## 3GPP TSG-T plenary meeting #19 Birmingham, UK, 12-14 March 2003

Source: T3

Title:

CRs to TS 31.102: Characteristics of the USIM Application

**Document for:** Approval

This document contains the following change requests:

T3-Doc	Spec	CR	Rev	Cat	Phase	Subject	Version- Current	Version- New	WI
T3-030188	31.102	130	1	D	Rel-6	Miscellaneous corrections on files	6.0.0	6.1.0	TEI
T3-030148	31.102	131	-	F		CR 31.102 Rel-4: Example for MMS connectivity parameters	4.7.0	4.8.0	TEI
T3-030149	31.102	132	-	A		CR 31.102 Rel-5: Example for MMS connectivity parameters	5.3.0	5.4.0	TEI
T3-030150	31.102	133	-	A		CR 31.102 Rel-6: Example for MMS connectivity parameters	6.0.0	6.1.0	TEI
T3-030177	31.102	134	-	F		CR to delete Elementary File EF_RPLMNAcT, in accordance with TP-020168 from TP#16 in Marco Island.	3.11.0	3.12.0	TEI
T3-030178	31.102	135	-	A		CR to delete Elementary File EF_RPLMNAcT, in accordance with TP-020168 from TP#16 in Marco Island.	4.7.0	4.8.0	TEI
T3-030179	31.102	136	-	A		CR to delete Elementary File EF_RPLMNAcT, in accordance with TP-020168 from TP#16 in Marco Island.	5.3.0	5.4.0	TEI
T3-030180	31.102	137	-	A		CR to delete Elementary File EFRPLMNAcT, in accordance with TP-020168 from TP#16 in Marco Island.	6.0.0	6.1.0	TEI
T3-030189	31.102	138	-	F	R99	CR to make EF-EXT1 optional in the USIM Phonebook	3.11.0	3.12.0	TEI
T3-030190	31.102	139	-	F	Rel-4	CR to make EF-EXT1 optional in the USIM Phonebook	4.7.0	4.8.0	TEI
T3-030191	31.102	140	-	F	Rel-5	CR to make EF-EXT1 optional in the USIM Phonebook	5.3.0	5.4.0	TEI
T3-030192	31.102	141	-	F	Rel-6	CR to make EF-EXT1 optional in the USIM Phonebook	6.0.0	6.1.0	TEI

Other comments:

ж

CHANGE REQUEST						CR-Form-v7						
ж -	<mark>ГS</mark>	<mark>31.102</mark>	CR	130	жrе	ev	1	Ħ	Current vers	ion:	6.0.0	ж
For <u>HELP</u> o	n u	sing this fo	m, see	bottom of thi	s page	e or l	ook	at th	e pop-up text	over	the X syn	nbols.
Proposed chan	ge a	affects:	JICC a	pps# <mark>X</mark>	M	E	Rac	dio A	ccess Networ	·k 📃	Core Ne	twork
Title:	ж	Miscellan	<mark>eous c</mark>	orrections on	files							
Source:	ж	T3										
Work item code	:: X	TEI							<i>Date:</i> ೫	11/	/02/2003	
Category:	ж	Use <u>one</u> of F (cor A (cor B (ade C (fun D (edi	rection) respond dition of ctional torial m planatio	ds to a correction feature), modification of f odification) ns of the above	on in ai feature	e)		eleas	2	the fc (GSN (Rele (Rele (Rele (Rele (Rele	I-6 bllowing rele M Phase 2) ease 1996) ease 1997) ease 1998) ease 1999) ease 4) ease 5) ease 6)	eases:

Reason for change: ೫	Miscellaneous corrections			
-				
Summary of change: ೫	Change DFgsm to Dfgsmaccess Delete references to DFsolsa and its files Add EFccp2 which was forgotten in figure			
Consequences if % not approved:	Misleading statements leading to confusion			
Clauses affected: #	4.3, 4.4.1, 4.7			
Other specs % affected:	Y       N         X       Other core specifications         X       Test specifications         X       O&M Specifications			

# 4.3 DFs at the USIM ADF (Application DF) Level

DFs may be present as child directories of USIM ADF. The following DFs are defined:

- DF<sub>PHONEBOOK</sub> '5F3A'.
- DF<sub>GSM-ACCESS</sub> ——'5F3B'.
- DF<sub>MExE</sub> '5F3C'.

(DF for application specific phonebook. This DF has the same structure as the  $DF_{PHONEBOOK}$  under  $DF_{TELECOM}$ ).

'5F70' is reserved for  $DF_{SoLSA}$ .

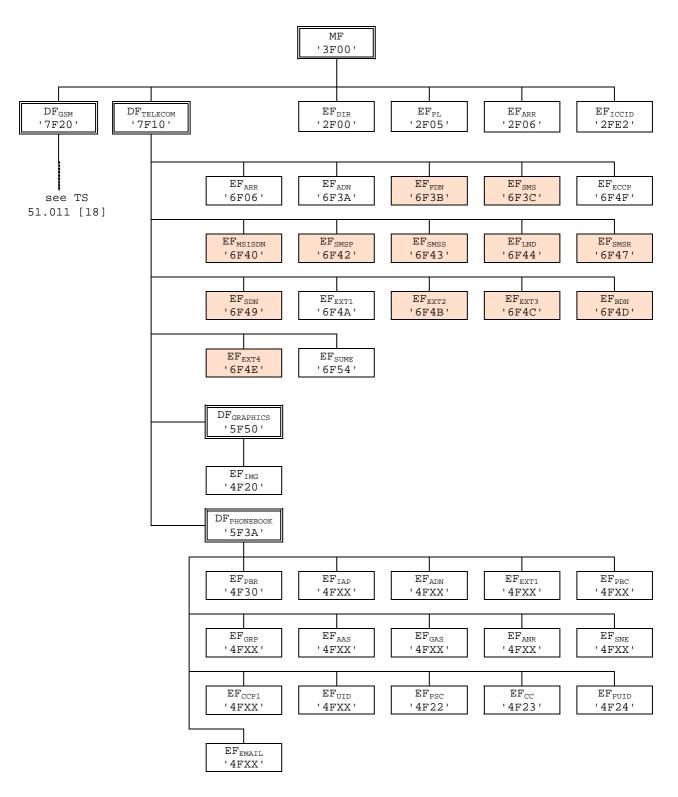
## 4.4 Contents of DFs at the USIM ADF (Application DF) level

## 4.4.1 VoidContents of files at the DF SoLSA level

<del>Void.</del>

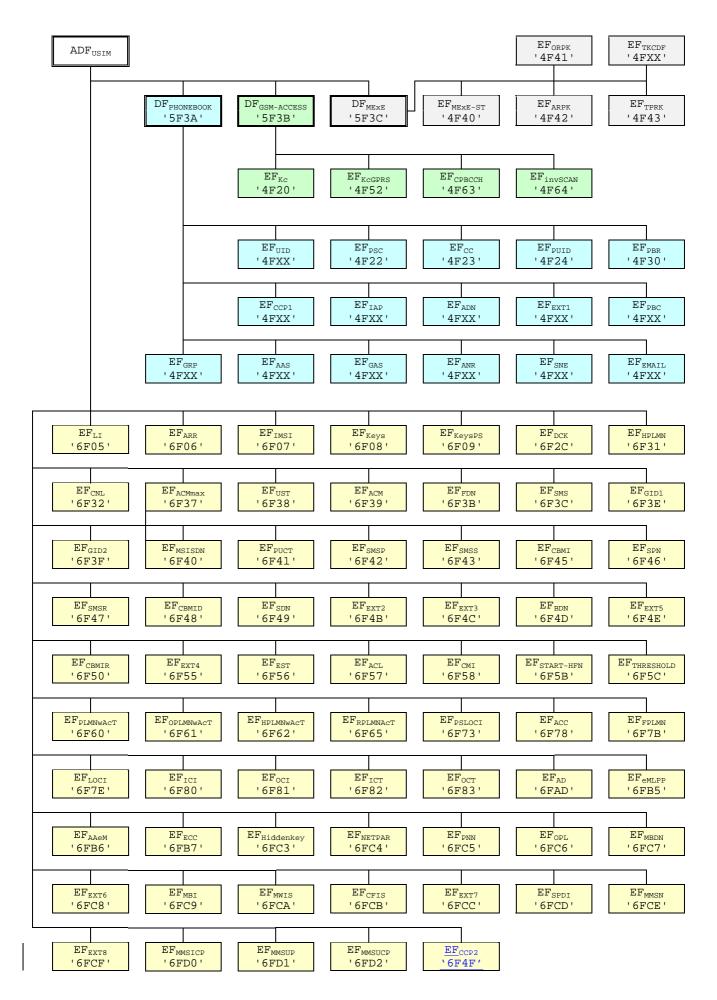
## 4.7 Files of USIM

This clause contains two figures depicting the file structure of the UICC and the  $ADF_{USIM}$ .  $ADF_{USIM}$  shall be selected using the AID and information in  $EF_{DIR}$ .



NOTE: Files under DF<sub>TELECOM</sub> with shaded background are defined in TS 51.011 [18].

### Figure 4.1: File identifiers and directory structures of UICC



## Figure 4.2: File identifiers and directory structures of USIM

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DF '5F70' is reserved for SoLSA. EF '4F30' (EF<sub>SAL</sub>) and EF '4F31' (EF<sub>SLL</sub>) are reserved under DF '5F70' (SoLSA).

	CHANGE REQUEST						
¥	31.102 CR	131	<b>-</b> ک	発 Current vei	rsion: <b>4.7.0</b>	ж	
For <u>HELP</u> on t	using this form, see	e bottom of this page	e or look at	the pop-up text	over the X syn	nbols.	
Proposed change	affects: UICC a	apps# <mark>X</mark> MI	E X Radic	Access Netwo	rk 📃 Core Ne	twork	
Title: #	<sup>6</sup> CR 31.102 Rel-4	: Example for MMS	connectivit	y parameters			
Source: ೫	в <mark>Т3</mark>						
Work item code: भ	f TEI			<i>Date:</i> ೫	14/02/2003		
Category: ೫	<ul> <li>B (addition of</li> <li>C (functional</li> <li>D (editorial m</li> </ul>	ds to a correction in a f feature), modification of feature odification) ons of the above categ	<del>)</del> )	2	Rel-4 the following rele (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5) (Release 6)	ases:	
Reason for change: # Discussions in T2 and T3 have shown that the current definitions regarding the storage of MMS connectivity parameters in the T2 and T3 specifications without an additional coding example would potentially result in severe interoperability							

	storage of MMS connectivity parameters in the T2 and T3 specifications without an additional coding example would potentially result in severe interoperabilily problems between terminals of different manufacturers when a UICC is moved from one terminal to another. Furthermore there is a potential problem with initial provsioning of MMS parameters on the UICC, as the format of the initial provisioning data may not be consistent on different UICCs.
	T3 and T2 have agreed during the joint T3/T2 session at the T3#26 meeting that an encoding example for the storage of the MMS Connectivity Information as depicted in this change request shall be added to the (U)SIM specifications (TS 31.102 and TS 51.011) in order to avoid misinterpretation.
Summary of change: ℜ	<ol> <li>addition of an new encoding example for MMS Connectivity Information in annex J.2.</li> <li>some minor editorial refinements for encoding example dealing with MMS User Preferences in annex J.1.</li> <li>update/addition of references to annex J.1 and J.2 in section 4.2.</li> </ol>
Consequences if भ not approved:	The current definition of how MMS Connectivity Information is stored in the (U)SIM is open to misinterpretation.

Clauses affected: % Chapter 4.2.69 and 4.2.70

Other specs affected:	Annex J * X Other core specifications * TS 51.011 X Test specifications X O&M Specifications
Other comments:	<u>ж</u>

### How to create CRs using this form:

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

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

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## 4.2.69 EF<sub>MMSICP</sub> (MMS Issuer Connectivity Parameters)

If service  $n^{\circ}52$  is "available", this file shall be present.

This EF contains values for Multimedia Messaging Connectivity Parameters as determined by the issuer, which can be used by the ME for MMS network connection. This file may contain one or more sets of Multimedia Messaging Issuer Connectivity Parameters. The first set of Multimedia Messaging Issuer Connectivity Parameters is used as the default set. Each set of Multimedia Messaging Issuer Connectivity Parameters may consist of one or more Interface to Core Network and Bearer information TLV objects, but shall contain only one MMS implementation TLV object, one MMS Relay/Server TLV object and one Gateway TLV object. The order of the Interface to Core Network and Bearer information, with the first TLV object having the highest priority.

Identifier: '6FD0'	Ś	Structure: Transparent		Optional
File Size: X <sub>1</sub> ++ X <sub>n</sub>	bytes	Upda	ate activity: l	ow
Access Conditions: READ UPDATE DEACTIVATE ACTIVATE	PIN ADM ADM ADM			
Bytes	D	escription	M/O	Length
1 to X <sub>1</sub>	MMS Connectivi object	ty Parameters TLV	М	X <sub>1</sub> bytes
$X_1$ +1 to $X_1$ + $X_2$	MMS Connectivi object	ity Parameters TLV	0	X <sub>2</sub> bytes
$X_1$ ++ $X_{n-1}$ +1 to $X_1$ ++ $X_n$	MMS Connectivi object	ity Parameters TLV	0	X <sub>n</sub> bytes

- MMS Connectivity Parameters tags

Description	Tag Value
MMS Connectivity Parameters Tag	'AB'
MMS Implementation Tag	'80'
MMS Relay/Server Tag	'81'
Interface to Core Network and Bearer Information Tag	'82'
GatewayTag	'83'

- MMS Connectivity Parameters contents

Description	Value	M/O	Length (bytes)

MMS Connectivity Parameters Tag	'AB'	М	1
Length	Note 1	М	Note 2
MMS Implementation Tag	'80'	М	1
Length	1	М	1
MMS Implementation Information		М	1
MMS Relay/Server Tag	'81'	М	1
Length	Х	М	Note 2
MMS Relay/Server Address		М	Х
1 <sup>st</sup> Interface to Core Network and	'82'	М	1
Bearer Information Tag (highest priority)			
Length	Y1	М	Note 2
1 <sup>st</sup> Interface to Core Network and		М	Y1
Bearer information			
2 <sup>nd</sup> Interface to Core Network and	'82'	М	1
Bearer Information Tag			
Length	Y2	M	Note 2
2 <sup>nd</sup> Interface to Core Network and		M	Y2
Bearer information			
N <sup>th</sup> Interface to Core Network and	'82'	М	1
Bearer Information Tag (lowest priority) Length	Y3	М	Note 2
N <sup>th</sup> Interface to Core Network and		M	Y3
Bearer information			
GatewayTag	'83'	0	1
Length	Z	0	Note 2
Gateway Information		0	Z
Note 1: This is the total size of the cons	structed TLV object	t	
Note 2: The length is coded according	to ISO/IEC 8825 [3	5]	

### - MMS Implementation Tag '80'

See section 4.2.67 for contents and coding.

- MMS Relay/server Tag '81'

Contents:

The MMS relay/server contains the address of the associated MMS relay/server.

Coding:

The MMS relay/server address is coded according to the guideline provided in 3GPP TS 23.140 [38].

- Interface to Core Network and Bearer Information Tag '82'

Contents:

The Interface to Core Network and Bearer Information may contain the following information to set up the bearer: Bearer, Address, Type of address, Speed, Call type, Authentication type, Authentication id, Authentication password.

Coding:

The coding is according to the guideline provided in 3GPP TS 23.140 [38].

- Gateway Tag '83'

Contents:

The Gateway may contain the following information; Address, Type of address, Port, Service, Authentication type, Authentication id and Authentication password.

Coding:

The coding is according to the guideline provided in 3GPP TS 23.140 [38].

Unused bytes shall be set to 'FF'.

An Example for the coding of these parameters can be found in Annex J.2.

## 4.2.70 EF<sub>MMSUP</sub> (MMS User Preferences)

If service n°52 is "available", this file shall be present.

This EF contains values for Multimedia Messaging Service User Preferences, which can be used by the ME for user assistance in preparation of mobile multimedia messages (e.g. default values for parameters that are often used).

Identifier: '6FD1'		Structure: Linear Fixed Optional		
Record Length: XI	oytes	Update activity: low		
Access Conditions: READ UPDATE DEACTIVATE ACTIVATE	PIN PIN ADM ADM			
Bytes	[	Description	M/O	Length
1 to X MMS L		erence TLV Objects	М	X bytes

### - MMS User Preference tags

Description	Tag Value
MMS Implementation Tag	'80'
MMS User preference profile name Tag	'81'
MMS User Preference information Tag	'82'

### MMS User Preference information

Description	Value	M/O	Length (bytes)
MMS Implementation Tag	'80'	М	1
Length	1	М	Note
MMS Implementation information		М	1
MMS User preference profile name Tag	'81'	М	1
Length	Х	М	Note
MMS User profile name		М	Х
MMS User Preference information Tag	'82'	М	1
Length	Y	М	Note
MMS User Preference information		М	Y
Note: The length is coded according to	D ISO/IEC 8825 [35	5]	

## - MMS Implementation Tag '80'

For contents and coding see 4.2.67

- MMS User preference profile name Tag '81'

### Contents:

- Alpha tagging of the MMS user preference profile.
- Coding:
  - this alpha-tagging shall use either:
  - the SMS default 7-bit coded alphabet as defined in TS 23.038 [5] with bit 8 set to 0. The alpha identifier shall be left justified.

or:

- one of the UCS2 coded options as defined in the annex of TS 31.101 [11].
- MMS User Preference information Tag '82'

Contents:

The following information elements may be coded; Sender Visibility, Delivery Report, Read-Reply, Priority, Time of Expiry and Earliest Delivery Time.

Coding:

Depending upon the MMS implementation as indicated in Tag '80'.

An Example for the coding of these parameters can be found in Annex J.1.

