		Application Data Format	
C.2.2		Application Data Format	
C.2.2			124
C.2.2		on TLV	
C.2.2		JV	
C.2.2	.4 Script Chaining	TLV	126
Anno	ex D (informative):	Full command structure sample	127
D.1	Formatted SMS with	PoR required - default	127
D.2	CAT-TP - default		127
D.3	HTTPS - default		127
Anno	ex E (normative):	AID and TAR values	128
E.1	UICC shared file sys	tem remote file management application	128
E.2		nagement application	
E.3	AID and TAR		128
Anno	ex F (informative):	FFS requirements	129
Anno	ex G (informative):	Core specification version information	132
	ex H (informative):	Change History	
Hiete	,	8,	135

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Secure Element Technologies (SET).

The contents of the present document are subject to continuing work within TC SET and may change following formal TC SET approval. If TC SET modifies the contents of the present document, it will then be republished by ETSI with an identifying change of release date and an increase in version number as follows:

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Modal verbs terminology

In the present document "shall", "shall not", "should", "should not", "may", "need not", "will", "will not", "can" and "cannot" are to be interpreted as described in clause 3.2 of the ETSI Drafting Rules (Verbal forms for the expression of provisions).

"must" and "must not" are NOT allowed in ETSI deliverables except when used in direct citation.

Introduction

The present document defines test cases for the UICC relating to Remote APDU structure for UICC based applications as specified in ETSI TS 102 226 [1].

1 Scope

The present document covers the minimum characteristics considered necessary for the UICC in order to provide compliance to ETSI TS 102 226 [1].

It specifies conformance test cases for the UICC relating to Remote APDU structure for UICC based applications as specified in ETSI TS 102 226 [1].

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

• In the case of a reference to a TC SET document, a non-specific reference implicitly refers to the latest version of that document in the same Release as the present document.

Referenced documents which are not found to be publicly available in the expected location might be found at https://docbox.etsi.org/Reference.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are necessary for the application of the present document.

[1]	ETSI TS 102 226: "Smart Cards; Remote APDU structure for UICC based applications".
[2]	ETSI TS 102 225: "Smart Cards; Secured packet structure for UICC based applications".
[3]	ETSI TS 102 221: "Smart Cards; UICC-Terminal interface; Physical and logical characteristics".
[4]	ETSI TS 102 223: "Smart Cards; Card Application Toolkit (CAT) (Release 9)".
[5]	GlobalPlatform: "GlobalPlatform Card Specification Version 2.3".

NOTE 1: Available at http://www.globalplatform.org/.

NOTE 2: Rel-12 and earlier versions of the current document reference Version 2.2.1.

[6]	ETSI TS 101 220: "Smart Cards; ETSI numbering system for telecommunication application
	providers".

- [7] ETSI TS 102 241: "Smart Cards; UICC Application Programming Interface (UICC API) for Java Card TM".
- [8] GlobalPlatform: "GlobalPlatform Card Specification Version 2.0.1".

NOTE 1: Available at http://www.globalplatform.org/.

NOTE 2: This reference is retained only because some requirements from older versions of the current document reference it.

[9]	ETSI TS 102 222: "Integrated Circuit Cards (ICC); Administrative commands for
	telecommunications applications".

- [10] ETSI TS 123 048: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Security mechanisms for the (U)SIM application toolkit; Stage 2 (3GPP TS 23.048)".
- [11] ETSI TS 102 127: "Smart Cards; Transport protocol for CAT applications; Stage 2".

[12] ETSI TS 143 019: "Digital cellular telecommunications system (Phase 2+); Subscriber Identity Module Application Programming Interface (SIM API) for Java Card; Stage 2 (3GPP TS 43.019)".

[13] FIPS-197 (2001): "Advanced Encryption Standard (AES)".

NOTE: Available at http://csrc.nist.gov/publications/fips/index.html.

[14] NIST Special Publication 800-38A (2001): "Recommendation for Block Cipher Modes of

Operation - Methods and Techniques".

NOTE: Available at http://csrc.nist.gov/publications/nistpubs/.

[15] NIST Special Publication 800-38B (2001): "Recommendation for Block Cipher Modes of

Operation: The CMAC Mode for Authentication".

NOTE: Available at http://csrc.nist.gov/publications/nistpubs/.

[16] GlobalPlatform: "GlobalPlatform Card, UICC Configuration", Version 1.0.1.

NOTE: Available at http://www.globalplatform.org/.

[17] ETSI TS 102 588: "Smart Cards; Application invocation Application Programming Interface

(API) by a UICC webserver for Java Card™ platform".

[18] GlobalPlatform: "GlobalPlatform Card, Confidential Card Content Management Card

Specification v2.3 - Amendment A", Version 1.1.

NOTE 1: Available at http://www.globalplatform.org/.

NOTE 2: Rel-12 and earlier versions of the current document reference Version 1.0.1.

[19] GlobalPlatform: "Card Specification Version v2.2 Amendment B", Version 1.1.3.

NOTE 1: Available at http://www.globalplatform.org/.

NOTE 2: The Rel-11 version of the current document references Version 1.1.

NOTE 3: The Rel-12 version of the current document references Version 1.1.1.

[20] ETSI TS 102 483: "Smart cards; UICC-Terminal interface; Internet Protocol connectivity between

UICC and terminal".

[21] ISO/IEC 8825-1: "Information technology -- ASN.1 encoding rules: Specification of Basic

Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules

(DER)".

[22] GlobalPlatform: "Card Specification Version 2.3, Amendment C: Contactless Services"

Version 1.2.

NOTE 1: Available at http://www.globalplatform.org/.

NOTE 2: The Rel-11 version of the current document references Version 1.0.1.

NOTE 3: The Rel-12 version of the current document references Version 1.1.

[23] ETSI TS 102 622: "Smart Cards; UICC - Contactless Front-end (CLF) Interface; Host Controller

Interface (HCI)".

[24] GlobalPlatform: "Security Upgrade for Card Content Management - GlobalPlatform Card

Specification v2.2 - Amendment E", Version 1.0.

NOTE: Available at http://www.globalplatform.org/.

[25] GlobalPlatform: "Java Card API and Export File for Card Specification v2.2.1

(org.globalplatform) Version 1.6".

NOTE 1: Available at http://www.globalplatform.org/.

NOTE 2	2: Rel-12 and earlier versions of the current document reference Version 1.5.
[26]	Oracle "Application Programming Interface, Java Card TM Platform, 3.0.1 Classic Edition".
[27]	Oracle "Runtime Environment Specification, Java Card TM Platform, 3.0.1 Classic Edition".
[28]	Oracle "Virtual Machine Specification Java Card TM Platform, 3.0.1 Classic Edition".
NOTE:	Oracle Java Card TM Specifications can be downloaded at http://docs.oracle.com/javame/javacard/javacard.html .
[29]	ISO/IEC 9646-7:1995: "Information technology Open Systems Interconnection Conformance testing methodology and framework Part 7: Implementation Conformance Statements".
[30]	ETSI TS 102 230-2: "Smart Cards; UICC-Terminal interface; Physical, electrical and logical test specification; Part 2: UICC features (Release 9)".
[31]	ETSI TS 102 705: "Smart Cards; UICC Application Programming Interface for JavaCard for

2.2 Informative references

Contactless Applications".

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

• In the case of a reference to a TC SET document, a non-specific reference implicitly refers to the latest version of that document in the same Release as the present document.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

Not applicable.

3 Definition of terms, symbols, abbreviations and formats

3.1 Terms

For the purposes of the present document, the terms given in ETSI TS 102 226 [1], ETSI TS 102 127 [11] and the following apply:

Controlling Authority Security Domain (CASD): on-card controlling entity representing an off card trusted third party

NOTE: It provides services to confidentially load or generate Secure Channel keys of the APSD.

3.2 Symbols

Void.

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in ETSI TS 102 226 [1], ETSI TS 102 127 [11] and the following apply:

ACK ACKnowledge
ADD Access Domain Data
ADF Application Data File
ADP Access Domain Parameter
AES Advanced Encryption Standard
AID Application IDentifier

APDU Application Protocol Data Unit
API Application Programming Interface
APSD Application Provider Security Domain
BER-TLV Basic Encoding Rules - Tag, Length, Value

BIP Bearer Independent Protocol

C-APDU Command - Application Protocol Data Unit
CASD Controlling Authority Security Domain

CBC Cell Broadcast Centre

CLA CLAss

CMAC Cipher-based Message Authentication Code

DAP Data Authentication Pattern
DEK Data Encryption Key
DES Data Encryption Standard

DF Directory File

ECB Electronic Code Book

ECKA Elliptic Curve Key Agreement algorithm

EF Elementary File FFS For Further Study

HTTP HyperText Transfer Protocol
HTTPS HyperText Transfer Protocol Secure
ICCID Integrated Circuit Card IDentification

INS INStruction

ISD Issuer Security Domain

KIC Key and algorithm Identifier for ciphering KID Key and algorithm IDentifier for RC/CC/DS

MAC Message Authentication Code

MF Management Field
MSL Minimum Security Level
MSLD Minimum Security Level Data

OTA Over The Air
PDU Packet Data Unit

RAM Remote Application Management

R-APDU Response - Application Protocol Data Unit

RF Radio Frequency

RFM Remote File Management RFU Reserved for Future Use SCP02 Secure Channel Protocol 02

SD Security Domain SDU Service Data Unit

TAR Toolkit Application Reference TCP Transmission Control Protocol

TLV Tag Length Value

3.4 Formats

3.4.1 Format of the table of optional features

The columns in table 4.1 have the following meaning.

Column	Meaning
Option	The optional feature supported or not by the IUT.
Status	See clause 3.4.3.
Support	The support columns are to be filled in by the supplier of the implementation. The following common notations, defined in ISO/IEC 9646-7 [29], are used for the support column in table 4.1. 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	The mnemonic column contains mnemonic identifiers for each item.

3.4.2 Format of the applicability table

The applicability of every test in table 4.2 a) is formally expressed by the use of Boolean expression defined in the following clause.

The columns in table 4.2 a) have the following meaning.

Column	Meaning
Clause	The "Clause" column identifies the clause containing the test case referenced in the "Test case
	number and description" column.
Test case number	The "Test case number and description" column gives a reference to the test case number (along
and description	with the corresponding description) detailed in the present document and required to validate the
	IUT.
Release	The "Release" column gives the Release applicable and onwards, for the corresponding test case.
Rel-x UICC	For a given Release, the corresponding "Rel-x UICC" column lists the tests required for a DUT to be
	declared compliant to this Release.
Support	The "Support" column is blank in the proforma, and is to be completed by the manufacturer in
	respect of each particular requirement to indicate the choices, which have been made in the
	implementation.

3.4.3 Status and Notations

The "Rel-x" columns show the status of the entries as follows:

The following notations, defined in ISO/IEC 9646-7 [29], 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 ..." is to be used to avoid ambiguities.

References to items

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

EXAMPLE: 4.1/4 is the reference to the answer of item 4 in table 4.1.

The ID (identifier) of a test case consists of a main identifier and optionally a sub-identifier; for example, 2-1 and 3. A sub-identifier is used when there are multiple test cases with this same main identifier; otherwise, no sub-identifier is used. Reference to a main identifier when the relevant test cases also have sub-identifier are assumed to reference all of the test cases with that main identifier.

3.4.4 Format of the conformance requirements tables

The columns in the requirement tables in clause 5 have the following meaning:

Column	Meaning
Req number	This column shows the ordinal term assigned to a requirement identified in the referenced specification. The following syntax has been used to define the unique R(equirement) terms: R <n><xx><yy>_<zzz> n: Identification letter for the referenced specification: Q: ETSI TS 102 226 [1] X: ETSI TS 102 221 [3] XX: Main clause of the core specification in which the conformance requirement is listed. YY: Sub-clause of the main clause in the core specification in which the conformance requirement is listed.</zzz></yy></xx></n>
	ZZZ: Continuously increasing number starting with '001'
Clause	The "Clause" column helps to identify the location of a requirement by listing the clause hierarchy down to the sub-clause the requirement is located in
Release	An optional column that is used if the listed requirement is valid for a specific release or a specific range of releases only, up to a specific release, or from a specific release onwards
Description	In this column the requirement text is shown. Where the text can either be a copy of the original requirement as found ETSI TS 102 226 [1] or ETSI TS 102 221 [3], or a text analogous to the requirement text (e.g. if the requirement text is descriptive and can be shortened or truncated)

4 Test Environment

4.1 Test Applicability

4.1.1 Table of optional features

The device supplier shall state the support of possible options in table 4.1. See clause 3.4 for the format of table 4.1.

Table 4.1: Options

Item	Option	Status	Support	Mnemonic
1	CAT TP protocol is supported	0		O_CAT_TP
2	SMS protocol supported	0		O_SMS
3	HTTPS protocol supported	0		O_HTTPS
4	The TAR may be taken out of the AID	0		O_Default_TAR
5	Reader Mode, Type A	0		O_RM_A
6	Reader Mode, Type B	0		O_RM_B
7	DES used for ciphering	0		O_DES_CHP
8	Void			
9	Additional combinations of the P1 parameter is supported for command GET STATUS; i.e. setting more than one bit of b5 to	0		O_P1_ADD_COM
	b8			
10	ISD has DAP Verification privilege and uses DES algorithm	0		O_ISD_DAP_DES
11	Void			
12	UICC Shared File System RFM application is supported	0		O_UICC_SHAR_RFM
	UICC Toolkit Parameters DAP with DES algorithm is supported	0		O_TK_DAP_DES
	UICC Toolkit Parameters DAP with AES algorithm is supported	0		O_TK_DAP_AES
15	Access Domain DAP with DES algorithm is supported	0		O_AD_DAP_DES
16	Access Domain DAP with AES algorithm is supported	0		O_AD_DAP_AES
17	SIM application is supported	0		O_SIM
18	Contactless card emulation mode is supported	0		O_CE

4.1.2 Applicability table

Table 4.2a) and table 4.2b) specify the applicability of each test case to the device under test. See clause 3.4 for the format of table 4.2 a).

Table 4.2 a): Applicability of tests

Clause	Test case number and description	Release	Rel-11 UICC	Rel-12 UICC	Rel-13 UICC	Rel-14 UICC	Rel-15 UICC	Support
6.2.2.1	Test case 1: A command session with C-APDU TLV Structure with definite length coding	Rel-11	М	М	М	М	М	
6.2.2.2	Test case 2: A command session containing multiple commands with C-APDU TLV Structure with definite length coding - Bad Format	Rel-11	M	М	M	М	M	
6.2.2.3	Test case 3: A command session with C-APDU TLV Structure with indefinite length coding	Rel-11	М	М	M	М	М	
6.2.2.4	Test case 4: A command session with C-APDU TLV Structure with indefinite length coding - Bad Format	Rel-11	М	М	M	М	М	
6.2.2.5	Test case 5: A command session with Immediate Action TLV Structure with definite length coding - Normal Format	Rel-11	М	М	M	М	М	
6.2.2.6	Test case 6: A command session with Immediate Action TLV Structure with definite length coding - Referenced Format	Rel-11	М	М	M	М	М	
6.2.2.7	Test case 7: A command session with Immediate Action TLV Structure with definite length coding - Immediate Action Error	Rel-11	C011	C011	C011	C011	C011	
6.2.2.8	Test case 8: A command session with Immediate Action TLV Structure with indefinite length coding - Normal Format	Rel-11	М	М	M	М	M	
6.2.2.9	Test case 9: A command session with Immediate Action TLV Structure with indefinite length coding - Referenced Format	Rel-11	М	М	M	М	M	
6.2.2.10	Test case 10: A command session with Immediate Action TLV Structure with indefinite length coding - Immediate Action Error	Rel-11	C011	C011	C011	C011	C011	
6.2.2.11	Test case 11: A command session with Error Action TLV Structure with definite length coding - normal format	Rel-11	М	М	M	М	M	
6.2.2.12	Test case 12: A command session with Error Action TLV Structure with definite length coding - Referenced format	Rel-11	M	М	M	М	M	
6.2.2.13	Test case 13: A command session with Error Action TLV Structure with indefinite length coding - Normal format	Rel-11	М	М	М	М	M	
6.2.2.14	Test case 14: A command session with Error Action TLV Structure with indefinite length coding - Referenced format	Rel-11	М	М	M	М	M	
6.2.2.15	Test case 15: A command session with Script Chaining TLV Structure with definite length coding	Rel-11	М	М	М	М	М	
6.2.2.16	Test case 16: A command session with Script Chaining TLV Structure with definite length coding (Script Chaining Error)	Rel-11	М	М	М	М	M	
6.2.2.17	Test case 17: A command session with Script Chaining TLV Structure with indefinite length coding	Rel-11	М	М	М	М	М	
6.2.2.18	Test case 18: A command session with Script Chaining TLV Structure with indefinite length coding (Script Chaining Error)	Rel-11	М	М	М	М	М	
6.4.1.1	Test case 1: A command session with a single SELECT command. Check access to the file tree	Rel-11	C012	C012	C012	C012	C012	
6.4.1.2	Test case 2: A command session with multiple commands (SELECT, UPDATE BINARY, READ BINARY)	Rel-11	C012	C012	C012	C012	C012	

Clause	Test case number and description	Release	Rel-11 UICC	Rel-12 UICC	Rel-13 UICC	Rel-14 UICC	Rel-15 UICC	Support
6.4.1.3	Test case 3: A command session with multiple commands (SEARCH RECORD, UPDATE RECORD, INCREASE, READ RECORD)	Rel-11	C012	C012	C012	C012	C012	
6.4.1.4	Test case 4: A command session with multiple commands (SET DATA, RETRIEVE DATA)	Rel-11	C012	C012	C012	C012	C012	
6.4.1.5	Test case 5: A command session with multiple commands (ACTIVATE FILE, DEACTIVATE FILE)	Rel-11	C012	C012	C012	C012	C012	
6.4.1.6	Test case 6: A command session with multiple commands (VERIFY PIN, CHANGE PIN)	Rel-11	C012	C012	C012	C012	C012	
6.4.1.7	Test case 7: A command session with multiple commands (DISABLE PIN, ENABLE PIN)	Rel-11	C012	C012	C012	C012	C012	
6.4.1.8	Test case 8: A command session with multiple commands (UNBLOCK PIN)	Rel-11	C012	C012	C012	C012	C012	
6.4.1.9	Test case 5: A command session with multiple commands (CREATE FILE, RESIZE FILE, DELETE FILE)	Rel-11	C012	C012	C012	C012	C012	
6.4.2.1	Test case 1: A command session with a single SELECT command. Check access to the file tree		М	М	M	М	М	
6.4.2.2	Test case 2: A command session with multiple commands (SELECT, UPDATE BINARY, READ BINARY)	Rel-11	М	М	M	М	М	
6.4.2.3	Test case 3: A command session with multiple commands (SEARCH RECORD, UPDATE RECORD, INCREASE, READ RECORD)	Rel-11	М	М	M	М	M	
6.4.2.4	Test case 4: A command session with multiple commands (SET DATA, RETRIEVE DATA)	Rel-11	М	М	M	М	М	
6.4.2.5	Test case 5: A command session with multiple commands (ACTIVATE FILE, DEACTIVATE FILE)	Rel-11	М	М	M	М	М	
6.4.2.6	Test case 6: A command session with multiple commands (VERIFY PIN, CHANGE PIN)	Rel-11	М	М	M	М	М	
6.4.2.7	Test case 7: A command session with multiple commands (DISABLE PIN, ENABLE PIN)	Rel-11	М	М	M	М	М	
6.4.2.8	Test case 8: A command session with multiple commands (UNBLOCK PIN)	Rel-11	М	М	M	М	М	
6.4.2.9	Test case 9: A command session with multiple commands (CREATE FILE, RESIZE FILE, DELETE FILE)	Rel-11	М	М	M	М	М	
6.5.1.1	Test case 1: DELETE command	Rel-11	М	М	М	М	M	
6.5.2.1	Test case 1: SET STATUS command within a command session	Rel-11	М	М	М	М	М	
6.5.3.1.1	Test case 1: INSTALL [for load] as a single command in the session	Rel-11	M	M	M	M	M	
6.5.3.1.2	Test case 2: INSTALL[for load] with memory management parameters	Rel-11	М	М	М	М	М	
6.5.3.2.1	Test case 1: INSTALL[for install] with SIM File Access and Toolkit Application Specific Parameters	Rel-11	C017	C017	C017	C017	C017	

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Clause	Test case number and description	Release	Rel-11 UICC	Rel-12 UICC	Rel-13 UICC	Rel-14 UICC	Rel-15 UICC	Support
6.5.3.2.2	Test case 2: INSTALL[for install] with UICC System Specific Parameters and SIM File Access and Toolkit Application Specific Parameters	Rel-11	C017	C017	C017	C017	C017	
6.5.3.2.3	Test case 3: INSTALL[for install] with UICC System Specific Parameter "UICC Toolkit Application specific parameters field"	Rel-11	М	М	M	М	М	
6.5.3.2.4	Test case 4: INSTALL[for install] with UICC System Specific Parameter "UICC Access Application specific parameters field"	Rel-11	М	М	M	М	М	
6.5.3.2.5	Test case 5: INSTALL[for install] with UICC System Specific Parameter "UICC Administrative Access Application specific parameters field"	Rel-11	M	M	М	М	М	
6.5.3.2.6	Test case 6: INSTALL[for install] with UICC System Specific Parameter "UICC Access Application specific parameters field" and "UICC Administrative Access Application specific parameters field" for the same ADF	Rel-11	M	М	М	М	М	
6.5.3.2.7	Test case 7: INSTALL[for install] with UICC System Specific Parameter "UICC Access Application specific parameters field" and "UICC Administrative Access Application specific parameters field" for the same UICC file system	Rel-11	M	М	М	М	M	
6.5.3.2.8	Test case 8: INSTALL[for install] with the maximum number of timers required for SIM Toolkit Application Specific Parameters set too high ('09')	Rel-11	C017	C017	C017	C017	C017	
6.5.3.2.9	Test case 9: INSTALL[for install] with the maximum number of timers required for UICC Toolkit Application Specific Parameters set too high ('09')	Rel-11	М	M	М	М	М	
6.5.3.2.10	Test case 10: INSTALL[for install] with the maximum number of channels required for SIM Toolkit Application Specific Parameters set too high ('08')	Rel-11	C017	C017	C017	C017	C017	
6.5.3.2.11	Test case 11: INSTALL[for install] with the maximum number of channels required for UICC Toolkit Application Specific Parameters set too high ('08')	Rel-11	M	М	М	М	М	
6.5.3.2.12	Test case 12: INSTALL[for install] with the maximum number of services required for UICC Toolkit Application Specific Parameters set too high ('09')	Rel-11	М	M	М	М	M	
6.5.3.2.13	Test case 13: INSTALL[for install] with requested item identifier for SIM Toolkit Application Specific Parameters set to '128'	Rel-11	C017	C017	C017	C017	C017	
6.5.3.2.14	Test case 14: INSTALL[for install] with requested item identifier for UICC Toolkit Application Specific Parameters set to '128'	Rel-11	М	М	М	М	М	
6.5.3.2.15	Test case 15: INSTALL[for install] with Minimum Security Level field of SIM Toolkit Application different from zero	Rel-11	C018	C018	C018	C018	C018	
6.5.3.2.16	Test case 16: INSTALL[for install] with Minimum Security Level field of UICC Toolkit Application different from zero	Rel-11	C001	C001	C001	C001	C001	
6.5.3.2.17	Test case 17: INSTALL[for install] with Minimum Security Level field of SIM Toolkit Application different from SPI1	Rel-11	C018	C018	C018	C018	C018	

Clause	Test case number and description	Release	Rel-11 UICC	Rel-12 UICC	Rel-13 UICC	Rel-14 UICC	Rel-15 UICC	Support
6.5.3.2.18	Test case 18: INSTALL[for install] with Minimum Security Level field of UICC Toolkit Application different from SPI1	Rel-11	C001	C001	C001	C001	C001	
6.5.3.2.19	Test case 19: INSTALL[for install] SIM Toolkit Applications with Access Domain Parameter equal to '00' and 'FF'	Rel-11	C017	C017	C017	C017	C017	
6.5.3.2.20	Test case 20: INSTALL[for install] UICC Toolkit Applications with Access Domain Parameter equal to '00' and 'FF'	Rel-11	М	М	М	М	M	
6.5.3.2.21			C017	C017	C017	C017	C017	
6.5.3.2.22			М	M	М	M	M	
6.5.3.2.23	Test case 23: INSTALL[for install] SIM Toolkit Application with Access Domain Parameter not supported	Rel-11	C017	C017	C017	C017	C017	
6.5.3.2.24	Test case 24: INSTALL[for install] UICC Toolkit Application with Access Domain Parameter not supported	Rel-11	М	М	M	М	М	
6.5.3.2.25	Test case 25: INSTALL[for install] UICC Toolkit Application with Access Domain Parameter equal to '02'	Rel-11	М	М	М	М	М	
6.5.3.2.26	Test case 26: INSTALL[for install] SIM Toolkit Applications with Access Domain Parameter equal to '00' - independency from the CHV status at UICC-Terminal interface	Rel-11	C017	C017	C017	C017	C017	
6.5.3.2.27	Test case 27: INSTALL[for install] UICC Toolkit Applications with Access Domain Parameter equal to '00' - independency from the PIN status at UICC-Terminal interface	Rel-11	М	М	М	М	М	
6.5.3.2.28	Test case 28: INSTALL[for install] of SIM Toolkit Applications with different Priority levels	Rel-11	C017	C017	C017	C017	C017	
6.5.3.2.29	Test case 29: INSTALL[for install] of UICC Toolkit Applications with different Priority levels	Rel-11	М	М	М	М	М	
6.5.3.2.30	Test case 30: INSTALL[for install] SIM Toolkit Applets with same Priority levels	Rel-11	C017	C017	C017	C017	C017	
6.5.3.2.31	Test case 31: INSTALL[for install] UICC Toolkit Applets with same Priority levels	Rel-11	М	М	M	М	М	
6.5.3.2.32	Test case 32: INSTALL[for install] two SIM Toolkit Applications with identical TAR value	Rel-11	C017	C017	C017	C017	C017	
6.5.3.2.33	Test case 33: INSTALL[for install] two UICC Toolkit Application with identical TAR value	Rel-11	М	М	М	М	М	
6.5.3.2.34	Test case 34: INSTALL[for install] SIM Toolkit Application with multiple TAR values	Rel-11	C018	C018	C018	C018	C018	
6.5.3.2.35	Test case 35: INSTALL[for install] UICC Toolkit Application with multiple TAR values	Rel-11	C001	C001	C001	C001	C001	
6.5.3.2.36	Test case 36: INSTALL[for install] SIM Toolkit Application without TAR value in the Install parameters, the AID contains TAR value	Rel-11	C019	C019	C019	C019	C019	

Release 15								
	Clause							
	6.5.3.2.37	Tes TAI						
	6.5.3.2.38	Tes Rea						
		Tes Rea						
	6.5.3.2.40	Tes Ca						
	6.5.3.2.41	Tes Par "Ul						
	6.5.3.2.42	Tes Par "Ul						
	6.5.3.2.43	Tes						
	6.5.3.2.44	Tes						
	6.5.4.1	Tes						
	6.5.5.1	Tes						
	6.5.5.2	Tes						
ļ	6.5.5.3	Tes						
	6.5.5.4	Tes						

23

Table 4.2 b): Conditional items referenced by table 4.2 a)

Conditional item	Description
C001	IF (O_CAT_TP OR O_SMS) THEN M ELSE N/A
C002	If (O_CAT_TP OR O_SMS) AND (O_Default_TAR) THEN M ELSE N/A
C003	IF O_RM_A THEN M ELSE N/A
C004	IF O_RM_B THEN M ELSE N/A
C005	IF O_CAT_TP THEN M ELSE N/A
C006	IF(O_DES_CHP AND O_CAT_TP) THEN M ELSE N/A
C007	Void
C008	IF O_P1_ADD_COM THEN M ELSE N/A
C009	IF O_ISD_DAP_DES THEN M ELSE N/A
C010	Void
C011	IF O_SMS THEN M ELSE N/A
C012	IF O_UICC_SHAR_RFM THEN M ELSE N/A
C013	IF O_TK_DAP_DES THEN M ELSE N/A
C014	IF O_TK_DAP_AES THEN M ELSE N/A
C015	IF O_AD_DAP_DES THEN M ELSE N/A
C016	IF O_AD_DAP_AES THEN M ELSE N/A
C017	IF O_SIM THEN M ELSE N/A
C018	IF O_SIM AND (O_CAT_TP OR O_SMS) THEN M ELSE N/A
C019	IF O_SIM AND (O_CAT_TP OR O_SMS) AND O_Default_TAR THEN M ELSE N/A
C020	IF O_CE THEN M ELSE N/A

4.2 Test environment description

The general architecture for the test environment is:

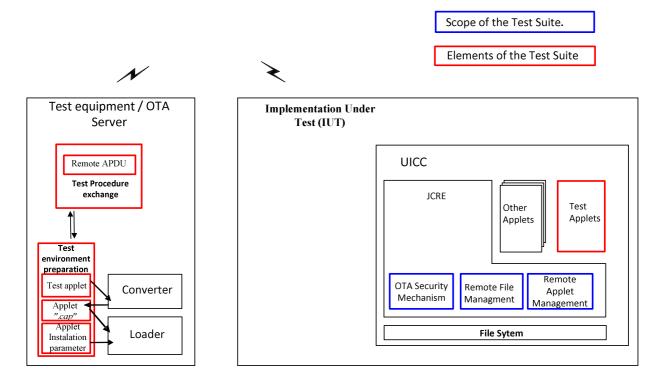


Figure 4.1

The general scheme for the Data Exchange:

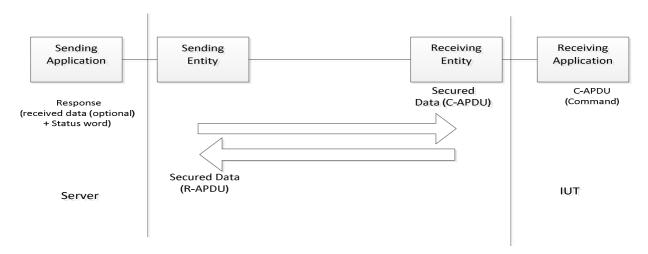


Figure 4.2

4.3 Tests format

4.3.1 Initial Conditions

In addition to the general preconditions defined in clause 4.3, this clause defines the initial conditions prior to the execution of each test case; i.e. for each ID.

4.3.2 Test procedure

Each test procedure contains a table to indicate the expected responses form the UICC as follows.

Step	Description	Expected Result	RQ
	Commands with Secured Data content	Expected returned Response with	Conformance
	description	Secured Data content description	Requirements Reference
	Each step consists of a command which may contain a single command or a sequence of commands		

The detailed information on the Data Format of Secured data to be sent in the "Description" column shall be configured as specified in annex C under:

- clause C.2.1 for "Compact Remote Application Data Format";
- clause C.2.2 for "Expanded Remote Application Data Format".

The detailed information on the Command Coding of the Secured data to be sent in the "Description" shall be configured as specified in annex C under:

• clause C.1 Commands, table C.1.

For usage of SELECT, SELECT by FID with no response data requested shall be used unless otherwise specified.

In case the expected returned Response with Secured Data in "Expected Result" shall contain Data in addition to the status word, the detailed description of the file contents for all system files used within the present document is specified in annex B.

4.4 General initial conditions

4.4.1 Common rules

The Initial Conditions are a set of general prerequisites for the IUT prior to the execution of testing. For each test procedure described in the present document, the following rules apply to the Initial Conditions:

- Unless otherwise stated, the file system and files content shall be restored to the contents definition in clause 4.3.1 and in annex B of the present document.
- Unless otherwise stated, before installing the applet(s) relevant to the current test procedure, no package specific to this test specification shall be present.
- Unless otherwise stated, all structured data shall be coded as Compact Remote Command Structure.
- Unless otherwise stated, all structured data sent via HTTP shall be coded as Expanded Remote command in indefinite length coding structure.
- Unless otherwise stated, the UICC shall be activated and a reset has been performed on ISO interface.
- Unless otherwise stated, the initial security conditions (i.e. PIN, ADM, etc.) shall be set to the default value before running of the test case.
- Unless otherwise specified, the default SPI1 coding for a RAM application should be set to '17' or '16'.

4.4.2 File system and files content

Figure 4.3 shows the file system and the files content that the IUT shall contain to execute the test cases of this test specification, unless otherwise stated. The definition of other files is out of scope of the present document.

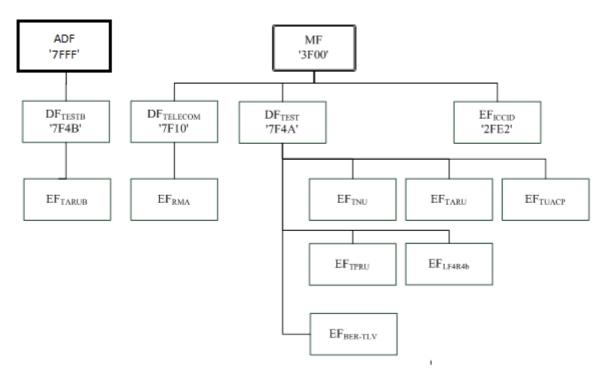


Figure 4.3

Further information can be found under annex B.

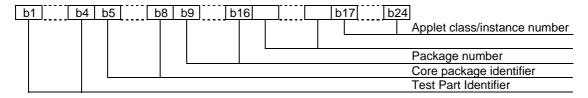
4.4.3 AID and TAR coding

The AID coding for the Test Packages, Applet classes and Applets shall be as specified in ETSI TS 101 220 [6]. In addition, the following TAR and Application Provider specific data values are defined for use within the present document.

AID coding:

Е	yte 1	 Byte 12	2 Byte	13	Byte	14	Byte	15	Byte	16	
											Application Provider specific data Default TAR if not defined in annex E
											Specified in ETSI TS 101 220 [6]

TAR coding (3 bytes / 24 bits):



Applet instance number, Applet Class number, Package number:

- For package AID, package number shall start from 0 and class and instance numbers shall be 0.
- For class AID, package number is the number of the class package, class number shall start from 1 and instance shall be 0.
- For instance AID, package and class number are the number of class and package of which instance belongs, and instance number shall start from 1.

Test Part and Core Package Identifier are defined in annex E, despite the values reserved in ETSI TS 101 220 [6].

Application Provider specific data (1 byte):

- '00' for Package.
- '01' for Applet class.
- '02' for Applet Instance.

Further information can be found under annex E.

4.5 Test equipment / OTA server

4.5.1 Test equipment / OTA server requirements

These sub-clauses recommend a minimum specification for each of the items of test equipment referenced in the tests.