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# Annex J (informative): Example of MMS coding

# J.1 Coding example for MMS User Preferences

0x80 MMS Implementation Tag

0x01 (Length = "1")

0x01 (MMS implementation information = "(WAP")

**0x81** MMS User Preference Profile Name Tag

0x1C (Length = "28")

(profile name = "Christmas Card"; 14 characters, 28 Bytes)

0x82 MMS User Information Preference Information Tag

0x19 (Length = "25")

**0x14** 0x80 (visibility: <u>= "hide"; 2 Bytes</u>)

**0x06** 0x80 (delivery report: = "yes"; 2 Bytes)

**0x10** 0x80 (read-reply: <u>= "yes"; 2 Bytes</u>)

**0x0F** 0x81 (priority: <u>= "normal"; 2 Bytes</u>)

**0x07** 0x07 0x80 0x05 0x11 0x22 0x33 0x44 0x55 (Delivery-Time-Tag, Value-Length, Absolute-Token-Tag, Date-Value-Length, Date-Value; <u>9 Bytes</u>)

**0x08** 0x06 0x81 0x04 0x55 0x22 0x33 0x44 (Expiry Tag, Value-Length, Relative-Token-Tag, Delta-Second-Value-Length, Delta-Second-Value; <u>8</u> <u>Bytes</u>)

# J.2 Coding Example for MMS Issuer/User Connectivity Parameters

## **0xAB** MMS Connectivity Parameters Tag

0x9F (Length = "159")

0x80 MMS Implementation Tag

0x01 (Length = "1")

0x01 (MMS implementation information = "WAP"; 1 Byte)

0x81 MMS Relay/Server Tag

### 0x2E (Length = "46")

0x68 0x74 0x74 0x70 0x3A 0x2F 0x6D 0x6D 0x73 0x2D 0x6F 0x70 0x65 0x72 0x61 0x74 0x6F 0x72 0x2E 0x63 0x6F 0x6D (MMS Relay/Server information = "http://mms-operator.com"; 23 characters; 46 Bytes)

0x82 Interface to Core Network and Bearer Tag

0x32 (Length = "50")

**0x10** 0xAA (bearer = "GSM-CSD"; 2 Bytes)

**0x08** 0x2B 0x34 0x39 0x35 0x33 0x34 0x31 0x39 0x30 0x36 0x00 (address = "+495341906", 12 Bytes)

**0x09** 0x87 (type of address = "E164"; 2 Bytes)

**0x25** 0xC5 (speed = "autobauding"; 2 Bytes)

**0x0A** 0x90 (call type = "ANALOG\_MODEM"; 2 Bytes)

**0x0C** 0x9A (authentication type = "PAP"; 2 Bytes)

**0x0D** 0x64 0x75 0x6D 0x6D 0x79 0x5F 0x6E 0x61 0x6D 0x65 0x00 (authentication id = "dummy\_name"; 12 Bytes)

### 0x83 Gateway Tag

0x36 (Length = "54")

<u>0x20</u> 0x31 0x37 0x30 0x2E 0x31 0x38 0x37 0x2E 0x35 0x31 0x2E 0x33 0x00 (address = "170.187.51.3"; 14 Bytes)

**0x21** 0x85 (type of address = "IPv4"; 2 Bytes)

**0x23** 0x39 0x32 0x30 0x33 0x00 (port = "9203"; 6 Bytes)

**0x24** 0xCB (service = "CO-WSP"; 2 Bytes)

**0x19** 0x9C (authentication type = "HTTP BASIC"; 2 Bytes)

**0x1A** 0x64 0x75 0x6D 0x6D 0x79 0x5F 0x6E 0x61 0x6D 0x65 0x00 (authentication id = "dummy\_name"; 12 Bytes)

**0x1B** 0x64 0x75 0x6D 0x6D 0x79 0x5F 0x70 0x61 0x73 0x73 0x77 0x6F 0x72 0x64 0x00 (authentication pw = "dummy\_password"; 16 Bytes)

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CHANGE REQUEST							
¥	31.102 CR 132	# Current version: <b>5.3.0</b> #					
For <u>HELP</u> on u	using this form, see bottom of this page or look at a	the pop-up text over the					
Proposed change	<i>affects:</i> UICC apps <b>೫ Ⅹ</b> ME Ⅹ Radio	Access Network Core Network					
Title: #	CR 31.102 Rel-5: Example for MMS connectivity	/ parameters					
Source: ೫	З ТЗ						
Work item code: भ	3 TEI	<b>Date:</b> ೫ <mark>14/02/2003</mark>					
Category: ೫	<ul> <li>A</li> <li>Use <u>one</u> of the following categories:</li> <li>F (correction)</li> <li>A (corresponds to a correction in an earlier releated between the following (addition of feature),</li> <li>C (functional modification of feature)</li> <li>D (editorial modification)</li> <li>Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u>.</li> </ul>	Release: %Rel-5Use oneof the following releases:2(GSM Phase 2)ase)R96(Release 1996)R97(Release 1997)R98(Release 1998)R99(Release 1999)Rel-4(Release 4)Rel-5(Release 5)Rel-6(Release 6)					
Reason for chang	e: # Discussions in T2 and T3 have shown that storage of MMS connectivity parameters in an additional coding example would poten	n the T2 and T3 specifications without tially result in severe interoperability					

	storage of MMS connectivity parameters in the T2 and T3 specifications without an additional coding example would potentially result in severe interoperability problems between terminals of different manufacturers when a UICC is moved from one terminal to another. Furthermore there is a potential problem with initial provsioning of MMS parameters on the UICC, as the format of the initial provisioning data may not be consistent on different UICCs.
	T3 and T2 have agreed during the joint T3/T2 session at the T3#26 meeting that an encoding example for the storage of the MMS Connectivity Information as depicted in this change request shall be added to the (U)SIM specifications (TS 31.102 and TS 51.011) in order to avoid misinterpretation.
Summary of change: 策	<ol> <li>addition of an new encoding example for MMS Connectivity Information in annex J.2.</li> <li>some minor editorial refinements for encoding example dealing with MMS User Preferences in annex J.1.</li> <li>update/addition of references to annex J.1 and J.2 in section 4.2.</li> </ol>
Consequences if % not approved:	The current definition of how MMS Connectivity Information is stored in the (U)SIM is open to misinterpretation.

Clauses affected: % Chapter 4.2.69 and 4.2.70

Other specs affected:	Annex J Y     N       %     X       Other core specifications     %       X     Test specifications       X     O&M Specifications	
Other comments:	¥	

### How to create CRs using this form:

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

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

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## 4.2.69 EF<sub>MMSICP</sub> (MMS Issuer Connectivity Parameters)

If service n°52 is "available", this file shall be present.

This EF contains values for Multimedia Messaging Connectivity Parameters as determined by the issuer, which can be used by the ME for MMS network connection. This file may contain one or more sets of Multimedia Messaging Issuer Connectivity Parameters. The first set of Multimedia Messaging Issuer Connectivity Parameters is used as the default set. Each set of Multimedia Messaging Issuer Connectivity Parameters may consist of one or more Interface to Core Network and Bearer information TLV objects, but shall contain only one MMS implementation TLV object, one MMS Relay/Server TLV object and one Gateway TLV object. The order of the Interface to Core Network and Bearer information, with the first TLV object having the highest priority.

Identifier: '6FD0'	Ś	Structure: Transparent Optional		
File Size: X <sub>1</sub> ++ X <sub>n</sub>	bytes	Upda	ate activity: l	ow
Access Conditions: READ UPDATE DEACTIVATE ACTIVATE	PIN ADM ADM ADM			
Bytes	D	escription	M/O	Length
1 to X <sub>1</sub>	MMS Connectivi object	ty Parameters TLV	М	X <sub>1</sub> bytes
$X_1$ +1 to $X_1$ + $X_2$	MMS Connectivi object	ity Parameters TLV	0	X <sub>2</sub> bytes
$X_1$ ++ $X_{n-1}$ +1 to $X_1$ ++ $X_n$	MMS Connectivi object	ity Parameters TLV	0	X <sub>n</sub> bytes

- MMS Connectivity Parameters tags

Description	Tag Value
MMS Connectivity Parameters Tag	'AB'
MMS Implementation Tag	'80'
MMS Relay/Server Tag	'81'
Interface to Core Network and Bearer Information Tag	'82'
GatewayTag	'83'

- MMS Connectivity Parameters contents

Description	Value	M/O	Length (bytes)

MMS Connectivity Parameters Tag	'AB'	М	1
Length	Note 1	М	Note 2
MMS Implementation Tag	'80'	М	1
Length	1	М	1
MMS Implementation Information		М	1
MMS Relay/Server Tag	'81'	М	1
Length	Х	М	Note 2
MMS Relay/Server Address		М	Х
1 <sup>st</sup> Interface to Core Network and	'82'	М	1
Bearer Information Tag (highest priority)			
Length	Y1	М	Note 2
1 <sup>st</sup> Interface to Core Network and		М	Y1
Bearer information			
2 <sup>nd</sup> Interface to Core Network and	'82'	М	1
Bearer Information Tag			
Length	Y2	М	Note 2
2 <sup>nd</sup> Interface to Core Network and		М	Y2
Bearer information			
N <sup>th</sup> Interface to Core Network and	'82'	М	1
Bearer Information Tag (lowest priority)	2/0	N	Nata O
Length	Y3	M	Note 2
N <sup>th</sup> Interface to Core Network and		M	Y3
Bearer information	10.01		
GatewayTag	'83'	0	1
Length	Z	0	Note 2
Gateway Information		0	Z
Note 1: This is the total size of the cons			
Note 2: The length is coded according	to ISO/IEC 8825 [3	5]	

### - MMS Implementation Tag '80'

See section 4.2.67 for contents and coding.

- MMS Relay/server Tag '81'

Contents:

The MMS relay/server contains the address of the associated MMS relay/server.

Coding:

The MMS relay/server address is coded according to the guideline provided in 3GPP TS 23.140 [38].

- Interface to Core Network and Bearer Information Tag '82'

Contents:

The Interface to Core Network and Bearer Information may contain the following information to set up the bearer: Bearer, Address, Type of address, Speed, Call type, Authentication type, Authentication id, Authentication password.

Coding:

The coding is according to the guideline provided in 3GPP TS 23.140 [38].

- Gateway Tag '83'

Contents:

The Gateway may contain the following information; Address, Type of address, Port, Service, Authentication type, Authentication id and Authentication password.

Coding:

The coding is according to the guideline provided in 3GPP TS 23.140 [38].

Unused bytes shall be set to 'FF'.

An Example for the coding of these parameters can be found in Annex J.2.

## 4.2.70 EF<sub>MMSUP</sub> (MMS User Preferences)

If service n°52 is "available", this file shall be present.

This EF contains values for Multimedia Messaging Service User Preferences, which can be used by the ME for user assistance in preparation of mobile multimedia messages (e.g. default values for parameters that are often used).

Identifier: '6FD1'		Structure: Linear Fixed		Optional	
Record Length: X	bytes	es Update activity: low			
Access Conditions: READ UPDATE DEACTIVATE ACTIVATE	PIN PIN ADM ADM				
Bytes		Description		Length	
1 to X	MMS User Pre	MMS User Preference TLV Objects		X bytes	

### - MMS User Preference tags

Description	Tag Value
MMS Implementation Tag	'80'
MMS User preference profile name Tag	'81'
MMS User Preference information Tag	'82'

### MMS User Preference information

Description	Value	M/O	Length (bytes)
MMS Implementation Tag	'80'	М	1
Length	1	М	Note
MMS Implementation information		М	1
MMS User preference profile name Tag	'81'	М	1
Length	Х	М	Note
MMS User profile name		М	X
MMS User Preference information Tag	'82'	М	1
Length	Y	М	Note
MMS User Preference information		М	Y
Note: The length is coded according to	ISO/IEC 8825 [35	5]	

### - MMS Implementation Tag '80'

For contents and coding see 4.2.67

- MMS User preference profile name Tag '81'

### Contents:

- Alpha tagging of the MMS user preference profile.
- Coding:
  - this alpha-tagging shall use either:
  - the SMS default 7-bit coded alphabet as defined in TS 23.038 [5] with bit 8 set to 0. The alpha identifier shall be left justified.

or:

- one of the UCS2 coded options as defined in the annex of TS 31.101 [11].
- MMS User Preference information Tag '82'

Contents:

The following information elements may be coded; Sender Visibility, Delivery Report, Read-Reply, Priority, Time of Expiry and Earliest Delivery Time.

Coding:

Depending upon the MMS implementation as indicated in Tag '80'.

An Example for the coding of these parameters can be found in Annex J.1.

# 4.2.71 EF<sub>MMSUCP</sub> (MMS User Connectivity Parameters)

...

# Annex J (informative): Example of MMS coding

# J.1 Coding example for MMS User Preferences

0x80 MMS Implementation Tag

0x01 (Length = "1")

0x01 (MMS implementation information = "(WAP")

**0x81** MMS User Preference Profile Name Tag

0x1C (Length = "28")

(profile name = "Christmas Card"; 14 characters, 28 Bytes)

0x82 MMS User Information Preference Information Tag

0x19 (Length = "25")

**0x14** 0x80 (visibility: <u>= "hide"; 2 Bytes</u>)

**0x06** 0x80 (delivery report: = "yes"; 2 Bytes)

**0x10** 0x80 (read-reply: <u>= "yes"; 2 Bytes</u>)

**0x0F** 0x81 (priority: <u>= "normal"; 2 Bytes</u>)

**0x07** 0x07 0x80 0x05 0x11 0x22 0x33 0x44 0x55 (Delivery-Time-Tag, Value-Length, Absolute-Token-Tag, Date-Value-Length, Date-Value; <u>9 Bytes</u>)

**0x08** 0x06 0x81 0x04 0x55 0x22 0x33 0x44 (Expiry Tag, Value-Length, Relative-Token-Tag, Delta-Second-Value-Length, Delta-Second-Value; <u>8</u> <u>Bytes</u>)

# J.2 Coding Example for MMS Issuer/User Connectivity Parameters

## **0xAB** MMS Connectivity Parameters Tag

0x9F (Length = "159")

0x80 MMS Implementation Tag

0x01 (Length = "1")

0x01 (MMS implementation information = "WAP"; 1 Byte)

0x81 MMS Relay/Server Tag

### 0x2E (Length = "46")

0x68 0x74 0x74 0x70 0x3A 0x2F 0x6D 0x6D 0x73 0x2D 0x6F 0x70 0x65 0x72 0x61 0x74 0x6F 0x72 0x2E 0x63 0x6F 0x6D (MMS Relay/Server information = "http://mms-operator.com"; 23 characters; 46 Bytes)

0x82 Interface to Core Network and Bearer Tag

0x32 (Length = "50")

**0x10** 0xAA (bearer = "GSM-CSD"; 2 Bytes)

**0x08** 0x2B 0x34 0x39 0x35 0x33 0x34 0x31 0x39 0x30 0x36 0x00 (address = "+495341906", 12 Bytes)

**0x09** 0x87 (type of address = "E164"; 2 Bytes)

**0x25** 0xC5 (speed = "autobauding"; 2 Bytes)

**0x0A** 0x90 (call type = "ANALOG\_MODEM"; 2 Bytes)

**0x0C** 0x9A (authentication type = "PAP"; 2 Bytes)

**0x0D** 0x64 0x75 0x6D 0x6D 0x79 0x5F 0x6E 0x61 0x6D 0x65 0x00 (authentication id = "dummy\_name"; 12 Bytes)

### 0x83 Gateway Tag

0x36 (Length = "54")

**0x20** 0x31 0x37 0x30 0x2E 0x31 0x38 0x37 0x2E 0x35 0x31 0x2E 0x33 0x00 (address = "170.187.51.3"; 14 Bytes)

**0x21** 0x85 (type of address = "IPv4"; 2 Bytes)

**0x23** 0x39 0x32 0x30 0x33 0x00 (port = "9203"; 6 Bytes)

**0x24** 0xCB (service = "CO-WSP"; 2 Bytes)

**0x19** 0x9C (authentication type = "HTTP BASIC"; 2 Bytes)

**0x1A** 0x64 0x75 0x6D 0x6D 0x79 0x5F 0x6E 0x61 0x6D 0x65 0x00 (authentication id = "dummy\_name"; 12 Bytes)

**0x1B** 0x64 0x75 0x6D 0x6D 0x79 0x5F 0x70 0x61 0x73 0x73 0x77 0x6F 0x72 0x64 0x00 (authentication pw = "dummy\_password"; 16 Bytes)

. . .

									CR-Form-v7
CHANGE REQUEST									
ж	3	<mark>81.102</mark>	CR 13	3		* <b>-</b> *	Current ver	sion: 6.0	<b>.0</b> <sup>ж</sup>
For <u>HELP</u> of	on usir	ng this for	m, see bott	om of this pa	ge or lo	ook at the	pop-up text	over the # s	symbols.
Proposed chan	ae aff	ects: l	JICC apps	€ <mark>X</mark> N	/E X	Radio Ac	cess Networ	k Core	Network
	<b>J</b> • •		nee oppos		=				
Title:	жC	R 31.102	Rel-6: Exa	mple for MMS	S conn	ectivity pa	arameters		
						,			
Source:	ж -	T3							
Work item code	e: Ж -	TEI					Date: ೫	14/02/2003	3
Category:	Ж /						Release: #		
	U		the following	categories:				the following i	
		F (corr		o correction in	on oorli	or roloooo	2	(GSM Phase	
			lition of featu	a correction in a	an ean	er reiease	) R96 R97	(Release 199 (Release 199	
				ication of featu	ro)		R98	(Release 199	
			orial modific		10)		R99	(Release 199	
	D			the above cate	annies	can	Rel-4	(Release 4)	0)
			3GPP TR 21		gonoo	oun	Rel-5	(Release 5)	
			<u></u>	<u></u> .			Rel-6	(Release 6)	
								. ,	
Reason for cha	nge:	H Disci	ussions in T	2 and T3 hav	/e shov	vn that th	e current de	initions rega	rding the
	-			connectivity					
				ding example					
				en terminals					

problems between terminals of different manufacturers when a UICC is moved from one terminal to another. Furthermore there is a potential problem with initial provsioning of MMS parameters on the UICC, as the format of the initial provisioning data may not be consistent on different UICCs.
T3 and T2 have agreed during the joint T3/T2 session at the T3#26 meeting that an encoding example for the storage of the MMS Connectivity Information as depicted in this change request shall be added to the (U)SIM specifications (TS 31.102 and TS 51.011) in order to avoid misinterpretation.
<ol> <li>addition of an new encoding example for MMS Connectivity Information in annex J.2.</li> </ol>
<ol> <li>some minor editorial refinements for encoding example dealing with MMS User Preferences in annex J.1.</li> </ol>
3.) update/addition of references to annex J.1 and J.2 in section 4.2.
The current definition of how MMS Connectivity Information is stored in the (U)SIM is open to misinterpretation.

Clauses affected: % Chapter 4.2.69, 4.2.70 and Annex J

Other specs affected:	ж	Y	N X X X	Other core specifications Test specifications O&M Specifications	Ж	
Other comments:	ж					

L

### How to create CRs using this form:

I

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

- 1) Fill out the above form. The symbols above marked **#** contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

#### . . .

## 4.2.69 EF<sub>MMSICP</sub> (MMS Issuer Connectivity Parameters)

If service n°52 is "available", this file shall be present.

This EF contains values for Multimedia Messaging Connectivity Parameters as determined by the issuer, which can be used by the ME for MMS network connection. This file may contain one or more sets of Multimedia Messaging Issuer Connectivity Parameters. The first set of Multimedia Messaging Issuer Connectivity Parameters is used as the default set. Each set of Multimedia Messaging Issuer Connectivity Parameters may consist of one or more Interface to Core Network and Bearer information TLV objects, but shall contain only one MMS implementation TLV object, one MMS Relay/Server TLV object and one Gateway TLV object. The order of the Interface to Core Network and Bearer information, with the first TLV object having the highest priority.

Identifier: '6FD0'	Ś	Structure: Transparent Optional				
File Size: X <sub>1</sub> ++ X <sub>n</sub>	bytes	Upda	ate activity: l	ow		
Access Conditions: READ UPDATE DEACTIVATE ACTIVATE	PIN ADM ADM ADM					
Bytes	D	escription	M/O	Length		
1 to X <sub>1</sub>	MMS Connectivi object	ty Parameters TLV	М	X <sub>1</sub> bytes		
$X_1$ +1 to $X_1$ + $X_2$	MMS Connectivi object	ity Parameters TLV	0	X <sub>2</sub> bytes		
$X_1$ ++ $X_{n-1}$ +1 to $X_1$ ++ $X_n$	MMS Connectivi object	ity Parameters TLV	0	X <sub>n</sub> bytes		

- MMS Connectivity Parameters tags

Description	Tag Value
MMS Connectivity Parameters Tag	'AB'
MMS Implementation Tag	'80'
MMS Relay/Server Tag	'81'
Interface to Core Network and Bearer Information Tag	'82'
GatewayTag	'83'

- MMS Connectivity Parameters contents

Description	Value	M/O	Length (bytes)

MMS Connectivity Parameters Tag	'AB'	М	1
Length	Note 1	М	Note 2
MMS Implementation Tag	'80'	М	1
Length	1	М	1
MMS Implementation Information		М	1
MMS Relay/Server Tag	'81'	М	1
Length	Х	М	Note 2
MMS Relay/Server Address		М	Х
1 <sup>st</sup> Interface to Core Network and	'82'	М	1
Bearer Information Tag (highest priority)			
Length	Y1	М	Note 2
1 <sup>st</sup> Interface to Core Network and		М	Y1
Bearer information			
2 <sup>nd</sup> Interface to Core Network and	'82'	М	1
Bearer Information Tag			
Length	Y2	M	Note 2
2 <sup>nd</sup> Interface to Core Network and		M	Y2
Bearer information			
N <sup>th</sup> Interface to Core Network and	'82'	М	1
Bearer Information Tag (lowest priority) Length	Y3	М	Note 2
N <sup>th</sup> Interface to Core Network and		M	Y3
Bearer information			
GatewayTag	'83'	0	1
Length	Z	0	Note 2
Gateway Information		0	Z
Note 1: This is the total size of the cons	structed TLV object	t	
Note 2: The length is coded according	to ISO/IEC 8825 [3	5]	

### - MMS Implementation Tag '80'

See section 4.2.67 for contents and coding.

- MMS Relay/server Tag '81'

Contents:

The MMS relay/server contains the address of the associated MMS relay/server.

Coding:

The MMS relay/server address is coded according to the guideline provided in 3GPP TS 23.140 [38].

- Interface to Core Network and Bearer Information Tag '82'

Contents:

The Interface to Core Network and Bearer Information may contain the following information to set up the bearer: Bearer, Address, Type of address, Speed, Call type, Authentication type, Authentication id, Authentication password.

Coding:

The coding is according to the guideline provided in 3GPP TS 23.140 [38].

- Gateway Tag '83'

Contents:

The Gateway may contain the following information; Address, Type of address, Port, Service, Authentication type, Authentication id and Authentication password.

Coding:

The coding is according to the guideline provided in 3GPP TS 23.140 [38].

Unused bytes shall be set to 'FF'.

An Example for the coding of these parameters can be found in Annex J.2.

## 4.2.70 EF<sub>MMSUP</sub> (MMS User Preferences)

If service n°52 is "available", this file shall be present.

This EF contains values for Multimedia Messaging Service User Preferences, which can be used by the ME for user assistance in preparation of mobile multimedia messages (e.g. default values for parameters that are often used).

Identifier: '6FD1'		Structure: Linear Fixed Optional		
Record Length: X	bytes	Upda	te activity: I	ow
Access Conditions: READ UPDATE DEACTIVATE ACTIVATE	PIN PIN ADM ADM			
Bytes		Description	M/O	Length
1 to X	MMS User Pre	ference TLV Objects	М	X bytes

### - MMS User Preference tags

Description	Tag Value
MMS Implementation Tag	'80'
MMS User preference profile name Tag	'81'
MMS User Preference information Tag	'82'

### MMS User Preference information

Description	Value	M/O	Length (bytes)
MMS Implementation Tag	'80'	М	1
Length	1	М	Note
MMS Implementation information		М	1
MMS User preference profile name Tag	'81'	М	1
Length	Х	М	Note
MMS User profile name		М	Х
MMS User Preference information Tag	'82'	М	1
Length	Y	М	Note
MMS User Preference information		М	Y
Note: The length is coded according to	D ISO/IEC 8825 [35	]	

### - MMS Implementation Tag '80'

For contents and coding see 4.2.67

- MMS User preference profile name Tag '81'

```
Contents:
```

- Alpha tagging of the MMS user preference profile.
- Coding:
  - this alpha-tagging shall use either:
  - the SMS default 7-bit coded alphabet as defined in TS 23.038 [5] with bit 8 set to 0. The alpha identifier shall be left justified.

or:

- one of the UCS2 coded options as defined in the annex of TS 31.101 [11].
- MMS User Preference information Tag '82'

Contents:

The following information elements may be coded; Sender Visibility, Delivery Report, Read-Reply, Priority, Time of Expiry and Earliest Delivery Time.

Coding:

Depending upon the MMS implementation as indicated in Tag '80'.

An Example for the coding of these parameters can be found in Annex J.1.

# 4.2.71 EF<sub>MMSUCP</sub> (MMS User Connectivity Parameters)

...

# Annex J (informative): Example of MMS coding

# J.1 Coding example for MMS User Preferences

0x80 MMS Implementation Tag

0x01 (Length = "1")

0x01 (MMS implementation information = "(WAP")

**0x81** MMS User Preference Profile Name Tag

0x1C (Length = "28")

(profile name = "Christmas Card"; 14 characters, 28 Bytes)

0x82 MMS User Information Preference Information Tag

0x19 (Length = "25")

**0x14** 0x80 (visibility: <u>= "hide"; 2 Bytes</u>)

**0x06** 0x80 (delivery report: = "yes"; 2 Bytes)

**0x10** 0x80 (read-reply: <u>= "yes"; 2 Bytes</u>)

**0x0F** 0x81 (priority: <u>= "normal"; 2 Bytes</u>)

**0x07** 0x07 0x80 0x05 0x11 0x22 0x33 0x44 0x55 (Delivery-Time-Tag, Value-Length, Absolute-Token-Tag, Date-Value-Length, Date-Value; <u>9 Bytes</u>)

**0x08** 0x06 0x81 0x04 0x55 0x22 0x33 0x44 (Expiry Tag, Value-Length, Relative-Token-Tag, Delta-Second-Value-Length, Delta-Second-Value; <u>8</u> <u>Bytes</u>)

# J.2 Coding Example for MMS Issuer/User Connectivity Parameters

## **0xAB** MMS Connectivity Parameters Tag

0x9F (Length = "159")

0x80 MMS Implementation Tag

0x01 (Length = "1")

0x01 (MMS implementation information = "WAP"; 1 Byte)

0x81 MMS Relay/Server Tag

### 0x2E (Length = "46")

0x68 0x74 0x74 0x70 0x3A 0x2F 0x6D 0x6D 0x73 0x2D 0x6F 0x70 0x65 0x72 0x61 0x74 0x6F 0x72 0x2E 0x63 0x6F 0x6D (MMS Relay/Server information = "http://mms-operator.com"; 23 characters; 46 Bytes)

0x82 Interface to Core Network and Bearer Tag

0x32 (Length = "50")

**0x10** 0xAA (bearer = "GSM-CSD"; 2 Bytes)

**0x08** 0x2B 0x34 0x39 0x35 0x33 0x34 0x31 0x39 0x30 0x36 0x00 (address = "+495341906", 12 Bytes)

**0x09** 0x87 (type of address = "E164"; 2 Bytes)

**0x25** 0xC5 (speed = "autobauding"; 2 Bytes)

**0x0A** 0x90 (call type = "ANALOG\_MODEM"; 2 Bytes)

**0x0C** 0x9A (authentication type = "PAP"; 2 Bytes)

**0x0D** 0x64 0x75 0x6D 0x6D 0x79 0x5F 0x6E 0x61 0x6D 0x65 0x00 (authentication id = "dummy\_name"; 12 Bytes)

**0x0E** 0x64 0x75 0x6D 0x6D 0x79 0x5F 0x70 0x61 0x73 0x73 0x77 0x6F 0x72 0x64 0x00 (authentication pw = "dummy password"; 16 Bytes)

### 0x83 Gateway Tag

0x36 (Length = "54")

<u>0x20</u> 0x31 0x37 0x30 0x2E 0x31 0x38 0x37 0x2E 0x35 0x31 0x2E 0x33 0x00 (address = "170.187.51.3"; 14 Bytes)

**0x21** 0x85 (type of address = "IPv4"; 2 Bytes)

**0x23** 0x39 0x32 0x30 0x33 0x00 (port = "9203"; 6 Bytes)

**0x24** 0xCB (service = "CO-WSP"; 2 Bytes)

**0x19** 0x9C (authentication type = "HTTP BASIC"; 2 Bytes)

**0x1A** 0x64 0x75 0x6D 0x6D 0x79 0x5F 0x6E 0x61 0x6D 0x65 0x00 (authentication id = "dummy\_name"; 12 Bytes)

**0x1B** 0x64 0x75 0x6D 0x6D 0x79 0x5F 0x70 0x61 0x73 0x73 0x77 0x6F 0x72 0x64 0x00 (authentication pw = "dummy\_password"; 16 Bytes)

. . .

## *Tdoc* **#***T3-030177*

	•							
		CHAN		UES	ST			CR-Form-v7
¥	31.102	CR <mark>134</mark>	ж <b>ге</b> v	<b>_</b> 3	⊭ Cι	urrent vers	<sup>ion:</sup> 3.11.	<mark>0</mark> <sup>ж</sup>
For <u>HELP</u> on L	ising this fo	rm, see bottom	of this page of	<sup>.</sup> look at	t the po	op-up text	over the # s	ymbols.
Proposed change	affects:	UICC apps೫ <mark>Х</mark>	ME	<	o Acce	ess Networ	k Core N	Vetwork
<i>Title:</i> ⊮	CR to de in Marco	lete Elementary Island.	File EF <sub>RPLMNA</sub>	<sub>ct,</sub> in acc	cordar	nce with T	P-020168 from	n TP#16
Source: #	TSG-T3							
Work item code: \	TEI					<i>Date:</i> ೫	13/02/2003	
Category: ₩	F (co A (co B (ad C (fui D (co Detailed ex	the following cate rrection) rresponds to a co dition of feature), nctional modification itorial modification planations of the 3GPP <u>TR 21.900</u>	rrection in an ea ion of feature) n) above categorie		l	elease: % Use <u>one</u> of 2 R96 R97 R98 R99 Rel-4 Rel-5 Rel-6	R99 the following re (GSM Phase 2 (Release 1996 (Release 1995 (Release 1995 (Release 4) (Release 5) (Release 6)	2) 5) 7) 3)
Reason for change	spe that follo CRs	as been identifie cification, and T T3 can delete to wing regarding were presented ed for the next (	P#16 wrote an he file from the the LS: "Notec d to this meeting	LS to C specifi I. CN1 a ng yet. (	CN1 in ication agreed CRs fr	documen s. CN1 m the propo om interes	t TP-020168 inutes state to sal in princip sted companie	requesting he le but no es were

	<ul> <li>that 13 can delete the file from the specifications. CN1 minutes state the following regarding the LS: "Noted. CN1 agreed the proposal in principle but no CRs were presented to this meeting yet. CRs from interested companies were invited for the next CN1 meeting. TSG-T would like to delete USIM file RPLMN last used access technology since it seems to be needed only for GSM compact and the definition is incorrect anyway. If this is agreed then the outcome is that CN1 must change 23.122 to move this information storage from USIM to ME memory."</li> <li>The LS to CN1 noted that there may a corresponding change to TS 23.122.</li> <li>The FIDs 4F23 and 4F24 are assigned to the CC and PUID files respectively and shall not be used by another file.</li> <li>DF<sub>USIM</sub> is incorrect, it must read ADF<sub>USIM</sub>.</li> </ul>
Summary of change: ೫	The references to $EF_{RPLMNAcT}$ are deleted everywhere in the specification, and the values of the file identifiers are set to "reserved, not to be used". Change FID of GRP and GRP1. All references to $DF_{USIM}$ are change to $ADF_{USIM}$ .
Consequences if % not approved:	Inconsistencies within the specification, leading to confusion and misinterpretation.
Clauses affected: Ж	4.2.8, 4.2.56, 4.4.2, 4.6.2,4.7, 5.1.1.2, 5.1.2.2, 5.3.2.2, Annex A, Annex E, Annex G, Annex H1

Other specs affected:	ж	YX	N X X	Other core specifications # Test specifications O&M Specifications	TS 11.11, TS 51.011, TS 23.122
Other comments:	ж				

# 4.2.8 EF<sub>UST</sub> (USIM Service Table)

This EF indicates which services are available. If a service is not indicated as available in the USIM, the ME shall not select this service.

Identifier: '6F38'		Structure: transparent			Mandatory
SFI: '04'					
File size: X bytes, X >= 1		Update activity: low			
Access Condi READ UPDA DEAC ACTIV	TE TIVATE	PIN ADM ADM ADM			
Bytes		Descriptio	n	M/O	Length
1	Services nº1 to nº8			М	1 byte
2	Services n°9 to n°16			0	1 byte
3	Services n°17 to n°24			0	1 byte
4	Services n°25 to n°32			0	1 byte
etc.					
Х	Services n°(8X-7) to n°(8X)			0	1 byte

-Services

beivices		
Contents:	Service n°1:	Local Phone Book
	Service n°2:	Fixed Dialling Numbers (FDN)
	Service n°3:	Extension 2
	Service n°4:	Service Dialling Numbers (SDN)
	Service n°5:	Extension3
	Service n°6:	Barred Dialling Numbers (BDN)
	Service n°7:	Extension4
	Service n°8:	Outgoing Call Information (OCI and OCT)
	Service n°9:	Incoming Call Information (ICI and ICT)
	Service n°10:	Short Message Storage (SMS)
	Service n°11:	Short Message Status Reports (SMSR)
	Service n°12:	Short Message Service Parameters (SMSP)
	Service n°13:	Advice of Charge (AoC)
	Service n°14:	Capability Configuration Parameters (CCP)
	Service n°15:	Cell Broadcast Message Identifier
	Service n°16:	Cell Broadcast Message Identifier Ranges
	Service n°17:	Group Identifier Level 1
	Service n°18:	Group Identifier Level 2
	Service n°19:	Service Provider Name
	Service n°20:	User controlled PLMN selector with Access Technology
	Service n°21:	MSISDN
	Service n°22:	Image (IMG)
	Service n°23:	Not used (reserved for SoLSA)
	Service n°24:	Enhanced Multi-Level Precedence and Pre-emption Service
	Service n°25:	Automatic Answer for eMLPP
	Service n°26:	RFU
	Service n°27:	GSM Access
	Service n°28:	Data download via SMS-PP
	Service n°29:	Data download via SMS-CB
	Service n°30:	Call Control by USIM
	Service n°31:	MO-SMS Control by USIM
	Service n°32:	RUN AT COMMAND command
	Service n°33:	shall be set to '1'
	Service n°34:	Enabled Services Table
	Service n°35:	APN Control List (ACL)
	Service n°36:	Depersonalisation Control Keys
	Service n°37:	Co-operative Network List
	Service n°38:	GSM security context
	Service n°39:	CPBCCH Information
	Service n°40:	Investigation Scan
	Service n°41:	MExE
	Service n°42:	Operator controlled PLMN selector with Access Technology
	Service n°43:	HPLMN selector with Access Technology
	Service n°44:	Extension 5
	Service n°45:	reserved for use in the release 5 version of the present document
	Service n°46:	reserved for use in the release 5 version of the present document
	Service n°47:	reserved for use in the release 5 version of the present document
	Service n°48:	reserved for use in the release 5 version of the present document
	Service n°49:	reserved for use in the release 5 version of the present document
	Service n°50:	Reserved and shall not be used RPLMN Last used Access Technology

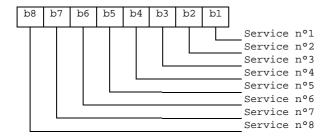
The EF shall contain at least one byte. Further bytes may be included, but if the EF includes an optional byte, then it is mandatory for the EF to also contain all bytes before that byte. Other services are possible in the future and will be coded on further bytes in the EF. The coding falls under the responsibility of the 3GPP.

#### Coding:

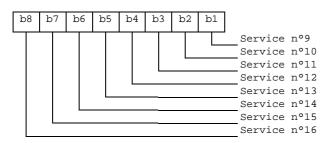
- 1 bit is used to code each service:
  - bit = 1: service available;
  - bit = 0: service not available.
- Service available means that the USIM has the capability to support the service and that the service is available for the user of the USIM unless the service is identified as "disabled" in  $EF_{EST}$ . Service not available means that the service shall not be used by the USIM user, even if the USIM has the capability to support the service.

First byte:

CR page 5



Second byte:



etc.