The simulator shall meet the following requirements:

- be able to send and receive secure data commands to the IUT;
- the result of I/O commands shall be presented at the application layer;
- the structure of commands shall be according to the generalized structure defined ETSI TS 102 221 [3];
- be able to provide results of the tests;

- shall send and/or compare all data specified in test file;
- shall be able to accept all valid status codes returned.

Further requirement when the UICC interface shall be checked in the test case:

- shall provide the possibility to monitor the UICC on the ISO and SWP interfaces;
- the result of I/O commands shall be presented at the application layer.

4.5.2 Default conditions for DUT operation

- Any level 1 user verification requirement (PIN, CHV if O_SIM is supported) on the IUT shall be enabled with three attempts remaining and ten unblock attempts remaining.
- The default PIN value shall be set on the IUT to '31 31 31 31 FF FF FF FF'.
- The default UNBLOCK PIN value shall be set on the IUT to '33 33 33 37 FF FF FF.
- If O_SIM is supported, the default CHV value shall be set on the IUT to '31 31 31 31 3F FF FF FF.
- An application residing on the UICC shall support the required commands specified in ETSI TS 102 221 [3].
- The ISD should be provisioned with a key set with a 32-byte AES DEK key.

NOTE: If the ISD is not provisioned with a key set with a 32-byte AES DEK key (for example, with a 3DES key or a shorter AES key), there will be some test cases which cannot be run.

The following application could be used for this purpose:

- UICC toolkit application (applications using the uicc.toolkit.ToolkitInterface).
- SIM toolkit application (applications using the sim.toolkit.ToolkitInterface or sim.access.SIMView).

4.5.3 Java Card™ Software Development Kit

Java CardTM software development kit (SDK) version supported by Java Card 3.0.1 specifications ([26], [27] and [28]) is 1.5.

4.5.4 Exercising RFM application

An RFM application is required by various test cases in order to exercise the functionality which is being tested by these test cases. The term "exercising RFM application" is used for this RFM application:

- If the UICC supports O_UICC_SHAR_RFM, the exercising RFM application shall be the UICC Shared File System RFM application.
- Otherwise, the exercising RFM application shall be an ADF RFM application. In this case, the ADF RFM application shall support access to the UICC Shared File System.

4.5.5 Test Applications

When communicating with Test Applications directly on the UICC-Terminal interface, a channel which is not the basic logical channel (channel 0) shall be used.

Unless otherwise stated, a logical channel for this purpose shall be opened just before the first attempted selection of the Test Application directly on the UICC-Terminal interface in the Test Procedure; or just before a subsequent selection of the Test Application if the logical channel used previously has been closed. The logical channel shall not be explicitly closed unless stated explicitly.

5 Conformance Requirements

5.1 Overview of remote management

Reference: ETSI TS 102 226 [1], clause 4.

RQ number	Clause	Release	Description
RQ01_0001	4		All data exchanged between the Sending Entity and Receiving Entity shall be formatted as "Secured data" according to ETSI TS 102 225 [2].
RQ01_0002	4		The parameter(s) (the command string) in the "Secured data" is either a single command, or a list of commands, which shall be processed sequentially.
RQ01_0012	4	Rel-13 upwards	Additional application provider security may be applied to the "secured data" as specified in clause 10.2 of ETSI TS 102 226 [1].
RQ01_0003	4		The Remote Management application shall take parameters from the "Secured data" and shall act upon the files or applications or perform other actions according to these parameters.
RQ01_0004	4		Remote Management commands shall be executed by the dedicated Remote Management Application.
RQ01_0005	4		A "Command session" is defined as starting upon receipt of the parameter/command list, and ends when the parameter list in the "Secured data" is completed, or when an error (i.e. SW1 of the command indicates an error condition) is detected which shall halt further processing of the command list.
RQ01_0006	4		Warnings or procedure bytes do not halt processing of the command list.
RQ01_0007	4		A "Command session" shall be handled like an application session defined in ETSI TS 102 221 [3] (for RFM) and GlobalPlatform Card Specification [5] (for RAM).
RQ01_0008	4		Application selection at the beginning of the session happens implicitly based on the header information (TAR or HTTP header field X-Admin-Targeted-Application).
RQ01_0009	4		Unless defined otherwise in ETSI TS 102 226 [1], the session context shall be deleted when the "Command session" ends.
RQ01_0010	4		At the beginning and end of a Command "session" the logical state of the UICC as seen from the terminal shall not be changed to an extent sufficient to disrupt the behaviour of the terminal.
RQ01_0011	4		If changes in the logical state have occurred that the terminal needs to be aware of, the application on the UICC may issue a REFRESH command according to ETSI TS 102 223 [4].
NOTE: RQ	01_0008 i	s implicitly t	ested in the present document.

5.2 Remote APDU format

Reference: ETSI TS 102 226 [1], clause 5.

RQ number	Clause	Description							
RQ02_0101	5.1.1	A command string may contain a single command or a sequence of commands.							
RQ02_0102	5.1.1	The structure of each command shall be according to the generalized structure defined below; each element other than the Data field is a single octet (see ETSI TS 102 221 [3]). The format of the commands is the same as the one defined in ETSI TS 102 221 [3] for $\Gamma = 0$ TPDU commands.							
		Class byte (CLA) Instruction code (INS) P1 P2 P3 Data							
RQ02_0103	5.1.1	If the sending application needs to retrieve the Response parameters/data of a case 4 command, then a GET RESPONSE command shall follow this command in the command string.							
RQ02_0104	5.1.1	The GET RESPONSE and any case 2 command (i.e. READ BINARY, READ RECORD) shall only occur once in a command string and, if present, shall be the last command in the string.							
RQ02_0105	5.1.1	For all case 2 commands and for the GET RESPONSE command, if P3 = '00', then the UICC shall send back all available response parameters/data e.g. if a READ RECORD command has P3 = '00' the whole record shall be returned.							
RQ02_0106	5.1.1	In case the data is truncated in the response, the remaining bytes are lost and the status words shall be set to '62 F1'.							

RQ number Clause		Description				
RQ02_0107	5.1.1	The limitation of 256 bytes does not apply for the length of the response data.				
NOTE: RQ	NOTE: RQ02 0102 is implicitly tested in the present document. All tests related to ETSI TS 102 221 [3] UICC					
cor	npliance to be	provided in ETSI TS 102 230-2 [30].				

RQ number	Clause	Description				
RQ02_0201	5.1.2	If a proof of Receipt is required by the sending entity, the Additional Response Data sent by the Remote Management Application shall be formatted as following: Number of commands executed within the command script, with Length =1. This field shall be set to '01' if one command was executed within the command script, '02' if two commands were executed, etc. Status bytes or '61 xx' procedure bytes of last executed command/GET RESPONSE, of Length = 2. Response data of last executed command / GET RESPONSE if available (i.e. if the last command was a case 2 command or a GET RESPONSE), with Length = X.				
NOTE: This field shall be set to '01' if one command was executed within the command script, '02' if two commands were executed, etc.						

RQ number	Clause		Description							
RQ2_0301	5.2.1		command structure, the "Secured data" sent to a Remote							
		Management Application shall be a BER-TLV data object formatted according to the table								
		below for definite length	below for definite length coding:							
		Langth in bytes	Length in bytes Name							
		1 Command Scripting template tag for definite length coding								
		L Length of Command Scripting template A+B+C								
		A	Command TLV							
		В	Command TLV							
			Communa 12 v							
		С	Command TLV							
		Where the tea of this TI	V is defined in appear A							
RQ02_0301a	5.2.1		.V is defined in annex A. command structure, the "Secured data" sent to a Remote							
KQ02_0301a	3.2.1		n shall be a BER-TLV data object formatted according to the							
		table below for indefinite								
		table below for indefinite	origin county.							
		Length in bytes	Name							
		1	Command Scripting template tag for indefinite length coding							
		1	Indicator for indefinite length coding (value '80')							
		A	Command TLV							
		В	Command TLV							
		С	Command TLV							
		2	End of content indicator (value '00 00')							
		Where the tex of this TI	V is defined in appear A							
RQ02_0302	5.2.1		LV is defined in annex A. application command string may contain a single or several							
NQ02_0302	5.2.1	Command TLVs.	application command string may contain a single of several							
RQ02_0303	5.2.1		a C-APDU it shall contain a remote management command.							
RQ02_0304	5.2.1		an Immediate Action TLV it shall contain a proactive command or							
11.402_0304	5.2.1		formed when it is encountered while processing the sequence of							
		Command TLVs.	Torriba Wildir it is choodificated willio processing the sequence of							
RQ02_0305	5.2.1		an Error Action TLV it shall contain a proactive command to be							
	3.2.		performed only if an error is encountered in a C APDU following this TLV.							
RQ02_0306	5.2.1	A Command TLV can be a script Chaining TLV as first Command TLV.								
	esting RQ02		s are defined in ETSI TS 102 226 [1], in annex A.							

RQ number	Clause	Description
RQ02_0401	5.2.1.1	The structure of each C-APDU shall be a TLV structure coded according to the C-APDU COMPREHENSION-TLV data object coding defined in ETSI TS 102 223 [4]. The restriction on the length of the C-APDU mentioned in the note in ETSI TS 102 223 [4] shall not apply.
RQ02_0402	5.2.1.1	For all case 2 and case 4 C-APDUs, if Le='00' in the C-APDU, then the UICC shall send back all available response parameters/data in the R-APDU e.g. if a READ RECORD command has Le='00' the whole record shall be returned. The limitation of 256 bytes does not apply for the length of the response data.
RQ02_0403	5.2.1.1	In case the data is truncated in the response of a C-APDU, the status words for this C-APDU shall be set to '62 F1' in the corresponding R-APDU. This shall terminate the processing of the command list.
RQ02_0404	5.2.1.1	If a R-APDU fills the response buffer so that no further R-APDU can be included in the response scripting template, this shall terminate the processing of the command list.
RQ02_0405	5.2.1.1	If Le field is empty in the C-APDU, then no response data is expected in the R-APDU and in case of expanded format with definite length coding, no R-APDU shall be returned by the UICC in the application additional response data except if the corresponding C-APDU is the last command executed in the script.
		ified in the present document for some C-APDUs. Further tests on TLV structure coding is f the present document.

RQ number	Clause	Description						
RQ02_0501	5.2.1.2	If the normal format is used for the Immediate Action TLV it shall be formatted as:						
		Length in bytes Name						
		1 Immediate Action tag (see annex A)						
		L Length of Immediate Action = A > 1						
		A Set of COMPREHENSION-TLV data objects						
RQ02_0502	5.2.1.2	If the referenced format is used for Immediate Action TLV it shall be formatted as:						
		Length in bytes Name						
		1 Immediate Action tag (see annex A)						
		1 Length of Immediate Action = 1						
		1 '01' to '7F': Reference to a record in EF _{RMA}						
		'81': Proactive session indication						
		'82': Early response						
		other values: RFU						
RQ02_0503	5.2.1.2	In case Immediate Action TLV with reference format and in case of reference to a record						
		in EF _{RMA} , the referenced record shall contain the set of COMPREHENSION-TLV data						
		objects preceded by a length value as defined for a BER-TLV, see ETSI TS 102 222 [9].						
RQ02_0504	5.2.1.2	If present, the Immediate Action TLV coding "proactive session indication" shall be:						
		The first Command TLV in the script if there is no script chaining.						
		The second Command TLV in the script if there is script chaining.						
RQ02_0505	5.2.1.2	In case of "proactive session indication", execution of the remaining script shall be						
D000 0500	5040	suspended if a proactive session is ongoing.						
RQ02_0506	5.2.1.2	In case of "proactive session indication", execution of the remaining script shall be						
		suspended if a proactive session is ongoing. Script processing shall be resumed after the end of the proactive session. If the UICC cannot suspend the script execution, e.g.						
		because there is not enough internal resources available, the UICC shall terminate the						
		processing of the script and return a "suspension error" in the response data.						
RQ02_0507	5.2.1.2	If no "proactive session indication" is present as first Command TLV and another						
	0.2	proactive session is ongoing, proactive commands in the script shall be silently ignored.						
RQ02_0508a	5.2.1.2	In case of "early response", the response to the sending entity shall be sent before						
		processing the rest of the command TLVs.						
RQ02_0508b	5.2.1.2	In case of "early response", the number of executed commands TLV objects shall include						
_		all objects up to the immediate action TLV encoding the "early response".						
RQ02_0508c	5.2.1.2	In case of "early response", no other response data shall be sent after the response sent						
		due to the early response action TLV.						
RQ02_0509	5.2.1.2	Proactive commands DISPLAY TEXT, PLAY TONE and REFRESH are allowed as						
		Immediate Action.						

RQ number	Clause		Description					
RQ02_0601	5.2.1.3	The Error Action TLV - normal format shall be formatted as:						
		Longth in hytes Nome						
		Length in bytes	Name					
			ror Action tag (see annex A)					
		l	ngth of Error Action = A > 1	inata				
DO00 0000	5040		t of COMPREHENSION-TLV data ob	jects				
RQ02_0602	5.2.1.3	The Error Action TLV - referenced	format shall be formatted as:					
		Length in bytes	Name					
		1 Er	ror Action tag (see annex A)					
		1 Le	ngth of Error Action = 1					
		1 '0	I' to '7F': Reference to a record in EFF	RMA				
		ot	ner values: RFU					
RQ02_0603	5.2.1.3	The Error Action TLV - no action s	nall be formatted as:					
		Length in bytes Name						
		1	1 Error Action tag (see annex A)					
		1	Length of Error Action = 0					
RQ02_0604	5.2.1.3		eferenced record in EF _{RMA} shall contain					
			ects preceded by a length value as def	fined for a				
		BER-TLV, see ETSI TS 123 048 [10].						
RQ02_0605	5.2.1.3	Proactive commands for Error Action DISPLAY TEXT and PLAY TONE are allowed for						
		Error Action.						
RQ02_0606	5.2.1.3	If there is an Error Action TLV between the start of the script and the C-APDU resulting in						
		an error, the action defined in the last Error Action TLVs shall be performed. If this last						
		Error Action TLV has zero length,						
RQ02_0607	5.2.1.3		veen the start of the script and the C-A	APDU resulting in				
		an error, no action shall be perforn	ned.					

RQ number	Clause		D	escription			
RQ02_0701	5.2.1.4	The optional Scrip	The optional Script Chaining TLV shall be coded as:				
			Length in bytes	Name			
			1	Script Chaining tag			
			1	Script Chaining Length = 1			
			1	Script Chaining Value			
		The Script Chainir	ng tag is defined in a	annex A.			
RQ02_0702	5.2.1.4	Command TLV in	If present, the Script Chaining TLV shall be present only once and shall be the first Command TLV in the Command Script. It may only be present for Remote File Management or Remote Application Management.				
RQ02_0703	5.2.1.4		If it is received by any other application standardized in the present document, the error "Script Chaining not supported by this application" shall be sent back to the sending entity.				
RQ02_0704	5.2.1.4	The Script Chaining Value is defined as follows: '01': first script - delete chaining information upon card reset - valid for RFM and RAM. '11': first script - keep chaining information across card reset - valid for RFM only. '02': subsequent script - subsequent script(s) will follow. '03': subsequent script - last script.					
RQ02_0705	5.2.1.4	With script chaining	ng, a command sess	sion is extended beyond the s context is kept until the last so			

In case no Script Chaining is present in the command list or processing of the Script Chaining produces no error, it shall be formated for Expanded Format of Remote Management application additional response data in case of definite length coding as: Length in bytes	RQ number	Clause	Release	Description					
Chaining produces no error, it shall be formatted for Expanded Format of Remote Management application additional response data in case of definite length coding as: Length in bytes			11010000	In case no Script Ch					
Management application additional response data in case of definite length coding as: Length in bytes		0.2.2							
as: Length in bytes									
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	RQ02_0806	5.2.2		The structure of each	n R-APDU shall be a TLV structure coded according to the				
TS 102 223 [4].				R-APDU COMPREHENSION-TLV data object coding defined in ETSI					
				IS 102 223 [4].					

RQ number	Clause	Release	Description					
RQ02_0807	5.2.2		The restriction on the length of the R-APDU mentioned in the note in ETSI					
_			TS 102 223 [4] shall not apply. For Le='00', the length of the R-APDU may be coded					
			on more than two bytes.					
RQ02_0809	5.2.2		In case of an unknown Tag, or TLV with a wrong format (e.g. length of Command					
			TLV exceeding end of Command Scripting template or length of C-APDU TLV < 4)					
			encountered while processing the command script, a Bad format TLV shall be put into the response data and processing of the command script shall be aborted at					
			that point.					
RQ02_0810	5.2.2		The Number of executed C-APDUs shall take into account the incorrectly formatted					
	0.2.2		TLV.					
RQ02_0811	5.2.2		The Bad format TLV is a BER-TLV data object and shall be coded as follow:					
			Length in bytes Description					
			1 Bad format TLV tag 1 Length					
			1 Length 1 Error type					
			1 Littor type					
			Where the tag of this TLV is defined in annex A.					
RQ02_0812	5.2.2		The Bad format TLV shall be coded with following error type coding:					
			'01': Unknown Tag found.					
			'02': Wrong length found.					
			'03': Length not found.					
D000 0040-	500		• other values: RFU.					
RQ02_0812a	5.2.2		For Expanded Format of Remote Management application additional response data in case of Immediate Action error - definite length coding and If "proactive session					
			indication" is present in the script and a proactive session is ongoing and the UICC					
			is unable to suspend script processing, the additional response application data					
			shall be formatted according to table below and indicate "suspension error":					
			Length in bytes Name					
			1 Response Scripting template tag for definite length coding					
			L Length of Response Scripting template= X+A X Number of executed command TLV objects (value is 1)					
			A Immediate Action Response					
			A					
			Where the tag of this TLV is defined in annex A.					
RQ02_0812b	5.2.2		Expanded Format of Remote Management application additional response data in					
			case of Immediate Action error - indefinite length coding and If "proactive session					
			indication" is present in the script and a proactive session is ongoing and the UICC					
			is unable to suspend script processing, the additional response application data shall be formatted according to table below and indicate "suspension error":					
			Shall be formation according to table below and indicate Suspension oner.					
			Length in bytes Name					
			Response Scripting template tag for indefinite length coding					
			1 Indicator for indefinite length coding (value '80')					
			A Immediate Action Response					
			2 End of content indicator (value '00 00')					
			Where the tag of this TLV is defined in annex A.					
RQ02_0813	5.2.2		The Immediate Action Response from RQ02_0812a and RQ02_0812b is an					
			Immediate Action Response TLV which is a BER-TLV data object coded as follow:					
			Length in bytes Description					
			1 Immediate Action Response tag (see annex A)					
			1 Length=X X Immediate Action Response Value					
RQ02_0814	5.2.2		X Immediate Action Response Value The Immediate Action Response Value from RQ02_0813 is defined as follows:					
11.002_0014	J.Z.Z		'01': Suspension error.					
RQ02_0815	5.2.2		In case a Script Chaining TLV indicating "subsequent script" is present in the					
			list, the following situation shall be considered as chaining errors:					
			The previous script did not contain a Script Chaining TLV indicating "first script"					
			or "subsequent script - subsequent script(s) will follow".					
RQ02_0816	5.2.2		In case a Script Chaining TLV indicating "subsequent script" is present in the					
			list, the following situation shall be considered as chaining errors:					
			The first script of the chain indicating "first script - delete chaining information upon card reset" was processed in an earlier card session.					
	1	1	para rosot was processed in an earlier card session.					

RQ number	Clause	Release			Description			
RQ02_0817a	5.2.2		In case of chaining errors, the additional response application data shall be					
			formatted according to table below, for definite length coding:					
			Length in bytes		Name			
			1		ting template tag for definite leng	th codina		
			L2		onse Scripting template= X+A	ar ccamig		
			X	Number of exec	cuted Command TLV objects			
			А	Script Chaining	Response			
			Where the Script (Chaining Respons	se tag is defined in annex A.			
RQ02_0817b	5.2.2				tional response application data s	hall be		
			formatted according	ng to table below,	for indefinite length coding:			
			Length in bytes	S	Name			
			1		ipting template tag for indefinite le	ength coding		
			1		ndefinite length coding (value '80')			
			A	Script Chainin				
			2	End of conten	t indicator (value '00 00')			
			Where the Script (Chaining Respons	se tag is defined in annex A.			
RQ02_0818	5.2.2		The Script Chainir	ng Response TLV	is a BER-TLV data object and sh	nall be coded		
			as:					
				ength in bytes	Description			
				1	Script Chaining Response tag			
			1 Length=X X Script Chaining Result Value					
			Where the Script Chaining Response tag is defined in annex A.					
RQ02_0819	5.2.2		The Script Chainir	ng Result Value is	s defined as follows:			
			'01': No previous s					
					by this application.			
			'03': Unable to pro	cess script chain	ing (e.g. no resources to store cha	aining context).		

RQ number	Clause	Description
RQ02_0901		If a TAR is configured for multiple data formats, the following automatic application data format detection shall apply:
		If b2b1 of the first data byte of the application data are 00, the format of the application
		data shall be the compact remote application data format.
RQ02_0902	5.3	If b2b1 of the first data byte of the application data are not 00, and if a TAR is configured
		for multiple data formats, the following automatic application data format detection shall
		apply: the first data byte of the application data shall indicate the format of the data
		packet.

5.3 Security parameters assigned to applications

Reference: ETSI TS 102 226 [1], clause 6.

RQ number	Clause	Release	Description
RQ03_0101	6.1		The Receiving Entity shall check the Minimum Security Level, set for the Receiving
			Application, before processing the security of the Command Packet.
RQ03_0102	6.1	Up to	If the check fails, the Receiving Entity shall reject the messages and a Response
		Rel-11	Packet with the "Insufficient Security Level" Response Status Code (see ETSI
			TS 102 225 [2]) shall be sent if required.
RQ03_0105	6.1		If the check fails, the Receiving Entity shall reject the messages and response
		upwards	processing shall be done as defined in ETSI TS 102 225 [2]. If a Response Packet is
			sent, the Response Status Code (see ETSI TS 102 225 [2]) shall be set to
			"Insufficient Security Level".
RQ03_0103	6.1		According to UICC Configuration [16], if the Receiving Application is a Security
			Domain which has no own secure channel key set, then the security will be
			processed by the closest ascendant Security Domain (= Receiving Entity) that has a
			suitable secure channel key set.

RQ number	Clause	Release	Description
RQ03_0104	6.1		A Minimum Security Level as described in clause 8.2.1.3.2.4 in ETSI TS 102 226 [1]
			shall be assigned to each Remote Management application (RFM/RAM).
NOTE 1: Development of test cases for RQ03_0103 is out of scope for the present document.			
NOTE 2: RQ03_0101 is for information only.			

RQ number	Clause	Description
RQ03_0201	6.2	The access rights granted to an application by its Access Domain shall be independent
		from the access rights granted at the UICC/Terminal interface.
RQ03_0202	6.2	An Access Domain as described in clause 8.2.1.3.2.5 in ETSI TS 102 226 [1] shall be
		assigned to each Remote File Management Application.

5.4 Remote File Management (RFM)

Reference: ETSI TS 102 226 [1], clause 7.

RQ number	Clause	Description
RQ04_0101	7	The concept of embedding APDUs in a command packet and the Additional Response data in a response packet shall be as defined in the previous clauses describing the Compact and expanded Remote Application data format.
RQ04_0102	7	Unless a TAR is used that is configured for automatic application data format detection, the Compact and expanded Remote Application data formats shall be distinguished by different TAR values.
RQ04_0103	7	For the Expanded Remote Application data format, it is possible to chain two or more scripts using Script Chaining TLVs.
RQ04_0104	7	If a Script Chaining TLV indicating "first script" or "subsequent script - subsequent script(s) will follow" is processed successfully, the file context (current directory, current file, current tag pointer, etc.) and the PIN verification status at the end of the script shall be remembered until the next script is processed by the Remote File Management application.
RQ04_0105	7	If the next script received successfully contains a Script Chaining TLV indicating "subsequent script", the remembered file context and PIN verification status shall be restored. Else the default context shall be used.
RQ04_0106	7	If a non-shareable file is selected by the remembered file context, the mechanisms defined in ETSI TS 102 221 [3] limiting the access to non-shareable files shall apply.

RQ number	Clause	Description
RQ04_0201	7.1	The SELECT command shall not include the selection by DF name corresponding to
		P1='04' in the Command Parameters of SELECT (see ETSI TS 102 221 [3]).
RQ04_0202	7.1	The Response Data shall be placed in the Additional Response Data element of the
		Response Packet.
		If P3/Le = '00' in the READ RECORD command, then the UICC shall send back all data
		until the end of the data object from the current BER-TLV structure EF.
RQ04_0203	7.1	The Response Data shall be placed in the Additional Response Data element of the
		Response Packet.
		If P3/Le = '00' in the READ BINARY command, then the UICC shall send back all data
		until the end of the file, according to clause 5.1.
RQ04_0204	7.1	The Response Data shall be placed in the Additional Response Data element of the
		Response Packet.
		If P3/Le = '00' in the RETRIEVE DATA command, then the UICC shall send back all
		data until the end of the data object from the current BER-TLV structure EF.

RQ number	Clause	Description
RQ04_0301	7.2	A UICC Shared File System Remote File Management application shall have access
		only to the MF and all DFs and EFs that are located under the MF (see note 2).
RQ04_0302	7.2	Unless Script Chaining is used, the MF shall be implicitly selected and be the current
		directory at the beginning of a "Command session".
RQ04_0303	7.2	No ADF shall be accessed by the UICC Shared File System Remote File Management
		application.

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RQ number	Clause	Description		
RQ04_0406	7.3	An ADF Remote File Management application shall have access to the DFs and EFs located under the ADF.		
RQ04_0407	7.3	Unless Script Chaining is used, the ADF shall be implicitly selected and be the current directory at the beginning of a "Command session".		
RQ04_0408	7.3	The UICC Shared File System, i.e. the MF and all DFs and EFs that are located under the MF, may also be accessed, depending on the access rights granted to the ADF Remote File Management application.		
RQ04_0409	7.3	The following commands shall apply for ADF Remote File Management:		
		Operational command		
		SELECT (see below)		
		UPDATE BINARY		
		UPDATE RECORD		
		SEARCH RECORD		
		INCREASE		
		VERIFY PIN		
		CHANGE PIN		
		DISABLE PIN		
		ENABLE PIN		
		UNBLOCK PIN		
		DEACTIVATE FILE		
		ACTIVATE FILE		
		READ BINARY		
		READ RECORD		
		CREATE FILE		
		DELETE FILE		
		RESIZE FILE		
		SET DATA		
		RETRIEVE DATA		
		The SELECT command shall not include the selection by DF name corresponding to		
		P1='04' in the Command Parameters of SELECT.		

RQ number Clause Description			
RQ04_0410 7.3		The TAR of an ADF RFM application shall be linked to the AID of the application to	
		which the ADF belongs.	
RQ04_0411	7.3	The TAR value of an ADF Remote File Management application is defined in ETSI	
		TS 101 220 [6].	
NOTE: RQ04_0411 is for information only.			

RQ number	Clause	Description		
RQ04_0501		When using remote APDUs to perform RFM over HTTPS, the header values defined in ETSI TS 102 225 [2] apply. The RFM / HTTP communication flow is illustrated in		
		annex B.		

Remote Application Management (RAM) 5.5

Reference: ETSI TS 102 226 [1], clause 8.

RQ number	Clause	Release	Description
RQ05_0101	8	Up to Rel-11	Remote Application Management on a UICC card includes the ability to load, install, and remove applications.
RQ05_0102	8	Up to	The Remote Application Management is under the control of a security domain with
_		Rel-11	card content management capabilities, such as the Issuer Security Domain or any
			Security Domain with Delegated Management privileges or Authorized Management
			as described in GlobalPlatform Card Specification [5].
RQ05_0111	8	Rel-12	Remote application management capability is provided by a Security Domain.
		upwards	
RQ05_0103	8		All GlobalPlatform features and functionality that are described in the present clause,
			as well as the assignment of GlobalPlatform privileges shall comply with
D005 0404			GlobalPlatform Card Specification [5] as detailed in the UICC Configuration [16].
RQ05_0104	8		A RAM Application shall support all features and functionality described in the
DO05 0405	8		present clause unless they are specifically described as optional.
RQ05_0105	8		The support of the APIs related to GlobalPlatform Card Specification [5], e.g. Java
			Card API [25], Multos API is optional. If implemented, it shall follow the specification in the UICC Configuration [16], especially concerning the Secure Channel Interface
			usage.
RQ05_0106	8	Up to	Remote Application Management commands shall be executed according to table
11.005_0100	0	Rel-11	"Authorized GlobalPlatform Commands per Card Life Cycle State" of GlobalPlatform
		I CI II	Card Specification [5].
RQ05_0107	8		The TAR value allocated for the Issuer Security Domain is defined in ETSI
			TS 101 220 [6]. The concept of embedding APDUs in a command packet and the
			Additional Response data in a response packet shall be as defined in the previous
			clauses describing the Compact and expanded Remote Application data format.
RQ05_0108	8		Unless a TAR is used that is configured for automatic application data format
			detection, the Compact and expanded Remote Application data formats shall be
			distinguished by different TAR values.
RQ05_0109	8		The Minimum Security Level of a RAM Application shall require at least integrity
			using CC or DS. It applies to all data formatted as secured data according to clause 4
			of the present document and including all commands listed below:
			Onevational command
			Operational command DELETE
			SET STATUS
			INSTALL
			LOAD
			PUT KEY
			GET STATUS
			GET DATA as case 2 command
			GET DATA as case 2 command
			(for Menu parameters)
			STORE DATA
RQ05_0110	8		A complying card shall support at least the triple DES algorithm in outer CBC mode
			for cryptographic computations.
H		1	line at Neural and American

NOTE 1: RQ05_0102 is not testable.

NOTE 2: Development of test cases for RQ05_0103, RQ05_0105 and RQ05_0106 is out of scope for the present document.

RQ number	Clause	Description
RQ05_0201 8.1		Remote Load File loading, Application installation, Load File removal, Application
		removal, Application locking/unlocking, Application information retrieval shall be compliant to GlobalPlatform Card Specification [5] as detailed in the UICC Configuration [16].
RQ05_0202	8.1	Support of the application personalization described in Global Platform Card
		Specification [5] is optional.
RQ05_0203 8.1		As a RAM Application is a Receiving Application per clause 4, application selection
		(SELECT command) and command dispatching as described in GlobalPlatform Card
		Specification [5] do not apply to Remote Application Management.
NOTE: Deve	lopment of te	est cases for RQ05_0201, RQ05_0202 and RQ05_0203 is out of scope for the present
docui	ment.	

RQ number	Clause	Description		
RQ05_3801	8.2	Commands and responses shall be coded according to GlobalPlatform Card Specification [5] as detailed in the UICC Configuration [16] unless otherwise specified in the present document.		
RQ05_3802	8.2	Secure messaging shall be based on ETSI TS 102 225 [2].		
RQ05_3803	8.2	if additional application provider security as defined in clause 10.2 of ETSI TS 102 226 [1] is applied, the secure messaging as defined in GlobalPlatform Card Specification [5] shall not apply to RAM APDU commands and responses (e.g. MAC shall not be present in the command data field).		
RQ05_3804	8.2	if additional application provider security as defined in clause 10.2 of ETSI TS 102 226 [1] is applied, the class byte shall indicate that an APDU command includes no secure messaging.		
RQ05_3805	8.2	The logical channel number indicated in the class byte shall be zero.		
RQ05_3806	8.2	Command status words placed in the Additional Response Data element of the Response Packet shall be coded according to the GlobalPlatform Card Specification [5] as detailed in the UICC Configuration [16].		
	NOTE: RQ05_3801, RQ05_3802, RQ05_3805 and RQ05_3806 are implicitly tested in the present document. Further detailed tests are out of the scope of the present document.			

RQ number	Clause		Description	
RQ05_0301	8.2.1	The following standardized A	application management commands	shall be supported:
			Operational command	
			DELETE	
			SET STATUS	
			INSTALL	
			LOAD	
			PUT KEY	
			GET STATUS	
			GET DATA as case 2 command	
			GET DATA as case 4 command	
			(for Menu parameters)	
RQ05_0302	8.2.1	The Response Data shall be Response Packet.	placed in the Additional Response	Data element of the
RQ05_0303	8.2.1	Script chaining may be used	for confidential application manage	ment as specified in
		clause 10 of ETSI TS 102 22	6 [1] or to chain a sequence of STC	ORE DATA commands. It
		has no effect for other comm		
RQ05_0304	8.2.1		present for RAM, it shall be process	sed as defined in the present
		document.		
RQ05_0305	8.2.1		mote Application data format and if	
			ession as defined below, this sessio	on context shall be deleted
		upon card reset.		

RQ numb	er Clause	Release	Description
RQ05_040	1 8.2.1.1		The Removal of Applications, of Executable Load Files, and of Executable Load
			Files and its related Applications shall be supported via DELETE command.
RQ05_040	2 8.2.1.1	Up to Rel-	The warning status word '6200' (Application has been logically deleted) as defined
		11	in Open Platform Card Specification 2.0.1 [8] may be returned.
NOTE: RQ05_0402 is not tested in the present document, as it based on an older version of GlobalPlatform Card			
Specification [5].			

RQ number	Clause	Description
RQ05_0501	8.2.1.2	The management of Applications, Issuer Security Domain and Security Domains Life Cycle
		States shall be supported via SET STATUS.

RQ number	Clause	Description
RQ05_0601	8.2.1.3	INSTALL [for load], INSTALL [for install] and INSTALL [for make selectable] commands
		shall be supported.
RQ05_0602	8.2.1.3	INSTALL [for personalization] and Install [for extradition] command described in
		GlobalPlatform Card Specification [5] are optional.
RQ05_0603	8.2.1.3	A UICC supporting confidential application management as specified in clause 10 of [1]
		shall support INSTALL [for personalization].
RQ05_0604	8.2.1.3	If INSTALL [for personalization] and Install [for extradition] implemented, both commands
		shall follow the specification in the UICC Configuration [16].
RQ05_0605	8.2.1.3	The support of the combined [for install and make selectable] within the same INSTALL
		command is mandatory.
RQ05_0606	8.2.1.3	When using the Compact Remote Application data format, the context established by
		INSTALL [for load] shall be saved across command sessions until the last LOAD command.
RQ05_0607	8.2.1.3	When using the Compact Remote Application data format, the context established by
		INSTALL [for personalization] (if supported) shall be saved across command sessions until
		the STORE DATA command containing the last block.