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## 4.2.56 VoidEF<sub>RPLMNAct</sub> (RPLMN Last used Access Technology)

This EF contains the last used access technology for the Registered PLMN, RPLMN. (see TS 23.122 [31]). This EF shall contain only one access technology.

NOTE: One access technology means that only one bit is set in the entire field.

Identific	Identifier: '6F65'		Structure: transparent		<del>Optional</del>
	<del>SFI: '18'</del>				
File size: 2+X bytes			Update activity: High		
Access Conditi	ons:				
READ		PIN			
		PIN			
		ADM			
<del>Bytes</del>	Description		<del>M/O</del>	Length	
<del>1 to 2</del>	Access Technology of RPLMN			М	<del>2 bytes</del>
<del>3 to 2+X</del>	- <del>RFU</del>			θ	X bytes

Access Technology

Coding:

<u>See EF<sub>PLMNwAcT</sub> for coding.</u>

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## 4.4.2 Contents of files at the DF PHONEBOOK level

The UICC may contain a global phonebook, or application specific phonebooks, or both in parallel. When both phonebook types co-exist, they are independent and no data is shared. In this case, it shall be possible for the user to select which phonebook the user would like to access.

It is recommended that the terminal searches for the global phonebook located under  $DF_{TELECOM}$  as its presence is not indicated anywhere in the USIM application.

The global phonebook is located in  $DF_{PHONEBOOK}$  under  $DF_{TELECOM}$ . Each specific USIM application phonebook is located in  $DF_{PHONEBOOK}$  of its respective Application <u>A</u>DF<sub>USIM</sub>. The organisation of files in  $DF_{PHONEBOOK}$  under <u>A</u>DF<sub>USIM</sub> and under DF <sub>TELECOM</sub> follows the same rules. Yet  $DF_{PHONEBOOK}$  under <u>A</u>DF<sub>USIM</sub> may contain a different set of files than  $DF_{PHONEBOOK}$  under DF<sub>TELECOM</sub>. All phonebook related EFs are located under their respective DF<sub>PHONEBOOK</sub>. USIM specific phonebooks are dedicated to application specific entries. Each application specific phonebook is protected by the application PIN.

 $EF_{ADN}$  and  $EF_{PBR}$  shall always be present if the  $DF_{Phonebook}$  is present. If any phonebook file other than  $EF_{ADN}$  or  $EF_{EXT1}$ , is used, then  $EF_{PBC}$  shall be present.

If a GSM application resides on the UICC, the EFs ADN and EXT1 from one  $DF_{PHONEBOOK}$  (defined at GSM application installation) are mapped to  $DF_{TELECOM}$ . Their file IDs are specified in TS 51.011 [18], i.e.  $EF_{ADN} = '6F3A'$  and  $EF_{EXT1} = '6F4A'$ , respectively.

If the UICC is inserted into a terminal accessing the ADN and EXT1 files under  $DF_{TELECOM}$ ; and a record in these files has been updated, a flag in the corresponding entry control information in the  $EF_{PBC}$  is set from 0 to 1 by the UICC. If the UICC is later inserted into a terminal that supports the 3G phonebook, the terminal shall check the flag in  $EF_{PBC}$  and if this flag is set, shall update the  $EF_{CC}$ , and then reset the flag. A flag set in  $EF_{PBC}$  results in a full synchronisation of the phonebook between an external entity and the UICC (if synchronisation is requested).

The EF structure related to the public phonebook is located under  $DF_{PHONEBOOK}$  in  $DF_{TELECOM}$ . A USIM specific phonebook may exist for application specific entries. The application specific phonebook is protected by the application PIN. The organisation of files in the application specific phonebook follows the same rules as the one specified for the public phone book under  $DF_{TELECOM}$ . The application specific phonebook may contain a different set of files than the one in the public area under  $DF_{TELECOM}$ .

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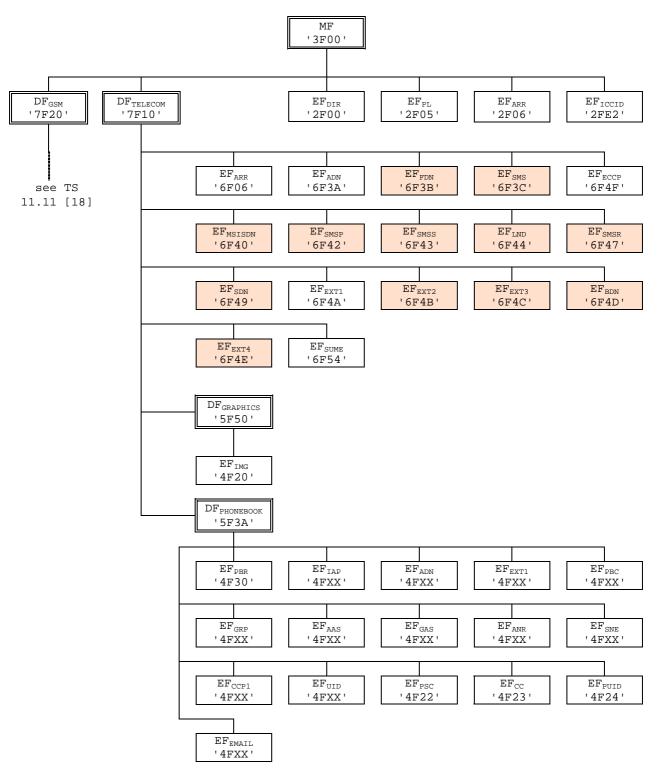
## 4.6.2 Contents of files at the DF<sub>PHONEBOOK</sub> under the DF<sub>TELECOM</sub>

This DF has the same structure as  $DF_{PHONEBOOK}$  under the <u>A</u>DF<sub>USIM</sub>.

NEXT REVISED SECTION

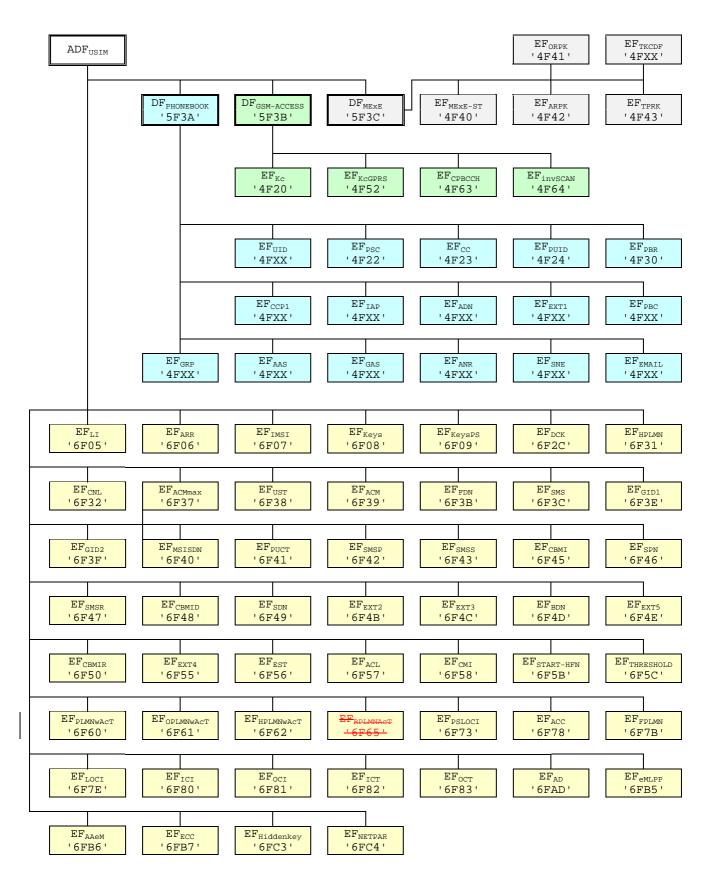
## 4.7 Files of USIM

This clause contains two figures depicting the file structure of the UICC and the  $ADF_{USIM}$ .  $ADF_{USIM}$  shall be selected using the AID and information in  $EF_{DIR}$ .



NOTE: Files under DF<sub>TELECOM</sub> with shaded background are defined in TS 11.11 [18].

Figure 4.1: File identifiers and directory structures of UICC



#### Figure 4.2: File identifiers and directory structures of USIM

DF '5F70' is reserved for SoLSA. EF '4F30' (EF<sub>SAL</sub>) and EF '4F31' (EF<sub>SLL</sub>) are reserved under DF '5F70' (SoLSA).

#### 5.1.1.2 USIM initialisation

The ME requests the emergency call codes. For service requirements, see TS 22.101 [24].

The ME requests the Language Indication. The preferred language selection shall always use the  $EF_{LI}$  in preference to the  $EF_{PL}$  at the MF unless any of the following conditions applies:

- if the  $EF_{LI}$  has the value 'FFFF' in its highest priority position, then the preferred language selection shall be the language preference in the  $EF_{PL}$  at the MF level according the procedure defined in TS 31.101[11];
- if the ME does not support any of the language codes indicated in  $EF_{LI}$ , or if  $EF_{LI}$  is not present, then the language selection shall be as defined in  $EF_{PL}$  at the MF level according the procedure defined in TS 31.101[11];
- if neither the languages of  $EF_{LI}$  nor  $EF_{PL}$  are supported by the terminal, then the terminal shall use its own internal default selection.

The ME then runs the user verification procedure. If the procedure is not performed successfully, the USIM initialisation stops.

The ME performs the administrative information request.

The ME performs the USIM Service Table request.

The ME performs the Enabled Services Table Request.

In case FDN is enabled, an ME which does not support FDN shall allow emergency calls but shall not allow MO-CS calls and MO-SMS.

If BDN is enabled, an ME which does not support Call Control shall allow emergency calls but shall not allow MO-CS calls.

If ACL is enabled, an ME which does not support ACL shall not send any APN to the network.

If all these procedures have been performed successfully then 3G session shall start. In all other cases 3G session shall not start.

Afterwards, the ME runs the following procedures if the ME and the USIM support the related services:

- IMSI request.
- Access control information request.
- HPLMN search period request.
- HPLMN selector with Access Technology request;
- User controlled PLMN selector with Access Technology request;
- Operator controlled PLMN selector with Access Technology request;
- GSM initialisation requests.
- Location Information request for CS-and/or PS-mode.
- Cipher key and integrity key request for CS- and/or PS-mode.
- Forbidden PLMN request.
- Initialisation value for hyperframe number request.
- Maximum value of START request.
- CBMID request.

- Depending on the further services that are supported by both the ME and the USIM the corresponding EFs have to be read.

After the USIM initialisation has been completed successfully, the ME is ready for a 3G session and shall indicate this to the USIM by sending a particular STATUS command.

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#### 5.1.2.2 GSM termination procedures

If GSM access is enabled the following termination procedures shall be performed if the applicable service is enabled.

- CPBCCH information update (if the ME supports the GSM compact access technology);

- RPLMN last used Access Technology update (if the ME supports the GSM compact access technology).

#### NEXT REVISED SECTION

### 5.3.22 Void RPLMN last used Access Technology

Requirement: Service n°50 "available".

Request: The ME performs the reading procedure with EF<sub>RPLMNAcT</sub>.

Update: The ME performs the updating procedure with EF<sub>RPLMNAcT</sub>.

# Annex A (informative): EF changes via Data Download or USAT applications

This annex defines if changing the content of an EF by the network (e.g. by sending an SMS), or by a USAT Application, is advisable. Updating of certain EFs "over the air" such as EF<sub>ACC</sub> could result in unpredictable behaviour of the UE; these are marked "Caution" in the table below. Certain EFs are marked "No"; under no circumstances should "over the air" changes of these EFs be considered.

File identification	Description	Change advised		
'2F00'	Application directory			
'2F05'	Preferred languages	Yes		
'2F06'	Access rule reference			
'2FE2'	ICC identification	No		
'4F20'	Image data	Yes		
'4FXX'	Image Instance data Files	Yes		
'4FXX'	Unique identifier	Yes		
'4F22'	Phone book synchronisation counter	Yes		
'4F23'	Change counter	Yes		
'4F24'	Previous unique identifier	Yes		
'4F30'	Phone book reference file	Yes		
'4FXX'	Capability configuration parameters 1	Yes		
'4F75'	CPBCCH Information	No		
'4F76	Investigation Scan	Caution		
'4FXX'	Additional number alpha string	Yes		
'4FXX'	Additional number	Yes		
'4FXX'	Second name entry	Yes		
'4FXX'	Grouping information alpha string	Yes		
'4FXX'	Phone book control	Yes		
'4FXX'	E-mail addresses	Yes		
'4FXX'	Index administration phone book	Yes		
'4FXX'	Extension 1	Yes		
'4FXX'	Abbreviated dialling numbers	Yes		
'4FXX'	Grouping file	Yes		
'6F05'	Language indication	Yes		
'6F07'	IMSI	Caution (Note 1)		
'6F08'	Ciphering and integrity keys	No		
'6F09'	Ciphering and integrity keys for packet switched domain	No		
'6F20'	Ciphering key Kc	No		
'6F2C'	De-personalization Control Keys	Caution		
'6F31'	HPLMN search period	Caution		
'6F32'	Co-operative network list	Caution		
'6F37'	ACM maximum value	Yes		
'6F38'	USIM service table	Caution		
'6F39'	Accumulated call meter	Yes		
'6F3B'	Fixed dialling numbers	Yes		
'6F3C'	Short messages	Yes		
'6F4F'	Extended Capability configuration parameters	Yes		
'6F3E'	Group identifier level 1	Yes		
'6F3F'	Group identifier level 2	Yes		
	Continued			

ile identification	Description	Change advise
'6F40'	MSISDN storage	Yes
'6F41'	PUCT	Yes
'6F42'	SMS parameters	Yes
'6F43'	SMS status	Yes
'6F44'	Last number dialled	Yes
'6F45'	СВМІ	Caution
'6F46'	Service provider name	Yes
'6F47'	Short message status reports	Yes
'6F48'	CBMID	Yes
'6F49'	Service Dialling Numbers	Yes
'6F4B'	Extension 2	Yes
'6F4C'	Extension 3	Yes
'6F4D'	Barred dialling numbers	Yes
'6F4E'	Extension 5	Yes
'6F4F'	Capability configuration parameters 2	Yes
'6F50'	CBMIR	Yes
'6F52'	GPRS Ciphering key KcGPRS	No
'6F54'	SetUp Menu Elements	Yes
'6F55'	Extension 4	Yes
	Enabled services table	100
'6F57'	Access point name control list	
'6F58'	Comparison method information	
'6F5B'	Initialisation value for Hyperframe number	Caution
'6F5C'	Maximum value of START	Yes
'6F60'	User controlled PLMN selector with Access Technology	No
'6F61'	Operator controlled PLMN selector with Access	Caution
0101	Technology	Caution
'6F62'	HPLMN selector with Access Technology	Caution
'6F6 <mark>53</mark> '	Reserved and shall not be used RPLMN last used Access	CautionN/A
01000	Technology	Oddion
'6F73'	Packet switched location information	Caution
'6F78'	Access control class	Caution
'6F7B'	Forbidden PLMNs	Caution
'6F7E'	Location information	No (Note 1)
'6F80'	Incoming call information	Yes
'6F81'	Outgoing call information	Yes
'6F82'	Incoming call timer	Yes
'6F83'	Outgoing call timer	Yes
	Administrative data	Caution
'6FB5'	Enhanced Multi Level Pre-emption and Priority	Yes
'6FB6'	Automatic Answer for eMLPP Service	Yes
'6FB7'	Emergency Call Codes	Caution
'6FC2'		No
	Group identity	INU
	Key for hidden phone book entries	No
'6FC4'	Network Parameters	No

NEXT REVISED SECTION

# Annex E (informative): Suggested contents of the EFs at pre-personalization

If EFs have an unassigned value, it may not be clear from the main text what this value should be. This annex suggests values in these cases.

ile Identification	Description	Value			
'2F00'	Application directory	Card issuer/operator dependant			
'2F05'	Preferred languages	'FFFF'			
'2F06'	Access rule reference	Card issuer/operator dependant			
'2FE2'	ICC identification	operator dependant			
'4F20'	Image data	'00FFFF'			
'4FXX'	Image instance data files	'FFFF'			
'4FXX'	Unique identifier	'0000'			
'4F22'	Phone book synchronisation counter	'0000000'			
'4F23'	Change counter	'0000'			
'4F24'	Previous unique identifier	0000'			
'4F30'	Phone book reference file	Operator dependant			
'4FXX'	Capability configuration parameters 1	'FFFF'			
'4F63'	CPBCCH Information	'FFFF'			
'4F64'	Investigation PLMN scan	'00'			
'4FXX'	E-mail addresses	'FFFF'			
'4FXX'	Additional number alpha string	'FFFF'			
'4FXX'	Second name entry	'FFFF'			
4FXX'	Abbreviated dialling numbers	'FFFF'			
4FXX'	Grouping file	0000			
'4FXX'	Grouping information alpha string	'FFFF'			
'4FXX'	Phone book control	'0000'			
	Index administration phone book	0000  'FFFF'			
4FXX'	Additional number				
4FXX'	Extension 1	'00FFFF'			
		00FFFF			
'6F05'	Language indication				
'6F07'		Operator dependant			
'6F08'	Ciphering and integrity keys	'07FFFF'			
'6F09'	Ciphering and integrity keys for packet switched domain	'07FFFF'			
'6F20'	Ciphering key Kc	'FFFF07'			
'6F2C'	De-personalization control keys	'FFFF'			
'6F31'	HPLMN search period	'FF'			
'6F32'	Co-operative network list	'FFFF'			
'6F37'	ACM maximum value	'000000' (see note 1)			
'6F38'	USIM service table	Operator dependant			
'6F39'	Accumulated call meter	'000000'			
'6F3B'	Fixed dialling numbers	'FFFF'			
'6F3C'	Short messages	'00FFFF'			
'6F3E'	Group identifier level 1	Operator dependant			
'6F3F'	Group identifier level 2	Operator dependant			
'6F40'	MSISDN storage	'FFFF'			
'6F41'	PUCT	'FFFFF0000'			
'6F42'	SMS parameters	'FFFF'			
'6F43'	SMS status	'FFFF'			
'6F45'	CBMI	'FFFF'			
'6F46'	Service provider name	Operator dependant			
'6F47'	Short message status reports	'00FFFF'			
'6F48'	CBMID	'FFFF'			
'6F49'	Service Dialling Numbers	'FFFF'			
'6F4B'	Extension 2	'00FFFF'			
'6F4C'	Extension 3	'00FFFF'			

File Identification	Description	Value	
'6F4D'	Barred Dialling Numbers	'FFFF'	
'6F4E'	Extension 5	'00FFFF'	
'6F4F'	Capability configuration parameters 2	'FFFF'	
'6F50'	CBMIR	'FFFF'	
'6F52'	GPRS Ciphering key KcGPRS	'FFFF07'	
'6F54'	SetUp Menu Elements	Operator dependant	
'6F55'	Extension 4	'FFFF'	
'6F56'	Enabled services table	Operator dependant	
'6F57'	Access point name control list	'00FFFF'	
'6F58'	Comparison method information	'FFFF'	
'6F5B'	Initialisation value for Hyperframe number	'0000'	
'6F5C'	Maximum value of START	Operator dependant	
'6F60'	User controlled PLMN selector with Access Technology	'FFFFF0000FFFFF0000'	
'6F61'	Operator controlled PLMN selector with Access Technology	'FFFFFF0000FFFFFF0000'	
'6F62'	HPLMN selector with Access Technology	'FFFFF0000FFFFF0000'	
'6F65'	Reserved and shall not be used Access Technology	' <del>0000'<u>N/A</u></del>	
'6F73'	Packet switched location information	'FFFFFFF FFFFFF xxxxxx 0000 FF 01' (see note 2)	
'6F78'	Access control class	Operator dependant	
'6F7B'	Forbidden PLMNs	'FFFF'	
'6F7E	Location information	'FFFFFFFF xxxxx 0000 FF 01' (see note 2)	
'6F80'	Incoming call information	'FFFF 000000 00 01FFFF'	
'6F81'	Outgoing call information	'FFFF 000000 01FFFF'	
'6F82'	Incoming call timer	'000000'	
'6F83'	Outgoing call timer	'000000'	
'6FAD'	Administrative data	Operator dependant	
'6FB5'	EMLPP	Operator dependant	
'6FB6'	AaeM	'00'	
'6FB7'	Emergency call codes	Operator dependant	
'6FC2'	Group identity	'FFFFFFF'	
'6FC3'	Key for hidden phone book entries	'FFFF'	
'6FC4'	Network Parameters	'FFFF'	

- NOTE 1: The value '000000' means that ACMmax is not valid, i.e. there is no restriction on the ACM. When assigning a value to ACMmax, care should be taken not to use values too close to the maximum possible value 'FFFFFF', because the INCREASE command does not update EF<sub>ACM</sub> if the units to be added would exceed 'FFFFFF'. This could affect the call termination procedure of the Advice of Charge function.
- NOTE 2: xxxxxx stands for any valid MCC and MNC, coded according to TS 24.008 [9].

#### NEXT REVISED SECTION

# Annex G (informative): Phonebook Example

This example phonebook has more than 254 entries. Additional number (3 additional numbers) information, second name and e-mail information can be added to each ADN entry. In addition each entry has a 2 byte Unique ID (UID) attached to it. The phonebook also contains three files that are shared  $EF_{EXT1}$ ,  $EF_{AAS}$  and  $EF_{GAS}$ . These files are addressed from inside a file.  $EF_{EXT1}$  is addressed via  $EF_{ADN}$ ,  $EF_{ADN1}$ ,  $EF_{AAS}$  is addressed via  $EF_{ANRA1}$ ,  $EF_{ANRA1}$  and  $EF_{GAS}$  is addressed via  $EF_{GRP}$ . The phonebook supports two levels of grouping and hidden entries in  $EF_{PBC}$ .

Two records are needed in the phonebook reference file PBR '4F30' for supporting more than 254 entries. The content of the phonebook reference file PBR '4F30' records is as shown in table G.2. The structure of the  $DF_{PHONEBOOK}$  is shown in table G.1.

The content of phonebook entries in the range from 1-508 is described in the tables G.3 and G.4.

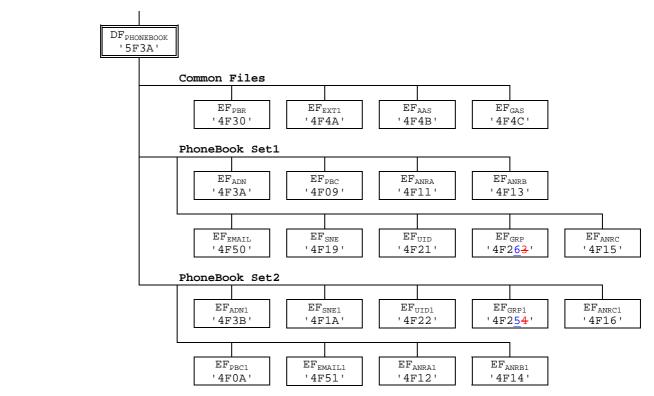


Table G.1: Structure of EFs inside DFPHONEBOOK

Table G.2: Contents of EF<sub>PBR</sub>

Rec 1 Tag'A8' L='26' (for Phonebook Set1)

 Tag'C0'
 L='03'
 '4F3A'
 '01'
 Tag'C5'
 L='03'
 '4F09'
 '02'
 Tag'C6'
 L='02'
 '4F263'
 Tag'C4'
 L='02'
 '4F11'

 Tag'C4'
 L='02'
 '4F13'
 Tag'C4'
 L='02'
 '4F15'
 Tag'C3'
 L='02'
 '4F19'
 Tag'C9'
 L='02'
 '4F21'

Tag'CA' L='02' | '4F50'

Tag'AA' L='0C'

Tag'C2' L='02' | '4F4A' |Tag'C7' L='02' | '4F4B' |Tag'C8' L='02' | '4F4C'

Rec 2 Tag'A8' L='24' (for Phonebook Set 2)

Tag'C0' L='02' '4F3B' Tag'C5' L='02' '4F0A' Tag'C6' L='02' '4F254' Tag'C4' L='02' '4F12'

Tag'C4' L='02' | '4F14' Tag'C4' L='02' | '4F16' Tag'C3' L='02' | '4F1A' Tag'C9' L='02' | '4F22'

Tag'CA' L='02' '4F51'

Tag'AA' L='0C'

Tag'C2' L='02' '4F4A' Tag'C7' L='02' '4F4B' Tag'C8' L='02' '4F4C 'FF' 'FF'

Phone book entry	'4F	DN '3A' '01'	PBC '4F09' SFI '02'	GRP '4F2 <mark>63</mark> '	ANRA '4F11'	ANRB '4F13'	ANRC '4F15'	SNE '4F19'	UID '4F21'	EXT1 '4F4A'	AAS '4F4B'	GAS '4F4C'	EMAIL '4F50'
#1	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '02'	Hidden (AID rec N° 3)	Rec n°1 Rec n°3 '00'	ANRA Rec n°1	ANRB Rec n°1	ANRC Rec n°1	Second Name Alpha String	UID	Rec '02'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP	email address
#2	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '2A'	Not Hidden	Rec n°2 Rec n°1 Rec n°3	ANRA Rec n°2	ANRB Rec n°2	ANRC Rec n°2	Second Name Alpha String	UID	Rec '2A'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP	email address
# 3													
:													
:													
: # 254													

### Table G.4: Structure of phone book entries 255 to 508 (Rec 1-254)

Phone book entry	AD '4F		PBC1 '4F0A'	GRP1 '4F2 <mark>5</mark> 4'	ANRA1 '4F12'	ANRB1 '4F14'	ANRC1 '4F16'	SNE1 '4F1A'	UID1 '4F22'	EXT1 '4F4A'	AAS '4F4B'	GAS '4F4C'	EMAIL1 '4F51'
#255	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '02'	Hidden (AID Rec n° 3)	Rec n°1 Rec n°3 '00'	ANRA1 Rec n°1	ANRB1 Rec n°1	ANRC1 Rec n°1	Second Name Alpha String	UID	Rec '02'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP1	email address
#256	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '2A'	Not Hidden	Rec n°2 Rec n°1 Rec n°3	ANRA1 Rec n°2	ANRB1 Rec n°2	ANRC1 Rec n°2	Second Name Alpha String	UID	Rec '2A'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP1	email address
#257													
:													
:													
: #508													

# H.1 List of SFI Values at the USIM ADF Level

File Identification	SFI	Description				
'6FB7'	'01'	Emergency call codes				
'6F05'	'02'	Language indication				
'6FAD'	'03'	Administrative data				
'6F38'	'04'	USIM service table				
'6F56'	'05'	Enabled services table				
'6F78'	'06'	Access control class				
'6F07'	'07'	IMSI				
'6F08'	'08'	Ciphering and integrity keys				
'6F09'	'09'	Ciphering and integrity keys for packet switched domain				
'6F60'	'0A'	User PLMN selector				
'6F7E	'0B'	Location information				
'6F73'	'0C'	Packet switched location information				
'6F7B'	'0D'	Forbidden PLMNs				
'6F48'	'0E'	CBMID				
'6F5B'	'0F'	Hyperframe number				
'6F5C'	'10'	Maximum value of hyperframe number				
'6F61'	'11'	Operator PLMN selector				
'6F31'	'12'	HPLMN search period				
'6F62'	'13'	Preferred HPLMN access technology				
'6F80'	'14'	Incoming call information				
'6F81'	'15'	Outgoing call information				
'6F4F'	'16'	Capability configuration parameters 2				
'6F06'	'17'	Access Rule Reference				
'6F65'	'18'	RPLMN last used Access TechnologyReserved and shall not be used				

All other SFI values are reserved for future use.

		CHAN	GE REQ	UE	ST			CR-Form-v7
æ	31.10	02 CR 135	ж <b>геv</b>	-	ж	Current vers	<sup>ion:</sup> <b>4.7.</b>	<mark>9</mark> ж
For <u>HELP</u> on	using this	form, see bottom of	f this page or	look a	at the	e pop-up text	over the X	symbols.
Proposed chang	e affects:	UICC apps <b>೫ <mark>Ⅹ</mark></b>	MEX	Rad	lio Ad	ccess Networ	k Core	Network
Title:		delete Elementary F co Island.		<sub>et,</sub> in a	ccor	dance with T	P-020168 fro	om TP#16
Source:	<mark>೫ TSG T</mark>	3						
Work item code:	ដ <mark>TEI</mark>					Date: ೫	13/02/200	3
Category:	F ( A ( B ( C ( D ( Detailed	of the following categ correction) corresponds to a corre addition of feature), functional modification explanations of the at I in 3GPP <u>TR 21.900</u> .	ection in an ea n of feature)		lease	2	Rel-4 the following (GSM Phase (Release 199 (Release 199 (Release 199 (Release 4) (Release 5) (Release 6)	92) 96) 97) 98)
Reason for chan		has been identified pecification, and TP						

Reason for change: ж	It has been identified that File EF <sub>RPLMNAcT</sub> has inconsistent file identifiers in the specification, and TP#16 wrote an LS to CN1 in document TP-020168 requesting that T3 can delete the file from the specifications. CN1 minutes state the following regarding the LS: "Noted. CN1 agreed the proposal in principle but no CRs were presented to this meeting yet. CRs from interested companies were invited for the next CN1 meeting. TSG-T would like to delete USIM file RPLMN last used access technology since it seems to be needed only for GSM compact and the definition is incorrect anyway. If this is agreed then the outcome is that CN1 must change 23.122 to move this information storage from USIM to ME memory." The LS to CN1 noted that there may a corresponding change to TS 23.122.
	DF <sub>USIM</sub> is incorrect, it must read ADF <sub>USIM</sub> .
Summary of change: ೫	The references to $EF_{RPLMNAcT}$ are deleted everywhere in the specification, and the values of the file identifiers are set to "reserved, not to be used". Change FID of GRP and GRP1 All references to $DF_{USIM}$ are change to $ADF_{USIM}$ .
Consequences if # not approved:	Inconsistencies within the specification, leading to confusion and misinterpretation.
Clauses affected: ೫	4.2.8, 4.2.56, 4.4.2, 4.6.2,4.7, 5.1.1.2, 5.1.2.2, 5.3.2.2, Annex A, Annex E, Annex G, Annex H1

Other specs affected:	ж	YX	N X X	Other core specifications # Test specifications O&M Specifications	TS 11.11, TS 51.011, TS 23.122
Other comments:	ж				

## 4.2.8 EF<sub>UST</sub> (USIM Service Table)

This EF indicates which services are available. If a service is not indicated as available in the USIM, the ME shall not select this service.

Identif	ier: '6F38'	Stru	ucture: transparent		Mandatory		
	SFI: '04'						
Files	size: X bytes, X >=	1	Update	activity	: low		
Access Condit READ UPDAT		PIN ADM					
· · · · · ·	<b>TIVATE</b>	ADM ADM ADM					
Bytes		Description	1	M/O	Length		
1	Services nº1 to n	°8		М	1 byte		
2	Services n°9 to n	°16		0	1 byte		
3	Services nº17 to	n°24		0	1 byte		
4	Services n°25 to	n°32		0	1 byte		
etc.							
Х	Services n°(8X-7	) to n°(8X)		0	1 byte		

-Services Contents

ts:	Service n°1:	Local Phone Book
	Service n°2:	Fixed Dialling Numbers (FDN)
	Service n°3:	Extension 2
	Service n°4:	Service Dialling Numbers (SDN)
	Service n°5:	Extension3
	Service n°6:	Barred Dialling Numbers (BDN)
	Service n°7:	Extension4
	Service n°8:	Outgoing Call Information (OCI and OCT)
	Service n°9:	Incoming Call Information (ICI and ICT)
	Service n°10:	Short Message Storage (SMS)
	Service n°11:	Short Message Status Reports (SMSR)
	Service n°12:	Short Message Service Parameters (SMSP)
	Service n°13:	Advice of Charge (AoC)
	Service n°14:	Capability Configuration Parameters (CCP)
	Service n°15:	Cell Broadcast Message Identifier
	Service n°16:	Cell Broadcast Message Identifier Ranges
	Service n°17:	Group Identifier Level 1
	Service n°18:	Group Identifier Level 2
	Service n°19:	Service Provider Name
	Service n°20:	User controlled PLMN selector with Access Technology
	Service n°21:	MSISDN
	Service n°22:	
	Service n°23:	Image (IMG) Not used (reserved for SoLSA)
	Service n°24:	Enhanced Multi-Level Precedence and Pre-emption Service
	Service n°25:	Automatic Answer for eMLPP
	Service n°26:	RFU
	Service n°27:	GSM Access
	Service n°28:	Data download via SMS-PP Data download via SMS-CB
	Service n°29:	
	Service n°30:	Call Control by USIM
	Service n°31:	MO-SMS Control by USIM
	Service n°32:	RUN AT COMMAND command
	Service n°33:	shall be set to '1'
	Service n°34:	Enabled Services Table
	Service n°35:	APN Control List (ACL)
	Service n°36:	Depersonalisation Control Keys
	Service n°37:	Co-operative Network List
	Service n°38:	GSM security context
	Service n°39:	CPBCCH Information
	Service n°40:	Investigation Scan
	Service n°41:	MEXE
	Service n°42:	Operator controlled PLMN selector with Access Technology
	Service n°43:	HPLMN selector with Access Technology
	Service n°44:	Extension 5
	Service n°45:	PLMN Network Name
	Service n°46:	Operator PLMN List
	Service n°47:	Mailbox Dialling Numbers
	Service n°48:	Message Waiting Indication Status
	Service n°49:	Call Forwarding Indication Status
	Service n°50:	Reserved and shall not be used RPLMN Last used Access
	Service n°51:	Service Provider Display Information
	Service n°52	Multimedia Messaging Service (MMS)
	Service n°53	Extension 8
	Service n°55	MMS User Connectivity Parameters
		-

The EF shall contain at least one byte. Further bytes may be included, but if the EF includes an optional byte, then it is mandatory for the EF to also contain all bytes before that byte. Other services are possible in the future and will be coded on further bytes in the EF. The coding falls under the responsibility of the 3GPP.

Coding:

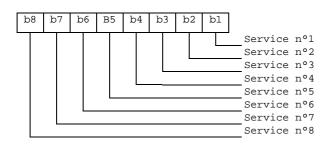
1 bit is used to code each service:

bit = 1: service available;

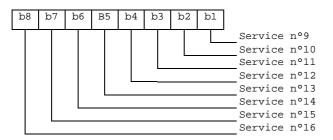
bit = 0: service not available.

Service available means that the USIM has the capability to support the service and that the service is available for the user of the USIM unless the service is identified as "disabled" in EF<sub>EST</sub>.
 Service not available means that the service shall not be used by the USIM user, even if the USIM has the capability to support the service.

First byte:



Second byte:



etc.

NEXT REVISED SECTION

### 4.2.56 VoidEF<sub>RPLMNACT</sub> (RPLMN Last used Access Technology)

This EF contains the last used access technology for the Registered PLMN, RPLMN. (see TS 23.122 [31]). This EF shall contain only one access technology.

NOTE: One access technology means that only one bit is set in the entire field.

Identifie	<del>r: '6F65'</del>	Structure:	transparent		optional
	<del>SFI: '18'</del>				
File	<del>size: 2+X bytes</del>		Update ac	tivity:	High
ccess Conditio	<del>)ns:</del>				
READ		PIN			
UPDATI		PIN			
DEACT					
ACTIVA	TE	ADM			
Bytes		<b>Description</b>	A	A/ <del>O</del>	Length
1 to 2	Access Technolog	ay of RPLMN		₩	2 bytes
<del>3 to 2+X</del>	-RFU			θ	X bytes

Access Technology

Coding:

#### NEXT REVISED SECTION

## 4.4.2 Contents of files at the DF PHONEBOOK level

The UICC may contain a global phonebook, or application specific phonebooks, or both in parallel. When both phonebook types co-exist, they are independent and no data is shared. In this case, it shall be possible for the user to select which phonebook the user would like to access.

It is recommended that the terminal searches for the global phonebook located under  $DF_{TELECOM}$  as its presence is not indicated anywhere in the USIM application.

The global phonebook is located in  $DF_{PHONEBOOK}$  under  $DF_{TELECOM}$ . Each specific USIM application phonebook is located in  $DF_{PHONEBOOK}$  of its respective Application  $\underline{A}DF_{USIM}$ . The organisation of files in  $DF_{PHONEBOOK}$  under  $\underline{A}DF_{USIM}$ and under  $DF_{TELECOM}$  follows the same rules. Yet  $DF_{PHONEBOOK}$  under  $\underline{A}DF_{USIM}$  may contain a different set of files than  $DF_{PHONEBOOK}$  under  $DF_{TELECOM}$ . All phonebook related EFs are located under their respective  $DF_{PHONEBOOK}$ . USIM specific phonebooks are dedicated to application specific entries. Each application specific phonebook is protected by the application PIN.