RQ number	Clause	Description		
RQ05_0701	8.2.1.3.1	Support and presence of the Load File Data Block Hash according to GlobalPlatform Card		
		Specification [5] shall be as specified in the UICC Configuration [16].		
RQ05_0702	8.2.1.3.1	present, the Load Parameter Field of the INSTALL [for load] command shall be coded		
		according to GlobalPlatform Card Specification [5].		
RQ05_0703	8.2.1.3.1	the System Specific parameters "Non volatile code space limit" (Tag 'C6'), "Volatile data		
		space limit" (Tag 'C7') and "Non volatile data space limit" (Tag 'C8') are present, the UICC		
		shall be able to handle them.		

RQ number	Clause			Description				
RQ05_0801	8.2.1.3.2		f present, the Install Parameter Field of the INSTALL [for install] command shall be coded according to GlobalPlatform Card Specification [5].					
RQ05_0802	8.2.1.3.2			parameters "Volatile data space limit" (Tag 'C7') and "Non volate present, the UICC shall be able to handle them.	atile data			
RQ05_0803	8.2.1.3.2	The application install] comma		e shall be registered with the instance AID present in the INS	TALL [for			
RQ05_0804	8.2.1.3.2	In case of Jav bLength) or th		applications, the application may invoke the register(bArray, to () method.	oOffset,			
RQ05_0805	8.2.1.3.2		n case of JavaCard TM applications, If the register (bArray, bOffset, bLength) is invoked, the AID passed in the parameters shall be the instance AID provided in the install method buffer.					
RQ05_0806	8.2.1.3.2	present in the	In case of JavaCard [™] applications, If the register() method is invoked the instance AID present in the INSTALL [for install] command and the AID within the Load File, as specified in GlobalPlatform Card Specification [5], should be the same.					
RQ05_0807	8.2.1.3.2	The "UICC System Specific Parameters" TLV object (Tag 'EA', as defined below) is included in the Install Parameter Field and shall be coded as follows:						
		Presence	Length	Name	Value			
		Optional	1	Tag of UICC System Specific Parameters constructed field	'EA'			
			1 to 3	Length of UICC System Specific Parameters constructed field as specified in GlobalPlatform Card Specification [5] for TLV data objects. Coded as defined in ETSI TS 101 220 [6] for a BER-TLV data object				
			0 to n	UICC System Specific Parameters constructed value field				

RQ number	Clause	Description						
RQ05_0901	8.2.1.3.2.1	as de	"SIM File A efined belo ed as follow	w) is includ	cess and Toolkit Application Specific Parameters" TLV object (Tag 'CA',) is included in the "System Specific Parameters" (Tag 'EF') and shall be :			
		Р	resence	Length	Name	Value		
			Optional	1	Tag of SIM file access and toolkit application specific parameters field	'CA'		
				1 to 3	Length of SIM file access and toolkit application specific parameters field. Coded as defined in ETSI TS 101 220 [6] for a BER-TLV data object			
				6 to n	SIM file access and toolkit Application specific Parameters			
RQ05_0902	8.2.1.3.2.1	termi the ti the M	The SIM file access and toolkit application specific parameters field is used to specify terminal and UICC resources the application instance can use. These resources include the timers, the Bearer Independent protocol channels, menu items for the Set Up Menthe Minimum Security Level and the TAR Value(s) field.					
RQ05_0903	8.2.1.3.2.1	sim.te	oolkit.Tool 43 019 [12	oolkit parameters are mandatory for application or sim.access.SIMView interface as defined in tess Domain is applicable to applications using face as defined in ETSI TS 143 019 [12]:	ETSI			
		L		Name		Value		
					Access Domain field			
				Access Dor				
		-	1 1		el of the Toolkit application instance number of timers allowed for this application			
					ext length for a menu entry			
			1 1		number of menu entries allowed for this	= m		
					the first menu entry	\		
			1 I	dentifier of	the first menu entry ('00' means do not care)			
			•	•••		= 2 × m bytes		
					the last menu entry			
					the last menu entry ('00' means do not care)	/		
			i	nstance	number of channels for this application			
					Minimum Security Level field			
					ecurity Level (MSL)			
					AR Value(s) field			
			3 × y	IAR Value	(s) of the Toolkit Application instance			

RQ number	Clause	Description
RQ05_1001	8.2.1.3.2.2	If the SIM file access and toolkit parameters TLV object (tag 'CA') is present and the UICC
		System Specific Parameters TLV object (tag 'EA') is present, the card shall return the Status
		Word '6A80', incorrect parameters in data field, to the INSTALL [for install] command.

RQ number	Clause		Description					
RQ05_1002	8.2.1.3.2.2			ecific Parameters constructed value field of the INSTALL [fo	r Install]			
		command sn	mmand shall be coded as follows:					
		Presence	resence Length Name					
		Optional	1	Tag of UICC Toolkit Application specific parameters field	'80'			
			1	Length of UICC Toolkit Application specific parameters field				
			N	UICC Toolkit Application specific parameters				
		Optional	1	Tag of UICC Toolkit parameters DAP	'C3'			
			1	Length of UICC Toolkit parameters DAP				
			N	UICC Toolkit parameters DAP				
		Optional	1	Tag of UICC Access Application specific parameters field	'81'			
			1	Length of UICC Access Application specific parameters field				
			N	UICC Access Application specific parameters				
		Optional	1	Tag of UICC Administrative Access Application specific parameters field	'82'			
			1	Length of UICC Administrative Access Application specific parameters field				
			N	UICC Administrative Access Application specific parameters				
RQ05_1003	8.2.1.3.2.2		meters fie	r the same ADF may be present in both the UICC Access A eld and the UICC Administrative Access Application specific				
RQ05_1004	8.2.1.3.2.2		pecific pa	r the same UICC file system may be present in both the UIC arameters field and the UICC Administrative Access Applica eld.				

RQ number	Clause		Description						
RQ05_1101	8.2.1.3.2.2.1		polkit application specific parameters field is used to specify the						
			JICC resources the application instance can use. These resources include the timers,						
			e Bearer Independent Protocol channels, the services for local bearers, menu items for						
			Menu, the Minimum Security Level and the TAR Value(s) field.						
RQ05_1102	8.2.1.3.2.2.1		Toolkit Application specific parameters are mandatory for applica						
			Ikit.ToolkitInterface defined in ETSLTS 102 241 [7] and for Apple						
			Extension interface as defined in ETSI TS 102 588 [17] that make	e use of the					
RQ05_1103	8.2.1.3.2.2.1		andler and the ProactiveResponseHandler. toolkit resources will be accessible if the UICC Toolkit Application	on oppositio					
KQ05_1103	0.2.1.3.2.2.1		are missing.	on specific					
RQ05_1104	8.2.1.3.2.2.1		it Application specific parameters shall be coded as follows:						
1104	0.2.1.0.2.2.1	0100 10011	it Application specific parameters shall be coded as follows.						
		Length	Name	Value					
		1	Priority level of the Toolkit application instance						
		1	Maximum number of timers allowed for this application						
			instance						
		1	1 Maximum text length for a menu entry						
		1	1 Maximum number of menu entries allowed for this application = m						
			instance						
		1	Position of the first menu entry						
		1	1 Identifier of the first menu entry ('00' means do not care)						
			= 2 × m						
				bytes					
		1	Position of the last menu entry	<u> </u>					
		1	Identifier of the last menu entry ('00' means do not care)	/					
		1	1 Maximum number of channels for this application instance						
		1 Length of Minimum Security Level field							
		0-q Minimum Security Level (MSL)							
		1	Length of TAR Value(s) field						
		3 × y	TAR Value(s) of the Toolkit Application instance						
D005 4465	0040004	1 1	Maximum number of services for this application instance						
RQ05_1105	8.2.1.3.2.2.1		nal parameters shall be ignored by the card.						
NOTE: RQ	05_1101 is for	information c	oniy.						

RQ number	Clause		Description					
RQ05_1201	8.2.1.3.2.2.2	The UICC access application specific parameters field is used to specify the access						
		rights. The application	hts. The application instance is granted access rights to files only according to these					
			CC access parameters.					
RQ05_1202	8.2.1.3.2.2.2	The UICC access application specific parameters are applicable to applications using the						
			icc.access.FileView defined in ETSI TS 102 241 [7]. These parameters shall be coded					
		as follows:						
		_	T					
		Presence	Name	Length				
			Length of UICC file system AID	1				
			Empty UICC file system AID	0				
		0	Length of Access Domain for UICC file system	1				
			Access Domain for UICC file system	n				
			Length of Access Domain DAP	1				
			Access Domain DAP	0 or n				
			Length of ADF #1 AID	1				
			ADF #1 AID	5 to 16				
		0	Length of Access Domain for ADF #1	1				
			Access Domain for ADF #1	N				
			Length of Access Domain DAP #1	1				
			Access Domain DAP #1	0 or n				
			Length of ADF #n AID	1				
			ADF #n AID	5 to 16				
		0	Length of Access Domain for ADF #n	1				
			Access Domain for ADF #n	n				
			Length of Access Domain DAP #n	1				
			Access Domain DAP #n	0 or n				
NOTE: RQ	05_1201 is for	information only.	<u> </u>					

RQ number	Clause	Description					
RQ05_1301	8.2.1.3.2.2.3	he UICC toolkit parameters DAP is an optional signature. The card issuer's security olicy may require the presence of this DAP.					
RQ05_1302	8.2.1.3.2.2.3	The input data used to compute UICC toolkit parameters DAP is the concatenation of the ollowing data:					
		Description	Length				
		Length of instance AID	1				
		Instance AID	5 to 16				
		Length of UICC Toolkit parameters	1				
		UICC Toolkit parameters	n				
		The key used to compute this DAP is: Key identifier '02' of Key Versic the Issuer Security Domain.					
RQ05_1303	8.2.1.3.2.2.3	Depending on the key type for DAP, if padding is required by the algorithm, the data is appended by '80' and filled up with zero or more '00'.					
RQ05_1304	8.2.1.3.2.2.3	Depending on the key type for DAP, if triple DES is used, MAC in CBC mode with initial haining value set to zero shall be used.					
RQ05_1305	8.2.1.3.2.2.3	Depending on the key type for DAP, if AES [13] is used, CMAC mode The length of the MAC shall be associated with the key.	e [15] shall be used.				

RQ number	Clause	Description
RQ05_1401		The UICC Administrative access application specific parameters field is used to specify the access rights. The application instance is granted access rights to administrate files only according to these UICC Administrative access parameters.
RQ05_1402		The UICC Administrative access application specific parameters are applicable to applications using the uicc.access.fileadministration.AdminFileView defined in ETSI TS 102 241 [7]. These parameters shall be coded as defined in ETSI TS 102 226 [1], clause 8.2.1.3.2.2.2.

RQ number	Clause	Description
RQ05_1501	8.2.1.3.2.3	If the maximum number of timers required for Toolkit Application Specific Parameters is greater than '08' (maximum numbers of timers specified in ETSI TS 102 223 [4]), the card
		shall return the Status Word '6A80', incorrect parameters in data field, to the INSTALL
		[for install] command.
RQ05_1502	8.2.1.3.2.3	If the maximum number of channels required for Toolkit Application Specific Parameters is
		greater than '07' (maximum numbers of channels specified in ETSI TS 102 223 [4]), the
		card shall return the Status Word '6A80', incorrect parameters in data field, to the INSTALL
		[for install] command.
RQ05_1503	8.2.1.3.2.3	If the maximum number of services requested for Toolkit Application Specific Parameters
		is greater than '08' (maximum numbers of services specified in ETSI TS 102 223 [4]), the
		card shall return the Status Word '6A80', incorrect parameters in data field, to the INSTALL
		[for install] command.
RQ05_1504	8.2.1.3.2.3	The mechanism to manage the position of the Menu Entries for Toolkit Application Specific
		Parameters is defined in ETSI TS 102 241 [7].
RQ05_1505	8.2.1.3.2.3	A part of the item identifier for Toolkit Application Specific Parameters shall be under the
		control of the card system and the other part under the control of the card issuer. Item
		identifiers are split in two ranges:
		• [1127] under control of the card issuer.
		 [128255] under the control of the toolkit framework.
RQ05_1506	8.2.1.3.2.3	If the requested item identifier for Toolkit Application Specific Parameters is already
		allocated, or in the range [128255], then the card shall reject the INSTALL command.
RQ05_1507	8.2.1.3.2.3	If the requested item identifier for Toolkit Application Specific Parameters is '00', the card
		shall take the first free value in the range [128255].
NOTE: RQ	05_1505 is fo	r information only.

RQ number	Clause		Description				
RQ05_1601	8.2.1.3.2.4	If the length of the Mi	nimum Sed	curity Level (MSL) field for Toolkit App	lication Specific		
		Parameters is zero, n Entity.	arameters is zero, no minimum security level check shall be performed by the Receiving ntity.				
RQ05_1602		Parameters is greater	f the length of the Minimum Security Level (MSL) field for Toolkit Application Specific Parameters is greater than zero, the Minimum Security Level (MSL) field shall be coded according to the following table:				
			Length	Name			
			1	MSL Parameter			
			q to 1	MSL Data			
		The MSL Data coding	g and lengt	h is defined for each MSL Parameter.			

RQ number	Clause		Description					
RQ05_1701	8.2.1.3.2.4.1	The possible	he possible values for the MSL Parameter for Toolkit Application Specific Parameters					
		are:						
		Value	Name	Support	MSL Data			
					length			
		'00'	RFU	RFU	N/A			
		'01'	Minimum SPI1	Optional	1			
		'02' to '7F'	RFU	RFU	N/A			
		'80' to 'FE'	Reserved for Proprietary Mechanisms	Optional	N/A			
		'FF'	RFU	RFU	N/A			

RQ number	Clause	Description
RQ05_1801	8.2.1.3.2.4.2	The Minimum Security Level Data (MSLD) for the Minimum SPI1 MSL parameter for
		Toolkit Application Specific Parameters shall use the same coding as the first octet of the
		SPI of a command packet (see clause 5.1.1 of ETSI TS 102 225 [2]).
RQ05_1802	8.2.1.3.2.4.2	The first octet of the SPI field of MSL parameter in the incoming message Command
		Packet (SPI1) shall be checked against the Minimum Security Level Data (MSLD) byte
		by the receiving entity according to the following rules:
		 if SPI1.b2b1 is equal to or greater than MSLD.b2b1;
		 if SPI1.b3 is equal to or greater than MSLD.b3; and
		 if SPI1.b5b4 is equal to or greater than MSLD.b5b4,
		then the Message Security Level is sufficient and the check is successful, otherwise the
		check is failed.

RQ number	Clause		Description					
RQ05_1901	8.2.1.3.2.5	The Access Do	The Access Domain field for Toolkit Application Specific Parameters is formatted as					
		follows:	follows:					
			Length	Name				
			1	Access Domain Parameter (ADP)				
			p to 1	Access Domain Data (ADD)				
		The Access Domain Data (ADD) coding and length is defined for each Access Domain						
		Parameter (ADI	P).					

RQ number	Clause		Description						
RQ05_2001	8.2.1.3.2.5.1	The Access Domain Parameter indicates the mechanism used to control the application instance access to the File System:							
		Value	Value Name Support ADD length						
		'00'	Full access to the File System	Mandatory	0				
		'01'	Reserved (for APDU access mechanism)	-	-				
		'02'	UICC access mechanism	Mandatory	3				
		'03' to '7F'	RFU	RFU	RFU				
		'80' to 'FE'	Proprietary mechanism	-	-				
		'FF'	No access to the File System	Mandatory	0				
RQ05_2002	8.2.1.3.2.5.1		ights granted to an application and define pendent from the access rights granted						
RQ05_2003	8.2.1.3.2.5.1	The access is	rights granted to an application implies in (e.g. disabled PIN1, blocked PIN2, etc.) access rights granted to an application	n particular that the at the UICC/Term	e status of a				
RQ05_2004	8.2.1.3.2.5.1		ion with Access Domain Parameter (ADs to access a file the framework shall thr	, ,	cess to the File				
RQ05_2005	8.2.1.3.2.5.1		If an application has Access Domain Parameter (ADP) '00' (i.e. Full Access to the File System), all actions can be performed on a file except the ones with NEVER access						
RQ05_2006	8.2.1.3.2.5.1		Domain Parameter (ADP) requested is ord '6A80', incorrect parameters in data	• •					

RQ number	Clause	Description
RQ05_2101	8.2.1.3.2.5.2	The UICC access mechanism shall be coded as specified in clause 8.2.1.3.2.5.2 in ETSI
		TS 102 226 [1].
RQ05_2102		The Access Domain Data for UICC access mechanism shall be checked against SE ID
		01 access rules as defined in ETSI TS 102 221 [3].

RQ number	Clause	Description						
RQ05_2201	8.2.1.3.2.5.3	The Access Domain DAP is an optional signature. The security policy of the provider of						
		the application to which the file system belongs may require the presence of this DAP.						
RQ05_2202	8.2.1.3.2.5.3		o compute the Access Domain DA	P is the con	catenation of the			
		following data:			•			
			Description	Length				
			Length of instance AID	1				
			Instance AID	5 to 16				
			Length of File System AID	1				
			File System AID	0 or n				
			Length of Access Domain	1				
			Access Domain	n				
RQ05_2203	8.2.1.3.2.5.3	In case of UICC share	ed File system, the Length of File S	System AID	is 0 and the File			
			esent in the Access Domain DAP.					
RQ05_2204	8.2.1.3.2.5.3		oute the Access Domain DAP is: K					
			curity Domain associated to the ap					
			ase of UICC shared file system, the					
		1	curity Domain or another Security	Domain, de	pending on the card			
		issuer's security policy						
RQ05_2205	8.2.1.3.2.5.3		type for the Access Domain DAP					
		algorithm, the data is appended by '80' and filled up with zero or more '00'.						
RQ05_2206	8.2.1.3.2.5.3	Depending on the key type for the Access Domain DAP, if triple DES is used, MAC in						
		CBC mode with initial value set to zero shall be used.						
RQ05_2207	8.2.1.3.2.5.3		type for the Access Domain DAP					
		mode [15] shall be us	ed. The length of the MAC shall be	e associated	I with the key.			

RQ number	Clause	Description
RQ05_2301	8.2.1.3.2.6	The Priority level of the toolkit application specifies the order of activation of an application
		compared to the other application registered to, the same event.
RQ05_2302	8.2.1.3.2.6	If two or more applications are registered to the same event and have the same priority
		level, the applications are activated according to their installation date (i.e. the most recent
		application is activated first).
RQ05_2303	8.2.1.3.2.6	The following values are defined for priority level of the toolkit application:
		• '00': RFU.
		'01': Highest priority level.
		•
		'FF': Lowest priority level.

RQ number	Clause	Description							
RQ05_2401	8.2.1.3.2.7	The TAR is defined and	The TAR is defined and coded according to ETSI TS 101 220 [6].						
RQ05_2402	8.2.1.3.2.7	It is possible to define se	everal TAR Values at the installation of a To	olkit Application.					
RQ05_2403	8.2.1.3.2.7	The TAR Value(s) field s	shall be coded according to the following tab	ole:					
		Bytes	Description	Length					
		1 to 3	TAR Value 1	3					
		4 to 6	TAR Value 2	3					
		$3 \times y$ -2 to $3 \times y$	TAR Value y	3					
RQ05_2404	8.2.1.3.2.7	If the length of TAR Valu	ie(s) is zero, the TAR may be taken out of the	ne AID if any.					
RQ05_2405	8.2.1.3.2.7		Value(s) is greater than zero then the applic						
			alue(s) field defined above and the TAR ind	icated in the AID if any	y				
		shall be ignored.							
RQ05_2406	8.2.1.3.2.7		If a TAR Value(s) is already assigned on the card for a Toolkit Application instance or if the						
		length of TAR Value(s) fi	ield is incorrect, the card shall return the Sta	atus Word '6A80',					
		incorrect parameters in c	data field, to the INSTALL [for install] comma	and.					

RQ number	Clause	Release							Descri	ption	
RQ05_2507	8.2.1.3.2.8	Rel-12 upwards		The support of contactless card emulation mode, reader mode and CLT activity observer is optional for a UICC.							
RQ05_2508	8.2.1.3.2.8	Rel-12		A UICC not supporting card emulation mode, reader mode or CLT activity							
		upwards				urn an	error	when	the pa	rame	ters related to the specific mode
			are pr								
RQ05_2501	8.2.1.3.2.8			SI TS	102 6	22 [23]					s card emulation mode as defined ecified in GlobalPlatform
RQ05_2502	8.2.1.3.2.8						to op	erate ii	n cont	actles	s reader mode as defined in ETSI
_											ers given below in
								1.3.2.8			
RQ05_2503	8.2.1.3.2.8										ers" TLV object (tag 'B0') shall be
											ag 'EF').
RQ05_2504	8.2.1.3.2.8		The v	alue p	art of	"Addit	ional	Contac	tless	Param	neters" shall be coded as follows:
				Tag		Lengtl	h			Val	ue Presence
				'86'		1					ocol data Type A Optional
				'87'		N+2					ocol data Type B Optional
				'88'		1					ver configuration Optional
RQ05_2505	8.2.1.3.2.8		techn	ology/ applic	techno cation	ologies	that	will be	active	once	col data Type" indicates the RF the Application Availability State Amendment C [22] changes to
RQ05_2506	8.2.1.3.2.8		specif param Visibil	ied in neters ity and	Globa . Appli d Appl	alPlatfo icable licatior	orm Á paran n Fam	nendn neters ily.	nent C for rea	[22] : ader n	er, user interaction parameters as shall be included in the installation node applications are Application
RQ05_2509	8.2.1.3.2.8	Rel-13 upwards	The T allower is not CLTO	Visibility and Application Family. The TLV CLT activity observer configuration determines if the Application is allowed to register a CLTObserverListener (see ETSI TS 102 705 [31]). If this TLV is not present the Application shall not be allowed to register a CLTObserverListener. The following values of CLT activity observer configuration are defined.							
			b8	b7	b6	b5	b4	b3	b2	b1	Meaning
			-	-	-	-	-	-	-	0	Application is not allowed to
											register a CLTObserverListener
								-	-	1	Application is allowed to register
			<u> </u>		L.,	L.,	L	1			a CLTObserverListener
			Χ	Χ	Χ	X	Χ	Χ	Χ	-	RFU

NOTE 1: RQ05_2505 is for information only.

NOTE 2: RQ05_2507 is taken into account via the optional features in clause 4.1.1.

RQ number	Clause		Description					
RQ05_2601	8.2.1.3.2.8.1	The value part of the	he value part of the Reader mode protocol data Type A has the following coding:					
		Parameter	Value	Length				
		DATARATE_MAX	Maximum data rate supported as defined in ETSI	1				
			TS 102 622 [23]					

RQ number	Clause	Description					
RQ05_2701	8.2.1.3.2.8.2	ne value part of the Reader mode protocol data Type B has the following coding:					
		Parameter	Value	Length			
		AFI	Application family identifier as defined	1			
			in ETSI TS 102 622 [23]				
		HIGHER_LAYER_DATA_LENGTH	Length of HIGHER_LAYER_DATA	1			
		HIGHER_LAYER_DATA	Higher layer data as defined in ETSI	Ν			
			TS 102 622 [23]				

RQ number	Clause	Description
RQ05_2801	8.2.1.4	A card supporting DAP verification shall support at least the "DES Scheme" for Load File
		Data Block Signature computation according to GlobalPlatform Card Specification [5].
RQ05_2802	8.2.1.4	When using the Compact Remote Application data format, the context established by
		INSTALL [for load] shall be saved across command sessions for the whole sequence until
		the last LOAD command.

RQ number	Clause	Release	Description
RQ05_2901	8.2.1.5		Key version number and key identifiers of Klc, KID and DEK shall be defined
			according to ETSI TS 102 225 [2].
			The key used for ciphering the key values (e.g. Klc, KID or DEK) of the PUT KEY
			command is the key with identifier 3 (i.e. DEK). It is a static key.
RQ05_2902	8.2.1.5	Up to	If a DES key is used to cipher a key value of the PUT KEY command, the ciphering
		Rel-12	mode shall be ECB as defined in NIST SP 800-38A [14].
RQ05_2903	8.2.1.5		When replacing or adding key(s) within the same key set, or when updating the key
			version number of a key set, the encrypting key to be used is the DEK of the same
			key version number as the changed key(s).
RQ05_2904	8.2.1.5		When creating keys or key set(s) or when replacing keys that do not belong to a
			keyset, the encrypting key to be used is the DEK of the same key version number as
			KIc and KID in the Command Packet containing the PUT KEY command.
RQ05_2905	8.2.1.5		The key version number of KIc and KID used to secure the Response Packet shall
			be the same as the key version number indicated in the Command Packet.
RQ05_2906	8.2.1.5		The transport security keys (i.e. KIc/KID) used to secure the Response Packet shall
			be the same as the ones of the Command Packet containing the PUT KEY
			command.
NOTE: RQ	05_2902	and RQ05_	3901 are effectively the same requirement but in different clauses for different
	ases.		

RQ number	Clause	Description							
RQ05_3101	8.2.1.5.1	If the command PUT KEY as defined in [5] is used with an AES key as encryption key							
		(DEK), the remote entity shall cipher key values of AES keys only with an AES key of the							
		same or greater length, where AES							
RQ05_3102	8.2.1.5.1	If the command PUT KEY as define			encryption ke	ey .			
		(DEK), the coding of the key type for							
RQ05_3103	8.2.1.5.1	If the command PUT KEY as define							
		(DEK), the definitions of the comma	and PUT KE	Y as defined in [5] shall	be extended	as			
		in RQ05_3103 to RQ05_3109.							
RQ05_3104	8.2.1.5.1	The field "length of the key or key or	•		be set to the				
		length of the "key data value" defin							
RQ05_3105	8.2.1.5.1	The "key data value" defined in [5]	shall be cor	structed as follows:					
						1			
		Description	Length	Value	Presence				
		Length of the key in bytes	1	16, 24 or 32 for AES	Mandatory				
				16 or 24 for triple DES					
		Ciphered key	16 or 32		Mandatory				
		Length of the MAC in bytes	1	4 or 8	Conditional				
RQ05_3106	8.2.1.5.1	The field "length of the key in bytes		et to the length of the key	y contained in	the			
		field "ciphered key" (without paddin							
RQ05_3107	8.2.1.5.1	The field "length of the MAC" shall							
		key identifier '02' and key version '0			g of the KID fo	r			
			Cryptographic Checksum" in ETSI TS 102 225 [2]).						
RQ05_3108	8.2.1.5.1	Key ciphering in case of PUT KEY for AES shall use CBC mode as defined in NIST							
		SP 800-38A [14] with initial chainin							
RQ05_3109	8.2.1.5.1	Keys that do not fill whole blocks of							
		length of 192 bits or triple DES usir			ded to the nex	ct			
		block boundary. Padding octets ma	y have any	value.					

RQ number	Clause	Release	Description		
RQ05_3901	8.2.1.5.2	Rel-13	If a triple DES key is used to cipher a key value, the ciphering mode shall be		
		upwards	ECB as defined in NIST SP 800-38A [14].		
RQ05_3902	8.2.1.5.2	Rel-13	The remote entity shall cipher key values of triple DES keys only with a triple		
		upwards	DES key of the same or greater length or with an AES key as defined in the		
			previous clause.		
NOTE: RQ05_2902 and RQ05_3901 are effectively the same requirement but in different clauses for different					
rele	releases.				

RQ number	Clause	Release				Description	
RQ05_3201	8.2.1.6		In addition	n addition to the mandatory values of the P1 parameter defined in GlobalPlatform			
						nations of the P1 parameter, i.e. setting more than or	ne
						ted for command GET STATUS.	
RQ05_3202	8.2.1.6	Up to	The LOGIC	CALLY_	DELETED	Life Cycle State may be returned as defined in Oper	n
		Rel-11	Platform C	ard Spe	ecification 2	.0.1 [8].	
RQ05_3203	8.2.1.6					GET STATUS is set, the returned GlobalPlatform	
			Registry Da	ata TĽV	shall include	de an SCP Registry Data TLV (see table below for	
			coding) wh	ich incl	udes a Men	u Parameters TLV for Issuer Security Domain,	
			Security Do	omains	and Applica	ations:	
				TAG	Length	Value	
				'EA'	Variable	SCP Registry Data	
				'80'	Variable	Menu parameters (see clause 8.2.1.6.1)	
RQ05_3204	8.2.1.6		When using the Compact Remote Application data format, the context established				
			by GET ST	ATUS	[get first or a	all occurrence(s)] shall be saved across command	
			sessions a	s long a	as more out	out data related to the initial GET STATUS command	ıd
			is available	on the	UICC.		

RQ number	Clause	Description					
RQ05_3301	8.2.1.6.1	The format of Menu parameters of SCP Registry Data shall be as follow:					
					7		
			Description	Length	<u> </u>		
			First menu entry position	1			
			First menu entry identifier	1			
			First menu entry state	1			
			Last menu entry position	1			
			Last menu entry identifier	1			
			Last menu entry state	1			
RQ05_3302	8.2.1.6.1	,	identifiers and positions of SCP Regi	,			
		the Menu Entries list defined in ETSI TS 102 241 [7], and shall be returned regardless of the					
		menu entry state as well as regardless of the Application life cycle state					
		(e.g. Selectable/	Locked, etc.).				
RQ05_3303	8.2.1.6.1	The menu entry	state of SCP Registry Data is defined	d as follows:			
		• '00': me	enu entry is disabled.				
		• '01': me	enu entry is enabled.				
		other value	alues: RFU.				
	NOTE: RQ05_3202 is not tested in the present document, as it based on an older version of GlobalPlatform Card						
Spe	cification [5]						

RQ number	Clause	Release	Description
RQ05_3401	8.2.1.7		For command GET DATA, the value '80' for the CLA byte shall be supported. The
			value '00' for the CLA byte is optional.
RQ05_3402	8.2.1.7		The Issuer Security Domain shall support at least the following data object tags in GET
			DATA:
			Tag '66': Card Data.
			Tag 'E0': Key Information Template.
RQ05_3403	8.2.1.7		If a UICC contains an Application Provider Security Domain with Delegated
			Management privilege, the tag values '42' and '45' shall be supported by the ISD as
			specified in the UICC Configuration for GET DATA [16].
RQ05_3404	8.2.1.7		An Application Provider Security Domain shall support at least the data object tags:
			Tag 'E0': Key Information Template in GET DATA.

RQ number	Clause	Release	Description
RQ05_3406	8.2.1.7	Rel-12	If confidential setup of security domains is supported, the Application Provider Security
		upwards	Domain shall support the following data object tag:
			Tag 'BF 30': Forwarded CASD Data, to retrieve certificates and CASD Management
			Data.
RQ05_3405	8.2.1.7		The command Get Data is extended to retrieve specific card information with tag
			values in P1 and P2. The following values have been defined:
			 'FF 1F': Reserved for ETSI TS 123 048 [10].
			 'FF 20': Reserved for ETSI TS 123 048 [10].
			 'FF 21': Extended Card Resources Tag, this retrieves information on the card resources used and available.
			'FF 22' to 'FF 3F': reserved for allocation in the present document.

RQ number	Clause		Description				
RQ05_3501	8.2.1.7.2	The Extended C	The Extended Card resources information data object shall be supported by the ISD.				
RQ05_3502	8.2.1.7.2	After the succes	sful execu	tion of the command, the GET DATA response	onse data	a field shall be	
		coded as define	d in Globa	IPlatform [5].			
RQ05_3503	8.2.1.7.2	The value of the	TLV code	d data object referred to in reference contr	ol param	eters P1 and P2	
		of the GET DAT	A commar	nd message is:	•		
				-			
			Length	Description	Value		
			1	Number of installed application tag	'81'		
			1	Number of installed application length	Х		
			Х	Number of installed application			
			1	Free non volatile memory tag	'82'		
			1	Free non volatile memory length	Υ		
			Υ	Free non volatile memory			
			1	Free volatile memory tag	'83'		
			1	Free volatile memory length	Z		
			Z	Free volatile memory			
RQ05_3504	8.2.1.7.2	The free memor	y indicated	in GET DATA shall be at least available for	or applica	ations to be	
_		loaded into the I			• •		

RQ number	Clause	Description
RQ05_3601	8.2.1.8	A UICC supporting confidential application management as specified in clause 10 of ETSI TS 102 226 [1] shall support the STORE DATA command as specified in the UICC Configuration [16].
RQ05_3602	8.2.1.8	Support of the STORE DATA command described in GlobalPlatform Card Specification [5] is optional, but if the Third Party Security Policy requires management of Executable Load Files access constraints, it shall be supported as specified in the following REQ_xx - REQ_YY.
RQ05_3603	8.2.1.8	When using the Compact Remote Application data format, the context established by INSTALL [for personalization] (if supported) shall be saved across command sessions until the STORE DATA command containing the last block.
RQ05_3604	8.2.1.8	The STORE DATA Command is sent to a Security Domain to specify access rights restrictions to its Executable Load Files for a specified Third Party Security Domain.
RQ05_3605	8.2.1.8	If the Forbidden Executable Load File List is present in the STORE DATA command, each Executable Load File specified in the list shall be considered as Forbidden for the indicated Third Party Security Domain. Any other Executable Load File not present in the list is allowed for the specified Third Party Security Domain.
RQ05_3606	8.2.1.8	Any subsequent loading of Load Files performed by the Third Party Security Domain shall fail if the Load File references one or more Forbidden Executable Load Files. Access rights of Executable Load Files already present on card are not affected by the command.
RQ05_3607	8.2.1.8	If a STORE DATA Command is resent to a Security Domain, specifying a Third Party Security Domain for which a Forbidden Executable Load File List has already been defined, the new Forbidden Executable Load File List replaces the previous list for this Third Party Security Domain. If the new Forbidden Executable Load File List is empty the access restrictions for this Third Party Security Domain are removed from the addressed Security Domain.
RQ05_3608	8.2.1.8	The UICC shall prevent an Executable Load File from being set as Forbidden for its associated Security Domain.
RQ05_3609	8.2.1.8	The STORE DATA command to load Forbidden Load File List shall support the chaining of multiple STORE DATA commands to transfer large amounts of data. Parameter P1 of the command shall indicate non encrypted data and BER-TLV format of the command data field.

RQ number	Clause			Description				
RQ05_3610	8.2.1.8	Security Domai in the Store Date	TAG 'BE' is used to specify a Forbidden Load File List in STORE DATA; the Third Party Security Domain AID TLV object and the Forbidden Load Files AID TLV objects are included in the Store Data Command Message to define the list of Forbidden Load Files for the Third Party Security Domain.					
		Presence	Length	Name	Value			
		Mandatory	1	Tag of Forbidden Executable Load Files AIDs constructed field	'BE'			
		Mandatory	1 or 2	Length of Forbidden Executable Load Files AIDs constructed field				
		Mandatory		Third Party Security Domain AID TLV				
		Optional		Forbidden Executable Load File #1 AID TLV				
		Optional		Forbidden Executable Load File #2 AID TLV				
		Optional		Forbidden Load File #N AID TLV				
RQ05_3611	8.2.1.8			omain AID TLV and the Forbidden Load File AID TLV ETSI TS 101 220 [6] using tag '4F'.	s are coded			

RQ number	Clause	Description
RQ05_3701	8.3	When using remote APDUs to perform RAM over HTTPS, the header values defined in
		Amendment B of the Global Platform Card Specification v 2.2 [19] apply.

5.6 Additional command for push

Reference: ETSI TS 102 226 [1], clause 9.

RQ number	Clause	Description	
RQ06_0101		The PUSH command enables an application to open a BIP channel, to establish a CAT_TP link, to open a TCP connection and/or to send an identification packet on TCP upon a remote entity request.	
NOTE: RQ06_0101 is a definition.			

RQ number	Clause	Description
RQ06_0201	9.1.1	The PUSH command shall be considered completed once the terminal response to the
		OPEN CHANNEL proactive command has been received by the application.
RQ06_0301	9.1.2	The PUSH command shall be considered completed once the link reaches the OPEN
		state in CAT_TP or the link establishment is terminated due to an error condition.

RQ number	Clause	Description
RQ06_0401	9.1.3	It is mandatory for applications that process PUSH commands to support additional
		response data management. The additional response data shall be coded as defined in
		clause 9.2 in ETSI TS 102 226 [1].

RQ number	Clause	Description	
RQ06_0501 9.1.4		The request for a TCP connection allows a remote entity to ask an application on the	
		UICC to establish a TCP connection as defined in ETSI TS 102 483 [20].	
NOTE: RQ06_0501 is a definition.			

RQ number	Clause	Description	
RQ06_0601	9.1.5	The request for an identification packet allows a remote entity to ask an application on the	
		UICC to send a data packet containing identification information on a TCP connection.	

RQ number	Clause	Description			
RQ06_0701	9.2	Each command is coded as an APDU. The support of PUSH command shall be supported in addition to the command tables defined in clauses 7 and 8 of ETSI TS 102 226 [1] for applications supporting BIP and/or CAT_TP.			
RQ06_0702	9.2	The PUSH command	shall be coded as follows:		
		Code	Value		
		CLA	'80'		
		INS	'EC'		
		P1	'01'		
			'80' reserved for application specific usage		
		P2 '01': Request for BIP channel opening			
			'02': Request for CAT_TP link establishment		
			'03': Request for TCP connection		
		'04': Request for Identification Packet			
			(see note)		
		Lc Length of subsequent data field			
		Data Described below			
		NOTE	These values only apply for P1 = '01'.		

RQ number	Clause	Description
RQ06_0801	9.2.1	For Command data BIP channel opening; any COMPREHENSION-TLV data objects as defined for OPEN CHANNEL in ETSI TS 102 223 [4] can be present in the data field of the PUSH command. In addition, the application may define default values for one or more of these data objects.
RQ06_0802	9.2.1	The application shall use the data objects provided by both means to construct the OPEN CHANNEL command, whereby the objects provided in the PUSH command take precedence.
RQ06_0803	9.2.1	For OPEN CHANNEL, related to packet data service bearer, in ETSI TS 102 223 [4] the "Other address (local address)" parameter shall not be included in the command.
RQ06_0804	9.2.1	For OPEN CHANNEL, related to packet data service bearer, in ETSI TS 102 223 [4] the "Login" parameter and "Password" parameter shall be both present or absent in the command.
RQ06_0805	9.2.1	If the rules in RQ06_0803 and RQ06_0804 are not satisfied the Push requesting BIP open channel is rejected with status word set to '6A 80'.
RQ06_0806	9.2.1	If the OPEN CHANNEL command was successful (general result < '10'), the status word of the PUSH command shall be set to '90 00'.
RQ06_0807	9.2.1	If the OPEN CHANNEL command fails (general result ≥ '10'), the status word of the PUSH command shall be set to '6F 00' and the Result TLV of the TERMINAL RESPONSE shall be used as response data in the additional response data.

RQ number	Clause	Description		
RQ06_0901	9.2.2	Data of Commands for CAT_TP link establishment shall have the following format:		
		Description	Format from ETSI TS 102 223 [4]	M/O/C
		CAT_TP Destination Port	UICC/terminal interface transport level	M
		Max SDU size	Buffer size	0
		Identification data	Channel data	0
RQ06_0902	9.2.2		rt the transport protocol type is insignificant and and, an allocable port number shall be used.	shall be set to
RQ06_0903	9.2.2	If the Max SDU size data object is present in the command data field of the PUSH command and is non null data object, and if the size is available on the UICC, then the UICC shall use the requested size.		
RQ06_0904	9.2.2	If the Max SDU size data object is not present in the command data field of the PUSH command or is null data object, or if the UICC is not able to provide the requested size, then the UICC shall use another appropriate value.		
RQ06_0905	9.2.2	The identification data object present in the command data field of the PUSH command shall be used as identification data in the SYN PDU sent from the UICC.		
RQ06_0906	9.2.2	If the identification data object present in the command data field of the PUSH command is of zero length, the length of the identification data in the SYN PDU shall also be zero.		
RQ06_0907	9.2.2	If identification data is not present in the command data field of the PUSH command, the ICCID shall be used as identification data in the SYN PDU.		
RQ06_0908	9.2.2	The SYN/ACK PDU sent fro	m the remote entity shall have a null identification	n data field.
RQ06_0909	9.2.2	If the link reaches the OPEN state in CAT_TP, the status word of the PUSH command shall be set to '90 00'.		

RQ number	Clause	Description	
RQ06_0910	9.2.2	If the CAT_TP OPEN state is not reached, the PUSH command shall be considered as	
		failed and the status word of the PUSH command shall be set to '6F 00'.	
RQ06_0911	9.2.2	The response data in the additional response data for CAT_TP link establishment shall be	
		oded as follows:	
		'01': SYN sent failed.	
		'02': SYN/ACK not received.	
		 '03': ACK sent failed (first ACK). 	

RQ number	Clause		Description			
RQ06_1001	9.2.3	By TCP connection opening the PUSH command shall be sent to the Multiplexing application identified by its TAR as defined in ETSI TS 101 220 [6].				
RQ06_1002	9.2.3	The data field of the PUSH command shall consist of the following COMPREHENSION-TLV data objects:				
		Data Object from ETSI TS 102 223 [4]	M/O/C	Comment		
		Bearer description	M			
		UICC/terminal interface transport level	M	Transport protocol type shall be set to "TCP, UICC in client mode, remote connection"		
		Data destination address	M			
		Network Access Name	0			
		Text String (User login)	0			
		Text String (User password)	С	"Text String (User login)" and "Text String (User password)" shall both be present or both be absent		
RQ06_1003	9.2.3	In case of errors in the command word set to '6A 80'.	data, the P	USH command shall be rejected with status		
RQ06_1004	9.2.3	If the TCP connection opening was successful, the status word of the PUSH command shall be set to '90 00'.				
RQ06_1005	9.2.3	If the TCP connection opening failed, the status word of the PUSH command shall be set to '6F 00'.				

RQ number	Clause		Description			
RQ06_1101	9.2.4	Sending of Identification Packet, the data field of the PUSH command may consist of the following COMPREHENSION-TLV data objects:				
		Description	Description Format from ETSI TS 102 223 [4] M/O/C			
		Identification data	Channel data	0		
RQ06_1102	9.2.4	The identification data object present in the command data field of the PUSH command shall be used as identification data in the identification packet sent from the UICC.				
RQ06_1103	9.2.4	If the identification data object present in the command data field of the PUSH command is of zero length, the length of the identification data in the identification packet shall also be zero.				
RQ06_1104	9.2.4	If identification data is not present in the command data field of the PUSH command, the ICCID shall be used as identification data string in the identification packet.				
RQ06_1105	9.2.4	If the identification packet was sent successfully, the status word of the PUSH command shall be set to '90 00'.				
RQ06_1106	9.2.4	If sending of the identification packet failed, the status word of the PUSH command shall be set to '6F 00'.				

RQ number	Clause	Description
RQ06_1201		The BIP channel shall be closed using the CLOSE CHANNEL proactive command specified in ETSI TS 102 223 [4] once the only or last link using the channel has been closed.

5.7 Confidential application management

Reference: ETSI TS 102 226 [1], clause 10.

NOTE: Requirements have only been extracted up to and including Rel-11 of ETSI TS 102 226 [1]. Requirements from Rel-12 and onwards of ETSI TS 102 226 [1] have not been extracted.

RQ number	Clause	Description
RQ07_0201		If confidential loading of applications is supported, it shall be implemented as specified in the
		UICC Configuration [16] for the LOAD command using tag 'D4' for encrypted load files, for the
		key used for deciphering the load file, and for the Ciphered Load File Data Block privilege.

RQ number	Clause	Description
RQ07_0301	10.2	If an application provider wants to communicate confidentially with his security domain or an application in this security domain, and his security domain has no OTA capability, encapsulation of secured APDUs in secured packets shall be implemented as specified in RQ07_0302 to RQ07_0308.
RQ07_0302	10.2	The command string shall use the Expanded Remote Application data format.
RQ07_0303	10.2	The command string shall be secured using SCP02 with implementation option "i" = '55' according to GlobalPlatform Card Specification [5], i.e. the APDUs to be protected shall be included in a GlobalPlatform secure channel session starting with INITIALIZE UPDATE and EXTERNAL AUTHENTICATE, using the GlobalPlatform secure channel keys of a security domain that has no OTA capabilities.
RQ07_0304	10.2	If a script does not contain chaining information, the SCP02 secure channel session shall be terminated at the end of the command string.
RQ07_0305	10.2	If a script contains the chaining information "first script" or "subsequent script(s) will follow", the SCP02 secure channel session shall continue with the next script until the last script, unless one of the following conditions, which shall terminate the secure channel session, applies: • a new first script or a script without chaining information is received but no last script of the previous secure channel session has been received; • card reset.
RQ07_0306	10.2	The TAR of the command string shall represent the security domain that processes the SCP02 security or an application associated to this security domain. In the latter case, the GlobalPlatform API for the secure channel services, which is specified in Java Card API and Export File for Card Specification v2.2.1 (org.globalplatform) or Java Card™, shall be available for the application.
RQ07_0307	10.2	The security domain that processes the SCP02 security shall be part of a hierarchy of security domains, where at least one ancestor has OTA capabilities.
RQ07_0308	10.2	The command string shall be contained in a secure packet that is unwrapped by the closest ascendant security domain with OTA capabilities as specified in UICC Configuration [16].
RQ07_0309	10.2	The support of the API related to Card Specification Version 2.2, Amendment A [18] is optional.
NOTE: Dev	elopment of te	est cases for RQ07_0309 is out of scope for the present document.

RQ number	Clause	Description
RQ07_0401	10.3	If confidential setup of security domains is supported, it shall be implemented as: Scenario #2.B (Push Model) as specified in the UICC Configuration [16] shall be supported.
RQ07_0402	10.3	If confidential setup of security domains is supported, it shall be implemented as: Scenario #1 (Pull Model) using the public key scheme as specified in the UICC Configuration [16] may be supported.
RQ07_0403	10.3	If confidential setup of security domains is supported, it shall be implemented as: Scenario #3 using ECKA-EG as specified in scenario #3 in Amendment E [24] may be supported.

RQ number	Clause	Description
RQ07_0501	10.4	The mechanism specified in the UICC Configuration [16] to personalize their associated applications, using INSTALL [for personalization] and STORE DATA, shall be supported
		by all security domains.

6 Test Cases

6.1 Overview of remote management

Test cases verifying the requirements from this clause are defined under clauses 6.2.1, 6.4.1 and 6.5.3 of the present document.

6.2 Remote APDU format

6.2.1 Compact Remote Application data format

Test cases verifying the requirements from this clause are defined under clause 6.4.1 of the present document.

6.2.2 Expanded Remote Application data format

6.2.2.1 Test case 1: A command session with C-APDU TLV Structure with definite length coding

6.2.2.1.1 Initial Conditions

None.

6.2.2.1.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data	Secured Response Data is returned:	RQ01_0001
	coded as: [Expanded Remote command structure]	'AB 07	RQ01_0002
	to the Exercising RFM application, which contains:	80 01 02	RQ01_0003
	- SELECT: MF - SELECT: DF _{TEST}	23 02 90 00'	RQ01_0005
	TLV Structure: C-APDU TLV		RQ02_0301
	Definite length coding		RQ02_0302
			RQ02_0303
			RQ02_0401
			RQ02_0801
			RQ02_0801a
			RQ02_0803
			RQ02_0805
			RQ02_0820
			RQ02_0821
			RQ02_0806
			RQ02_0807
			RQ04_0101
			RQ04_0102

Step	Description	Expected Result	RQ
2	Send Command with Secured Data	Secured Response Data is returned:	RQ01_0001
	coded as: [Expanded Remote command structure]	'AB 7F	RQ01_0002
	to the Exercising RFM application, which contains:	80 01 04	RQ01_0003
	- SELECT: MF	23 LEN [Data 90 00]' where the	RQ01_0005
	- SELECT: DFTEST	Data should 'FF FF FF'	
	- SELECT: EFTARU	(120 bytes)	RQ02_0301
	 READ BINARY coded with Le='00' 		RQ02_0302
	TLV Structure: C-APDU TLV		RQ02_0303
	Definite length coding		RQ02_0401
			RQ02_0402
			RQ02_0801
			RQ02_0801a
			RQ02_0803
			RQ02_0805
			RQ02_0820
			RQ02_0821
			RQ02_0806
			RQ02_0807
			RQ04_0101
			RQ04_0102
3	Send Command with Secured Data	Secured Response Data is returned:	RQ01_0001
	coded as: [Expanded Remote command structure]	'AB 07	RQ01_0002
	to the Exercising RFM application, which contains:	80 01 04	RQ01_0003
	- SELECT: MF	23 02 90 00'	RQ01_0005
	- SELECT: DFTEST		
	- SELECT: EFTARU		RQ02_0301
	 UPDATE BINARY (empty Le field) 		RQ02_0302
	TLV Structure: C-APDU TLV		RQ02_0303
	Definite length coding		RQ02_0401
			RQ02_0405
			RQ02_0801
			RQ02_0801a
			RQ02_0803
			RQ02_0805
			RQ02_0820
			RQ02_0821
			RQ02_0806
			RQ02_0807
			RQ04_0101
			RQ04_0102

6.2.2.2 Test case 2: A command session containing multiple commands with C-APDU TLV Structure with definite length coding - Bad Format

6.2.2.2.1 Initial Conditions

None.

6.2.2.2.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data	Secured Response Data is returned:	RQ01_0001
	coded as: [Expanded Remote command structure] to	'AB 06	RQ01_0002
	the Exercising RFM application, which contains:	80 01 04	RQ01_0003
	- SELECT: MF	90 01 01'	RQ01_0005
	- SELECT: DFTEST		1.401_0000
	- SELECT: EFTARU		RQ02_0301
	- READ BINARY with wrong C-APDU Tag		RQ02_0302
	coded as: '23 05 00 B0 00 00 00'		RQ02_0303
	TLV Structure: C-APDU TLV		RQ02_0401
	Definite length coding		RQ02_0801
			RQ02_0801a
			RQ02_0803
			_
			RQ02_0805
			RQ02_0820
			RQ02_0821
			RQ02_0806
			RQ02_0807
			RQ02_0809
			RQ02_0810
			RQ02_0811
			RQ02_0812
			BO04 0101
			RQ04_0101
2	Send Command with Secured Data	Secured Response Data is returned:	RQ04_0102
	coded as: [Expanded Remote command structure] to	l'AB 06	RQ01_0001
	the Exercising RFM application, which contains:		RQ01_0002
		80 01 04 90 01 02'	RQ01_0003
	- SELECT: MF - SELECT: DFTEST	90 01 02	RQ01_0005
	- SELECT: EFTARU		RQ02 0301
	- READ BINARY with wrong C-APDU length		RQ02_0301
	coded as: '22 0F 00 B0 00 00 '00'		RQ02_0303
	TLV Structure: C-APDU TLV		RQ02_0303 RQ02_0401
	Definite length coding		_
			RQ02_0801 RQ02_0801a
			RQ02_0803
			RQ02_0805
			RQ02_0820
			RQ02_0821
			RQ02_0806
			RQ02_0807
			RQ02_0809
			RQ02_0810
			RQ02_0811
			RQ02_0812
			RQ04_0101
			_
			RQ04_0102

Step	Description	Expected Result	RQ
3	Send Command with Secured Data	Secured Response Data is returned:	RQ01_0001
	coded as: [Expanded Remote command structure] to	'AB 06	RQ01_0002
	the Exercising RFM application, which contains:	80 01 04	RQ01_0003
	- SELECT: MF	90 01 NN'	RQ01_0005
	- SELECT: DF _{TEST}	where NN can be '02' or '03'	
	- SELECT: EF _{TARU}		RQ02_0301
	 READ BINARY with no length in C-APDU 		RQ02_0302
	structure coded as: '22 00 B0 00 00 00'		RQ02_0303
	TLV Structure: C-APDU TLV		RQ02_0401
	Definite length coding		RQ02_0801
			RQ02_0801a
			RQ02_0803
			RQ02_0805
			RQ02_0820
			RQ02_0821
			RQ02_0806
			RQ02_0807
			RQ02_0809
			RQ02_0810
			RQ02_0811
			RQ02_0812
			RQ04_0101
			RQ04_0102

6.2.2.3 Test case 3: A command session with C-APDU TLV Structure with indefinite length coding

6.2.2.3.1 Initial Conditions

• None.

6.2.2.3.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data	Secured Response Data is returned:	RQ01_0001
	coded as: [Expanded Remote command structure]	'AF 80	RQ01_0002
	to the Exercising RFM application, which contains:	23 02 90 00	RQ01_0003
	- SELECT: MF	23 02 90 00	RQ01_0005
	- SELECT: DFTEST	00 00'	
	TLV Structure: C-APDU TLV		RQ02_0301a
	Indefinite length coding		RQ02_0302
			RQ02_0303
			RQ02_0401
			RQ02_0802
			RQ02_0802a
			RQ02_0804
			RQ04_0101
			RQ04_0102

Step	Description	Expected Result	RQ
2	Send Command with Secured Data coded as: [Expanded Remote command structure] to the Exercising RFM application, which contains: - SELECT: MF - SELECT: DFTEST - SELECT: EFTARU - UPDATE BINARY with offset 0 and command data '00' TLV Structure: C-APDU TLV Indefinite length coding	Secured Response Data is returned: 'AF 80 23 02 90 00 23 02 90 00 23 02 90 00 23 02 90 00 00 00'	RQ01_0002 RQ01_0001 RQ01_0003 RQ02_0301a RQ02_0302 RQ02_0303 RQ02_0401 RQ02_0402 RQ02_0802 RQ02_0802 RQ02_0802a
3	Send Command with Secured Data coded as: [Expanded Remote command structure] to the Exercising RFM application, which contains: - SELECT: MF - SELECT: DF _{TEST} - SELECT: EF _{TARU} - READ BINARY coded with Le field set to '00' TLV Structure: C-APDU TLV Indefinite length coding	Secured Response Data is returned: 'AF 80 23 02 90 00 23 02 90 00 23 02 90 00 23 LEN [Data 90 00] 00 00' where the Data should be '00 FF FF FF' (120 bytes)	RQ02_0804 RQ04_0101 RQ04_0102 RQ01_0002 RQ01_0001 RQ01_0003 RQ01_0005 RQ02_0301a RQ02_0302 RQ02_0303 RQ02_0401 RQ02_0802 RQ02_0802 RQ02_0802 RQ02_0804 RQ04_0101

6.2.2.4 Test case 4: A command session with C-APDU TLV Structure with indefinite length coding - Bad Format

6.2.2.4.1 Initial Conditions

• None.

6.2.2.4.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data	Secured Response Data is returned:	RQ01_0001
	coded as: [Expanded Remote command structure]	'AF 80	RQ01_0002
	to the Exercising RFM application, which contains:	23 02 90 00	RQ01_0003
	- SELECT: MF	23 02 90 00	RQ01_0005
	- SELECT: DFTEST	23 02 90 00	
	- SELECT: EF _{TARU}	90 01 01	RQ02_0301a
	 READ BINARY with wrong C-APDU coded 	00 00'	RQ02_0302
	as ' 23 05 00 B0 00 00 00'		RQ02_0303
	TLV Structure: C-APDU TLV		RQ02_0401,
	Indefinite length coding		RQ02_0802
			RQ02_0802a
			RQ02_0804
			RQ02_0806
			RQ02_0807
			RQ02_0809
			RQ02_0811
			RQ02_0812
			RQ04_0101
			RQ04_0102

Step	Description	Expected Result	RQ
2	Send Command with Secured Data coded as: [Expanded Remote command structure] to the Exercising RFM application, which contains: - SELECT: MF - SELECT: DF _{TEST} - SELECT: EF _{TARU} - READ BINARY with wrong C-APDU length coded as:'22 0F 00 B0 00 00 00' TLV Structure: C-APDU TLV Indefinite length coding	Secured Response Data is returned: 'AF 80 23 02 90 00 23 02 90 00 23 02 90 00 90 01 02 00 00'	RQ01_0001 RQ01_0002 RQ01_0003 RQ01_0005 RQ02_0301a RQ02_0401 RQ02_0802 RQ02_0802a RQ02_0804 RQ02_0806 RQ02_0807 RQ02_0809 RQ02_0811 RQ02_0812 RQ04_0101 RQ04_0102
3	Send Command with Secured Data coded as: [Expanded Remote command structure] to the Exercising RFM application, which contains: - SELECT: MF - SELECT: DF _{TEST} - SELECT: EF _{TARU} - READ BINARY with no length in C-APDU structure as:'22 00 B0 00 00 00' TLV Structure: C-APDU TLV Indefinite length coding	Secured Response Data is returned: 'AF 80 23 02 90 00 23 02 90 00 23 02 90 00 90 01 NN 00 00' where NN can be '02' or '03'.	RQ01_0001 RQ01_0002 RQ01_0003 RQ01_0005 RQ02_0301a RQ02_0401 RQ02_0802 RQ02_0802a RQ02_0804 RQ02_0806 RQ02_0807 RQ02_0807 RQ02_0809 RQ02_0811 RQ02_0811 RQ02_0812 RQ04_0101 RQ04_0101

6.2.2.5 Test case 5: A command session with Immediate Action TLV Structure with definite length coding - Normal Format

6.2.2.5.1 Initial Conditions

• On the UICC-Terminal interface, prior to this test the Terminal shall have been powered on and performed the PROFILE DOWNLOAD procedure.

6.2.2.5.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data	On the UICC-Terminal interface:	RQ01_0001
	coded as: [Expanded Remote command structure]	The proactive session is performed	RQ01_0002
	to the Exercising RFM application, which contains:	successfully for DISPLAY TEXT.	RQ01_0003
	 Immediate Action TLV, normal format, 		RQ01_0005
	DISPLAY TEXT	Secure Response Data is returned to the	RQ02_0301
	 C-APDU TLV, SELECT: MF 	sending entity, containing	RQ02_0302
	Definite length coding	'AB 07	RQ02_0304
		80 01 02	RQ02_0501
		23 02 90 00'	RQ02_0504
			RQ02_0509
			RQ04_0101
			RQ04 0102

Step	Description	Expected Result	RQ
2	Send Command with Secured Data	On the UICC-Terminal interface:	RQ01_0001
	coded as: [Expanded Remote command structure]	The proactive session is performed	RQ01_0002
	to the Exercising RFM application, which contains:	successfully for PLAY TONE.	RQ01_0003
	 Immediate Action TLV, normal format, 		RQ01_0005
	PLAY TONE	Secure Response Data is returned to the	
	- C-APDU TLV, SELECT: MF	sending entity, containing	RQ02_0301
	Definite length coding	'AB 07	RQ02_0302
		80 01 02	RQ02_0304
		23 02 90 00'	
			RQ02_0501
			RQ02_0504
			RQ02_0509
			RQ04_0101
			RQ04_0102
3	Send Command with Secured Data	On the UICC-Terminal interface:	RQ01_0001
	coded as: [Expanded Remote command structure]	The proactive session is performed	RQ01_0002
	to the Exercising RFM application, which contains:	successfully for REFRESH.	RQ01_0003
	 Immediate Action TLV, normal format, 		RQ01_0005
	REFRESH	Secure Response Data is returned to the	
	- C-APDU TLV, SELECT: MF	sending entity, containing	RQ02_0301
	Definite length coding	'AB 07	RQ02_0302
		80 01 02	RQ02_0304
		23 02 90 00'	RQ02_0501
			RQ02_0504
			RQ02_0509
			RQ04_0101
			RQ04_0102

6.2.2.6 Test case 6: A command session with Immediate Action TLV Structure with definite length coding - Referenced Format

6.2.2.6.1 Initial Conditions

• On the UICC-Terminal interface, prior to this test the Terminal shall have been powered on and performed the PROFILE DOWNLOAD procedure on the UICC/terminal interface.

6.2.2.6.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data	On the UICC-Terminal interface:	RQ02_0301
	coded as: [Expanded Remote command structure]	The proactive session is performed	RQ02_0302
		successfully for DISPLAY TEXT.	RQ02_0304
	the following in Definite length coding:	-	RQ02_0502
	 Immediate Action TLV, referenced format 	Secure Response Data is returned to the	RQ02_0509
	containing proactive session indication	sending entity, containing	
	('81')	'AB 07	
	 Immediate Action TLV, normal format, 	80 01 03	
	DISPLAY TEXT	23 02 90 00'	
	- C-APDU TLV, SELECT: MF		

Step	Description	Expected Result	RQ
2	Send Command with Secured Data	On the UICC-Terminal interface:	RQ02_0301
	coded as: [Expanded Remote command structure]	The proactive session is performed	RQ02_0302
	to the Exercising RFM application, which contains	successfully for PLAY TONE.	RQ02_0304
	the following in Definite length coding:		RQ02_0502
	- C-APDU TLV, SELECT: MF	Secure Response Data is returned to the	RQ02_0503
	 Immediate Action TLV, normal format, 	sending entity, containing	RQ02_0504
	PLAY TONE	'AB 07	RQ02_0509
	 Immediate Action TLV,referenced format, 	80 01 03	RQ02_0508a
	containing early response ('82')	23 02 90 00'	RQ02_0508b
	- C-APDU TLV, SELECT: DFTEST		RQ02_0508c
	- C-APDU TLV, SELECT: EFTARU	On the UICC-Terminal interface:	RQ02_0801
	- C-APDU TLV, UPDATE BINARY with data	The proactive session is performed	
	'01'	successfully for DISPLAY TEXT.	
	- Immediate Action TLV, normal format,		
	DISPLAY TEXT	The proactive session is performed	
	- Immediate Action TLV, referenced format,	successfully for REFRESH command.	
	referencing the second record in EFRMA		
_	('02') refers to REFRESH	O	DO00 0500-
3	On the UICC-Terminal interface: read the content of EFTARU.	Content is '01 FF FF' (120 bytes).	RQ02_0508a
4	Send Command with Secured Data	On the UICC-Terminal interface:	RQ02_0301
	coded as: [Expanded Remote command structure]	The proactive session is performed	RQ02_0302
	to the Exercising RFM application, which contains	successfully for DISPLAY TEXT.	RQ02_0304
	the following in Definite length coding:		RQ02_0502
	 Immediate Action TLV, referenced format, 	The proactive session is performed	RQ02_0503
	referencing the first record in EF _{RMA} ('01')	successfully for REFRESH command.	RQ02_0504
	DISPLAY TEXT		RQ02_0509
	- C-APDU TLV, SELECT: MF	Secure Response Data is returned to the	
	- Immediate Action TLV, referenced format,	sending entity, containing	
	referencing the second record in EFRMA	'AB 07	
	('02') REFRESH	80 01 03	
		23 02 90 00'	

6.2.2.7 Test case 7: A command session with Immediate Action TLV Structure with definite length coding - Immediate Action Error

6.2.2.7.1 Initial Conditions

• On the UICC-Terminal interface, prior to this test the Terminal shall have been powered on and performed the PROFILE DOWNLOAD procedure.

6.2.2.7.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data coded as:	Secured Response Data is returned:	RQ02_0301
	[Expanded Remote command structure] to the	'AB 06	RQ02_0302
	Exercising RFM application, which consist of 2	80 01 01	RQ02_0304
	Command TLV having the following TLV Structure:	81 01 01'	RQ02_0501
	Immediate Action TLV using referenced format		RQ02_0509
	containing proactive session indication ('81')	On the UICC-Terminal interface:	RQ02_0812a
	followed by a C-APDU TLV.	The proactive session is not performed.	RQ02_0813
	Definite length coding.		RQ02_0814

NOTE: The test can be applied only in case of SMS protocol.

6.2.2.8 Test case 8: A command session with Immediate Action TLV Structure with indefinite length coding - Normal Format

6.2.2.8.1 Initial Conditions

• On the UICC-Terminal interface, prior to this test the Terminal shall have been powered on and performed the PROFILE DOWNLOAD procedure.

6.2.2.8.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data	On the UICC-Terminal interface:	RQ02_0301a
	coded as: [Expanded Remote command structure]	The proactive session is performed	RQ02_0302
	to the Exercising RFM application, which contains:	successfully for DISPLAY TEXT.	RQ02_0304
	 Immediate Action TLV, normal format, 		RQ02_0501
	DISPLAY TEXT	Secure Response Data is returned to the	RQ02_0504
	- C-APDU TLV, SELECT: MF	sending entity, containing	RQ02_0509
	Indefinite length coding.	'AF 80	
		23 02 90 00	
		00 00'	
2	Send Command with Secured Data	On the UICC-Terminal interface:	RQ02_0301a
	coded as: [Expanded Remote command structure]	The proactive session is performed	RQ02_0302
	to the Exercising RFM application, which contains:	successfully for PLAY TONE.	RQ02_0304
	 Immediate Action TLV, normal format, 		RQ02_0501
	PLAY TONE	Secure Response Data is returned to the	RQ02_0504
	- C-APDU TLV, SELECT: MF	sending entity, containing	RQ02_0509
	Indefinite length coding.	'AF 80	
		23 02 90 00	
		00 00'	
3	Send Command with Secured Data	On the UICC-Terminal interface:	RQ01_0003
	coded as: [Expanded Remote command structure]	The proactive session is performed	
	to the Exercising RFM application, which contains:	successfully for REFRESH.	RQ02_0301a
	 Immediate Action TLV, normal format, 		RQ02_0302
	REFRESH	Secure Response Data is returned to the	RQ02_0304
	- C-APDU TLV, SELECT: MF	sending entity, containing	RQ02_0501
	Indefinite length coding.	'AF 80	RQ02_0504
		23 02 90 00	RQ02_0509
		00 00'	

6.2.2.9 Test case 9: A command session with Immediate Action TLV Structure with indefinite length coding - Referenced Format

6.2.2.9.1 Initial Conditions

• On the UICC-Terminal interface, prior to this test the Terminal shall have been powered on and performed the PROFILE DOWNLOAD procedure.

6.2.2.9.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data	On the UICC-Terminal interface:	RQ02_0301a
	coded as: [Expanded Remote command structure]	The proactive session is performed	RQ02_0302
	to the Exercising RFM application, which contains	successfully for DISPLAY TEXT.	RQ02_0304
	the following:		RQ02_0502
	 Immediate Action TLV, referenced format 	Secure Response Data is returned to the	RQ02_0503
	containing proactive session indication	sending entity, containing	RQ02_0509
	('81')	'AF 80	
	 Immediate Action TLV, normal format, 	23 02 90 00	
	DISPLAY TEXT	00 00'	
	- C-APDU TLV, SELECT: MF		
	Indefinite length coding.		

Step	Description	Expected Result	RQ
2	Send Command with Secured Data coded as: [Expanded Remote command structure] to the Exercising RFM application, which contains the following in Indefinite length coding: - C-APDU TLV, SELECT: MF - Immediate Action TLV, normal format, PLAY TONE - Immediate Action TLV, referenced format, containing early response ('82') - C-APDU TLV, SELECT: DFTEST - C-APDU TLV, SELECT: EFTARU - C-APDU TLV, UPDATE BINARY with data '01' - Immediate Action TLV, normal format, DISPLAY TEXT - Immediate Action TLV, referenced format, referencing the second record in EFRMA ('02') refers to REFRESH	On the UICC-Terminal interface: The proactive session is performed successfully for PLAY TONE. Secure Response Data is returned to the sending entity, containing 'AF 80 23 02 90 00 00 00' On the UICC-Terminal interface: The proactive session is performed successfully for DISPLAY TEXT. The proactive session is performed successfully for REFRESH command.	RQ02_0301a RQ02_0302 RQ02_0304 RQ02_0502 RQ02_0503 RQ02_0504 RQ02_0509 RQ02_0508a RQ02_0508b RQ02_0508c RQ02_0801
3	On the UICC-Terminal interface: read the content of EFTARU.	Content is '01 FF FF' (120 bytes).	RQ02_0508a
4	Send Command with Secured Data coded as: [Expanded Remote command structure] to the Exercising RFM application, which contains the following in Indefinite length coding: - Immediate Action TLV, referenced format, referencing the first record in EF _{RMA} ('01') DISPLAY TEXT - C-APDU TLV, SELECT: MF - Immediate Action TLV, referenced format, referencing the second record in EF _{RMA} ('02') REFRESH	On the UICC-Terminal interface: The proactive session is performed successfully for DISPLAY TEXT. The proactive session is performed successfully for REFRESH command. Secure Response Data is returned to the sending entity, containing 'AF 80 23 02 90 00 00 00'	RQ02_0301a RQ02_0302 RQ02_0304 RQ02_0502 RQ02_0503 RQ02_0504 RQ02_0509

6.2.2.10 Test case 10: A command session with Immediate Action TLV Structure with indefinite length coding - Immediate Action Error

6.2.2.10.1 Initial Conditions

• On the UICC-Terminal interface, prior to this test the Terminal shall have been powered on and performed the PROFILE DOWNLOAD procedure.

6.2.2.10.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data	Secured Response Data is returned:	RQ02_0301a
	coded as: [Expanded Remote command structure]	'AF 80	RQ02_0302
	to the Exercising RFM application, which consist of:	81 01 01	RQ02_0304
	TLV Structure: Immediate Action TLV using	00 00'	RQ02_0501
	referenced format containing proactive session		RQ02_0509
	indication ('81') in the first command TLV followed	On the UICC-Terminal interface:	RQ02_0812b
	by C-APDU TLV	The proactive session is not performed.	RQ02_0813
	Indefinite length coding.		RQ02_0814

NOTE: The test can be applied only in case of SMS protocol.