 $EF_{ADN}$  and  $EF_{PBR}$  shall always be present if the  $DF_{Phonebook}$  is present. If any phonebook file other than  $EF_{ADN}$  or  $EF_{EXTL}$  is used, then  $EF_{PBC}$  shall be present.

If a GSM application resides on the UICC, the EFs ADN and EXT1 from one  $DF_{PHONEBOOK}$  (defined at GSM application installation) are mapped to  $DF_{TELECOM}$ . Their file IDs are specified in TS 51.011 [18], i.e.  $EF_{ADN} = '6F3A'$  and  $EF_{EXT1} = '6F4A'$ , respectively.

If the UICC is inserted into a terminal accessing the ADN and EXT1 files under  $DF_{TELECOM}$ ; and a record in these files has been updated, a flag in the corresponding entry control information in the  $EF_{PBC}$  is set from 0 to 1 by the UICC. If the UICC is later inserted into a terminal that supports the 3G phonebook, the terminal shall check the flag in  $EF_{PBC}$  and if this flag is set, shall update the  $EF_{CC}$ , and then reset the flag. A flag set in  $EF_{PBC}$  results in a full synchronisation of the phonebook between an external entity and the UICC (if synchronisation is requested).

The EF structure related to the public phonebook is located under  $DF_{PHONEBOOK}$  in  $DF_{TELECOM}$ . A USIM specific phonebook may exist for application specific entries. The application specific phonebook is protected by the application PIN. The organisation of files in the application specific phonebook follows the same rules as the one specified for the public phone book under  $DF_{TELECOM}$ . The application specific phonebook may contain a different set of files than the one in the public area under  $DF_{TELECOM}$ .

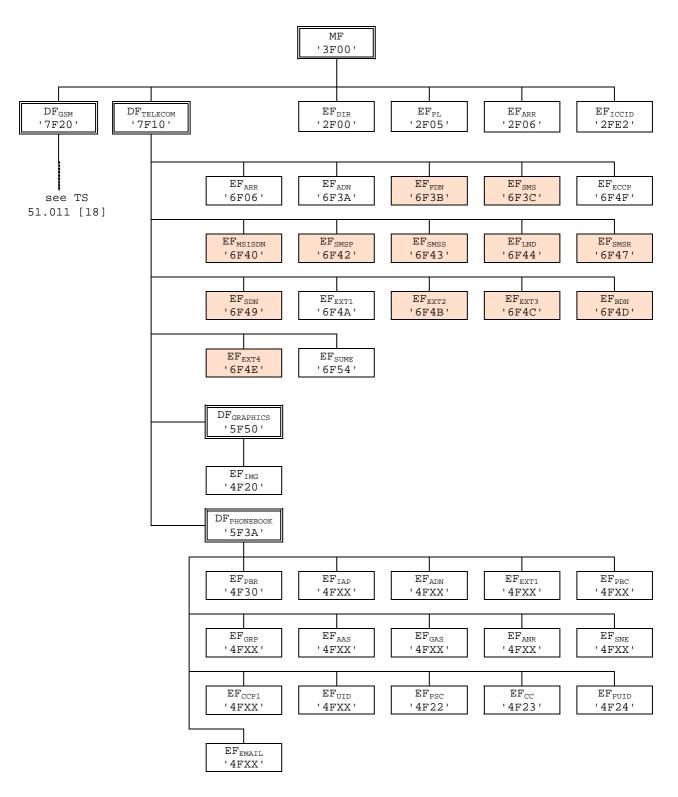
NEXT REVISED SECTION

### 4.6.2 Contents of files at the DF<sub>PHONEBOOK</sub> under the DF<sub>TELECOM</sub>

This DF has the same structure as  $DF_{PHONEBOOK}$  under the <u>A</u>DF<sub>USIM</sub>.

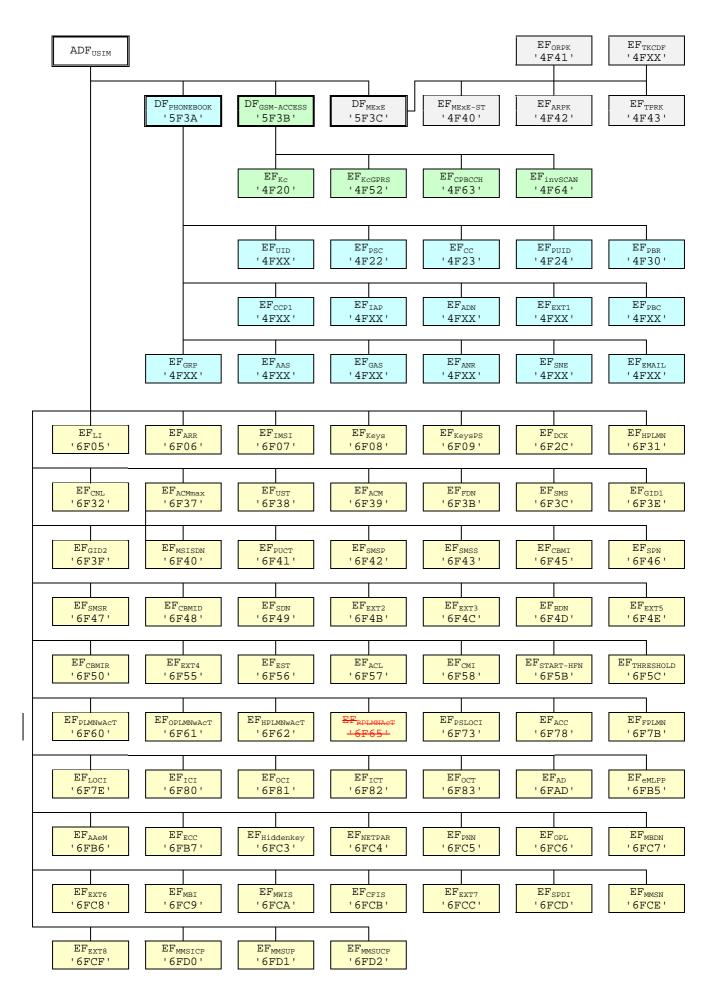
## 4.7 Files of USIM

This clause contains two figures depicting the file structure of the UICC and the  $ADF_{USIM}$ .  $ADF_{USIM}$  shall be selected using the AID and information in  $EF_{DIR}$ .



NOTE: Files under DF<sub>TELECOM</sub> with shaded background are defined in TS 51.011 [18].

#### Figure 4.1: File identifiers and directory structures of UICC



#### Figure 4.2: File identifiers and directory structures of USIM

DF '5F70' is reserved for SoLSA. EF '4F30' (EF<sub>SAL</sub>) and EF '4F31' (EF<sub>SLL</sub>) are reserved under DF '5F70' (SoLSA).

#### NEXT REVISED SECTION

5.1.1.2 USIM initialisation

The ME requests the emergency call codes. For service requirements, see TS 22.101 [24].

The ME requests the Language Indication. The preferred language selection shall always use the  $EF_{LI}$  in preference to the  $EF_{PL}$  at the MF unless any of the following conditions applies:

- if the  $EF_{LI}$  has the value 'FFFF' in its highest priority position, then the preferred language selection shall be the language preference in the  $EF_{PL}$  at the MF level according the procedure defined in TS 31.101[11];
- if the ME does not support any of the language codes indicated in  $EF_{LI}$ , or if  $EF_{LI}$  is not present, then the language selection shall be as defined in  $EF_{PL}$  at the MF level according the procedure defined in TS 31.101[11];
- if neither the languages of  $EF_{LI}$  nor  $EF_{PL}$  are supported by the terminal, then the terminal shall use its own internal default selection.

The ME then runs the user verification procedure. If the procedure is not performed successfully, the USIM initialisation stops.

The ME performs the administrative information request.

The ME performs the USIM Service Table request.

The ME performs the Enabled Services Table Request.

In case FDN is enabled, an ME which does not support FDN shall allow emergency calls but shall not allow MO-CS calls and MO-SMS.

If BDN is enabled, an ME which does not support Call Control shall allow emergency calls but shall not allow MO-CS calls.

If ACL is enabled, an ME which does not support ACL shall not send any APN to the network.

If all these procedures have been performed successfully then 3G session shall start. In all other cases 3G session shall not start.

Afterwards, the ME runs the following procedures if the ME and the USIM support the related services:

- IMSI request.
- Access control information request.
- HPLMN search period request.
- HPLMN selector with Access Technology request;
- User controlled PLMN selector with Access Technology request;
- Operator controlled PLMN selector with Access Technology request;
- GSM initialisation requests.

- Location Information request for CS-and/or PS-mode.
- Cipher key and integrity key request for CS- and/or PS-mode.
- Forbidden PLMN request.
- Initialisation value for hyperframe number request.
- Maximum value of START request.
- CBMID request.
- Depending on the further services that are supported by both the ME and the USIM the corresponding EFs have to be read.

After the USIM initialisation has been completed successfully, the ME is ready for a 3G session and shall indicate this to the USIM by sending a particular STATUS command.

NEXT REVISED SECTION

#### 5.1.2.2 GSM termination procedures

If GSM access is enabled the following termination procedures shall be performed if the applicable service is enabled.

- CPBCCH information update (if the ME supports the GSM compact access technology);

-RPLMN last used Access Technology update (if the ME supports the GSM compact access technology).

NEXT REVISED SECTION

### 5.3.22 VoidRPLMN last used Access Technology

- Requirement: Service n°50 "available".

— Request: The ME performs the reading procedure with EF<sub>RPLMNAcT</sub>

Update: The ME performs the updating procedure with EF<sub>RPLMNAcT</sub>.

# Annex A (informative): EF changes via Data Download or USAT applications

This annex defines if changing the content of an EF by the network (e.g. by sending an SMS), or by a USAT Application, is advisable. Updating of certain EFs "over the air" such as EF<sub>ACC</sub> could result in unpredictable behaviour of the UE; these are marked "Caution" in the table below. Certain EFs are marked "No"; under no circumstances should "over the air" changes of these EFs be considered.

ile identification	Description	Change advised		
'2F00'	Application directory	Caution		
'2F05'	Preferred languages	Yes		
'2F06'	Access rule reference	Caution		
'2FE2'	ICC identification	No		
'4F20'	Image data	Yes		
'4F20'	GSM Ciphering key Kc	No		
'4FXX'	Image Instance data Files	Yes		
'4FXX'	Unique identifier	Yes		
'4F22'	Phone book synchronisation counter	Yes		
'4F23'	Change counter	Yes		
'4F24'	Previous unique identifier	Yes		
'4F30'	Phone book reference file	Yes		
'4FXX'	Capability configuration parameters 1	Yes		
'4F52'	GPRS Ciphering key KcGPRS	No		
'4F63'	CPBCCH Information	No		
'4F64'	Investigation Scan	Caution		
'4FXX'	Additional number alpha string	Yes		
'4FXX'	Additional number	Yes		
'4FXX'	Second name entry	Yes		
'4FXX'	Grouping information alpha string	Yes		
'4FXX'	Phone book control	Yes		
'4FXX'	E-mail addresses	Yes		
'4FXX'	Index administration phone book	Yes		
'4FXX'	Extension 1	Yes		
'4FXX'	Abbreviated dialling numbers	Yes		
'4FXX'	Grouping file	Yes		
'6F05'	Language indication	Yes		
'6F06'	Access rule reference (under ADF <sub>USIM</sub> and DF <sub>TELECOM</sub> )	Caution		
'6F07'	IMSI	Caution (Note 1		
'6F08'	Ciphering and integrity keys	No		
'6F09'	Ciphering and integrity keys for packet switched domain	No		
'6F2C'	De-personalization Control Keys	Caution		
'6F31'	HPLMN search period	Caution		
'6F32'	Co-operative network list	Caution		
'6F37'	ACM maximum value	Yes		
'6F38'	USIM service table	Caution		
'6F39'	Accumulated call meter	Yes		
'6F3B'	Fixed dialling numbers	Yes		
'6F3C'	Short messages	Yes		
'6F3E'	Group identifier level 1	Yes		
'6F3F'	Group identifier level 2	Yes		

File identification	Description	Change advise
'6F40'	MSISDN storage	Yes
'6F41'	PUCT	Yes
'6F42'	SMS parameters	Yes
'6F43'	SMS status	Yes
'6F45'	СВМІ	Caution
'6F46'	Service provider name	Yes
'6F47'	Short message status reports	Yes
'6F48'	CBMID	Yes
'6F49'	Service Dialling Numbers	Yes
'6F4B'	Extension 2	Yes
'6F4C'	Extension 3	Yes
'6F4D'	Barred dialling numbers	Yes
'6F4E'	Extension 5	Yes
'6F4F'	Capability configuration parameters 2	Yes
'6F50'	CBMIR	Yes
'6F54'	SetUp Menu Elements	Yes
'6F55'	Extension 4	Yes
'6F56'	Enabled services table	Caution
'6F57'	Access point name control list	Yes
'6F58'	Comparison method information	Yes
'6F5B'	Initialisation value for Hyperframe number	Caution
'6F5C'	Maximum value of START	Yes
'6F60'	User controlled PLMN selector with Access Technology	No
'6F61'	Operator controlled PLMN selector with Access	Caution
	Technology	oddion
'6F62'	HPLMN selector with Access Technology	Caution
'6F65'	RPLMN last used Access TechnologyReserved and	CautionN/A
	shall not be used	
'6F73'	Packet switched location information	Caution
'6F78'	Access control class	Caution
'6F7B'	Forbidden PLMNs	Caution
'6F7E'	Location information	No (Note 1)
'6F80'	Incoming call information	Yes
'6F81'	Outgoing call information	Yes
'6F82'	Incoming call timer	Yes
'6F83'	Outgoing call timer	Yes
'6FAD'	Administrative data	Caution
'6FB5'	Enhanced Multi Level Pre-emption and Priority	Yes
'6FB6'	Automatic Answer for eMLPP Service	Yes
'6FB7'	Emergency Call Codes	Caution
'6FC3'	Key for hidden phone book entries	No
'6FC4'	Network Parameters	No
'6FC5'	PLMN Network Name	Yes
'6FC6'	Operator Network List	Yes
'6FC7'	Mailbox Dialling Numbers	Yes
'6FC8'	Extension 6	Yes
'6FC9'	Mailbox Identifier	Caution
	Message Waiting Indication Status	Caution
'6FCB'	Call Forwarding Indication Status	Caution
'6FCC'	Extension 7	Yes
6FCC	Service Provider Display Information	
		Yes
'6FCE'	MMS Notification	Yes
<u>'6FCF'</u>	Extension 8	Yes
'6FD0'	MMS Issuer Connectivity Parameters	Yes
'6FD1' '6FD2'	MMS User Preferences	Yes
	MMS User Connectivity Parameters	Yes

# Annex E (informative): Suggested contents of the EFs at pre-personalization

If EFs have an unassigned value, it may not be clear from the main text what this value should be. This annex suggests values in these cases.

e Identification '2F00'	Description Application directory	Value Card issuer/operator dependant
'2F05'	Preferred languages	'FFFF'
2F05 '2F06'	Access rule reference	Card issuer/operator dependant
'2FE2'	ICC identification	operator dependant
'4F20'	Image data	00FFFF'
4F20'	GSM Ciphering key Kc	'FFFF07'
4F20 '4FXX'		'FFFF'
4FXX'	Image instance data files Unique identifier	'0000'
4F^7		'0000000'
4F22 '4F23'	Phone book synchronisation counter	
	Change counter Previous unique identifier	'0000' '0000'
'4F24'		
'4F30'	Phone book reference file	Operator dependant
'4FXX'	Capability configuration parameters 1	'FFFF'
'4F52'	GPRS Ciphering key KcGPRS	'FFFF07'
'4F63'	CPBCCH Information	'FFFF'
'4F64'	Investigation PLMN scan	'00'
'4FXX'	E-mail addresses	'FFFF'
'4FXX'	Additional number alpha string	'FFFF'
'4FXX'	Second name entry	'FFFF'
'4FXX'	Abbreviated dialling numbers	'FFFF'
'4FXX'	Grouping file	'0000'
'4FXX'	Grouping information alpha string	'FFFF'
'4FXX'	Phone book control	'0000'
'4FXX'	Index administration phone book	'FFFF'
'4FXX'	Additional number	'FFFF'
'4FXX'	Extension 1	'00FFFF'
'6F05'	Language indication	'FFFF'
'6F06'	Access rule reference (under ADF <sub>USIM</sub> and DF <sub>TELECOM</sub> )	Card issuer/operator dependant
'6F07'	IMSI	Operator dependant
'6F08'	Ciphering and integrity keys	'07FFFF'
'6F09'	Ciphering and integrity keys for packet switched domain	'07FFFF'
'6F2C'	De-personalization control keys	'FFFF'
'6F31'	HPLMN search period	'FF'
'6F32'	Co-operative network list	'FFFF'
'6F37'	ACM maximum value	'000000' (see note 1)
'6F38'	USIM service table	Operator dependant
'6F39'	Accumulated call meter	'000000'
'6F3B'	Fixed dialling numbers	'FFFF'
'6F3C'	Short messages	'00FFFF'
'6F3E'	Group identifier level 1	Operator dependant
'6F3F'	Group identifier level 2	Operator dependant
'6F40'	MSISDN storage	'FFFF'
'6F41'	PUCT	'FFFFF0000'
'6F42'	SMS parameters	'FFFF'
'6F43'	SMS status	'FFFF'
'6F45'	CBMI	'FFFF'
6F45 '6F46'	Service provider name	Operator dependant
		00FFFF'
'6F47'	Short message status reports	
'6F48'	CBMID	'FFFF'
'6F49'	Service Dialling Numbers	'FFFF'
'6F4B'	Extension 2	'00FFFF'
'6F4C'	Extension 3	'00FFFF'

File Identification	Description	Value				
'6F4D'	Barred Dialling Numbers	'FFFF'				
'6F4E'	Extension 5	'00FFFF'				
'6F4F'	Capability configuration parameters 2	'FFFF'				
'6F50'	CBMIR	'FFFF'				
'6F54'	SetUp Menu Elements	Operator dependant				
'6F55'	Extension 4	'FFFF'				
'6F56'	Enabled services table	Operator dependant				
'6F57'	Access point name control list	'00FFFF'				
'6F58'	Comparison method information	'FFFF'				
'6F5B'	Initialisation value for Hyperframe number	'F0 00 00 F0 00 00'				
'6F5C'	Maximum value of START	Operator dependant				
'6F60'	User controlled PLMN selector with Access Technology	'FFFFF0000FFFFF0000'				
'6F61'	Operator controlled PLMN selector with Access Technology	'FFFFF0000FFFFF0000'				
'6F62'	HPLMN selector with Access Technology	'FFFFF60000FFFFF60000'				
'6F65'	Reserved and shall not be used used Access Technology	'0000' <u>N/A</u>				
'6F73'	Packet switched location information	'FFFFFFF FFFFFF xxxxx 0000 FF 01' (see note 2)				
'6F78'	Access control class	Operator dependant				
'6F7B'	Forbidden PLMNs	'FFFF'				
'6F7E	Location information	'FFFFFFF xxxxx 0000 FF 01' (see note 2)				
'6F80'	Incoming call information	'FFFF 000000 00 01FFFF'				
'6F81'	Outgoing call information	'FFFF 000000 01FFFF'				
'6F82'	Incoming call timer	'000000'				
'6F83'	Outgoing call timer	'000000'				
'6FAD'	Administrative data	Operator dependant				
'6FB5'	EMLPP	Operator dependant				
'6FB6'	AaeM	'00'				
'6FB7'	Emergency call codes	Operator dependant				
'6FC3'	Key for hidden phone book entries	'FFFF'				
'6FC4'	Network Parameters	'FFFF'				
'6FC5'	PLMN Network Name	Operator dependant				
'6FC6'	Operator Network List	Operator dependant				
'6FC7'	Mailbox Dialling Numbers	Operator dependant				
'6FC8'	Extension 6	'00 FFFF'				
'6FC9'	Mailbox Identifier	Operator dependant				
'6FCA'	Message Waiting Indication Status	'00 00 00 00'				
'6FCB'	Call Forwarding Indication Status	'xx 00 FFFF'				
'6FCC'	Extension 7	'00 FFFF'				
'6FCD'	Service Provider Display Information					
'6FCE'	MMS Notification	'00 00 00 FFFF'				
'6FCF'	Extension 8	'FFFF'				
'6FD0'	MMS Issuer Connectivity Parameters	'FFFF'				
'6FD1'	MMS User Preferences	'FFFF'				
'6FD2'	MMS User Connectivity Parameters	'FFFF'				

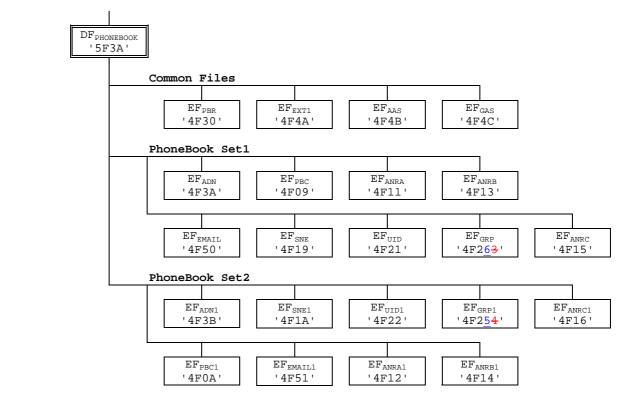
- NOTE 1: The value '000000' means that ACMmax is not valid, i.e. there is no restriction on the ACM. When assigning a value to ACMmax, care should be taken not to use values too close to the maximum possible value 'FFFFFF', because the INCREASE command does not update EF<sub>ACM</sub> if the units to be added would exceed 'FFFFFF'. This could affect the call termination procedure of the Advice of Charge function.
- NOTE 2: xxxxxx stands for any valid MCC and MNC, coded according to TS 24.008 [9].

# Annex G (informative): Phonebook Example

This example phonebook has more than 254 entries. Additional number (3 additional numbers) information, second name and e-mail information can be added to each ADN entry. In addition each entry has a 2 byte Unique ID (UID) attached to it. The phonebook also contains three files that are shared  $EF_{EXT1}$ ,  $EF_{AAS}$  and  $EF_{GAS}$ . These files are addressed from inside a file.  $EF_{EXT1}$  is addressed via  $EF_{ADN}$ ,  $EF_{ADN1}$ ,  $EF_{AAS}$  is addressed via  $EF_{ANRA1}$ ,  $EF_{ANRA1}$  and  $EF_{GAS}$  is addressed via  $EF_{GRP}$ . The phonebook supports two levels of grouping and hidden entries in  $EF_{PBC}$ .

Two records are needed in the phonebook reference file PBR '4F30' for supporting more than 254 entries. The content of the phonebook reference file PBR '4F30' records is as shown in table G.2. The structure of the  $DF_{PHONEBOOK}$  is shown in table G.1.

The content of phonebook entries in the range from 1-508 is described in the tables G.3 and G.4.



#### Table G.1: Structure of EFs inside DFPHONEBOOK

Table G.2: Contents of EF<sub>PBR</sub>

 Rec 1
 Tag'A8'
 L='26'
 (for Phonebook Set1)

 Tag'C0'
 L='03'
 '4F3A'
 '01'
 Tag'C5'
 L='03'
 '4F09'
 '02'
 Tag'C6'
 L='02'
 '4F2<u>6</u>3'
 Tag'C4'
 L='02'
 '4F11'

 Tag'C4'
 L='02'
 '4F13'
 Tag'C4'
 L='02'
 '4F15'
 Tag'C3'
 L='02'
 '4F19'
 Tag'C9'
 L='02'
 '4F21'

 Tag'CA'
 L='02'
 '4F50'
 Tag'AA'
 L='0C'
 '4F50'
 Tag'AA'
 L='0C'
 '4F50'

Tag'C2' L='02' | '4F4A' | Tag'C7' | L='02' | '4F4B' | Tag'C8' | L='02' | '4F4C' |

Rec 2 Tag'A8' L='24' (for Phonebook Set 2)

Tag'C0' L='02' |'4F3B' Tag'C5' L='02' |'4F0A' Tag'C6' L='02' |'4F254' Tag'C4' L='02' |'4F12'

Tag'C4' L='02' | '4F14' Tag'C4' L='02' | '4F16' Tag'C3' L='02' | '4F1A' Tag'C9' L='02' | '4F22'

Tag'CA' L='02' '4F51'

Tag'AA' L='0C'

1

Tag'C2' L='02' |'4F4A' Tag'C7' L='02' |'4F4B' Tag'C8' L='02' |'4F4C | 'FF' | 'FF'

#### Table G.3: Structure of the 254 first entries in the phonebook

Phone book entry			ANRA '4F11'	ANRB '4F13'	ANRC '4F15'	SNE '4F19'	UID '4F21'	EXT1 '4F4A'	AAS '4F4B'	GAS '4F4C'	EMAIL '4F50'		
#1	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '02'	Hidden (AID rec N° 3)	Rec n°1 Rec n°3 '00'	ANRA Rec nº1	ANRB Rec n°1	ANRC Rec n°1	Second Name Alpha String	UID	Rec '02'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP	email address
#2	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '2A'	Not Hidden	Rec n°2 Rec n°1 Rec n°3	ANRA Rec n°2	ANRB Rec n°2	ANRC Rec n°2	Second Name Alpha String	UID	Rec '2A'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP	email address
#3													
:													
1													
:													
# 254													

#### Table G.4: Structure of phone book entries 255 to 508 (Rec 1-254)

	Phone book entry	AD '4F		PBC1 '4F0A'	GRP1 '4F2 <mark>5</mark> 4'	ANRA1 '4F12'	ANRB1 '4F14'	ANRC1 '4F16'	SNE1 '4F1A'	UID1 '4F22'	EXT1 '4F4A'	AAS '4F4B'	GAS '4F4C'	EMAIL1 '4F51'
;	#255	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '02'	Hidden (AID Rec n° 3)	Rec n°1 Rec n°3 '00'	ANRA1 Rec n°1	ANRB1 Rec n°1	ANRC1 Rec n°1	Second Name Alpha String	UID	Rec '02'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP1	email address
;	#256	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '2A'	Not Hidden	Rec n°2 Rec n°1 Rec n°3	ANRA1 Rec n°2	ANRB1 Rec n°2	ANRC1 Rec n°2	Second Name Alpha String	UID	Rec '2A'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP1	email address
;	#257													
	:													
	:													
	:													
3	#508													

# H.1 List of SFI Values at the USIM ADF Level

File Identification	SFI	Description			
'6FB7'	'01'	Emergency call codes			
'6F05'	'02'	Language indication			
'6FAD'	'03'	Administrative data			
'6F38'	'04'	USIM service table			
'6F56'	'05'	Enabled services table			
'6F78'	'06'	Access control class			
'6F07'	'07'	IMSI			
'6F08'	'08'	Ciphering and integrity keys			
'6F09'	'09'	Ciphering and integrity keys for packet switched domain			
'6F60'	'0A'	User PLMN selector			
'6F7E	'0B'	Location information			
'6F73'	'0C'	Packet switched location information			
'6F7B'	'0D'	Forbidden PLMNs			
'6F48'	'0E'	CBMID			
'6F5B'	'0F'	Hyperframe number			
'6F5C'	'10'	Maximum value of hyperframe number			
'6F61'	'11'	Operator PLMN selector			
'6F31'	'12'	HPLMN search period			
'6F62'	'13'	Preferred HPLMN access technology			
'6F80'	'14'	Incoming call information			
'6F81'	'15'	Outgoing call information			
'6F4F'	'16'	Capability configuration parameters 2			
'6F06'	'17'	Access Rule Reference			
'6F65'	'18'	Reserved and shall not be used RPLMN last used Access Technology			
'6FC5'	'19'	PLMN Network Name			
'6FC6'	'1A'	Operator Network List			
'6FCD'	'1B'	Service Provider Display Information			

All other SFI values are reserved for future use.

			СНА	NGE R	EQ	UE	ST				CR-Form-v7
æ		<mark>31.102</mark>	CR 136	жI	ev	-	Ħ	Current vers	sion:	5.3.0	ж
For <u>HELP</u> or	า น	sing this fo	rm, see botton	n of this pa	ge or	look	at th	e pop-up text	over	r the	nbols.
Proposed chang	e a	affects:	UICC appsℋ	<mark>X</mark> N	ИЕ <mark>Х</mark>	Rad	dio A	ccess Netwo	rk	Core Ne	etwork
Title:	ж	CR to del in Marco	ete Elementa Island.	ry File EF <sub>RF</sub>	PLMNAc	<sub>т,</sub> in a	ICCOR	dance with T	P-02	0168 from	TP#16
Source:	ж	TSG T3									
Work item code:	ж	TEI						<i>Date:</i> ೫	13,	/02/2003	
Category:	ж	F (cor A (cor B (add C (fun D (edi Detailed ex	the following ca rection) responds to a c dition of feature actional modificat itorial modificati planations of th 3GPP <u>TR 21.9</u>	correction in ), ation of featu on) e above cate	re)		elease	Release: ¥ Use <u>one</u> of 2 9) R96 R97 R98 R99 Rel-4 Rel-5 Rel-6	the fo (GSI (Rela (Rela (Rela (Rela (Rela		pases:
Reason for chan	ge		s been identifi					<mark>s inconsisten</mark>	t file	identifiers	

Reason for change: ж	specification, and TP#16 wrote an LS to CN1 in document TP-020168 requesting that T3 can delete the file from the specifications. CN1 minutes state the following regarding the LS: "Noted. CN1 agreed the proposal in principle but no CRs were presented to this meeting yet. CRs from interested companies were invited for the next CN1 meeting. TSG-T would like to delete USIM file RPLMN last used access technology since it seems to be needed only for GSM compact and the definition is incorrect anyway. If this is agreed then the outcome is that CN1 must change 23.122 to move this information storage from USIM to ME memory." The LS to CN1 noted that there may a corresponding change to TS 23.122. The FIDs 4F23 and 4F24 are assigned to the CC and PUID files respectively and shall not be used by another file. DF <sub>USIM</sub> is incorrect, it must read ADF <sub>USIM</sub> .
Summary of change: ೫	The references to EF <sub>RPLMNAcT</sub> are deleted everywhere in the specification, and the values of the file identifiers are set to "reserved, not to be used". Change FID of GRP and GRP1. All references to DF <sub>USIM</sub> are change to ADF <sub>USIM</sub> .
Consequences if ೫	Inconsistencies within the specification, leading to confusion and
not approved:	misinterpretation.
Clauses affected: Ж	4.2.8, 4.2.56, 4.4.2, 4.6.2,4.7, 5.1.1.2, 5.1.2.2, 5.3.2.2, Annex A, Annex E, Annex G, Annex H1

Other specs affected:	ж	YX	N X X	Other core specifications # Test specifications O&M Specifications	TS 11.11, TS 51.011, TS 23.122
Other comments:	ж				

## 4.2.8 EF<sub>UST</sub> (USIM Service Table)

This EF indicates which services are available. If a service is not indicated as available in the USIM, the ME shall not select this service.

Identif	ier: '6F38'	Stru	ucture: transparent		Mandatory
	SFI: '04'				
Files	size: X bytes, X >=	1	Update activity: low		
Access Condit READ UPDAT		PIN ADM			
	TIVATE	ADM ADM			
Bytes		Descriptior	า	M/O	Length
1	Services nº1 to n	°8		М	1 byte
2	Services n°9 to n	°16		0	1 byte
3	Services nº17 to	n°24		0	1 byte
4	Services n°25 to	n°32		0	1 byte
etc.					
Х	Services n°(8X-7	) to n°(8X)		0	1 byte

-Services Contents

ts:	Service n°1:	Local Phone Book
	Service n°2:	Fixed Dialling Numbers (FDN)
	Service n°3:	Extension 2
	Service n°4:	Service Dialling Numbers (SDN)
	Service n°5:	Extension3
	Service n°6:	Barred Dialling Numbers (BDN)
	Service n°7:	Extension4
	Service n°8:	Outgoing Call Information (OCI and OCT)
	Service n°9:	Incoming Call Information (ICI and ICT)
	Service n°10:	Short Message Storage (SMS)
	Service n°11:	Short Message Status Reports (SMSR)
	Service n°12:	Short Message Service Parameters (SMSP)
	Service n°13:	Advice of Charge (AoC)
	Service n°14:	Capability Configuration Parameters (CCP)
	Service n°15:	Cell Broadcast Message Identifier
	Service n°16:	Cell Broadcast Message Identifier Ranges
	Service n°17:	Group Identifier Level 1
	Service n°18:	Group Identifier Level 2
	Service n°19:	Service Provider Name
	Service n°20:	User controlled PLMN selector with Access Technology MSISDN
	Service n°21:	
	Service n°22:	Image (IMG)
	Service n°23:	Not used (reserved for SoLSA)
	Service n°24:	Enhanced Multi-Level Precedence and Pre-emption Service
	Service n°25:	Automatic Answer for eMLPP
	Service n°26:	RFU
	Service n°27:	GSM Access
	Service n°28:	Data download via SMS-PP
	Service n°29:	Data download via SMS-CB
	Service n°30:	Call Control by USIM
	Service n°31:	MO-SMS Control by USIM
	Service n°32:	RUN AT COMMAND command
	Service n°33:	shall be set to '1'
	Service n°34:	Enabled Services Table
	Service n°35:	APN Control List (ACL)
	Service n°36:	Depersonalisation Control Keys
	Service n°37:	Co-operative Network List
	Service n°38:	GSM security context
	Service n°39:	CPBCCH Information
	Service n°40:	Investigation Scan
	Service n°41:	MExE
	Service n°42:	Operator controlled PLMN selector with Access Technology
	Service n°43:	HPLMN selector with Access Technology
	Service n°44:	Extension 5
	Service n°45:	PLMN Network Name
	Service n°46:	Operator PLMN List
	Service n°47:	Mailbox Dialling Numbers
	Service n°48:	Message Waiting Indication Status
	Service n°49:	Call Forwarding Indication Status
	Service n°50:	Reserved and shall not be used RPLMN Last used Access
		Technology
	Service n°51:	Service Provider Display Information
	Service n°52	Multimedia Messaging Service (MMS)
	Service n°53	Extension 8
	Service n°55	MMS User Connectivity Parameters
		wine ever connectivity r drameters

The EF shall contain at least one byte. Further bytes may be included, but if the EF includes an optional byte, then it is mandatory for the EF to also contain all bytes before that byte. Other services are possible in the future and will be coded on further bytes in the EF. The coding falls under the responsibility of the 3GPP.

Coding:

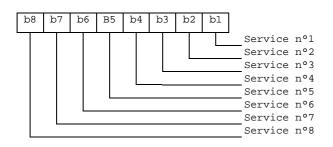
1 bit is used to code each service:

bit = 1: service available;

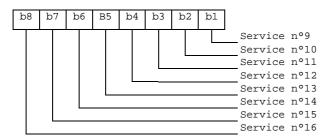
bit = 0: service not available.

Service available means that the USIM has the capability to support the service and that the service is available for the user of the USIM unless the service is identified as "disabled" in EF<sub>EST</sub>.
 Service not available means that the service shall not be used by the USIM user, even if the USIM has the capability to support the service.

First byte:



Second byte:



etc.

NEXT REVISED SECTION

### 4.2.56 VoidEF<sub>RPLMNACT</sub> (RPLMN Last used Access Technology)

This EF contains the last used access technology for the Registered PLMN, RPLMN. (see TS 23.122 [31]). This EF shall contain only one access technology.

NOTE: One access technology means that only one bit is set in the entire field.

Identifier: '6F65'		Structure: transparent		optional
	SFI: '18'			
File size: 2+X bytes			Update activity: High	
ccess Condi	tions:			
READ		PIN		
		PIN		
ACTIVATE		ADM		
Putoo		Description	M/C	
Bytes				· · · · · · · · · · · · · · · · · · ·
<del>1 to 2</del>	Access Technology of RPLMN		₩	<del>2 bytes</del>
<del>3 to 2+X</del>	-RFU		θ	<del>X bytes</del>

Access Technology

Coding:

#### NEXT REVISED SECTION

## 4.4.2 Contents of files at the DF PHONEBOOK level

The UICC may contain a global phonebook, or application specific phonebooks, or both in parallel. When both phonebook types co-exist, they are independent and no data is shared. In this case, it shall be possible for the user to select which phonebook the user would like to access.