6.2.2.11 Test case 11: A command session with Error Action TLV Structure with definite length coding - normal format

6.2.2.11.1 Initial Conditions

• On the UICC-Terminal interface, prior to this test the Terminal shall have been powered on and performed the PROFILE DOWNLOAD procedure.

6.2.2.11.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data	On the UICC-Terminal interface:	RQ02_0301
	coded as: [Expanded Remote command structure]	The proactive session is performed	RQ02_0302
	to the Exercising RFM application, which contains:	successfully for DISPLAY TEXT.	RQ02_0305
	 Error Action TLV, normal format, DISPLAY 		
	TEXT	Secured Response Data is returned:	RQ02_0601
	 C-APDU TLV, SELECT: MF 	'AB 13	RQ02_0605
	- C-APDU TLV, SELECT: DFTEST	80 01 05	RQ02_0606
	 C-APDU TLV, SELECT: EFTPRU 	23 02 6X XX'	
	 C-APDU TLV, READ RECORD 		
	Definite length coding.		
2	Send Command with Secured Data	The proactive session is not performed	RQ02_0301
	coded as: [Expanded Remote command structure]	for DISPLAY TEXT.	RQ02_0302
	to the Exercising RFM application, which contains:		RQ02_0305
	 Error Action TLV, normal format, DISPLAY 	Secured Response Data is returned:	RQ02_0603
	TEXT	'AB 13	RQ02_0607
	- C-APDU TLV, SELECT: MF	80 01 06	
	- C-APDU TLV, SELECT: DFTEST	23 02 6X XX'	
	- C-APDU TLV, SELECT: EFTPRU		
	 Error Action TLV, no action 		
	 C-APDU TLV, READ RECORD 		
	Definite length coding.		

6.2.2.12 Test case 12: A command session with Error Action TLV Structure with definite length coding - Referenced format

6.2.2.12.1 Initial Conditions

• On the UICC-Terminal interface, prior to this test the Terminal shall have been powered on and performed the PROFILE DOWNLOAD procedure.

6.2.2.12.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data	On the UICC-Terminal interface:	RQ02_0301
	coded as: [Expanded Remote command structure]	The proactive session is performed	RQ02_0302
	to the Exercising RFM application, which contains:	successfully for PLAY TONE.	RQ02_0305
	 Error Action TLV, referenced format, 		RQ02_0602
	referencing the third record in EF _{RMA} (' 03')	Secured Response Data is returned:	RQ02_0604
	to: PLAY TONE	'AB 13	RQ02_0605
	- C-APDU TLV, SELECT: MF	80 01 05	RQ02_0606
	 C-APDU TLV, SELECT: DFTEST 	23 02 6X XX'	
	- C-APDU TLV, SELECT: EFTPRU		
	 C-APDU TLV, READ RECORD 		
	Definite length coding.		

6.2.2.13 Test case 13: A command session with Error Action TLV Structure with indefinite length coding - Normal format

6.2.2.13.1 Initial Conditions

• On the UICC-Terminal interface, prior to this test the Terminal shall have been powered on and performed the PROFILE DOWNLOAD procedure.

6.2.2.13.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data coded as:	On the UICC-terminal interface:	RQ02_0301a
	[Expanded Remote command structure] to the	The proactive session is performed	RQ02_0302
	Exercising RFM application, which contains:	successfully for DISPLAY TEXT.	RQ02_0305
	 Error Action TLV, normal format, DISPLAY 		RQ02_0601
	TEXT	Secured Response Data is returned:	RQ02_0605
	- C-APDU TLV, SELECT: MF	'AF 80	RQ02_0606
	 C-APDU TLV, SELECT: DFTEST 	23 02 90 00	RQ02_0802
	- C-APDU TLV, SELECT: EF _{TPRU}	23 02 90 00	RQ02_0802a
	 C-APDU TLV, READ RECORD 	23 02 90 00	RQ02_0804
	Indefinite length coding.	23 02 6X XX'	
2	Send Command with Secured Data	The proactive session is not performed	RQ02_0301a
	coded as: [Expanded Remote command structure]	for DISPLAY TEXT.	RQ02_0302
	to the Exercising RFM application, which contains:		RQ02_0305
	 Error Action TLV, normal format, DISPLAY 	Secured Response Data is returned:	RQ02_0603
	TEXT	'AF 80	RQ02_0607
	- C-APDU TLV, SELECT: MF	23 02 90 00	RQ02_0802
	- C-APDU TLV, SELECT: DFTEST	23 02 90 00	RQ02_0802a
	- C-APDU TLV, SELECT: EFTPRU	23 02 90 00	RQ02_0804
	 Error Action TLV, no action 	23 02 6X XX'	
	 C-APDU TLV, READ RECORD 		
	Indefinite length coding.		

6.2.2.14 Test case 14: A command session with Error Action TLV Structure with indefinite length coding - Referenced format

6.2.2.14.1 Initial Conditions

• On the UICC-Terminal interface, prior to this test the Terminal shall have been powered on and performed the PROFILE DOWNLOAD procedure.

6.2.2.14.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data	On the UICC-terminal interface:	RQ02_0301a
	coded as: [Expanded Remote command structure]	The proactive session is performed	RQ02_0302
	to the Exercising RFM application, which contains:	successfully for PLAY TONE.	RQ02_0305
	 Error Action TLV, referenced format, 		
	referencing the third record in EF _{RMA} ('03')	Secured Response Data is returned:	RQ02_0602
	for PLAY TONE	'AF 80	RQ02_0604
	 C-APDU TLV, SELECT: MF 	23 02 90 00	RQ02_0605
	 C-APDU TLV, SELECT: DFTEST 	23 02 90 00	RQ02_0606
	- C-APDU TLV, SELECT: EFTPRU	23 02 90 00	
	 C-APDU TLV, READ RECORD 	23 02 6X XX'	RQ02_0802
	Indefinite length coding.		RQ02_0802a
			RQ02_0804

6.2.2.15 Test case 15: A command session with Script Chaining TLV Structure with definite length coding

6.2.2.15.1 Initial Conditions

• None.

6.2.2.15.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Secured Data coded as: [Expanded Remote command structure] to the Exercising RFM application, which contains: - Script Chaining TLV with the Script Chaining Value '01' as the first command TLV - SELECT: MF as C-APDU TLV - SELECT: DF _{TEST} as C-APDU TLV - SELECT: EF _{TARU} as C-APDU TLV - UPDATE BINARY with offset 0 and data '01 01 01' (17 bytes) as C-APDU TLV Definite length coding.	'AB 07 80 01 05 23 02 90 00'	RQ02_0301 RQ02_0302 RQ02_0306 RQ02_0701 RQ02_0702 RQ02_0704 RQ04_0103 RQ04_0104
2	Send Secured Data coded as: [Expanded Remote command structure] to the Exercising RFM application, which contains: - Script Chaining TLV with the Script Chaining Value '02' as the first command TLV - UPDATE BINARY with offset 17 and data '01 01 01' (100 bytes) as C-APDU TLV Definite length coding.	'AB 07 80 01 02 23 02 90 00'	RQ02_0301 RQ02_0302 RQ02_0306 RQ02_0701 RQ02_0702 RQ02_0704 RQ04_0103 RQ04_0104
3	Send Secured Data coded as: [Expanded Remote command structure] to the Exercising RFM application, which contains: - Script Chaining TLV with the Script Chaining Value '03' as the first command TLV - UPDATE BINARY with offset 117 and data '01 01 01' as C-APDU TLV - READ BINARY as C-APDU TLV Definite length coding.	'AB 81 83 80 01 03 23 LEN [Data 90 00]' where the Data should be '01 01 01' (120 bytes).	RQ02_0301 RQ02_0302 RQ02_0306 RQ02_0701 RQ02_0702 RQ02_0704 RQ04_0103 RQ04_0104

6.2.2.16 Test case 16: A command session with Script Chaining TLV Structure with definite length coding (Script Chaining Error)

6.2.2.16.1 Initial Conditions

None.

6.2.2.16.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Secured Data	'AB 06	RQ02_0301,
	coded as: [Expanded Remote command structure]	80 01 01	RQ02_0302,
	to the Exercising RFM application, which contains:	83 01 01'	RQ02_0306,
	 Script Chaining TLV with the Script 		
	Chaining Value '02' as the first command		RQ02_0817a
	TLV		
	 SELECT: MF as C-APDU TLV 		
	 SELECT: DFTEST as C-APDU TLV 		
	 SELECT: EF_{TARU} as C-APDU TLV 		
	 UPDATE BINARY with data '01 01 01' as 		
	C-APDU TLV		
	Definite length coding.		

6.2.2.17 Test case 17: A command session with Script Chaining TLV Structure with indefinite length coding

6.2.2.17.1 Initial Conditions

• None.

6.2.2.17.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Secured Data coded as: [Expanded Remote command structure] to the Exercising RFM application, which contains: - Script Chaining TLV with the Script Chaining Value '01' as the first command TLV - SELECT: MF as C-APDU TLV - SELECT: DFTEST as C-APDU TLV - SELECT: EFTARU as C-APDU TLV - UPDATE BINARY with offset 0 and data '01 01 01' (17 Bytes) as C-APDU TLV Indefinite length coding.	'AF 80 23 02 90 00 23 02 90 00 23 02 90 00 23 02 90 00 00 00'	RQ02_0301a RQ02_0302 RQ02_0306 RQ04_0103 RQ04_0104
2	Send Secured Data coded as: [Expanded Remote command structure] to the Exercising RFM application, which contains: - Script Chaining TLV with the Script Chaining Value '02' as the first command TLV - UPDATE BINARY with offset 17 and data '01 01 01' (100 bytes) as C-APDU TLV Indefinite length coding.	'AF 80 23 02 90 00 00 00'	RQ02_0301a RQ02_0302 RQ02_0306 RQ04_0103 RQ04_0104
3	Send Secured Data coded as: [Expanded Remote command structure] to the Exercising RFM application, which contains: - Script Chaining TLV with the Script Chaining Value '03' as the first command TLV - UPDATE BINARY with offset 117 and data '01 01 01' as C-APDU TLV - READ BINARY as C-APDU TLV Indefinite length coding.	'AF 80 23 02 90 00 23 LEN [Data 90 00] 00 00' where the Data should be '01 01 01' (120 bytes)	RQ02_0301a RQ02_0302 RQ02_0306 RQ04_0103 RQ04_0104

6.2.2.18 Test case 18: A command session with Script Chaining TLV Structure with indefinite length coding (Script Chaining Error)

6.2.2.18.1 Initial Conditions

• None.

6.2.2.18.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Secured Data	'AF 80	RQ02_0301a
	coded as: [Expanded Remote command structure]	83 01 01 00 00'	RQ02_0302
	to the Exercising RFM application, which contains:		RQ02_0306
	 Script Chaining TLV with the Script 		
	Chaining Value '02' as the first command		RQ02_0817b
	TLV		RQ02_0818
	 SELECT: MF as C-APDU TLV 		RQ02_0819
	 SELECT: DFTEST as C-APDU TLV 		
	 SELECT: EF_{TARU} as C-APDU TLV 		
	 UPDATE BINARY with data '01 01 01' as 		
	C-APDU TLV		
	Indefinite length coding.		

6.3 Security parameters assigned to applications

6.3.1 Minimum Security Level (MSL)

Test cases verifying the requirements from this clause are defined under clause 6.5.3 of the present document.

6.3.2 Access domain

Test cases verifying the requirements from this clause are defined under clause 6.5.3 of the present document.

6.4 Remote File Management (RFM)

6.4.1 UICC Shared File System Remote File Management

6.4.1.1 Test case 1: A command session with a single SELECT command. Check access to the file tree

6.4.1.1.1 Initial Conditions

• None.

6.4.1.1.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - SELECT (return FCP template): EF _{DIR} - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '02 90 00' and FCP data containing TLV '83 02 2F 00'	RQ04_0301 RQ04_0302 RQ04_0304 RQ01_0001
	- GET REGIONGE		RQ01_0002 RQ01_0003
			RQ02_0101 RQ02_0103 RQ02_0104 RQ02_0201
2	Send Command with Secured Data to the UICC Shared File System Remote File Management application which contains: - SELECT: DFTEST	Response with Secured Data is returned, last or only additional data response shall be '01 90 00'	RQ04_0301 RQ04_0304 RQ01_0001
	- SELECT. DI TEST		RQ01_0002 RQ01_0003
			RQ02_0101 RQ02_0201
3	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains:	Response with Secured Data is returned, last or only additional data response shall be '01 69 85' or other	RQ04_0303 RQ01_0001
	- SELECT: DFTESTB	error SW	RQ01_0002 RQ01_0003
			RQ02_0101 RQ02_0201
4	Send Command with Secured Data to the UICC Shared File System Remote File Management application which contains: - SELECT by DF name: ADF	Response with Secured Data is returned, last or only additional data response shall be '01 69 85' or other error SW	RQ04_0201
5	Send Command with Secured Data to the UICC Shared File System Remote File Management application which contains: - SELECT: DFTEST - SELECT: EFTARU	Response with Secured Data is returned, last or only additional data response shall be '02 90 00'	RQ04_0201

6.4.1.2 Test case 2: A command session with multiple commands (SELECT, UPDATE BINARY, READ BINARY)

6.4.1.2.1 Initial Conditions

• None.

6.4.1.2.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - SELECT: DF _{TEST} - SELECT: EF _{TARU} - UPDATE BINARY with data '01 01 01'	Response with Secured Data is returned, last or only additional data response shall be '03 90 00'	RQ01_0001 RQ01_0002 RQ01_0003 RQ01_0005 RQ01_0007 RQ02_0101 RQ02_0201 RQ04_0101
2	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - SELECT: DF _{TEST} - SELECT: EF _{TARU} - READ BINARY with P3/Le = '00'	Response with Secured Data is returned, last or only additional data response shall be '03 90 00' and contain all data of EF _{TARU} starting with '01 01 01' until the end of file	RQ04_0304 RQ01_0001 RQ01_0002 RQ01_0003 RQ01_0005 RQ01_0007 RQ02_0101 RQ02_0104 RQ02_0105 RQ02_0201 RQ04_0101 RQ04_0201 RQ04_0203 RQ04_0304
3	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - READ BINARY with P3/Le = '00'	Response with Secured Data is returned, last or only additional data response shall be '01 69 86' or other error SW	RQ01_0001 RQ01_0002 RQ01_0003 RQ01_0005 RQ01_0009

6.4.1.3 Test case 3: A command session with multiple commands (SEARCH RECORD, UPDATE RECORD, INCREASE, READ RECORD)

6.4.1.3.1 Initial Conditions

• None.

6.4.1.3.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0101
	UICC Shared File System Remote File	returned, last or only additional data	RQ04_0201
	Management application, which contains:	response shall be '03 90 00'	RQ04_0304
	- SELECT: DFTEST		
	- SELECT: EF _{CY4R4b}		
	 UPDATE RECORD with data '01 01 01 01' 		
	with P2 set to PREVIOUS mode		
2	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0101
	UICC Shared File System Remote File	returned, last or only additional data	RQ04_0201
	Management application, which contains:	response shall be '04 90 00' and contain	RQ04_0203
	- SELECT: DFTEST	'01' data byte	RQ04_0304
	- SELECT: EF _{CY4R4b}		
	- SEARCH RECORD with data '01 01 01 01'		
	- GET RESPONSE		

Step	Description	Expected Result	RQ
3	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0101
	UICC Shared File System Remote File	returned, last or only additional data	RQ04_0201
	Management application, which contains:	response shall be'03 90 00 ' and contain	RQ04_0202
	- SELECT: DFTEST	'01 01 01 01' data bytes	RQ04_0304
	- SELECT: EFcy4R4b	-	
	 READ RECORD with P3/Le = '00' 		
4	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0101
	UICC Shared File System Remote File	returned, last or only additional data	RQ04_0201
	Management application, which contains:	response shall be '04 90 00' and contain	RQ04_0304
	- SELECT: DF _{TEST}	'02 02 02 02 01 01 01 01' data bytes	
	- SELECT: EF _{CY4R4b}		
	 INCREASE with data '01 01 01 01' 		
	- GET RESPONSE		

6.4.1.4 Test case 4: A command session with multiple commands (SET DATA, RETRIEVE DATA)

6.4.1.4.1 Initial Conditions

• None.

6.4.1.4.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0101
	UICC Shared File System Remote File	returned, last or only additional data	RQ04_0201
	Management application, which contains:	response shall be '03 90 00'	RQ04_0304
	- SELECT: DFTEST		
	- SELECT: EF _{BER-TLV}		
	- SET DATA with '81 02 01 01'		
2	Send Command with Secured Data to the		RQ04_0101
	UICC Shared File System Remote File	, ,	RQ04_0201
	Management application, which contains:	response shall be'04 90 00' and contain	RQ04_0204
	- SELECT: DFTEST	'81 02 01 01' data bytes	RQ04_0304
	- SELECT: EF _{BER-TLV}		
	 RETRIEVE DATA Tag value '81' 		
	- GET RESPONSE		

6.4.1.5 Test case 5: A command session with multiple commands (ACTIVATE FILE, DEACTIVATE FILE)

6.4.1.5.1 Initial Conditions

• None.

6.4.1.5.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0101
	UICC Shared File System Remote File	returned, last or only additional data	RQ04_0201
	Management application, which contains:	response shall be '03 90 00'	RQ04_0304
	- SELECT: DFTEST		
	- SELECT: EFTARU		
	- ACTIVATE FILE		
2	Send Command with Secured Data to the	Last or only additional data response	RQ04_0101
	UICC Shared File System Remote File	shall be '03 90 00'	RQ04_0201
	Management application, which contains:		RQ04_0304
	- SELECT: DFTEST		
	- SELECT: EFTARU		
	- DEACTIVATE FILE		

Step	Description	Expected Result	RQ
3	Send Command with Secured Data to the	Response with Secured Data is	RQ01_0005
	UICC Shared File System Remote File	returned, last or only additional data	
	Management application, which contains:	response shall be '03 69 85' or	RQ04_0101
	- SELECT: DFTEST	other error SW	RQ04_0201
	- SELECT: EFtaru		RQ04_0304
	- READ BINARY		

6.4.1.6 Test case 6: A command session with multiple commands (VERIFY PIN, CHANGE PIN)

6.4.1.6.1 Initial Conditions

• None.

6.4.1.6.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - VERIFY PIN with PIN = '31 31 31 31 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 90 00'	RQ04_0101 RQ04_0201 RQ04_0304
2	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - SELECT: DFTEST - SELECT: EFTPRU - VERIFY PIN with PIN = '31 31 31 31 FF FF FF FF' - READ BINARY	Response with Secured Data is returned, last or only additional data response shall be '04 90 00', and contain all data of EFTPRU	
3	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - CHANGE PIN with data = '31 31 31 31 FF FF FF FF 32 32 32 32 FF FF FF FF' - VERIFY PIN with PIN = '32 32 32 32 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '02 90 00'	RQ04_0101 RQ04_0201 RQ04_0304

6.4.1.7 Test case 7: A command session with multiple commands (DISABLE PIN, ENABLE PIN)

6.4.1.7.1 Initial Conditions

• None.

6.4.1.7.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0101
	UICC Shared File System Remote File	returned, last or only additional data	RQ04_0201
	Management application, which contains:	response shall be '01 90 00'	RQ04_0304
	 DISABLE PIN with PIN = '31 31 31 31 FF 		
	FF FF FF'		
2	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0101
	UICC Shared File System Remote File	returned, last or only additional data	RQ04_0201
	Management application, which contains:	response shall be '01 69 83' or any other	RQ04_0304
	 VERIFY PIN with PIN = '31 31 31 31 FF FF 	security error SW	
	FF FF'		

Step	Description	Expected Result	RQ
3	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0101
	UICC Shared File System Remote File	returned, last or only additional data	RQ04_0201
	Management application, which contains:	response shall be '01 90 00'	RQ04_0304
	 ENABLE PIN with PIN = '31 31 31 31 FF 		
	FF FF FF'		
4	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0101
	UICC Shared File System Remote File	returned, last or only additional data	RQ04_0201
	Management application, which contains:	response shall be '01 90 00'	RQ04_0304
	 VERIFY PIN with PIN = '31 31 31 31 FF FF 		
	FF FF'		

6.4.1.8 Test case 8: A command session with multiple commands (UNBLOCK PIN)

6.4.1.8.1 Initial Conditions

• None.

6.4.1.8.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - VERIFY PIN with PIN = '30 30 30 30 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 63 C2'	RQ04_0101 RQ04_0201 RQ04_0304
2	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - VERIFY PIN with PIN = '30 30 30 30 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 63 C1'	RQ04_0101 RQ04_0201 RQ04_0304
3	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - VERIFY PIN with PIN = '30 30 30 30 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 63 C0'	RQ04_0101 RQ04_0201 RQ04_0304
4	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - VERIFY PIN with PIN = '30 30 30 30 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 69 83'	RQ04_0101 RQ04_0201 RQ04_0304
5	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - UNBLOCK PIN with Data = '33 33 33 33 FF FF FF FF 34 34 34 34 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 90 00'	RQ04_0101 RQ04_0201 RQ04_0304
6	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - VERIFY PIN with PIN = '34 34 34 34 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 90 00'	RQ04_0101 RQ04_0201 RQ04_0304

6.4.1.9 Test case 9: A command session with multiple commands (CREATE FILE, RESIZE FILE, DELETE FILE)

6.4.1.9.1 Initial Conditions

• None.

6.4.1.9.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - SELECT: DF _{TEST} - CREATE FILE: EF _{CREATED}	Response with Secured Data is returned, last or only additional data response shall be '02 90 00'	RQ04_0101 RQ04_0201 RQ04_0304
2	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - SELECT: DFTEST - SELECT: EFCREATED - READ BINARY	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 FF FF FF FF FF'	RQ04_0101 RQ04_0201 RQ04_0304
3	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - SELECT: DFTEST - RESIZE FILE: EFCREATED - SELECT: EFCREATED - READ BINARY	Response with Secured Data is returned, last or only additional data response shall be '04 90 00 FF FF FF'	RQ04_0101 RQ04_0201 RQ04_0304
4	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - SELECT: DF _{TEST} - DELETE FILE: EF _{CREATED}	Response with Secured Data is returned, last or only additional data response shall be '02 90 00'	RQ04_0101 RQ04_0201 RQ04_0304
5	Send Command with Secured Data to the UICC Shared File System Remote File Management application, which contains: - SELECT: DFTEST - SELECT: EFCREATED	Response with Secured Data is returned, last or only additional data response shall be '02 6A 82'	RQ04_0101 RQ04_0201 RQ04_0304

6.4.2 ADF Remote File Management

6.4.2.1 Test case 1: A command session with a single SELECT command. Check access to the file tree

6.4.2.1.1 Initial Conditions

• None.

6.4.2.1.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ADF Remote File Management application which contains: - SELECT: DFTESTB - SELECT: EFTARUB	Response with Secured Data is returned, last or only additional data response shall be '02 90 00'	RQ04_0406 RQ04_0407 RQ04_0409 RQ04_0410
	Send Command with Secured Data to the ADF Remote File Management application, which contains: - SELECT by path from MF: EFTARU	Response with Secured Data is returned, last or only additional data response shall be '01 90 00'	RQ04_0408 RQ04_0409 RQ04_0410

6.4.2.2 Test case 2: A command session with multiple commands (SELECT, UPDATE BINARY, READ BINARY)

6.4.2.2.1 Initial Conditions

None.

6.4.2.2.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ADF Remote File Management application, which contains: - SELECT: DFTESTB - SELECT: EFTARUB - UPDATE BINARY with data '01 01 01'	Response with Secured Data is returned, last or only additional data response shall be '03 90 00'	RQ04_0409 RQ04_0410
2	Send Command with Secured Data to the ADF Remote File Management application, which contains: - SELECT: DFTESTB - SELECT: EFTARUB - READ BINARY with P3/Le = '00'	Response with Secured Data is returned, last or only additional data response shall be '03 90 00' and contain all data of EF _{TARUB} starting with '01 01 01' until the end of file	RQ04_0403 RQ04_0409 RQ04_0410
3	Send Command with Secured Data to the ADF File System Remote File Management application, which contains: READ BINARY with P3/Le = '00'	Response with Secured Data is returned, last or only additional data response shall be '01 69 86' or other error SW	RQ01_0009

6.4.2.3 Test case 3: A command session with multiple commands (SEARCH RECORD, UPDATE RECORD, INCREASE, READ RECORD)

6.4.2.3.1 Initial Conditions

• None.

6.4.2.3.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0201
	ADF Remote File Management application, which	returned, last or only additional data	RQ04_0409
	contains:	response shall be '02 90 00'	RQ04_0410
	- SELECT by path: EFcY4R4b		
	- UPDATE RECORD with data '01 01 01 01'		
	with P2 set to PREVIOUS mode	D 31 0 1 D 1 1	D004 0004
2	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0201
	ADF Remote File Management application, which contains:	returned, last or only additional data	RQ04_0409 RQ04_0410
	- SELECT by path: EF _{CY4R4b}	response shall be '03 90 00' and contain '01' data byte	NQ04_0410
	- SEARCH RECORD with data '01 01 01 01'	O i data byte	
	- GET RESPONSE		
3	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0201
	ADF Remote File Management application, which	returned, last or only additional data	RQ04_0202
	contains:	response shall be 02 90 00 and contain	RQ04_0409
	- SELECT by path: EFcY4R4b - READ RECORD with P3/Le = '00'	'01 01 01 01' data bytes	RQ04_0410
4	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0409
	ADF Remote File Management application, which	returned, last or only additional data	RQ04_0410
	contains:	response shall be '03 90 00' and contain	
	- SELECT by path: EFcY4R4b	'02 02 02 02 01 01 01 01' data bytes	
	- INCREASE with data '01 01 01 01'		
	- GET RESPONSE		

6.4.2.4 Test case 4: A command session with multiple commands (SET DATA, RETRIEVE DATA)

6.4.2.4.1 Initial Conditions

None.

6.4.2.4.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0101
	ADF Remote File Management application, which	returned, last or only additional data	RQ04_0201
	contains:	response shall be '02 90 00'	RQ04_0409
	 SELECT by path: EF_{BER-TLV} 		RQ04_0410
	 SET DATA with '81 02 01 01' 		
2	Send Command with Secured Data to the		RQ04_0101
	ADF Remote File Management application, which	returned, last or only additional data	RQ04_0201
	contains:	response shall be'03 90 00' and contain	RQ04_0204
	 SELECT by path: EFBER-TLV 	'81 02 01 01' data bytes	RQ04_0409
	 RETRIEVE DATA Tag value '81' 		RQ04_0410
	- GET RESPONSE		

6.4.2.5 Test case 5: A command session with multiple commands (ACTIVATE FILE, DEACTIVATE FILE)

6.4.2.5.1 Initial Conditions

• None.

6.4.2.5.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0101
	ADF Remote File Management application, which	returned, last or only additional data	RQ04_0409
	contains:	response shall be '03 90 00'	RQ04_0410
	- SELECT: DF _{TESTB}		
	- SELECT: EFTARUB		
	- ACTIVATE FILE		
2	Send Command with Secured Data to the	Last or only additional data response	RQ04_0101
	ADF Remote File Management application, which	shall be '03 90 00'	RQ04_0409
	contains:		RQ04_0410
	- SELECT: DF _{TESTB}		
	- SELECT: EFTARUB		
	- DEACTIVATE FILE		
3	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0409
	ADF Remote File Management application, which	returned, last or only additional data	RQ04_0410
	contains:	response shall be '03 69 85' or	
	- SELECT: DFTESTB	other error SW	
	- SELECT: EFTARUB		
	- READ BINARY		

6.4.2.6 Test case 6: A command session with multiple commands (VERIFY PIN, CHANGE PIN)

6.4.2.6.1 Initial Conditions

• None.

6.4.2.6.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0101
	ADF Remote File Management application, which	returned, last or only additional data	RQ04_0201
	contains:	response shall be '01 90 00'	RQ04_0409
	 VERIFY PIN with PIN = '31 31 31 31 FF FF 		RQ04_0410
	FF FF'		

Step	Description	Expected Result	RQ
2	Send Command with Secured Data to the ADF Remote File Management application, which contains: - SELECT by path: EFTPRU - VERIFY PIN with PIN = '31 31 31 31 FF FF FF FF' - READ BINARY	Response with Secured Data is returned, last or only additional data response shall be '03 90 00', and contain all data of EFTPRU	RQ04_0409 RQ04_0410
3	Send Command with Secured Data to the ADF Remote File Management application, which contains: - CHANGE PIN with data = '31 31 31 31 FF FF FF FF 32 32 32 32 FF FF FF FF' - VERIFY PIN with PIN = '32 32 32 32 FF FF FF FF'		RQ04_0101 RQ04_0201 RQ04_0409 RQ04_0410

6.4.2.7 Test case 7: A command session with multiple commands (DISABLE PIN, ENABLE PIN)

6.4.2.7.1 Initial Conditions

• None.

6.4.2.7.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ADF Remote File Management application, which contains: - DISABLE PIN with PIN = '31 31 31 31 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 90 00'	RQ04_0101 RQ04_0201 RQ04_0409 RQ04_0410
2	Send Command with Secured Data to the ADF Remote File Management application, which contains: - VERIFY PIN with PIN = '31 31 31 31 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 69 83' or any other security error SW	RQ04_0101 RQ04_0201 RQ04_0409 RQ04_0410
3	Send Command with Secured Data to the ADF Remote File Management application, which contains: - ENABLE PIN with PIN = '31 31 31 31 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 90 00'	RQ04_0101 RQ04_0201 RQ04_0409 RQ04_0410
4	Send Command with Secured Data to the ADF Remote File Management application, which contains: - VERIFY PIN with PIN = '31 31 31 31 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 90 00'	RQ04_0101 RQ04_0201 RQ04_0409 RQ04_0410

6.4.2.8 Test case 8: A command session with multiple commands (UNBLOCK PIN)

6.4.2.8.1 Initial Conditions

• None.

6.4.2.8.2 Test Procedure

,	Step	Description	Expected Result	RQ
	1	Send Command with Secured Data to the	Response with Secured Data is	RQ04_0101
		ADF Remote File Management application, which	returned, last or only additional data	RQ04_0201
		contains:	response shall be '01 63 C2'	RQ04_0409
		 VERIFY PIN with PIN = '30 30 30 30 FF FF 		RQ04_0410
		FF FF'		

Step	Description	Expected Result	RQ
2	Send Command with Secured Data to the ADF Remote File Management application, which contains: - VERIFY PIN with PIN = '30 30 30 30 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 63 C1'	RQ04_0101 RQ04_0201 RQ04_0409 RQ04_0410
3	Send Command with Secured Data to the ADF Remote File Management application, which contains: - VERIFY PIN with PIN = '30 30 30 30 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 63 C0'	RQ04_0101 RQ04_0201 RQ04_0409 RQ04_0410
4	Send Command with Secured Data to the ADF Remote File Management application, which contains: - VERIFY PIN with PIN = '30 30 30 30 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 69 83'	RQ04_0101 RQ04_0201 RQ04_0409 RQ04_0410
5	Send Command with Secured Data to the ADF Remote File Management application, which contains: - UNBLOCK PIN with Data = '33 33 33 FF FF FF FF 34 34 34 34 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 90 00'	RQ04_0101 RQ04_0201 RQ04_0409 RQ04_0410
6	Send Command with Secured Data to the ADF Remote File Management application, which contains: - VERIFY PIN with PIN = '34 34 34 34 FF FF FF FF'	Response with Secured Data is returned, last or only additional data response shall be '01 90 00'	RQ04_0101 RQ04_0201 RQ04_0409 RQ04_0410

6.4.2.9 Test case 9: A command session with multiple commands (CREATE FILE, RESIZE FILE, DELETE FILE)

6.4.2.9.1 Initial Conditions

• None.

6.4.2.9.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ADF Remote File Management application, which contains: - SELECT: DFTESTB - CREATE FILE: EFCREATED	Response with Secured Data is returned, last or only additional data response shall be '02 90 00'	RQ04_0101 RQ04_0201 RQ04_0409
2	Send Command with Secured Data to the ADF Remote File Management application, which contains: - SELECT: DFTESTB - SELECT: EFCREATED READ BINARY	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 FF FF FF FF FF'	RQ04_0101 RQ04_0201 RQ04_0409
3	Send Command with Secured Data to the ADF Remote File Management application, which contains: - SELECT: DFTESTB - RESIZE FILE: EFCREATED - SELECT: EFCREATED READ BINARY	Response with Secured Data is returned, last or only additional data response shall be '04 90 00 FF FF FF'	RQ04_0101 RQ04_0201 RQ04_0409
4	Send Command with Secured Data to the ADF Remote File Management application, which contains: - SELECT: DFTESTB DELETE FILE: EFCREATED	Response with Secured Data is returned, last or only additional data response shall be '02 90 00'	RQ04_0101 RQ04_0201 RQ04_0409

Step	Description	Expected Result	RQ
5	Send Command with Secured Data	Response with Secured Data is	RQ04_0101
	to the ADF Remote File Management application,	returned, last or only additional data	RQ04_0201
	which contains:	response shall be '02 6A 82'	RQ04_0409
	- SELECT: DFTESTB		
	- SELECT: EFCREATED		

6.4.3 RFM implementation over HTTPS

The content of this clause is FFS.

6.5 Remote Application Management (RAM)

6.5.1 DELETE

6.5.1.1 Test case 1: DELETE command

6.5.1.1.1 Initial Conditions

• Test application with AID1 have been successfully installed.

6.5.1.1.2 Test Procedure

Step	Description	Expected Result	RQ
1	On the UICC-Terminal interface: select the Test Application with AID1	Response: '90 00'	RQ01_0002 RQ01_0004 RQ01_0007
			RQ02_0201
2	On the UICC-Terminal interface: close the logical channel used to select the Test Application with AID1	Logical channel is successfully closed	
3	Send Command with Secured Data to the ISD which contains: - DELETE with AID1 - GET RESPONSE	Response with Secured Data is returned to the sending entity containing '02 90 00' and contain '00' data byte	RQ01_0002 RQ01_0004 RQ01_0007 RQ05_0109 RQ05_0301
			RQ05_0401
4	On the UICC-Terminal interface: select the Test Application with AID1	Response: '6X XX'	RQ05_0101 / RQ05_0111 RQ05_0401

6.5.2 SET STATUS

6.5.2.1 Test case 1: SET STATUS command within a command session

6.5.2.1.1 Initial Conditions

• Test Application with AID1 has been successfully installed.

6.5.2.1.2 Test Procedure

Step	Description	Expected Result	RQ
1	On the UICC-Terminal interface: select the Test Application with AID1	Response: '90 00'	
2	On the UICC-Terminal interface: close the logical channel used to select the Test Application with AID1	Logical channel is successfully closed	
3	Send Command with Secured Data to the ISD, which contains: - SET STATUS to lock the applet with AID1	Response with Secured Data is returned to the sending entity containing '01 90 00'	RQ01_0002 RQ01_0004 RQ01_0007 RQ02_0201 RQ05_0501 RQ05_0109
4	On the UICC-Terminal interface: select the Test Application with AID1	Response: '6X XX'	RQ05_0301 RQ01_0002 RQ01_0004 RQ01_0007 RQ02_0201 RQ05_0501 RQ05_0109 RQ05_0301

6.5.3 INSTALL

6.5.3.1 INSTALL[for load]

6.5.3.1.1 Test case 1: INSTALL[for load] as a single command in the session

6.5.3.1.1.1 Initial Conditions

• None.

6.5.3.1.1.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD	Response with Secured Data is	RQ01_0007
	which contains:	returned, last or only additional data	
	 INSTALL (for load) command with Load 	response shall be '02 90 00' and shall	RQ05_0101 /
	File AID1	contain the data byte '00'	RQ05_0111
	- GET RESPONSE		RQ05_0109
			RQ05_0301
			RQ05_0302
			RQ05_0601

6.5.3.1.2 Test case 2: INSTALL[for load] with memory management parameters

6.5.3.1.2.1 Initial Conditions

• None.

6.5.3.1.2.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the TAR of the ISD which contains: - INSTALL [for load] with Load File AID1 The System Specific parameters "Non volatile code space limit" (Tag 'C6'), "Volatile data space limit" (Tag 'C7') and "Non volatile data space limit" (Tag 'C8') should be set Params = 'EF 0C C6 02 FF FF C7 02 FF FF C8 02 FF FF' - LOAD command(s) - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be ' NN 90 00' where NN = number of LOAD commands + 2, and shall contain the data byte '00'	RQ05_0101 / RQ05_0111 RQ05_0601 RQ05_0701 RQ05_0702 RQ05_0703
2	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install and make selectable] with AID1 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '02 90 00' and shall contain the data byte '00'	RQ05_0101 / RQ05_0111 RQ05_0605
3	On the UICC-Terminal interface: select the Test Application with AID1	Response: '90 00'	RQ05_0101 / RQ05_0111 RQ05_0701

6.5.3.2 INSTALL[for install]

6.5.3.2.1 Test case 1: INSTALL[for install] with SIM File Access and Toolkit Application Specific Parameters

6.5.3.2.1.1 Initial Conditions

• The 'Test Application AID2' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.1.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains:	Response with Secured Data is returned, last or only additional data	RQ01_0007
	INSTALL[for install] with AID2. The "SIM File Access and Toolkit Application Specific Parameters" TLV object (Tag 'CA') included in the "System Specific Parameters" (Tag 'EF') should be set. The MSL length should be set to '00'. Params = 'EF 1A C8 02 FF FF C7 02 FF FF C7 02 FF FF CA 10 01 FF 01 00 10 02 01 01 03 02 00 00 03 TAR006' - INSTALL[for make selectable] with AID2 - GET RESPONSE	response shall be '03 90 00 00'	RQ05_0109 RQ05_0101 / RQ05_0111 RQ05_0601 RQ05_0801 RQ05_0802 RQ05_0901 RQ05_0902 RQ05_0903
2	On the UICC-Terminal interface: select the Test Application with AID2	Response: '90 00'	RQ05_0601 RQ05_0803 RQ05_0802 RQ05_0901

6.5.3.2.2 Test case 2: INSTALL[for install] with UICC System Specific Parameters and SIM File Access and Toolkit Application Specific Parameters

6.5.3.2.2.1 Initial Conditions

 The 'Test Application AID4' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.2.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_0901
	which contains:	returned, last or only additional data	RQ05_0902
	 INSTALL[for install] with AID4. 	response shall be '01 6A 80'	RQ05_0903
	The UICC System Specific Parameters		RQ05_1001
	(Tag 'EA') and the "SIM File Access and		RQ05_1101
	Toolkit Application Specific Parameters"		RQ05_1102
	TLV object (Tag 'CA') should be set:		RQ05_1104
	Params = 'EF 1A		
	C8 02 FF FF		
	C7 02 FF FF		
	CA 10 01 FF 01 00 10 02		
	01 01 03 02 00 00 03		
	TAR010		
	EA 11		
	80 0F 01 00 10 02 01 01		
	03		
	02 00 00 03 TAR010		
	00'		
	 INSTALL[for make selectable] with AID4 		
	- GET RESPONSE		
2	On the UICC-Terminal interface: select the Test	Response: '6A 82'	RQ05_1001
	Application with AID4		

6.5.3.2.3 Test case 3: INSTALL[for install] with UICC System Specific Parameter "UICC Toolkit Application specific parameters field"

6.5.3.2.3.1 Initial Conditions

• The 'Test Application AID3' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.3.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_0801
	which contains:	returned, last or only additional data	RQ05_0802
	 INSTALL[for install] with AID3. 	response shall be '03 90 00 00'	RQ05_0807
	The UICC System Specific Parameter		RQ05_1002
	"UICC Toolkit Application specific		RQ05_1101
	parameters field" (Tag '80') should be set.		RQ05_1102
	The MSL length should be set to '00':		RQ05_1104
	Params = 'EF 08		RQ05_1601
	C8 02 FF FF		
	C7 02 FF FF		
	EA 11		
	80 0F 01 00 10 02 01 01		
	03 02 00 00 03		
	TAR008 00'		
	 INSTALL[for make selectable] with AID3 		
	- GET RESPONSE		
2	On the UICC-Terminal interface: select the Test	Response: '90 00'	RQ05_1101
	Application with AID3		

6.5.3.2.4 Test case 4: INSTALL[for install] with UICC System Specific Parameter "UICC Access Application specific parameters field"

6.5.3.2.4.1 Initial Conditions

• The 'Test Application AID8' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.4.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_1002
	which contains:	returned, last or only additional data	RQ05_1201
	 INSTALL[for install] with AID8. 	response shall be '03 90 00 00'	RQ05_1202
	The UICC System Specific Parameter		
	"UICC Access Application specific		
	parameters field" (Tag '81') should be set:		
	Params = 'EA 13		
	80 0B 01 00 10 00 00 00		
	03 TAR014 00		
	81 04 00 01 FF 00'		
	 INSTALL[for make selectable] with AID8 		
	- GET RESPONSE		
2	On the UICC-Terminal interface: select the Test	Response: '90 00'	RQ05_1201
	Application with AID8		

6.5.3.2.5 Test case 5: INSTALL[for install] with UICC System Specific Parameter "UICC Administrative Access Application specific parameters field"

6.5.3.2.5.1 Initial Conditions

• The 'Test Application AID5' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.5.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data coded as	Response with Secured Data is	RQ05_1002
	Compact Remote command structure to the ISD,	returned, last or only additional data	RQ05_1401
	which contains:	response shall be '03 90 00 00'	RQ05_1402
	 INSTALL[for install] with AID5. 		
	The UICC System Specific Parameter		
	"UICC Administrative Access Application		
	specific parameters field" (Tag '82') should		
	be set:		
	Params = 'EA 13		
	80 0B 01 00 10 00 00 00		
	03 TAR011 00		
	82 04 00 01 FF 00'		
	 INSTALL[for make selectable] with AID5 		
	- GET RESPONSE		
2	On the UICC-Terminal interface: select the Test	Response: '90 00'	RQ05_1401
	Application with AID5		

6.5.3.2.6 Test case 6: INSTALL[for install] with UICC System Specific Parameter "UICC Access Application specific parameters field" and "UICC Administrative Access Application specific parameters field" for the same ADF

6.5.3.2.6.1 Initial Conditions

• The 'Test Application AID18' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.6.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains: INSTALL[for install] with AID18. The UICC System Specific Parameter "UICC Access Application specific parameters field" (Tag '81') and "UICC Administrative Access Application specific parameters field" (Tag '82') should be set: Params = 'EA 39 80 0B 01 00 10 00 00 00 00 03 TAR022 00 81 14 10 A0 00 00 00 00 09 00 05 FF FF FF FF 89 E0 00 00 02 01 00 00 82 14 10 A0 00 00 00 09 00 05 FF FF FF FF 89 E0 00 00 02 01 00 00' (see note) INSTALL[for make selectable] with AID18 GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_1003 RQ05_1201 RQ05_1202 RQ05_1401 RQ05_1402
2	On the UICC-Terminal interface: select the Test Application with AID18	Response: '90 00'	RQ05_1003
3	Trigger the Test Application with AID18 to call (where AID_ADF1 is the AID of ADF_1): - UICCSystem.getTheFileView(AID_ADF1,) - fileView.select(DFTESTB) - fileView.select(EFTARUB) - fileView.readBinary() in order to retrieve all of the data in EFTARUB	Results of the method calls: - FileView is returned successfully - select() returns successfully - select() returns successfully - readBinary() provides all of the data in EF _{TARUB} : FF FF (120 bytes)	RQ05_1003
NOTE	The parameters are specified using an example A E0 00 00 02'. If the AID is different, the parameter		

6.5.3.2.7 Test case 7: INSTALL[for install] with UICC System Specific Parameter "UICC Access Application specific parameters field" and "UICC Administrative Access Application specific parameters field" for the same UICC file system

6.5.3.2.7.1 Initial Conditions

• The 'Test Application AID18' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.7.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the TAR value of the ISD, which contains: - INSTALL[for install] with AID18. The UICC System Specific Parameter "UICC Access Application specific parameters field" (Tag '81') and "UICC Administrative Access Application specific parameters field" (Tag '82') should be set: Params = 'EA 19 80 0B 01 00 10 00 00 00 03 TAR022 00 81 04 00 01 00 00 82 04 00 01 00 00' - INSTALL[for make selectable] with AID18 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_1004 RQ05_1201 RQ05_1202 RQ05_1401 RQ05_1402
2	On the UICC-Terminal interface: select the Test Application with AID18	Response: '90 00'	RQ05_1004
3	Trigger the Test Application with AID18 to call: - UICCSystem.getTheUICCView() - fileView.select(DF _{TEST}) - fileView.select(EF _{TARU}) - fileView.readBinary() in order to retrieve all of the data in EF _{TARU}	Results of the method calls: - FileView is returned successfully - select() returns successfully - select() returns successfully - readBinary() provides all of the data in EFTARU: FF FF (120 bytes)	RQ05_1004

6.5.3.2.8 Test case 8: INSTALL[for install] with the maximum number of timers required for SIM Toolkit Application Specific Parameters set too high ('09')

6.5.3.2.8.1 Initial Conditions

• The 'Test Application AID2' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.8.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_0901
	which contains:	returned, last or only additional data	RQ05_0902
	 INSTALL[for install] with AID2. 	response shall be: '01 6A 80'	RQ05_0903
	The maximum number of timers required		RQ05_1501
	for Toolkit Application Specific Parameters		
	should be set to '09':		
	Params = 'EF 12		
	CA 10 01 FF 01 09 10 02		
	01 01 03 02 00 00 03		
	TAR006'		
	 INSTALL[for make selectable] with AID2 		
	- GET RESPONSE		
2	On the UICC-Terminal interface: select the Test	Response: '6A 82'	RQ05_1501
	Application with AID2		

6.5.3.2.9 Test case 9: INSTALL[for install] with the maximum number of timers required for UICC Toolkit Application Specific Parameters set too high ('09')

6.5.3.2.9.1 Initial Conditions

• The 'Test Application AID3' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.9.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_1101
	which contains:	returned, last or only additional data	RQ05_1102
	 INSTALL[for install] with AID3. 	response shall be '01 6A 80'	RQ05_1104
	The maximum number of timers required		RQ05_1501
	for Toolkit Application Specific Parameters		
	should be set to '09':		
	Params = 'EA 11		
	80 0F 01 09 10 02 01 01		
	03 02 00 00 03 TAR008		
	00'		
	 INSTALL[for make selectable] with AID3 		
	- GET RESPONSE		
2	On the UICC-Terminal interface: select the Test	Response: '6A 82'	RQ05_1501
	Application with AID3		

6.5.3.2.10 Test case 10: INSTALL[for install] with the maximum number of channels required for SIM Toolkit Application Specific Parameters set too high ('08')

6.5.3.2.10.1 Initial Conditions

• The 'Test Application AID2' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.10.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_0901
	which contains:	returned, last or only additional data	RQ05_0902
	 INSTALL[for install] with AID2. 	response shall be '01 6A 80'	RQ05_0903
	The maximum number of channels		RQ05_1502
	required for Toolkit Application Specific		
	Parameters should be set to '08':		
	Params = 'EF 12		
	CA 10 01 FF 01 00 10 02		
	01 01 03 02 00 08 03		
	TAR006'		
	 INSTALL[for make selectable] with AID2 		
	- GET RESPONSE		
2	On the UICC-Terminal interface: select the Test	Response: '6A 82'	RQ05_1502
	Application with AID2		

6.5.3.2.11 Test case 11: INSTALL[for install] with the maximum number of channels required for UICC Toolkit Application Specific Parameters set too high ('08')

6.5.3.2.11.1 Initial Conditions

• The 'Test Application AID3' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.11.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_1101
	which contains:	returned, last or only additional data	RQ05_1102
	 INSTALL[for install] with AID3. 	response shall be '01 6A 80'	RQ05_1104
	The maximum number of channels		RQ05_1502
	required for Toolkit Application Specific		
	Parameters should be set to '08':		
	Params = 'EA 11		
	80 0F 01 00 10 02 01 01		
	03 02 08 00 03 TAR008		
	00'		
	 INSTALL[for make selectable] with AID3 		
	- GET RESPONSE		
2	On the UICC-Terminal interface: select the Test	Response: '6A 82'	RQ05_1502
	Application with AID3		

6.5.3.2.12 Test case 12: INSTALL[for install] with the maximum number of services required for UICC Toolkit Application Specific Parameters set too high ('09')

6.5.3.2.12.1 Initial Conditions

• The 'Test Application AID3' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.12.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_1101
	which contains:	returned, last or only additional data	RQ05_1102
	 - INSTALL[for install] with AID3. 	response shall be '01 6A 80'	RQ05_1104
	The maximum number of services required		RQ05_1503
	for Toolkit Application Specific Parameters		
	should be set to '09':		
	Params = 'EA 11		
	80 0F 01 00 10 02 01 01		
	03		
	02 00 00 03 TAR008 09'		
	 INSTALL[for make selectable] with AID3 		
	- GET RESPONSE		
2	On the UICC-Terminal interface: select the Test	Response: '6A 82'	RQ05_1503
	Application with AID3		

6.5.3.2.13 Test case 13: INSTALL[for install] with requested item identifier for SIM Toolkit Application Specific Parameters set to '128'

6.5.3.2.13.1 Initial Conditions

• The 'Test Application AID2' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.13.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_0901
	which contains:	returned, last or only additional data	RQ05_0902
	 INSTALL[for install] with AID2. 	response shall be '01 6X XX' (6X XX is	RQ05_0903
	The requested item identifier for Toolkit	error SW)	RQ05_1506
	Application Specific Parameters should be		
	set to '128':		
	Params = 'EF 1A		
	C8 02 FF FF		
	C7 02 FF FF		
	CA 10 01 FF 01 00 10 02		
	01 01 03 80 00 00 03		
	TAR006'		
	 INSTALL[for make selectable] with AID2 		
	- GET RESPONSE		
2	On the UICC-Terminal interface: select the Test	Response: '6A 82'	RQ05_1506
	Application with AID2		

6.5.3.2.14 Test case 14: INSTALL[for install] with requested item identifier for UICC Toolkit Application Specific Parameters set to '128'

6.5.3.2.14.1 Initial Conditions

• The 'Test Application AID3' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.14.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_1101
	which contains:	returned, last or only additional data	RQ05_1102
	 INSTALL[for install] with AID3. 	response shall be '01 6X XX' (6X XX is	RQ05_1104
	The requested item identifier for Toolkit	error SW)	RQ05_1506
	Application Specific Parameters should be		
	set to '128':		
	Params = 'EA 11		
	80 0F 01 00 10 02 01 01		
	03		
	80 00 00 03 TAR008 00'		
	 INSTALL[for make selectable] with AID3 		
	- GET RESPONSE		
2	On the UICC-Terminal interface: select the Test	Response: '6A 82'	RQ05_1506
	Application with AID3		

6.5.3.2.15 Test case 15: INSTALL[for install] with Minimum Security Level field of SIM Toolkit Application different from zero

6.5.3.2.15.1 Initial Conditions

• Prepare for install of the 'Test Application AID2' using the load() and install(for load) methods.

6.5.3.2.15.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_1602
	which contains:	returned, last or only additional data	RQ05_1701
	 INSTALL[for install] with AID2. 	response shall be '03 90 00 00'	RQ05_1801
	MSL field should be set to '0102':	-	RQ05_1802
	Params = 'EF 1C		
	C8 02 FF FF		
	C7 02 FF FF		
	CA 12 01 FF 01 00 10 02		
	01 01 03 02 00 02 01		
	02 03 TAR006'		
	 INSTALL[for make selectable] with AID2 		
	- GET RESPONSE		
2	Send Command with Secured Data with SPI1 set to	Response with Secured Data is	RQ05_1802
	'02' to the Test Application with AID2 with:	returned, last or only additional data	
	- '00 01 00 00'	response shall be '01 90 00'	RQ03_0104

6.5.3.2.16 Test case 16: INSTALL[for install] with Minimum Security Level field of UICC Toolkit Application different from zero

6.5.3.2.16.1 Initial Conditions

• Prepare for install of the 'Test Application AID3' using the load() and install(for load) methods.

6.5.3.2.16.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID3. MSL field should be set to '0102': Params = 'EA 13 80 11 01 00 10 02 01 01 03 02 00 02 01 02 03 TAR008 00' - INSTALL[for make selectable] with AID3 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_1602 RQ05_1701 RQ05_1801 RQ05_1802
2	Send Command with Secured Data with SPI1 set to '02' to the Test Application with AID3 with: - '00 01 00 00'	Response with Secured Data is returned, last or only additional data response shall be '01 90 00'	RQ05_1802 RQ03_0104

6.5.3.2.17 Test case 17: INSTALL[for install] with Minimum Security Level field of SIM Toolkit Application different from SPI1

6.5.3.2.17.1 Initial Conditions

• Prepare for install of the 'Test Application AID2' using the load() and install(for load) methods.

6.5.3.2.17.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID2 MSL field should be set to '0106': Params = 'EF 1C C8 02 FF FF C7 02 FF FF CA 12 01 FF 01 00 10 02 01 01 03 02 00 02 01 06 03 TAR006' - INSTALL[for make selectable] with AID2 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_1602 RQ05_1701 RQ05_1801 RQ05_1802
2	Send Command with Secured Data with SPI1 set to '02' to the Test Application with AID2 with: - '00 01 00 00'	Rel-11 or earlier UICC: response with Secured Data is returned with Response Status Code = '0A' 'Insufficient Security Level' Rel-12 or later UICC: either: - response with Secured Data is returned with Response Status Code = '0A' 'Insufficient Security Level'; or - no response is returned	RQ05_1802 RQ03_0102 / RQ03_0105

6.5.3.2.18 Test case 18: INSTALL[for install] with Minimum Security Level field of UICC Toolkit Application different from SPI1

6.5.3.2.18.1 Initial Conditions

• Prepare for install of the 'Test Application AID3' using the load() and install(for load) methods.

6.5.3.2.18.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID3. MSL field should be set to '0106': Params = 'EA 13 80 11 01 00 10 02 01 01 03 02 00 02 01 06 03 TAR008 00' - INSTALL[for make selectable] with AID3 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_1602 RQ05_1701 RQ05_1801 RQ05_1802
2	Send Command with Secured Data with SPI1 set to '02' to the Test Application with AID3 with: - '00 01 00 00'	Secured Data is returned with Response	RQ05_1802 RQ03_0102 / RQ03_0105

6.5.3.2.19 Test case 19: INSTALL[for install] SIM Toolkit Applications with Access Domain Parameter equal to '00' and 'FF'

6.5.3.2.19.1 Initial Conditions

• The 'Test Application AID6' and 'Test Application AID7' are ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.19.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID6. The Access Domain Parameter should be set to '00': Params = 'EF 16 C8 02 FF FF C7 02 FF FF CA 0C 01 00 01 00 10 00 00 00 03 TAR012' - INSTALL[for make selectable] with AID6 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_0901 RQ05_0903 RQ05_1901 RQ05_2001 RQ05_2004
2	On the UICC-Terminal interface: select the Test Application with AID6	Response: '90 00'	RQ05_2001
3	Trigger the Test Application with AID6 to call: - SIMSystem.getTheSIMView() - simView.select(DF _{TEST}) - simView.select(EF _{TARU}) - simView.readBinary() in order to retrieve all of the data in EF _{TARU}	Results of the method calls: - SIMView is returned successfully - select() returns successfully - select() returns successfully - readBinary() provides all of the data in EFTARU: FF FF (120 bytes)	RQ05_2001
4	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID7. The Access Domain Parameter should be set to 'FF': Params = 'EF 16 C8 02 FF FF C7 02 FF FF CA 0C 01 FF 01 00 10 00 00 00 03 TAR013' - INSTALL[for make selectable] with AID7 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_2004
5	On the UICC-Terminal interface: select the Test Application with AID7	Response: '90 00'	RQ05_2004
6	Trigger the Test Application with AID7 to call: - SIMSystem.getTheSIMView() - simView.select(DF _{TEST}) - simView.select(EF _{TARU}) - simView.readBinary() in order to retrieve all of the data in EF _{TARU}	Results of the method calls: - SIMView is returned successfully - select() returns successfully - select() returns successfully - readBinary() throws SIMViewException with reason AC_NOT_FULFILLED	RQ05_2004 RQ03_0202

6.5.3.2.20 Test case 20: INSTALL[for install] UICC Toolkit Applications with Access Domain Parameter equal to '00' and 'FF'

6.5.3.2.20.1 Initial Conditions

• The 'Test Application AID8' and 'Test Application AID9' are ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.20.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID8 - The Access Domain Parameter should be set to '00': - Params = 'EA 13 - 80 0B 01 00 10 00 00 00 - 03 TAR014 00 - 81 04 00 01 00 00' - INSTALL[for make selectable] with AID8 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_1201 RQ05_1202 RQ05_1901 RQ05_2001 RQ05_2004
2	On the UICC-Terminal interface: select the Test Application with AID8	Response: '90 00'	RQ05_2001
3	Trigger the Test Application with AID8 to call: - UICCSystem.getTheUICCView() - fileView.select(DF _{TEST}) - fileView.select(EF _{TARU}) - fileView.readBinary() in order to retrieve all of the data in EF _{TARU}	Results of the method calls: - FileView is returned successfully - select() returns successfully - select() returns successfully - readBinary() provides all of the data in EFTARU: FF FF (120 bytes)	RQ05_2001
4	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID9. The Access Domain Parameter should be set to 'FF': Params = 'EA 13 80 0B 01 00 10 00 00 00 03 TAR015 00 81 04 00 01 FF 00' - INSTALL[for make selectable] with AID9 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_2004
5	On the UICC-Terminal interface: select the Test Application with AID9	Response: '90 00'	RQ05_2004
6	Trigger the Test Application with AID9 to call: - UICCSystem.getTheUICCView() - fileView.select(DFTEST) - fileView.select(EFTARU) - fileView.readBinary() in order to retrieve all of the data in EFTARU	Results of the method calls: - FileView is returned successfully - select() returns successfully - select() returns successfully - readBinary() throws UICCException with reason SECURITY_STATUS_NOT_SA TISFIED	RQ05_2004 RQ03_0202

6.5.3.2.21 Test case 21: INSTALL[for install] SIM Toolkit Application with Access Domain Parameter equal to '00' and access condition set to 'NEVER'

6.5.3.2.21.1 Initial Conditions

• The 'Test Application AID6' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.21.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID6. The Access Domain Parameter should be set to '00': Params = 'EF 16 C8 02 FF FF C7 02 FF FF CA 0C 01 00 01 00 10 00 00 00 03 TAR012' - INSTALL[for make selectable] with AID6 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_0901 RQ05_0903 RQ05_1901 RQ05_2002 RQ05_2003 RQ05_2005
2	On the UICC-Terminal interface: select the Test Application with AID6	Response: '90 00'	RQ05_2005
3	Trigger the Test Application with AID6 to call: - SIMSystem.getTheSIMView() - simView.select(DF _{TEST}) - simView.select(EF _{TNR}) - simView.readBinary() in order to retrieve all of the data in EF _{TNR}	Results of the method calls: - SIMView is returned successfully - select() returns successfully - select() returns successfully - readBinary() throws SIMViewException with reason AC_NOT_FULFILLED	RQ05_2005 RQ03_0202

6.5.3.2.22 Test case 22: INSTALL[for install] UICC Toolkit Application with Access Domain Parameter equal to '00' and access condition set to 'NEVER'

6.5.3.2.22.1 Initial Conditions

• The 'Test Application AID8' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.22.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID8. The Access Domain Parameter should be set to '00': Params = 'EA 13 80 0B 01 00 10 00 00 00 03 TAR014 00 81 04 00 01 00 00' - INSTALL[for make selectable] with AID8 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_1201 RQ05_1202 RQ05_2002 RQ05_2003 RQ05_2005
2	On the UICC-Terminal interface: select the Test Application with AID8	Response: '90 00'	RQ05_2005
3	Trigger the Test Application with AID8 to call: - UICCSystem.getTheUICCView() - fileView.select(DFTEST) - fileView.select(EFTNR) - fileView.readBinary() in order to retrieve all of the data in EFTNR	Results of the method calls: - FileView is returned successfully - select() returns successfully - select() returns successfully - readBinary() throws UICCException with reason SECURITY_STATUS_NOT_SA TISFIED	RQ05_2005 RQ03_0202

6.5.3.2.23 Test case 23: INSTALL[for install] SIM Toolkit Application with Access Domain Parameter not supported

6.5.3.2.23.1 Initial Conditions

• The 'Test Application AID2' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.23.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_0901
	which contains:	returned, last or only additional data	RQ05_0903
	 INSTALL[for install] with AID2 	response shall be '01 6A 80'	RQ05_2006
	The Access Domain Parameter should be		
	set to '02' and the Access Domain Data		
	should be set to '000004':		
	Params = 'EF 19		
	C8 02 FF FF		
	C7 02 FF FF		
	CA 0F 04 02 00 00 04 01		
	00 10 00 00 00 03		
	TAR012'		
	 INSTALL[for make selectable] with AID6 		
	- GET RESPONSE		
2	On the UICC-Terminal interface: select the Test	Response: '6A 82'	RQ05_2006
	Application with AID2		
			RQ03_0202

6.5.3.2.24 Test case 24: INSTALL[for install] UICC Toolkit Application with Access Domain Parameter not supported

6.5.3.2.24.1 Initial Conditions

• The 'Test Application AID8' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.24.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID8. The Access Domain Parameter should be set to '01': Params = 'EA 13 80 0B 01 00 10 00 00 00	Response with Secured Data is returned, last or only additional data response shall be '01 6A 80'	RQ05_1201 RQ05_1202 RQ05_2006
2	03 TAR014 00 81 04 00 01 01 00' - INSTALL[for make selectable] with AID8 - GET RESPONSE On the UICC-Terminal interface: select the Test	Response: '6A 82'	RQ05 2006
2	Application with AID8	Response: 6A 62	RQ03_2006 RQ03_0202

6.5.3.2.25 Test case 25: INSTALL[for install] UICC Toolkit Application with Access Domain Parameter equal to '02'

6.5.3.2.25.1 Initial Conditions

• The 'Test Application AID8' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.25.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_1201
	which contains:	returned, last or only additional data	RQ05_1202
	 INSTALL[for install] with AID8 	response shall be '03 90 00 00'	RQ05_2101
	The Access Domain Parameter should be		
	set to '02', the Access Domain Data		
	should be set to '000004':		
	Params = 'EA 16		
	80 0B 01 00 10 00 00 00		
	03 TAR014 00		
	81 07 00 04 02 00 00 04		
	00'		
	 INSTALL[for make selectable] with AID8 		
	- GET RESPONSE		
2	On the UICC-Terminal interface: select the Test	Response: '90 00'	RQ05_2101
	Application with AID8		
3	Trigger the Test Application with AID8 to call:	Results of the method calls:	RQ05_2101
	 UICCSystem.getTheUICCView() 	 FileView is returned 	
	- fileView.select(DFтеsт)	successfully	RQ03_0202
	 fileView.select(EF_{TARU}) 	 select() returns successfully 	
	 fileView.readBinary() in order to retrieve 	 select() returns successfully 	
	all of the data in EFTARU	 readBinary() provides all of the 	
		data in EF _{TARU} : FF FF (120	
		bytes)	

6.5.3.2.26 Test case 26: INSTALL[for install] SIM Toolkit Applications with Access Domain Parameter equal to '00' - independency from the CHV status at UICC-Terminal interface

6.5.3.2.26.1 Initial Conditions

• The 'Test Application AID6' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.26.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_0901
	which contains:	returned, last or only additional data	RQ05_0903
	 INSTALL[for install] with AID6. 	response shall be '03 90 00 00'	RQ05_2002
	The Access Domain Parameter should be		RQ05_2003
	set to '00':		
	Params = 'EF 16		
	C8 02 FF FF		
	C7 02 FF FF		
	CA 0C 01 00 01 00 10 00		
	00 00 03 TAR012'		
	 INSTALL[for make selectable] with AID6 		
	- GET RESPONSE		
2	On the UICC-Terminal interface: send VERIFY CHV	Response: '98 04'	RQ05_2002
	with CHV = '30 30 30 30 FF FF FF FF'		RQ05_2003
3	On the UICC-Terminal interface: send VERIFY CHV	Response: '98 04'	RQ05_2002
	with CHV = '30 30 30 30 FF FF FF FF'		RQ05_2003

Step	Description	Expected Result	RQ
4	On the UICC-Terminal interface: send VERIFY CHV	Response: '98 40'	RQ05_2002
	with CHV = '30 30 30 30 FF FF FF FF'	·	RQ05_2003
5	On the UICC-Terminal interface: select the Test	Response: '90 00'	RQ05_2002
	Application with AID6		RQ05_2003
6	Trigger the Test Application with AID6 to call:	Results of the method calls:	RQ05_2002
	 SIMSystem.getTheSIMView() 	 SIMView is returned 	RQ05_2003
	 simView.select(DF_{TEST}) 	successfully	
	 simView.select(EF_{TPRU}) 	 select() returns successfully 	RQ03_0201
	 simView.readBinary() in order to retrieve 	 select() returns successfully 	RQ03_0202
	all of the data in EFTPRU	 readBinary() provides all of the 	
		data in EFTPRU: FF FF (120	
		bytes)	

6.5.3.2.27 Test case 27: INSTALL[for install] UICC Toolkit Applications with Access Domain Parameter equal to '00' - independency from the PIN status at UICC-Terminal interface

6.5.3.2.27.1 Initial Conditions

• The 'Test Application AID8' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.27.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID8. The Access Domain Parameter should be set to '00': Params = 'EA 13 80 0B 01 00 10 00 00 00 03 TAR014 00 81 04 00 01 00 00' - INSTALL[for make selectable] with AID8 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_1201 RQ05_1202 RQ05_2002 RQ05_2003
2	On the UICC-Terminal interface: send VERIFY PIN with PIN = '30 30 30 30 FF FF FF FF'	Response: '63 C2'	RQ05_2002 RQ05_2003
3	On the UICC-Terminal interface: send VERIFY PIN with PIN = '30 30 30 30 FF FF FF FF'	Response: '63 C1'	RQ05_2002 RQ05_2003
4	On the UICC-Terminal interface: send VERIFY PIN with PIN = '30 30 30 30 FF FF FF FF'	Response: '63 C0'	RQ05_2002 RQ05_2003
5	On the UICC-Terminal interface: select the Test Application with AID8	Response: '90 00'	RQ05_2002 RQ05_2003
6	Trigger the Test Application with AID8 to call: - UICCSystem.getTheUICCView() - fileView.select(DFTEST) - fileView.select(EFTPRU) - fileView.readBinary() in order to retrieve all of the data in EFTPRU	Results of the method calls: - FileView is returned successfully - select() returns successfully - select() returns successfully - readBinary() provides all of the data in EFTPRU: FF FF (120 bytes)	RQ05_2002 RQ05_2003 RQ03_0201 RQ03_0202

6.5.3.2.28 Test case 28: INSTALL[for install] of SIM Toolkit Applications with different Priority levels

6.5.3.2.28.1 Initial Conditions

• The 'Test Application AID10' and 'Test Application AID11' are ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.28.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID10. The Priority level should be set to '01': Params = 'EF 16 C8 02 FF FF C7 02 FF FF CA 0C 01 FF 01 00 10 00 00 00 03 TAR016' - INSTALL[for make selectable] with AID10 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_0901 RQ05_0903 RQ05_2301 RQ05_2303
2	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID11. The Priority level should be set to 'FF': Params = 'EF 16 C8 02 FF FF C7 02 FF FF CA 0C 01 FF FF 00 10 00 00 00 03 TAR017' - INSTALL[for make selectable] with AID11 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_2301
3	Start Proactive Session: Check Activation Priority	AID10 is triggered before AID11	RQ05_2301

6.5.3.2.29 Test case 29: INSTALL[for install] of UICC Toolkit Applications with different Priority levels

6.5.3.2.29.1 Initial Conditions

• The 'Test Application AID12' and 'Test Application AID13' are ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent..

6.5.3.2.29.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID12. The Priority level should be set to '01': Params = 'EA 0D 80 0B 01 00 10 00 00 00 03 TAR018 00'	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_1101 RQ05_1102 RQ05_1104 RQ05_2301 RQ05_2303
	INSTALL[for make selectable] with AID12 GET RESPONSE		
2	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID13. The Priority level should be set to 'FF': Params = 'EA 0D 80 0B FF 00 10 00 00 00 03 TAR019 00' - INSTALL[for make selectable] with AID13 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_2301
3	Start Proactive Session: Check Activation Priority	AID12 is triggered before AID13	RQ05_2301

6.5.3.2.30 Test case 30: INSTALL[for install] SIM Toolkit Applets with same Priority levels

6.5.3.2.30.1 Initial Conditions

• The 'Test Application AID10' and 'Test Application AID11' are ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.30.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_0901
	which contains:	returned, last or only additional data	RQ05_0903
	 INSTALL[for install] with AID10. 	response shall be '03 90 00 00'	RQ05_2302
	The Priority level should be set to '01':		
	Params = 'EF 16		
	C8 02 FF FF		
	C7 02 FF FF		
	CA 0C 01 FF 01 00 10 00		
	00 00 03 TAR016'		
	 INSTALL[for make selectable] with AID10 		
	- GET RESPONSE		
2	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_2302
	which contains:	returned, last or only additional data	
	- INSTALL[for install] with AID11.	response shall be '03 90 00 00'	
	The Priority level should be set to '01':		
	Params = 'EF 16		
	C8 02 FF FF		
	C7 02 FF FF		
	CA 0C 01 FF 01 00 10 00		
	00 00 03 TAR017'		
	 INSTALL[for make selectable] with AID11 		
	- GET RESPONSE		
3	Start Proactive Session: Check Activation Priority	AID11 is triggered before AID10	RQ05_2302

6.5.3.2.31 Test case 31: INSTALL[for install] UICC Toolkit Applets with same Priority levels

6.5.3.2.31.1 Initial Conditions

• The 'Test Application AID12' and 'Test Application AID13' are ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.31.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_1101
	which contains:	returned, last or only additional data	RQ05_1102
	 INSTALL[for install] with AID12. 	response shall be '03 90 00 00'	RQ05_1104
	The Priority level should be set to '01':		RQ05_2302
	Params = 'EA 0D		
	80 0B 01 00 10 00 00 00		
	03 TAR018 00'		
	 INSTALL[for make selectable] with AID12 		
	- GET RESPONSE		
2	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_2302
	which contains:	returned, last or only additional data	
	 INSTALL[for install] with AID13. 	response shall be '03 90 00 00'	
	The Priority level should be set to '01':		
	Params = 'EA 0D		
	80 0B 01 00 10 00 00 00		
	03 TAR019 00'		
	- INSTALL[for make selectable] with AID13		
	- GET RESPONSE		
3	Start Proactive Session: Check Activation Priority	AID13 is triggered before AID12	RQ05_2302

6.5.3.2.32 Test case 32: INSTALL[for install] two SIM Toolkit Applications with identical TAR value

6.5.3.2.32.1 Initial Conditions

 Prepare for install of the 'Test Application AID2' and 'Test Application AID14' using the load() and install(for load) methods.

6.5.3.2.32.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID2. TAR026 value should be set: Params = 'EF 1A - C8 02 FF FF - C7 02 FF FF - CA 10 01 FF 01 00 10 02 - 01 01 03 02 00 00 03 - TAR026' - INSTALL[for make selectable] with AID2 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_0901 RQ05_0902 RQ05_0903 RQ05_2401 RQ05_2405
2	Send Command with Secured Data to the Test Application with TAR006 , with: - '00 01 00 00'	Response with Secured Data is returned: SW = '6X XX' with Response Status Code = '09' TAR unknown (CAT- TP/SMS) or "unknown application" (HTTPS)	RQ05_2405
3	Send Command with Secured Data to the Test Application with TAR026 , with: - '00 01 00 00'	Response with Secured Data is returned, last or only additional data response shall be '01 90 00'	RQ05_2405
4	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID14. TAR026 value should be set: Params = 'EF 1A - C8 02 FF FF - C7 02 FF FF - CA 10 01 FF 01 00 10 02 - 01 01 03 02 00 00 03 - TAR026' - INSTALL[for make selectable] with AID14 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '01 6A 80'	RQ05_2406
5	Send Command with Secured Data to the Test Application with AID14 which contains: - '00 01 00 00'	Response with Secured Data is returned: SW = '6X XX' with Response Status Code = '09' TAR unknown (CAT-TP/SMS), or "unknown application" (HTTPS)	RQ05_2406

6.5.3.2.33 Test case 33: INSTALL[for install] two UICC Toolkit Application with identical TAR value

6.5.3.2.33.1 Initial Conditions

 Prepare for install of the 'Test Application AID3' and 'Test Application AID15' using the load() and install(for load) methods.

6.5.3.2.33.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID3. TAR028 value should be set: Params = 'EA 11 80 0F 01 00 10 02 0101 03 02 00 00 03 TAR028 00' - INSTALL[for make selectable] with AID3 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_1101 RQ05_1102 RQ05_1104 RQ05_2401 RQ05_2403 RQ05_2405
2	Send Command with Secured Data to the Test Application with TAR008 , with: - '00 01 00 00'	Response with Secured Data is returned: SW = '6X XX' with Response Status Code = '09' TAR unknown (CAT-TP/SMS) or "unknown application" (HTTPS)	RQ05_2405
3	Send Command with Secured Data to the TAR028 value, with: - '00 01 00 00'	Response with Secured Data is returned, last or only additional data response shall be '01 90 00'	RQ05_2405
4	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID15. TAR028 value should be set: Params = 'EA 11 80 0F 01 00 10 02 01 01 03 02 00 00 03 TAR028 00' - INSTALL[for make selectable] with AID15 - GET RESPONSE	Response with Secured Data is returned, last or only additional data response shall be '01 6A 80'	RQ05_2406
5	Send Command with Secured Data to the Test Application with AID15 which contains: - '00 01 00 00'	Response with Secured Data is returned: SW = '6X XX' with Response Status Code = '09' TAR unknown (CAT-TP/SMS) or "unknown application" (HTTPS)	RQ05_2406

6.5.3.2.34 Test case 34: INSTALL[for install] SIM Toolkit Application with multiple TAR values

6.5.3.2.34.1 Initial Conditions

• Prepare for install of the 'Test Application AID2' using the load() and install(for load) methods.

6.5.3.2.34.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_0901
	which contains:	returned, last or only additional data	RQ05_0902
	 INSTALL[for install] with AID2. 	response shall be '03 90 00 00'	RQ05_0903
	TAR006 and TAR007values should be set:		RQ05_2402
	Params = 'EF 1D		RQ05_2403
	C8 02 FF FF		
	C7 02 FF FF		
	CA 13 01 FF 01 00 10 02		
	01 01 03 02 00 00 06 TAR006 TAR007'		
	 INSTALL[for make selectable] with AID2 		
	- GET RESPONSE		

Step	Description	Expected Result	RQ
		Response with Secured Data is	RQ05_2402
	Application with TAR006 value, which contains:	returned, last or only additional data	
	- '00 01 00 00'	response shall be '01 90 00'	
3	Send Command with Secured Data to the Test	Response with Secured Data is	RQ05_2402
	Application with TAR007 value, which contains:	returned, last or only additional data	
	- '00 01 00 00'	response shall be '01 90 00'	

6.5.3.2.35 Test case 35: INSTALL[for install] UICC Toolkit Application with multiple TAR values

6.5.3.2.35.1 Initial Conditions

• Prepare for install of the 'Test Application AID3' using the load() and install(for load) methods.

6.5.3.2.35.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_1101
	which contains:	returned, last or only additional data	RQ05_1102
	 INSTALL[for install] with AID3. 	response shall be '03 90 00 00'	RQ05_1104
	TAR008 and TAR009values should be set:		RQ05_2402
	Params = 'EA 14		RQ05_2403
	80 12 01 00 10 02 01 01		
	03		
	02 00 00 06 TAR008		
	TAR009 00'		
	 INSTALL[for make selectable] with AID3 		
	- GET RESPONSE		
2	Send Command with Secured Data to the Test	Response with Secured Data is	RQ05_2402
	Application with TAR008 value, which contains:	returned, last or only additional data	
	- '00 01 00 00'	response shall be '01 90 00'	
3	Send Command with Secured Data to the Test	Response with Secured Data is	RQ05_2402
	Application with TAR009 value, which contains:	returned, last or only additional data	
	- '00 01 00 00'	response shall be '01 90 00'	

6.5.3.2.36 Test case 36: INSTALL[for install] SIM Toolkit Application without TAR value in the Install parameters, the AID contains TAR value

6.5.3.2.36.1 Initial Conditions

• Prepare for install of the 'Test Application AID16' using the load() and install(for load) methods.

6.5.3.2.36.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_0901
	which contains:	returned, last or only additional data	RQ05_0902
	 INSTALL[for install] with AID16. 	response shall be '03 90 00 00'	RQ05_0903
	(AID16 contains TAR020 value).		RQ05_2404
	The TAR value length in install parameters		
	should be set to '00':		
	Params = 'EF 17		
	C8 02 FF FF		
	C7 02 FF FF		
	CA 0D 01 FF 01 00 10 02		
	01 01 03 02 00 00 00'		
	 INSTALL[for make selectable] with AID16 		
	- GET RESPONSE		
2	Send Command with Secured Data to the Test	Response with Secured Data is	RQ05_2404
	Application with TAR010 value, which contains:	returned, last or only additional data	
	- '00 01 00 00'	response shall be '01 90 00'	

6.5.3.2.37 Test case 37: INSTALL[for install] UICC Toolkit Application without TAR value in the Install parameters, the AID contains TAR value

6.5.3.2.37.1 Initial Conditions

• Prepare for install of the 'Test Application AID17' using the load() and install(for load) methods.

6.5.3.2.37.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_1101
	which contains:	returned, last or only additional data	RQ05_1102
	 INSTALL[for install] with AID17. 	response shall be '03 90 00 00'	RQ05_1104
	(AID17 contains TAR021 value)		RQ05_2404
	The TAR value length in install parameters		
	should be set to '00':		
	Params = 'EA 0E		
	80 0C 01 00 10 02 01 01		
	03 02 00 00 00 00'		
	 INSTALL[for make selectable] with AID17 		
	- GET RESPONSE		
2	Send Command with Secured Data to the Test	Response with Secured Data is	RQ05_2404
	Application with TAR021 value, which contains:	returned, last or only additional data	
	- '00 01 00 00'	response shall be '01 90 00'	

6.5.3.2.38 Test case 38: INSTALL[for install] for contactless application with Reader mode protocol data type A

6.5.3.2.38.1 Initial Conditions

• The 'Test Application AID19' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.38.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_2502
	which contains:	returned, last or only additional data	RQ05_2504
	 INSTALL[for install] with AID19. 	response shall be '03 90 00 00'	RQ05_2506
	The "Reader mode protocol data Type A"		RQ05_2601
	TLV object (tag '86') should be set.		RQ05_2503
	Params= EF 0D		
	C7 02 FF FF		
	C8 02 FF FF		
	B0 03 86 01 03		
	 INSTALL[for make selectable] with AID19 		
	- GET RESPONSE		
2	Activate the SWP interface and perform HCI	During the HCI initialization the UICC	RQ05_2601
	initialization	shall set DATARATE_MAX to '03'	

6.5.3.2.39 Test case 39: INSTALL[for install] for contactless application with Reader mode protocol data type B

6.5.3.2.39.1 Initial Conditions

• The 'Test Application AID20' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.39.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains:	Response with Secured Data is returned, last or only additional data	RQ05_2502 RQ05_2504
	- INSTALL[for install] with AID20.	response shall be '03 90 00 00'	RQ05_2506
	The "Reader mode protocol data Type B" TLV object (tag '87') should be set.		RQ05_2503
	Params= 'EF 0F C7 02 FF FF		
	C8 02 FF FF		
	B0 05 87 03 03 01 00		
	INSTALL[for make selectable] with AID20GET RESPONSE		
2	Activate the SWP interface and perform HCI initialization	During the HCI initialization the UICC shall set the parameters to the values	RQ05_2701
	initianzation	specified in step 1	

6.5.3.2.40 Test case 40: INSTALL[for install] for contactless application with Card Emulation mode

6.5.3.2.40.1 Initial Conditions

• The 'Test Application AID21' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.40.2 Test Procedure

Step	Description	Expected Result	RQ
1			RQ05_2501
	which contains:	returned, last or only additional data	
	 INSTALL[for install] with AID21. 	response shall be '03 90 00 00'	
	Params= 'EF 11		
	C7 02 FF FF		
	C8 02 FF FF		
	A0 07 80 00 A5 03 82 01		
	C0		
	 INSTALL[for make selectable] with AID21 		
	- GET RESPONSE		

6.5.3.2.41 Test case 41: INSTALL[for install] with UICC System Specific Parameter "UICC Toolkit Application specific parameters field" and "UICC Toolkit parameters DAP" - DAP is calculated with DES

6.5.3.2.41.1 Initial Conditions

• The 'Test Application AID3' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.41.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_0801
	which contains:	returned, last or only additional data	RQ05_0802
	 INSTALL[for install] with AID3. 	response shall be '03 90 00 00'	RQ05_0807
	The UICC System Specific Parameter		RQ05_1002
	"UICC Toolkit Application specific		RQ05_1101
	parameters field" (Tag '80') and "UICC		RQ05_1102
	Toolkit parameters DAP" (Tag 'C3') should		RQ05_1104
	be set:		RQ05_1301
	Params = 'EF 08		RQ05_1302
	C8 02 FF FF		RQ05_1303
	C7 02 FF FF		RQ05_1304
	EA XX		
	80 0F 01 00 10 02 01 01		
	03		
	02 00 00 03 TAR008		
	00		
	C3 YY DAP'		
	The DAP signature is calculated with DES		
	algorithm.		
	- INSTALL[for make selectable] with AID3		
	- GET RESPONSE	D 100 001	D005 4004
2	On the UICC-Terminal interface: select the	Response: '90 00'	RQ05_1301
	Test Application with AID3		

6.5.3.2.42 Test case 42: INSTALL[for install] with UICC System Specific Parameter "UICC Toolkit Application specific parameters field" and "UICC Toolkit parameters DAP" - DAP is calculated with AES

6.5.3.2.42.1 Initial Conditions

• The 'Test Application AID3' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.42.2 Test Procedure

Send Command with Secured Data to the ISD, which contains:	Response with Secured Data is	RQ05_0801
- INSTALL[for install] with AID3. The UICC System Specific Parameter "UICC Toolkit Application specific parameters field" (Tag '80') and "UICC Toolkit parameters DAP" (Tag 'C3') should be set: Params = 'EF 08 C8 02 FF FF C7 02 FF FF EA XX 80 0F 01 00 10 02 01 01 03 02 00 00 03 TAR008 00 C3 YY DAP' The DAP signature is calculated with AES algorithm INSTALL[for make selectable] with AID3 - GET RESPONSE	returned, last or only additional data response shall be '03 90 00 00'	RQ05_0802 RQ05_0807 RQ05_1002 RQ05_1101 RQ05_1102 RQ05_1104 RQ05_1301 RQ05_1302 RQ05_1303 RQ05_1305
On the UICC-Terminal interface: select the Test Application with AID3	Response: '90 00'	RQ05_1301

6.5.3.2.43 Test case 43: INSTALL[for install] UICC Toolkit Applications with Access Domain DAP using DES algorithm

6.5.3.2.43.1 Initial Conditions

• The 'Test Application AID8' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.43.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD, which contains: - INSTALL[for install] with AID8. The Access Domain Parameter should be	Response with Secured Data is returned, last or only additional data response shall be '03 90 00 00'	RQ05_1201 RQ05_1202 RQ05_1901 RQ05_2001
	set to '00': Params = 'EA ZZ		RQ05_2201 RQ05_2202 RQ05_2203 RQ05_2204 RQ05_2205 RQ05_2206
2	On the UICC-Terminal interface: select the Test Application with AID8	Response: '90 00'	RQ05_2201
3	Trigger the Test Application with AID18 to call: - UICCSystem.getTheUICCView() - fileView.select(DF _{TEST}). - fileView.select(EF _{TARU}). - fileView.readBinary() in order to retrieve all of the data in EF _{TARU}	Results of the method calls: - FileView is returned successfully - select() returns successfully - select() returns successfully - readBinary() provides all of the data in EF _{TARU} : FF FF (120 bytes)	RQ05_2201

6.5.3.2.44 Test case 44: INSTALL[for install] UICC Toolkit Applications with Access Domain DAP using AES algorithm

6.5.3.2.44.1 Initial Conditions

• The 'Test Application AID8' is ready for installation - i.e. suitable INSTALL[for load] and LOAD commands have been sent.

6.5.3.2.44.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data to the ISD,	Response with Secured Data is	RQ05_1201
	which contains:	returned, last or only additional data	RQ05_1202
	 INSTALL[for install] with AID8. 	response shall be '03 90 00 00'	RQ05_1901
	The Access Domain Parameter should be		RQ05_2001
	set to '00':		RQ05_2201
	Params = 'EA ZZ		RQ05_2202
	80 0B 01 00 10 00 00 00		RQ05_2203
	03 TAR014 00		RQ05_2204
	81 XX 00 01 00 YY DAP'		RQ05_2205
	The DAP signature is calculated with AES		RQ05_2207
	algorithm.		
	 INSTALL[for make selectable] with AID8 		
	- GET RESPONSE		
2	On the UICC-Terminal interface: select the Test	Response: '90 00'	RQ05_2201
	Application with AID8		

Step	Description	Expected Result	RQ
3	Trigger the Test Application with AID18 to call: - UICCSystem.getTheUICCView() - fileView.select(DFTEST). - fileView.select(EFTARU). - fileView.readBinary() in order to retrieve all of the data in EFTARU	Results of the method calls: - FileView is returned successfully - select() returns successfully - select() returns successfully - readBinary() provides all of the data in EF _{TARU} : FF FF (120 bytes)	RQ05_2201

6.5.4 LOAD

6.5.4.1 Test case 1: LOAD with DES for DAP verification

6.5.4.1.1 Initial Conditions

• The key and algorithm to be used for DAP Verification or Mandated DAP Verification are implicitly known by the corresponding Security Domain.

6.5.4.1.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Secured Data to the ISD which contains:	Response with Secured Data is	RQ05_0109
	 INSTALL[for load] command with Load File 	returned, last or only additional data	RQ05_0301
	AID1	response shall be ' NN 90 00' where NN	RQ05_0606,
	 LOAD command(s) with DES DAP 	= number of LOAD commands + 2, and	RQ05_2801,
	- GET RESPONSE	contain '00' data byte	RQ05_2802
2	Send Secured Data to the ISD, which contains:	Response with Secured Data is	RQ02_0104
	 INSTALL[for install and make selectable] 		RQ05_0109
	the applet with AID1	response shall be '02 90 00' and contain	RQ05_0301
	- GET RESPONSE	'00' data byte	RQ05_0605
3	On the UICC-Terminal interface: select the Test	Response: '90 00'	RQ05_0109
	Application with AID1		RQ05_0301

6.5.5 PUT KEY

6.5.5.1 Test case 1: PUT KEY - create new 3DES 2 keys

6.5.5.1.1 Initial Conditions

• The ISD DEK key which is to be used is either a 3DES key with length of at least 16 bytes, or an AES key.

6.5.5.1.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Secured Data to create new key set, with Key	Response with Secured Data is	RQ05_0109
	Version Number (KVN) and key identifiers of Klc, KID and	returned, last or only additional data	RQ05_0301,
	DEK as defined in ETSI TS 102 225 [2], to the ISD which	response shall be '02 90 00' and contain	RQ05_0110
	contains:	'KVN KeyCheckValue1	RQ05_2901
	 PUT KEY command with new 3DES 2 keys 	KeyCheckValue2 KeyCheckValue3',	RQ05_2904
	- GET RESPONSE	secured using keys as indicated in the	RQ05_2905
	The encrypting key to be used is the DEK of the same Key	Command Packet	RQ05_2906
	Version Number (KVN) as the KIc and KID in the		RQ05_3105
	Command Packet containing the PUT KEY command		

6.5.5.2 Test case 2: PUT KEY - create new 3DES 3 keys

6.5.5.2.1 Initial Conditions

• The ISD DEK key which is to be used is either a 3DES key with length of 24 bytes, or an AES key.

6.5.5.2.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Secured Data to create new key set, with Key	Response with Secured Data is	RQ05_0110
	Version Number (KVN) and key identifiers of Klc,	returned, last or only additional data	RQ05_2901
	KID and DEK as defined in ETSI TS 102 225 [2], to	response shall be '02 90 00' and contain	RQ05_2904
	the ISD which contains:	'KVN KeyCheckValue1	RQ05_2905
	 PUT KEY command with new 3DES 3 keys 	KeyCheckValue2 KeyCheckValue3',	RQ05_2906
	- GET RESPONSE	secured using keys as indicated in the	RQ05_3105
		Command Packet	
	same key version number (KVN) as the KIc and KID		
	in the Command Packet containing the PUT KEY		
	command		

6.5.5.3 Test case 3: PUT KEY - add and replace DES keys

6.5.5.3.1 Initial Conditions

• None.

6.5.5.3.2 Test Procedure

Step	Description	Expected Result	RQ
1	- GET RESPONSE	'KVN KeyCheckValue1 KeyCheckValue2 KeyCheckValue3',	RQ05_2901 RQ05_2902 / RQ05_3901 RQ05_2904 RQ05_2905 RQ05_2906
2	Send Secured Data to change KIc with Key Version number (KVN) defined in step 1, to the Test Application with AID4 which contains: - PUT KEY command with existing DES keys - GET RESPONSE Use DES key for DEK (key id 3) in ECB mode of the same key version number as the changed keys		RQ05_2901 RQ05_2902 / RQ05_3901 RQ05_2903 RQ05_2905 RQ05_2906

6.5.5.4 Test case 4: PUT KEY - create new 16 bytes AES keys

6.5.5.4.1 Initial Conditions

• The ISD DEK key which is to be used is an AES key with length of at least 16 bytes.

6.5.5.4.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Secured Data to create new key set with key	Response with Secured Data is	RQ05_2901
	version number and key identifiers of Klc, KID and	returned, last or only additional data	RQ05_2904
	DEK as defined in ETSI TS 102 225 [2], to the ISD	response shall be '02 90 00' and contain	RQ05_2905
	which contains:	'KVN KeyCheckValue1	RQ05_2906
	 PUT KEY command with new 16 bytes 	KeyCheckValue2 KeyCheckValue3',	RQ05_3101
	AES keys	secured using keys as indicated in the	RQ05_3102
	- GET RESPONSE	Command Packet	RQ05_3103
	The encrypting key to be used is the DEK of the		
	same key version number (KVN) as the KIc and KID		
	in the Command Packet containing the PUT KEY		
	command.		
	For the new keys, use key type '88' in CBC mode		
	with initial chaining value set to zero		

6.5.5.5 Test case 5: PUT KEY - create new 24 bytes AES keys

6.5.5.5.1 Initial Conditions

• The ISD DEK key which is to be used is an AES key with length of at least 24 bytes.

6.5.5.5.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Secured Data with key version number and	Response with Secured Data is	RQ05_2901
	key identifiers of KIc, KID and DEK as defined in	returned, last or only additional data	RQ05_2904
	ETSI TS 102 225 [2], to the ISD which contains:	response shall be '02 90 00' and contain	RQ05_2905
	 PUT KEY command with new 24 bytes 	'KVN KeyCheckValue1	RQ05_2906
	AES keys	KeyCheckValue2 KeyCheckValue3',	RQ05_3101
	- GET RESPONSE	secured using keys as indicated in the	RQ05_3102
	The encrypting key to be used is the DEK of the	Command Packet	RQ05_3103
	same key version number (KVN) as the KIc and KID		RQ05_3104
	in the Command Packet containing the PUT KEY		RQ05_3105
	command.		RQ05_3106
	For the new keys, use key type '88' in CBC mode		RQ05_3107
	with initial chaining value set to zero.		RQ05_3108
	Use padding with any value.		RQ05_3109

6.5.5.6 Test case 6: PUT KEY - create new 32 bytes AES keys

6.5.5.6.1 Initial Conditions

• The ISD DEK key which is to be used is an AES key with length of 32 bytes.

6.5.5.6.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Secured Data with key version number and	Response with Secured Data is	RQ05_2901
	key identifiers of Klc, KID and DEK as defined in	returned, last or only additional data	RQ05_2904
	ETSI TS 102 225 [2] to the ISD which contains:	response shall be '02 90 00' and contain	RQ05_2905
	 PUT KEY command with new 32 bytes 	'KVN KeyCheckValue1	RQ05_2906
	AES keys	KeyCheckValue2 KeyCheckValue3',	RQ05_3101
	- GET RESPONSE	secured using keys as indicated in the	RQ05_3102
	The encrypting key to be used is the DEK of the	Command Packet	RQ05_3103
	same key version number (KVN) as the KIc and KID		RQ05_3104
	in the Command Packet containing the PUT KEY		RQ05_3105
	command.		RQ05_3106
	For the new keys, use key type '88' in CBC mode		RQ05_3107
	with initial chaining value set to zero		RQ05_3108

6.5.6 GET STATUS

6.5.6.1 Test case 1: GET STATUS with different P1 values

6.5.6.1.1 Initial Conditions

• Install Test Application with AID1 with UICC Toolkit Application specific parameters containing 2 menu entries with the following values: '01 01' and '03 02'.

6.5.6.1.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Secured Data to the ISD, which contains:	Response with Secured Data is	RQ05_0109
	 GET STATUS with P1= '40' with AID1 	returned, last or only additional data	RQ05_0301
	- GET RESPONSE	response shall be '02 90 00', containing	RQ05_3201
		'EA 08 80 06 01 01 00/01 03 02 00/01'	RQ05_3203
			RQ05_3301
			RQ05_3302
			RQ05 3303

6.5.6.2 Test case 2: GET STATUS with optional P1 values

6.5.6.2.1 Initial Conditions

• Install Test Application with AID1 with UICC Toolkit Application specific parameters containing 2 menu entries with the following values: '01 01' and '03 02'.

6.5.6.2.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Secured Data to the ISD, which contains:	Response with Secured Data is	RQ05_0109
	 GET STATUS with P1= 'D0' with AID1 	returned, last or only additional data	RQ05_0301
	- GET RESPONSE	response shall be '02 90 00', containing	RQ05_3201
		'EA 08 80 06 01 01 00/01 03 02 00/01	RQ05_3203

6.5.6.3 Test case 3: GET STATUS returns Menu Entries in the LOCKED state

6.5.6.3.1 Initial Conditions

• Install Test Application with AID1 with UICC Toolkit Application specific parameters containing 2 menu entries with the following values: '01 01' and '03 02'.

6.5.6.3.2 Test Procedure

Step	Description Expected Result		RQ
1	Send Secured Data to the ISD, which contains:	Response with Secured Data is	RQ01_0002
	 SET STATUS to lock the applet with AID1 	returned, last or only additional data	
		response shall be '01 90 00'	RQ05_0501
2	Send Secured Data coded to the ISD, which	Response with Secured Data is	RQ05_3201
	contains:	returned, last or only additional data	RQ05_3203
	 GET STATUS with P1='40' with AID1 	response shall be '02 90 00', containing	RQ05_3301
	- GET RESPONSE	'EA 08 80 06 01 01 00/01 03 02 00/01'	RQ05_3302
			RQ05 3303

6.5.7 GET DATA

6.5.7.1 Test case 1: GET DATA with different P1 values

6.5.7.1.1 Initial Conditions

• All necessary information (i.e. Card Data, Key Information, Extended Card Resources Information) is made available on the card.

6.5.7.1.2 Test Procedure

Step	Description Expected Result		RQ
1	Send Secured Data to the ISD, which contains:	ata to the ISD, which contains: Response with Secured Data is	
	- GET DATA with P1P2 = '0066' (Card Data)	returned, last or only additional data	RQ05_0301
	- GET RESPONSE	includes tag '66' and starts with '02 90	RQ05_3401
		00'	RQ05_3402
2	Send Secured Data to the ISD, which contains:	Response with Secured Data is	RQ05_0109
	 GET DATA with P1P2 = '00E0' (Key 	returned, last or only additional data	RQ05_0301
	Information Template)	includes tag 'E0' and starts with '02 90	RQ05_3401
	- GET RESPONSE	00'	RQ05_3402
3	Send Secured Data to the Application Provider SD	Response with Secured Data is	RQ05_0109
	with AID40, which contains:	returned, last or only additional data	RQ05_0301
	 GET DATA with P1P2 = '00E0' (Key 	includes tag 'E0' and starts with '02 90	RQ05_3401
	Information Template)	00'	RQ05_3404
	- GET RESPONSE		
4	Send Secured Data to the ISD, which contains:	Response with Secured Data is	RQ05_0109
	 GET DATA with P1P2 = 'FF21' (Extended 	returned, last or only additional data	RQ05_0301
	Card resources information)	includes '81 LEN NN 82 LEN NVM 83	RQ05_3405
	- GET RESPONSE	LEN VM' and starts with '02 90 00' (see	RQ05_3501
		note)	RQ05_3503
			RQ05_3504
NOTE:	: Values and length of NN (number of installed appl	lications), NVM (Non Volatile Memory) and	VM (Volatile
Memory) should not be checked.			

6.5.8 STORE DATA

6.5.8.1 Test case 1: STORE DATA

6.5.8.1.1 Initial Conditions

FFS.

6.5.8.1.2 Test Procedure

FFS.

6.5.8.2 Test case 2: STORE DATA with a Forbidden Load File List

6.5.8.2.1 Initial Conditions

FFS.

6.5.8.2.2 Test Procedure

FFS.

6.5.9 RAM implementation over HTTPS

The content of this clause is FFS.

6.6 Additional command for push

6.6.1 BIP

See test case definition in clause 6.6.2.

6.6.2 CAT_TP

6.6.2.1 Test case 1: Send Secured Data (READ BINARY) using Expanded and Compact format with the different TAR value

6.6.2.1.1 Initial Conditions

• None.

6.6.2.1.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data coded as: [Compact Remote command structure] to the	Response with Secured Data is returned, last or only additional data	RQ02_0901
	Exercising RFM application [TAR value for Compact format], which contains: - SELECT: MF - SELECT: DFTEST - SELECT: EFTARU	response shall be '04 90 00' and contain all data of EF _{TARU} until the end of file	RQ05_0107 RQ05_0108
2	- READ BINARY with P3/Le = '00' Send Command with Secured Data coded as: [Expanded Remote command structure] to the Exercising RFM application [TAR value for Expanded format], which contains: - SELECT: MF - SELECT: DFTEST - SELECT: EFTARU - READ BINARY TLV Structure: C-APDU TLV Definite length coding	Secured Response Data is returned: 'AB 7F 80 01 04 23 LEN [Data 90 00]' where the Data should be the content of EFTARU	RQ02_0902 RQ05_0107 RQ05_0108

6.6.2.2 Test case 2: Send Secured Data (READ BINARY) using Expanded and Compact format with the same TAR value

6.6.2.2.1 Initial Conditions

• None.

6.6.2.2.2 Test Procedure

Step	Description	Expected Result	RQ
1	Send Command with Secured Data coded as:	SW = '6X XX' with Error Response	RQ04_0102
	[Expanded Remote command structure] to the	Status Code = '09' TAR unknown or	
	Exercising RFM application [TAR value for Compact	other error	RQ05_0108
	format], which contains:		
	- SELECT: MF		
	- SELECT: DFTEST		
	- SELECT: EFTARU		
	- READ BINARY		
	TLV Structure: C-APDU TLV		
	Definite length coding		
2	Send Command with Secured Data coded as:	SW = '6X XX' with Error Response	RQ04_0102
	[Compact Remote command structure] to the	Status Code = '09' TAR unknown or	DO05 0400
	Exercising RFM application [TAR value for	other error	RQ05_0108
	Expanded format], which contains:		
	- SELECT: MF		
	- SELECT: DFTEST		
	- SELECT: EF _{TARU}		
	- READ BINARY		

6.6.2.3 Test case 3: PUSH Command, PoR required - No Error

6.6.2.3.1 Initial Conditions

• None.

6.6.2.3.2 Test Procedure

Step	Description	Expected result	RQ
1	Send ENVELOPE_SMS_PP to the ISD with SPI = '02 21', and Secured Data which contains: - PUSH command for BIP channel opening - PUSH command for CAT_TP link establishment i.e. Data = '80 EC 01 01 25 35 07 02 00 00 03 00 00 02 3C 03 01 1F 40 39 02 05 78 0A 09 47 53 4D 41 65 55 49 43 43 3E 05 21 7F 00 00 01 80 EC 01 02 05 3C 03 01 02 02'	SW = '91 XX'	RQ06_0101 RQ06_0701 RQ06_0702 RQ06_0806 RQ06_0901
2	Send FETCH	OPEN CHANNEL with response data 'D0 27 81 03 01 40 01 82 02 81 82 35 07 02 00 00 03 00 00 02 39 02 05 78 47 0A 09 47 53 4D 41 65 55 49 43 43 3C 03 01 30 50 3E 05 21 7F 00 00 01 90 00'	RQ06_0201 RQ06_0801 RQ06_0802
3	Send TERMINAL RESPONSE (OPEN CHANNEL)	SW = '91 XX'	RQ06_0201
4	Send FETCH	PROACTIVE COMMAND: SEND DATA (SYN PDU)	
5	Send TERMINAL RESPONSE (SEND DATA)	SW = '91 XX'	RQ06_0201
6	Send ENVELOPE(EVENT DOWNLOAD - Data available)	SW = '91 XX'	
7	Send FETCH	PROACTIVE COMMAND: RECEIVE DATA (SYN/ACK PDU)	
8	Send TERMINAL RESPONSE (RECEIVE DATA)	SW = '91 XX'	RQ06_0201
9	Send FETCH	PROACTIVE COMMAND: SEND DATA (ACK PDU)	

Step	Description	Expected result	RQ
10	Send TERMINAL RESPONSE (SEND DATA)	SW = '91 XX'	RQ06_0201
11	Send FETCH	PROACTIVE COMMAND: SEND SHORT MESSAGE (PoR)	RQ06_0401
	Send TERMINAL RESPONSE (SEND SHORT MESSAGE)	SW = '90 00'	RQ06_0301

6.7 Confidential application management

FFS.

Annex A (normative): BER-TLV tags

A.1 BER-TLV tags

Table A.1: BER-TLV tags

Description	Length of tag	Value
Command Scripting template tag for definite length coding	1	Defined in ETSI TS 101 220 [6]
Response Scripting template tag for definite length coding	1	Defined in ETSI TS 101 220 [6]
Command Scripting template tag for indefinite length coding	1	Defined in ETSI TS 101 220 [6]
Response Scripting template tag for indefinite length coding	1	Defined in ETSI TS 101 220 [6]
Number of executed command TLV objects tag	1	Defined in ETSI TS 101 220 [6]
Bad format TLV tag	1	Defined in ETSI TS 101 220 [6]
Immediate Action tag	1	Defined in ETSI TS 101 220 [6]
Immediate Action Response tag	1	Defined in ETSI TS 101 220 [6]
Error Action tag	1	Defined in ETSI TS 101 220 [6]
Script Chaining tag	1	Defined in ETSI TS 101 220 [6]
Script Chaining Response tag	1	Defined in ETSI TS 101 220 [6]

Annex B (normative): Default file system and files content

B.1 DF_{TEST} (UICC Access Tests DF)

B.1.1 DF

B.1.1.1 DF identifier

A file identifier not allocated to ensure that the File ID is not used by any other DF defined in any of the applications listed in clause 4.4.3. The suggestion is to use '7F4A'.

B.1.1.2 EF_{ARR}

An EF_{ARR} shall be available to EFs in DF_{TEST} – i.e. within DF_{TEST} or within the MF.

In particular, a record shall be available in the EF_{ARR} file which encodes the following access conditions:

READ	ALWAYS
UPDATE	ALWAYS
ACTIVATE	ALWAYS
DEACTIVATE	ALWAYS
RESIZE FILE	ALWAYS

The record number of this record shall be identified, in order that it can be used in CREATE FILE when creating $EF_{CREATED}$.

B.1.2 EF_{TNR} (Transparent Never Read)

This is a 3 byte transparent EF for testing purposes with fixed contents.

A file identifier not allocated to ensure that the File ID is not used by any other EF defined in any of the applications listed in clause 4.4.3. The suggestion is to use '6F 02'.

	Identifier: '6FXX'	Structure: transparent	
	File size: 3 bytes	Update activity	: low
Access Condi	tions:		
READ	NEVE	R	
UPDA	TE ALWA	AYS	
ACTIV	ATE ALWA	AYS	
DEAC	TIVATE ALWA	AYS	
If O_SIM is su	ipported, GSM Access Conditio	ns:	
READ	NEVE	R	
UPDA	TE ALWA	AYS	
ACTIV	ATE ALWA	AYS	
DEAC	TIVATE ALWA	AYS	
Bytes		Description	Length
1 - 3		55 55 55	3 bytes

B.1.3 EF_{TARU} (Transparent Always Read and Update)

This is a 120 byte transparent EF for testing purposes with predefined contents.

A file identifier not allocated to ensure that the File ID is not used by any other EF defined in any of the applications listed in clause 4.4.3. The suggestion is to use '6F 03'.

	Identifier: '6FXX '	Structure: transparent	
	File size: 120 bytes	Update activity	: low
Access Condi	itions:		
READ	ALW	AYS	
UPDA	TE ALW	AYS	
ACTIV	/ATE ALW	AYS	
DEAC	TIVATE ALW	AYS	
If O_SIM is su	upported, GSM Access Condition	ons:	
READ	ALW	AYS	
UPDA	TE ALW	AYS	
ACTIV	/ATE ALW	AYS	
DEAC	TIVATE ALW	AYS	
Bytes		Description	Length
1 - 120		FF FF	120 bytes

B.1.4 Void

B.1.5 EFTPRU (Transparent PIN Read and Update)

This is a 120 byte transparent EF for testing purposes with predefined contents.

A file identifier not allocated to ensure that the File ID is not used by any other EF defined in any of the applications listed in clause 4.4.3. The suggestion is to use '6F 06'.

	Identifier: '6FXX'		Structure: transparent	
	File size: 120 bytes		Update activity	: low
Access Condi	tions:			
READ		PIN		
UPDA	TE	PIN		
ACTIV	'ATE	ALWAYS		
DEAC	TIVATE	ALWAYS		
Bytes	Description			Length
1 - 120		FF FF		120 bytes

B.1.6 EF_{LF4R4b}

This is a linear fixed EF for testing purposes with 4 records and 4 bytes/record with predefined contents located under $DF_{TEST.}$

A file identifier is not allocated in order to ensure that the File ID is not used by any other EF defined in any of the applications listed in clause 4.4.3. The suggestion is to use '6F FC'.

Identifie	Identifier: '6F XX'		Structure: linear fixed		
Reco	Record length: 4 bytes		Update activity: low		
Access Conditions:					
READ		ALWA	YS		
UPDATI	=	ALWAYS			
DEACTI	VATE	ALWAYS			
ACTIVA	TE	ALWAYS			
Bytes		Descriptio			Length
1 to 4	LF4	1R4b test co	ntents		4 bytes

Coding:

1 st record:	A0	A1	A2	B0
2 nd record:	B0	B1	B2	A0
3 rd record:	B0	B1	B2	A0
4 th record:	A0	A1	A2	B0

B.1.7 EFBER-TLV

This is a 120 byte BER-TLV EF for testing purposes with predefined contents.

A file identifier not allocated to ensure that the File ID is not used by any other EF defined in any of the applications listed in clause 4.4.3. The suggestion is to use '6F 09'.

Identifie	Identifier: '6F XX'		Structure: BER-TLV		
Fil	e size: 10 bytes	Update activity: low			
Access Condition	ons:				
READ		ALWA	YS		
UPDATI		ALWAYS			
DEACTI	VATE	ALWA	YS		
ACTIVA	TE	ALWA	YS		
INCREA	\SE	ALWA	YS		
Bytes		Description	า	Length	
1 to 10	Test	contents: ,FI	F FF'	10 bytes	

B.1.8 EF_{CY4R4b}

This is a cyclic EF for testing purposes with 4 records and 4 bytes/record with predefined contents located under $DF_{TEST.}$

A file identifier is not allocated in order to ensure that the File ID is not used by any other EF defined in any of the applications listed in clause 4.4.3. The suggestion is to use '6F FD'.

Identifie	Identifier: '6F XX'		Structure: cyclic		
Reco	Record length: 4 bytes		Update activity: low		
Access Condition	ons:				
READ		ALWA	YS		
UPDATI	UPDATE		ALWAYS		
DEACTI	VATE	ALWAYS			
ACTIVA	TE	ALWA	YS		
INCREA	\SE	ALWAYS			
Bytes	Description		า	Length	
1 to 4	CY4	R10b test co	ontents	4 bytes	

Coding:

1 st record:	A0	A1	A2	B0
2 nd record:	B0	B1	B2	A0
3 rd record:	B0	B1	B2	A0
4 th record:	A0	A1	A2	B0

B.2 DF_{TESTB} (Tests DF under ADF_1)

B.2.1 DF

B.2.1.1 DF identifier

A file identifier not allocated to ensure that the File ID is not used by any other DF defined in any of the applications listed in clause 4.4.3. The suggestion is to use '7F4B'.

B.2.1.2 EF_{ARR}

An EF_{ARR} shall be available to EFs in DF_{TESTB} – i.e. within DF_{TESTB} or within the ADF.

In particular, a record shall be available in the EF_{ARR} file which encodes the following access conditions:

READ	ALWAYS
UPDATE	ALWAYS
ACTIVATE	ALWAYS
DEACTIVATE	ALWAYS
RESIZE FILE	ALWAYS

The record number of this record shall be identified, in order that it can be used in CREATE FILE when creating EF_{CREATED}.

B.2.2 EFTARUB (Transparent Always Read and Update B)

This is a 120 byte transparent EF for testing purposes with predefined contents.

A file identifier not allocated to ensure that the File ID is not used by any other EF defined in any of the applications listed in clause 4.4.3. The suggestion is to use '6F 04'.

	Identifier: '6FXX'		Structure: transparent	
	File size: 120 bytes		Update activity	: low
Access Condi	tions:			
READ	Α	LWAYS		
UPDA	TE A	LWAYS		
ACTIV	'ATE A	LWAYS		
DEAC	TIVATE A	LWAYS		
Bytes	Description		Length	
1 - 120	FF FF 120 bytes			120 bytes

B.3 DF_{TELECOM}

B.3.1 EF_{RMA} (Remote Management Actions)

This is a linear fixed EF for testing purposes with is a 36 byte with predefined contents.

This file is located under DF_{TELECOM} ('7F10') as defined in ETSI TS 102 222 [9].

	Identifier: '6F53'	Structure	e: linear fixed
	Record length: 36 bytes	U	pdate activity: low
Access Condi	tions:		
READ	ADM		
UPDA	TE ADM		
ACTIV	ATE ADM		
DEAC	TIVATE ADM		
Bytes	Description		Length
1 to 36	Test conte	nt as defined below	36 bytes

	DISPLAY	1A	81	03	01	21	80	82	02	81	02	8D	0F
1 st record:	TEXT	04	54	6F	6F	6C	6B	69	74	20	54	65	73
	ILAI	74	20	31	FF								
		10	81	03	01	01	01	82	02	81	82	92	05
2 nd record:	REFRESH	01	3F	00	2F	E2	FF						
		FF											
	DLAV	1B	81	03	01	20	00	82	02	81	03	85	09
3 rd record:	PLAY TONE	44	69	61	6C	20	54	6F	6E	65	8E	01	01
		84	02	01	05	FF							

Annex C (normative): Secure data coding and command structure

C.1 Commands

Table C.1

Command														
	SELECT MF: '00 A4 00 0C 02 3F 00' (no response data)													
	SELECT DF <text> by FID 'd1 d2': '00 A4 00 0C 02 d1 d2' (no response data)</text>													
	SELECT EF <text> by FID 'e1 e2': '00 A4 00 04 02 e1 e2 00' (return FCP template) (see note)</text>													
SELECT	SELECT EF <text> by FID 'e1 e2': '00 A4 00 0C 02 e1 e2' (no response data)</text>													
	Select Applet by AID '00 A4 04 0C LC AID' (SELECT by DF name)													
	SELECT by path: '00 A4 09 0C LC File_path' (no response data)													
	SELECT by path from MF: '00 A4 08 0C LC File_path' (no response data)													
UPDATE BINARY	UPDATE BINARY with data 'XX XX XX': '00 D6 00 00 03 XX XX XX'													
	TERMINAL PROFILE should indicate support of following features:													
			-											
			Item	Byte	e.bit	Termin								
			1	1.1		Profile I								
TERMINAL PROFILE			17	3.1		DISPLA		l						
			21	3.5		PLAY T								
			24	3.8		REFRE								
			30	4.6		SET UF	MENU	J						
SET STATUS	Cat Status to	look th	a annia	4	ho Al	D. 100 F	0.40.55	- Lon A	יםו					
SELSTATUS	Set Status to '80 C2 00 00		іе арріє	t Willi	ine Ai	D. 60 F	U 4U FF	· Len A	- עו					
	D1 XX	LC												
		82 81												
ENVELOPE_SMS_PP		80 01												
	8B Y													
	40 05 81 12 50 F3 96 F6 22 22 22 22 22 22 len ZZZZ Secure Packet Header Data',													
	where the Data is the Secured Data as defined in the test case and the header contains SPI2 = '21'													
PROACTIVE								1			ı			
COMMAND: DISPLAY	BER-TLV:	D0	1A	81	03	01	21	80	82	02	81	02	8D	
TEXT		0F	04	54	6F	6F	6C	6B	69	74	20	54	65	
TEDAMALAL		73	74	20	31									
TERMINAL RESPONSE: DISPLAY	BER-TLV:	81	03	01	21	80	82	02	82	81	83	01	00	
TEXT	DER-ILV.	01	03	UI	Z I	00	02	02	02	01	03	UT	00	
ILXI														
PROACTIVE	BER-TLV:	D0	1B	81	03	01	20	00	82	02	81	03	85	
COMMAND: PLAY		09	44	69	61	6C	20	54	6F	6E	65	8E	01	
TONE		01	84	02	01	05		1-			1	1-		
TERMINAL			<u> </u>			<u> </u>	!							
RESPONSE: PLAY	BER-TLV:	81	03	01	20	00	82	02	82	81	83	01	00	
TONE														
PROACTIVE	BER-TLV:	D0	10	81	03	01	01	01	82	02	81	82	92	
COMMAND: REFRESH		05	01	3F	00	2F	E2							
TERMINAL														
RESPONSE:														
REFRESH READ BINARY	'00 B0 00 00	00'												
READ BINARY	'00 B0 00 00 '00 B2 01 04													
	'00 DC 00 04		ata' (cur	rent m	nde)									
UPDATE RECORD	'00 DC 00 04					de)								
SEARCH RECORD	'00 A2 01 04					,								
INCREASE	'80 32 00 00													
SET DATA	'00 DB 00 80													
RETRIEVE DATA	'00 CB 00 P2					alue (se	e note)							
ACTIVATE FILE	'00 44 00 00													
DEACTIVATE FILE	'00 04 00 00	00' dea	activatin	g curre	ent file	9								

Command	Description
VERIFY PIN	'00 20 00 01 08 PIN'
CHANGE PIN	'00 24 00 01 10 Data' with Data = PINold PINnew
ENABLE PIN	'00 28 00 01 08 PIN'
DISABLE PIN	'00 26 00 01 08 PIN'
UNBLOCK PIN	'00 2C 00 01 10 Data' with Data = PINtoUnblock PINnew
VERIFY CHV	'A0 20 00 01 08 CHV'
DELETE	'80 E4 00 00 12 4F 10 AID'
DLLLIL	CREATE FILE EF _{CREATED} : '0X E0 00 00 14 62 13 82 02 41 21 83 02 EF1 EF2 8A 01 05 8B 03
CREATE FILE	EF _{ARR} 1 EF _{ARR} 2 RR 80 01 05' where EF1 EF2 is the FID, EF _{ARR} 1 EF _{ARR} 2 is the FID of the EF _{ARR} file which is referenced by this file, and RR is the record number in EF _{ARR} (see Annex B.1.1.2 and Annex B.2.1.2).
DELETE FILE	DELETE FILE EFCREATED: 0X E4 00 00 02 EF1 EF2 where EF1 EF2 is the FID
RESIZE FILE	RESIZE FILE EFCREATED: '8X D4 00 00 09 62 07 83 02 EF1 EF2 80 01 03' where EF1 EF2 is the FID
	INSTALL[for load]: '80 E6 02 00 LC Data 00' with Data = '10 AID 00 00 XX Params 00' where XX = length of Params field ('00' if no Params) and Params are the Systems Specific Parameters as defined in the test case (see note)
	INSTALL[for install]: '80 E6 04 00 LC
	10 ELF AID
	10 EM AID
	10 Application AID
	03 XX XX XX (privileges)
	length [C9 01 00 Params]
INICTALI	00 where Params are the parameters as defined in the test
INSTALL	00' (see note)
	INSTALL[for install and make selectable]: '80 E6 08 00 LC
	00
	00
	10 Application AID
	03 XX XX XX (privileges)
	length [Params]
	00
	where Params are the Make Selectable Parameters
	as defined in the test (if any)
	00' (see note)
	LOAD (first block): '80 E6 P1 P2 LC C4 Len Data 00', where Len is the length of Data and the Data
	the first part of is the Load File Data Block (see note)
	LOAD (subsequent blocks): '80 E6 P1 P2 LC Data 00', where Data is the next part of the Load File
	Data Block (see note)
	LOAD with DES DAP:
LOAD	'80 E6 P1 P2 LC E2 YY 4F XX AID C3 08 Sign C4 Len Data 00',
	where Sign is the Load File Data Block DES Signature,
	XX is the length of the AID of the Security Domain with DAP verification privilege,
	YY is the length of DAP block, i.e. YY=0C+XX,
	Len is the length of Data,
	Data is the Load File Data Block
	(see note)
GET RESPONSE	'00 C0 00 00 Len' where Len is the length of data available
GET STATUS	'80 F2 P1 02 02 4F 00 00' (see note)
GET DATA	'80 CA P1 P2 00'
STORE DATA	FFS
	-
	PUT KEY command with new 3DES 3 keys (each of length 24 bytes):
	'80 D8 00 81 Len KVN FF 82 18 XXXX 03 YY YY YY 01 18 01 00 FF 82 18 XXXX 03 YY YY
	YY 01 14 01 00 FF 82 18 XXXX 03 YY YY YY 01 48 01 00 MAC 00', where XXXX is the coded
	key value, YY YY YY is the key check value and the KVN (key version number) should be chosen
	from the set of possible version numbers that are not already in use (see note)
PUT KEY	PUT KEY command with new 3DES 2 keys (each of length 16 bytes):
J. O. INET	'80 D8 00 81 Len KVN FF 82 10 XXXX 03 YY YY YY 01 18 01 00 FF 82 10 XXXX 03 YY YY
	YY 01 14 01 00 FF 82 10 XXXX 03 YY YY YY 01 48 01 00 MAC 00', where XXXX is the coded
	key value, YY YY YY is the key check value and the KVN (key version number) should be chosen
	from the set of possible version numbers that are not already in use (see note)
	PUT KEY command with new DES keys (each of length 8 bytes):
	'80 D8 00 81 Len KVN FF 83 08 XXXX 03 YY YY YY 01 18 01 00 FF 83 08 XXXX 03 YY YY
	YY 01 14 01 00 FF 83 08 XXXX 03 YY YY YY 01 48 01 00 MAC 00', where XXXX is the coded

Command	Description						
	key value, YY YY YY is the key check value and the KVN (key version number) should be chosen						
	from the set of possible version numbers that are not already in use (see note)						
	PUT KEY command with existing DES keys (each of length 8 bytes):						
	'80 D8 KVN 01 Len FF 83 08 XXXX 03 YY YY Y 01 18 01 00 MAC 00', where XXXX is the						
	coded key value, YY YY YY is the key check value and the KVN (key version number) should be						
	the one that already exists (see note)						
	PUT KEY command with new 16 bytes AES key:						
	80 D8 00 81 Len KVN FF 88 10 XXXX 03 YY YY YY 01 18 01 00 FF 88 10 XXXX 03 YY YY						
	YY 01 14 01 00 FF 88 10 XXXX 03 YY YY YY 01 48 01 00 MAC 00', where XXXX is the coded						
	key value, YY YY YY is the key check value and the KVN (key version number) should be chosen						
	from the set of possible version numbers that are not already in use (see note)						
	PUT KEY command with new 24 bytes AES key						
	'80 D8 00 81 Len KVN FF 88 18 XXXX 03 YY YY YY 01 18 01 00 FF 88 18 XXXX 03 YY YY						
	YY 01 14 01 00 FF 88 18 XXXX 03 YY YY YY 01 48 01 00 MAC 00', where XXXX is the coded						
	key value, YY YY YY is the key check value and the KVN (key version number) should be chosen						
	from the set of possible version numbers that are not already in use (see note)						
	PUT KEY command with new 32 bytes AES key						
	'80 D8 00 81 Len KVN FF 88 20 XXXX 03 YY YY YY 01 18 01 00 FF 88 20 XXXX 03 YY YY						
	YY 01 14 01 00 FF 88 20 XXXX 03 YY YY YY 01 48 01 00 MAC 00', where XXXX is the coded						
	key value, YY YY YY is the key check value and the KVN (key version number) should be chosen						
	from the set of possible version numbers that are not already in use (see note)						
	PUT KEY command with 24 bytes AES (error)						
	'80 D8 00 81 Len KVN FF 88 18 XXXX 03 YY YY YY 01 18 01 00 FF 88 18 XXXX 03 YY YY						
	YY 01 14 01 00 FF 88 10 XXXX 03 YY YY YY 01 48 01 00 MAC 00', where XXXX is the coded						
	key value, YY YY YY is the key check value and the KVN (key version number) should be chosen						
	from the set of possible version numbers that are not already in use (see note)						
	PUT KEY command with 32 bytes AES (error)						
	80 D8 00 81 Len KVN FF 88 20 XXXX 03 YY YY YY 01 18 01 00 FF 88 20 XXXX 03 YY YY						
	YY 01 14 01 00 FF 88 10 XXXX 03 YY YY YY 01 48 01 00 MAC 00', where XXXX is the coded						
	key value, YY YY YY is the key check value and the KVN (key version number) should be chosen						
	from the set of possible version numbers that are not already in use (see note)						
NOTE: All case 4 com	nmands shall be sent without last "00" (Le byte) if Compact Format is used.						

C.2 Remote APDU Format

C.2.1 Compact Remote Application Data Format

A command string contain a single command; APDU_1:

CLA_1 INS_1 P1_1 P2_1 P3_1 Data_1

EXAMPLE 1:

• '00 A4 00 0C 02 d1 d2'

Command string contain a sequence of 2 commands; APDU_1 APDU_2:

CLA_1 INS_1 P1_1 P2_1 P3_1 Data_1 CLA_2 INS_2 P1_2 P2_2 P3_2 Data_2

EXAMPLE 2:

• '00 A4 00 04 02 e1 e2 00 B0 00 00 00'

C.2.2 Expanded Remote Application Data Format

C.2.2.1 C-APDU TLV

```
Definite length coding
```

```
'AA LEN

22 LEN APDU1
...+
22 LEN APDUx'

Indefinite length coding

'AE 80

22 LEN APDU1
...
22 LEN APDUx
```

C.2.2.2 Immediate Action TLV

00 00'

Definite length coding

Normal format

```
'AA LEN

81 LEN PRO_CMD1

...

81 LEN PRO_CMDx'
```

Referenced format

```
'AA LEN
81 01 81
22 LEN PRO_CMD1,
or
81 01 82
22 LEN PRO_CMD2
or
81 01 YX (see note 2)'
```

Indefinite length coding

Normal format

```
'AE 80
81 LEN PRO_CMD1
...
81 LEN PRO_CMDx'
00 00'
```

• Referenced format

```
'AE 80

81 01 81

22 LEN PRO_CMD1,
81 01 82

22 LEN PRO_CMD2,
81 01 YX (see note 2)
00 00'
```

PRO_CMDx shall be a set of COMPREHENSION-TLV data objects constituting one of the allowed proactive commands specified for immediate action; i.e. DISPLAY TEXT, PLAY TONE or REFRESH.

NOTE 1: Void.

NOTE 2: This byte has value between '01' to '7F': Reference to a record in EF_{RMA}.

C.2.2.3 Error Action TLV

Definite length coding:

Normal format

```
'AA LEN
82 LEN PRO_CMD1'
```

Referenced format

```
'AA LEN
82 01 YX (see note 2)'
```

No Action

```
'AA 02
82 00'
```

Indefinite length coding:

Normal format

```
'AE 80
82 LEN PRO_CMD1
00 00'
```

• Referenced format

```
'AE 80
82 01 YX (see note 2)
00 00'
```

No Action

```
'AE 02
82 00
00 00'
```

NOTE 1: PRO CMDx should be one of the allowed proactive commands specified for immediate action; i.e. DISPLAY TEXT or PLAY TONE.

NOTE 2: This byte has value between '01' to '7F': Reference to a record in EF_{RMA} .

C.2.2.4 Script Chaining TLV

Definite length coding:

'AA len 83 01 XX CMD TLV1 CMD TLVx' with 'XX'=Script Chaining Value

Indefinite length coding:

'AE 80 83 01 XX 00 00' with 'XX'=Script Chaining Value

Annex D (informative): Full command structure sample

D.1 Formatted SMS with PoR required - default

FFS.

D.2 CAT-TP - default

FFS.

D.3 HTTPS - default

FFS.

Annex E (normative): AID and TAR values

E.1 UICC shared file system remote file management application

Description	TAR
Compact Format as defined in ETSI TS 101 220 [6]	TAR1: 'B0 00 00'
Expanded Format or automatic data format detection as defined in ETSI TS 101 220 [6]	TAR3: 'B0 01 20'

E.2 ADF remote file management application

Description	TAR
Compact Format as defined in ETSI TS 101 220 [6]	TAR2: 'B0 00 01'
For Expanded Format or automatic data format detection as defined in ETSI TS 101 220 [6]	TAR4: 'B0 01 40'

E.3 AID and TAR

Applet AID	AID	TAR	Description
AID1	FFS	FFS	UICC Toolkit Test Applet
AID2			SIM Toolkit application with menu
AID3	FFS	FFS	UICC Toolkit application with menu
AID4	FFS	FFS	SIM Toolkit application with menu and UICC Toolkit application with menu combined
AID5	FFS	FFS	UICC Toolkit Admin Access application
AID6	FFS	FFS	SIM Toolkit Access application to read EFTARU, EFTARU, EFTARU
AID7	FFS	FFS	SIM Toolkit Access application to read EF _{TARU}
AID8			UICC Toolkit Access application to read EF _{TARU} , EF _{TNR} , EF _{TPRU}
AID9			UICC Toolkit Access application to read EF _{TARU}
AID10			SIM Toolkit application with Proactive Session: Check Application Priority
AID11			SIM Toolkit application with Proactive Session: Check Application Priority
AID12			UICC Toolkit application with Proactive Session: Check Application Priority
AID13			UICC Toolkit application with Proactive Session: Check Application Priority
AID14			SIM Toolkit application with menu
AID15	FFS	FFS	UICC Toolkit application with menu
AID16			SIM Toolkit application with menu
AID17			UICC Toolkit application with menu
AID18			UICC Toolkit Access and Admin Access application with menu to update EFTARUB
AID19			Contactless application - Reader mode typeA
AID20			Contactless application - Reader mode typeB
AID21	FFS	FFS	Contactless application - Card Emulation
AID30		FFS	
AID31		FFS	Void
AID32	FFS		Void
AID33	FFS		Void
AID34	FFS		Void
AID35		FFS	
AID36		FFS	
AID37		FFS	
AID40	FFS	FFS	Application Provider SD

RQ05_0607

RQ05_0804

Annex F (informative): FFS requirements

The following is a compilation of requirements of the present document which are not verified in the present document. This compilation is for information only.

This compilation is for information only. A verification of the listed requirements identified in ETSI TS 102 226 [1], clause 4 currently is FFS: RQ01_0006 RQ01_0010 RQ01_0011 RQ01_0012 A verification of the listed requirements identified in ETSI TS 102 226 [1], clause 5 currently is FFS: RQ02_0106 RQ02_0107 RQ02_0403 RQ02_0404 RQ02_0505 RQ02_0506 RQ02_0507 RQ02_0703 RQ02_0705 RQ02_0815 RQ02_0816 A verification of the listed requirements identified in ETSI TS 102 226 [1], clause 7 currently is FFS: RQ04_0105 RQ04_0106 RQ04_0501 A verification of the listed requirements identified in ETSI TS 102 226 [1], clause 8 currently is FFS: RQ05_0104 RQ05_0303 RQ05_0304 RQ05_0305 RQ05_0602 RQ05_0603 RQ05_0604

RQ05_0805		
RQ05_0806		
RQ05_1103		
RQ05_1105		
RQ05_1504		
RQ05_1507		
RQ05_2102		
RQ05_2201		
RQ05_2508		
RQ05_3204		
RQ05_3403		
RQ05_3406		
RQ05_3502		
RQ05_3601		
RQ05_3602		
RQ05_3603		
RQ05_3604		
RQ05_3605		
RQ05_3606		
RQ05_3607		
RQ05_3608		
RQ05_3609		
RQ05_3610		
RQ05_3611		
RQ05_3701		
RQ05_3803		
RQ05_3804		
RQ05_3902		
A verification of	the listed requirements identified in ETSI TS 102 226 [1], clause 9 currently is FFS:	
RQ06_0601		
RQ06_0803		
RQ06_0804		
RQ06_0805		
RQ06_0807		
RQ06_0902		

RQ07_0501

R	Q06_0903
R	Q06_0904
R	Q06_0905
R	Q06_0906
R	Q06_0907
R	Q06_0908
R	Q06_0909
R	Q06_0910
R	Q06_0911
R	Q06_1001
R	Q06_1002
R	Q06_1003
R	Q06_1004
R	Q06_1005
R	Q06_1101
R	Q06_1102
R	Q06_1103
R	Q06_1104
R	Q06_1105
R	Q06_1106
R	Q06_1201
A ver	ification of the listed requirements identified in ETSI TS 102 226 [1], clause 10 currently is FFS:
R	Q07_0201
R	Q07_0301
R	Q07_0302
R	Q07_0303
R	Q07_0304
R	Q07_0305
R	Q07_0306
R	Q07_0307
R	Q07_0308
R	Q07_0401
R	Q07_0402
R	Q07_0403

Annex G (informative): Core specification version information

Unless otherwise specified, the versions of ETSI TS 102 226 [1] from which conformance requirements have been extracted are as follows.

Release	Latest version from which conformance requirements have been extracted
Rel-11	V11.2.0
Rel-12	V12.0.0
Rel-13	V13.1.0
Rel-14	V14.0.0
Rel-15	V15.0.0

Annex H (informative): Change History

					Ch	nange history		
Date	Meeting	Plenary Doc	CR	Rev			Old	New
2018	SCP-84	SCP(18)000153r1	6	1	F	Correction of the length in the expected Response Scripting Template	11.0.0	11.1.0
2018	SCP-84	SCP(18)000154	7		F	Correction of the number of executed command and response TAG in the expected	11.0.0	11.1.0
2018	SCP-84	SCP(18)000155	8		F	response Correction of increase and install [for install]	11.0.0	11.1.0
2018	SCP-84	SCP(18)000156	9		F	commands Correction of the SW for missing verify pin	11.0.0	11.1.0
2018		SCP(18)000157	10		F	Remove Select as case 4	11.0.0	11.1.0
2018		SCP(18)000158r1	11	1	F	Correction of wrong definition of EF _{LF4R4b}	11.0.0	11.1.0
2018		SCP(18)000160	13		F	Correction for Search Record command with wrong P1	11.0.0	11.1.0
2018	SCP-84	SCP(18)000161	14		F	Correction of wrong number of executed commands	11.0.0	11.1.0
2018		SCP(18)000162	15		F	Add select by path from MF	11.0.0	11.1.0
2018		SCP(18)000163	16		F	Addition of missing additional data for Delete command	11.0.0	11.1.0
2018	SCP-84	SCP(18)000164	17		F	Addition of "unknown application" missing in case of HTTPS	11.0.0	11.1.0
2018		SCP(18)000165	18		F	Send the put key command to SD	11.0.0	11.1.0
2018		SCP(18)000166r1	19	1	F	GET STATUS command sent to SD	11.0.0	11.1.0
2018		SCP(18)000167r1	20	1	F	Add Cyclic file for Increase command tests	11.0.0	11.1.0
2018		SCP(18)000168	21		F	Correction of wrong number of expected commands	11.0.0	11.1.0
2018		SCP(18)000223	22		F	Clarification on Note about HTTP protocol	11.0.0	11.1.0
2018		SCP(18)000224r1	23		F	Correction of length in the expected response AB tag	11.0.0	11.1.0
2018		SCP(18)000225	24		F	Correction of EFRMA	11.0.0	11.1.0
2016		SCP(16)000075	1		F	Definition of Compact Remote Application Data Format in Annex C.2.1	11.1.0	11.2.0
2016		SCP(16)000076	2		D	Update the FFS requirements list in Annex F	11.1.0	11.2.0
2016		SCP(16)000077	3		F	Correction of command definition in Annex C.1	11.1.0	11.2.0
2016		SCP(16)000078r1	4	1	F	Definition of option "ISD with DAP verification privilege" used for test case 6.5.4.1	11.1.0	11.2.0
2018		SCP(16)000079	5		В	Addition of test cases for DAP signature	11.1.0	11.2.0
2018		SCP(18)000159r1	12		F	Missing GET RESPONSE command	11.1.0	11.2.0
		SCP(21)000095	25		F	Test corrections for Immediate Action Response in the tests 6.2.2.7 and 6.2.2.10	11.1.0	11.2.0
		SCP(21)000203	26		F	Make UICC Shared File System RFM application optional		11.2.0
		SCP(21)000205	28		F	Miscellaneous corrections	11.1.0	11.2.0
		SCP(21)000206	29		F	Correction of options for test cases for DAP signature	11.1.0	11.2.0
		SCP(21)000220r1	30	1	F	Deletion of normative text from an informative Annex F	11.1.0	11.2.0
		SET(22)000020	31		F	Update Binary corrections and clarifications	11.2.0	11.3.0
		SET(22)000021	32	<u> </u>	F	Select corrections and clarifications	11.2.0	11.3.0
		SET(22)000022	33	<u> </u>	F	Flexibility for error status words	11.2.0	11.3.0
		SET(22)000023	34		F	Clarification of response data for file created via CREATE FILE	11.2.0	11.3.0
		SET(22)000024	35		F	Correction of "number of executed commands"	11.2.0	11.3.0
		SET(22)000025	36		C	Test case 6.4.2.2: addition of further READ BINARY	11.2.0	11.3.0
2022		SET(22)000026	37		F	RFM scripts with PINs: simplification and corrections	11.2.0	11.3.0
2022	SET-104	SET(22)000027	38		F	Corrections and clarifications for case 4 commands	11.2.0	11.3.0

					Ch	nange history		
Date	Meeting	Plenary Doc	CR	Rev			Old	New
2022	SET-104	SET(22)000028r2	39	2	F	Correction of "bad format, length missing" test cases	11.2.0	11.3.0
2022	SET-105	SET(22)000135	41		F	Corrections to response format descriptions	11.2.0	11.3.0
		SET(22)000136	42		F	Install for load / load: correction of "number of commands"	11.2.0	11.3.0
2022	SET-105	SET(22)000137	43		F	Install for install: addition of missing GET RESPONSEs	11.2.0	11.3.0
		SET(22)000138	44		F	Corrections of incorrect lengths and MSLs	11.2.0	11.3.0
		SET(22)000139	45		F	Install test cases: correction of contactless parameters	11.2.0	11.3.0
		SET(22)000140	46		F	Corrections to install and load commands	11.2.0	11.3.0
		SET(22)000173r2	47	1	F	Immediate / Error action test cases: various fixes	11.3.0	11.4.0
2022	SET-107	SET(22)000174	48		F	RFM test cases: various corrections	11.3.0	11.4.0
2022	SET-107	SET(22)000175	49		F	RAM test cases: checking application presence on the UICC-Terminal interface	11.3.0	11.4.0
2022	SET-107	SET(22)000176	50		F	Access Domain test cases: updated to exercise using FileView / SIMView	11.3.0	11.4.0
2022	SET-107	SET(22)000177	51		F	SET STATUS test case: using UICC-Terminal interface	11.3.0	11.4.0
2022	SET-107	SET(22)000178	52		F	Install, independency from PIN status test case: update to send Verify PIN on UICC-Terminal interface	11.3.0	11.4.0
2022	SET-107	SET(22)000179	53		F	SIM-related test cases: various corrections and improvements	11.3.0	11.4.0
2022		SET(22)000180	54		F	PUT KEY test cases: various fixes	11.3.0	11.4.0
2022	SET-107	SET(22)000181	55		F	GET STATUS test cases: corrections and improvements	11.3.0	11.4.0
2022	SET-107	SET(22)000182r1	56	1	F	Annex C.1: various corrections	11.3.0	11.4.0
		SET(22)000185	59		F	RAM test cases: various fixes	11.3.0	11.4.0
2022		SET(22)000186	60		D	INSTALL [for install] test cases: improved initial conditions text	11.3.0	11.4.0
		SET(22)000192	66		F	STORE DATA test cases: make FFS	11.3.0	11.4.0
		SET(22)000187	61		В	Update to Rel-12	11.4.0	12.0.0
		SET(22)000188r1	62	1	В	Update to Rel-13	12.0.0	13.0.0
		SET(22)000189	63		В	Update to Rel-14	13.0.0	14.0.0
2022	SET-107	SET(22)000190	64		В	Update to Rel-15	14.0.0	15.0.0

History

Document history		
V15.0.0	December 2022	Publication