It is recommended that the terminal searches for the global phonebook located under  $DF_{TELECOM}$  as its presence is not indicated anywhere in the USIM application.

The global phonebook is located in  $DF_{PHONEBOOK}$  under  $DF_{TELECOM}$ . Each specific USIM application phonebook is located in  $DF_{PHONEBOOK}$  of its respective Application  $\underline{A}DF_{USIM}$ . The organisation of files in  $DF_{PHONEBOOK}$  under  $\underline{A}DF_{USIM}$  and under  $DF_{TELECOM}$  follows the same rules. Yet  $DF_{PHONEBOOK}$  under  $\underline{A}DF_{USIM}$  may contain a different set of files than  $DF_{PHONEBOOK}$  under  $DF_{TELECOM}$ . All phonebook related EFs are located under their respective  $DF_{PHONEBOOK}$ . USIM specific phonebooks are dedicated to application specific entries. Each application specific phonebook is protected by the application PIN.

 $EF_{ADN}$  and  $EF_{PBR}$  shall always be present if the  $DF_{Phonebook}$  is present. If any phonebook file other than  $EF_{ADN}$  or  $EF_{EXTL}$  is used, then  $EF_{PBC}$  shall be present.

If a GSM application resides on the UICC, the EFs ADN and EXT1 from one  $DF_{PHONEBOOK}$  (defined at GSM application installation) are mapped to  $DF_{TELECOM}$ . Their file IDs are specified in TS 51.011 [18], i.e.  $EF_{ADN} = '6F3A'$  and  $EF_{EXT1} = '6F4A'$ , respectively.

If the UICC is inserted into a terminal accessing the ADN and EXT1 files under  $DF_{TELECOM}$ ; and a record in these files has been updated, a flag in the corresponding entry control information in the  $EF_{PBC}$  is set from 0 to 1 by the UICC. If the UICC is later inserted into a terminal that supports the 3G phonebook, the terminal shall check the flag in  $EF_{PBC}$  and if this flag is set, shall update the  $EF_{CC}$ , and then reset the flag. A flag set in  $EF_{PBC}$  results in a full synchronisation of the phonebook between an external entity and the UICC (if synchronisation is requested).

The EF structure related to the public phonebook is located under  $DF_{PHONEBOOK}$  in  $DF_{TELECOM}$ . A USIM specific phonebook may exist for application specific entries. The application specific phonebook is protected by the application PIN. The organisation of files in the application specific phonebook follows the same rules as the one specified for the public phone book under  $DF_{TELECOM}$ . The application specific phonebook may contain a different set of files than the one in the public area under  $DF_{TELECOM}$ .

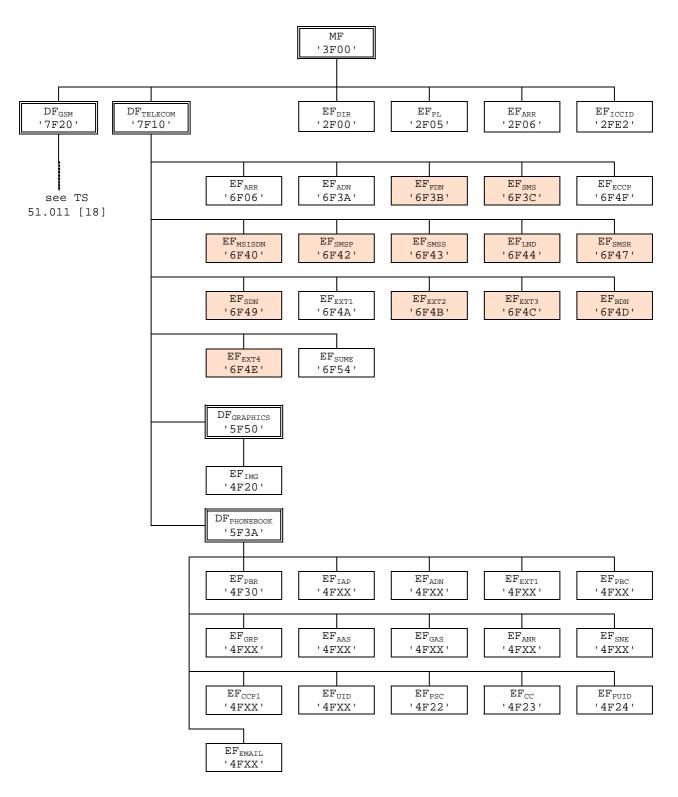
NEXT REVISED SECTION

## 4.6.2 Contents of files at the DF<sub>PHONEBOOK</sub> under the DF<sub>TELECOM</sub>

This DF has the same structure as  $DF_{PHONEBOOK}$  under the <u>A</u>DF<sub>USIM</sub>.

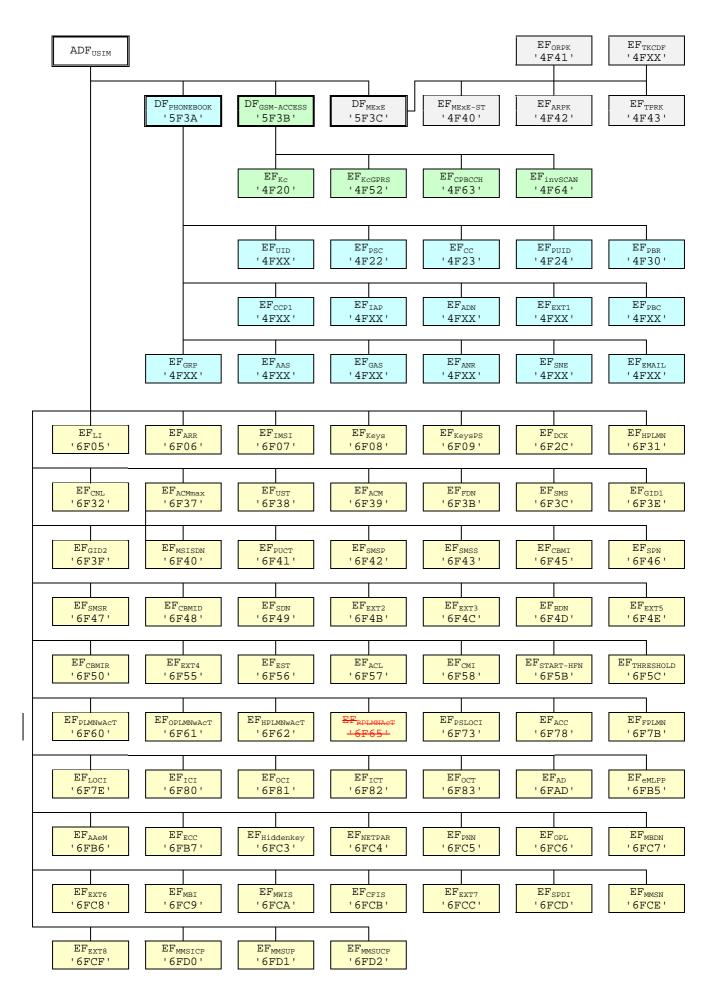
## 4.7 Files of USIM

This clause contains two figures depicting the file structure of the UICC and the  $ADF_{USIM}$ .  $ADF_{USIM}$  shall be selected using the AID and information in  $EF_{DIR}$ .



NOTE: Files under DF<sub>TELECOM</sub> with shaded background are defined in TS 51.011 [18].

#### Figure 4.1: File identifiers and directory structures of UICC



### Figure 4.2: File identifiers and directory structures of USIM

DF '5F70' is reserved for SoLSA. EF '4F30' (EF<sub>SAL</sub>) and EF '4F31' (EF<sub>SLL</sub>) are reserved under DF '5F70' (SoLSA).

### NEXT REVISED SECTION

5.1.1.2 USIM initialisation

The ME requests the emergency call codes. For service requirements, see TS 22.101 [24].

The ME requests the Language Indication. The preferred language selection shall always use the  $EF_{LI}$  in preference to the  $EF_{PL}$  at the MF unless any of the following conditions applies:

- if the  $EF_{LI}$  has the value 'FFFF' in its highest priority position, then the preferred language selection shall be the language preference in the  $EF_{PL}$  at the MF level according the procedure defined in TS 31.101[11];
- if the ME does not support any of the language codes indicated in  $EF_{LI}$ , or if  $EF_{LI}$  is not present, then the language selection shall be as defined in  $EF_{PL}$  at the MF level according the procedure defined in TS 31.101[11];
- if neither the languages of  $EF_{LI}$  nor  $EF_{PL}$  are supported by the terminal, then the terminal shall use its own internal default selection.

The ME then runs the user verification procedure. If the procedure is not performed successfully, the USIM initialisation stops.

The ME performs the administrative information request.

The ME performs the USIM Service Table request.

The ME performs the Enabled Services Table Request.

In case FDN is enabled, an ME which does not support FDN shall allow emergency calls but shall not allow MO-CS calls and MO-SMS.

If BDN is enabled, an ME which does not support Call Control shall allow emergency calls but shall not allow MO-CS calls.

If ACL is enabled, an ME which does not support ACL shall not send any APN to the network.

If all these procedures have been performed successfully then 3G session shall start. In all other cases 3G session shall not start.

Afterwards, the ME runs the following procedures if the ME and the USIM support the related services:

- IMSI request.
- Access control information request.
- HPLMN search period request.
- HPLMN selector with Access Technology request;
- User controlled PLMN selector with Access Technology request;
- Operator controlled PLMN selector with Access Technology request;
- GSM initialisation requests.

- Location Information request for CS-and/or PS-mode.
- Cipher key and integrity key request for CS- and/or PS-mode.
- Forbidden PLMN request.
- Initialisation value for hyperframe number request.
- Maximum value of START request.
- CBMID request.
- Depending on the further services that are supported by both the ME and the USIM the corresponding EFs have to be read.

After the USIM initialisation has been completed successfully, the ME is ready for a 3G session and shall indicate this to the USIM by sending a particular STATUS command.

NEXT REVISED SECTION

## 5.1.2.2 GSM termination procedures

If GSM access is enabled the following termination procedures shall be performed if the applicable service is enabled.

- CPBCCH information update (if the ME supports the GSM compact access technology);

-RPLMN last used Access Technology update (if the ME supports the GSM compact access technology).

NEXT REVISED SECTION

## 5.3.22 VoidRPLMN last used Access Technology

- Requirement: Service n°50 "available".

— Request: The ME performs the reading procedure with EF<sub>RPLMNAcT</sub>

Update: The ME performs the updating procedure with EF<sub>RPLMNAcT</sub>.

NEXT REVISED SECTION

## Annex A (informative): EF changes via Data Download or USAT applications

This annex defines if changing the content of an EF by the network (e.g. by sending an SMS), or by a USAT Application, is advisable. Updating of certain EFs "over the air" such as EF<sub>ACC</sub> could result in unpredictable behaviour of the UE; these are marked "Caution" in the table below. Certain EFs are marked "No"; under no circumstances should "over the air" changes of these EFs be considered.

ile identification	Description	Change advise
'2F00'	Application directory	Caution
'2F05'	Preferred languages	Yes
'2F06'	Access rule reference	Caution
'2FE2'	ICC identification	No
'4F20'	Image data	Yes
'4F20'	GSM Ciphering key Kc	No
'4FXX'	Image Instance data Files	Yes
'4FXX'	Unique identifier	Yes
'4F22'	Phone book synchronisation counter	Yes
'4F23'	Change counter	Yes
'4F24'	Previous unique identifier	Yes
'4F30'	Phone book reference file	Yes
'4FXX'	Capability configuration parameters 1	Yes
'4F52'	GPRS Ciphering key KcGPRS	No
'4F63'	CPBCCH Information	No
'4F64'	Investigation Scan	Caution
'4FXX'	Additional number alpha string	Yes
'4FXX'	Additional number	Yes
'4FXX'	Second name entry	Yes
'4FXX'	Grouping information alpha string	Yes
'4FXX'	Phone book control	Yes
'4FXX'	E-mail addresses	Yes
'4FXX'	Index administration phone book	Yes
'4FXX'	Extension 1	Yes
'4FXX'	Abbreviated dialling numbers	Yes
'4FXX'	Grouping file	Yes
'6F05'	Language indication	Yes
'6F06'	Access rule reference (under ADF <sub>USIM</sub> and DF <sub>TELECOM</sub> )	Caution
'6F07'	IMSI	Caution (Note 1
'6F08'	Ciphering and integrity keys	No
'6F09'	Ciphering and integrity keys for packet switched domain	No
'6F2C'	De-personalization Control Keys	Caution
'6F31'	HPLMN search period	Caution
'6F32'	Co-operative network list	Caution
'6F37'	ACM maximum value	Yes
'6F38'	USIM service table	Caution
'6F39'	Accumulated call meter	Yes
'6F3B'	Fixed dialling numbers	Yes
'6F3C'	Short messages	Yes
'6F3E'	Group identifier level 1	Yes
'6F3F'	Group identifier level 2	Yes

File identification	Description	Change advise
'6F40'	MSISDN storage	Yes
'6F41'	PUCT	Yes
'6F42'	SMS parameters	Yes
'6F43'	SMS status	Yes
'6F45'	СВМІ	Caution
'6F46'	Service provider name	Yes
'6F47'	Short message status reports	Yes
'6F48'	CBMID	Yes
'6F49'	Service Dialling Numbers	Yes
'6F4B'	Extension 2	Yes
'6F4C'	Extension 3	Yes
'6F4D'	Barred dialling numbers	Yes
'6F4E'	Extension 5	Yes
'6F4F'	Capability configuration parameters 2	Yes
'6F50'	CBMIR	Yes
'6F54'	SetUp Menu Elements	Yes
'6F55'	Extension 4	Yes
'6F56'	Enabled services table	Caution
'6F57'	Access point name control list	Yes
'6F58'	Comparison method information	Yes
'6F5B'	Initialisation value for Hyperframe number	Caution
'6F5C'	Maximum value of START	Yes
'6F60'	User controlled PLMN selector with Access Technology	No
'6F61'	Operator controlled PLMN selector with Access	Caution
	Technology	oddion
'6F62'	HPLMN selector with Access Technology	Caution
'6F65'	RPLMN last used Access TechnologyReserved and	CautionN/A
	shall not be used	
'6F73'	Packet switched location information	Caution
'6F78'	Access control class	Caution
'6F7B'	Forbidden PLMNs	Caution
'6F7E'	Location information	No (Note 1)
'6F80'	Incoming call information	Yes
'6F81'	Outgoing call information	Yes
'6F82'	Incoming call timer	Yes
'6F83'	Outgoing call timer	Yes
'6FAD'	Administrative data	Caution
'6FB5'	Enhanced Multi Level Pre-emption and Priority	Yes
'6FB6'	Automatic Answer for eMLPP Service	Yes
'6FB7'	Emergency Call Codes	Caution
'6FC3'	Key for hidden phone book entries	No
'6FC4'	Network Parameters	No
'6FC5'	PLMN Network Name	Yes
'6FC6'	Operator Network List	Yes
'6FC7'	Mailbox Dialling Numbers	Yes
'6FC8'	Extension 6	Yes
'6FC9'	Mailbox Identifier	Caution
	Message Waiting Indication Status	Caution
'6FCB'	Call Forwarding Indication Status	Caution
'6FCC'	Extension 7	Yes
6FCC	Service Provider Display Information	
		Yes
'6FCE'	MMS Notification	Yes
<u>'6FCF'</u>	Extension 8	Yes
'6FD0'	MMS Issuer Connectivity Parameters	Yes
'6FD1' '6FD2'	MMS User Preferences	Yes
	MMS User Connectivity Parameters	Yes

# Annex E (informative): Suggested contents of the EFs at pre-personalization

If EFs have an unassigned value, it may not be clear from the main text what this value should be. This annex suggests values in these cases.

e Identification '2F00'	Description Application directory	Value Card issuer/operator dependant
'2F05'	Preferred languages	'FFFF'
2F05 '2F06'	Access rule reference	Card issuer/operator dependant
'2FE2'	ICC identification	operator dependant
'4F20'	Image data	00FFFF'
4F20'	GSM Ciphering key Kc	'FFFF07'
4F20 '4FXX'		'FFFF'
4FXX'	Image instance data files Unique identifier	'0000'
4F^7		'0000000'
4F22 '4F23'	Phone book synchronisation counter	
	Change counter Previous unique identifier	'0000' '0000'
'4F24'		
'4F30'	Phone book reference file	Operator dependant
'4FXX'	Capability configuration parameters 1	'FFFF'
'4F52'	GPRS Ciphering key KcGPRS	'FFFF07'
'4F63'	CPBCCH Information	'FFFF'
'4F64'	Investigation PLMN scan	'00'
'4FXX'	E-mail addresses	'FFFF'
'4FXX'	Additional number alpha string	'FFFF'
'4FXX'	Second name entry	'FFFF'
'4FXX'	Abbreviated dialling numbers	'FFFF'
'4FXX'	Grouping file	'0000'
'4FXX'	Grouping information alpha string	'FFFF'
'4FXX'	Phone book control	'0000'
'4FXX'	Index administration phone book	'FFFF'
'4FXX'	Additional number	'FFFF'
'4FXX'	Extension 1	'00FFFF'
'6F05'	Language indication	'FFFF'
'6F06'	Access rule reference (under ADF <sub>USIM</sub> and DF <sub>TELECOM</sub> )	Card issuer/operator dependant
'6F07'	IMSI	Operator dependant
'6F08'	Ciphering and integrity keys	'07FFFF'
'6F09'	Ciphering and integrity keys for packet switched domain	'07FFFF'
'6F2C'	De-personalization control keys	'FFFF'
'6F31'	HPLMN search period	'FF'
'6F32'	Co-operative network list	'FFFF'
'6F37'	ACM maximum value	'000000' (see note 1)
'6F38'	USIM service table	Operator dependant
'6F39'	Accumulated call meter	'000000'
'6F3B'	Fixed dialling numbers	'FFFF'
'6F3C'	Short messages	'00FFFF'
'6F3E'	Group identifier level 1	Operator dependant
'6F3F'	Group identifier level 2	Operator dependant
'6F40'	MSISDN storage	'FFFF'
'6F41'	PUCT	'FFFFF0000'
'6F42'	SMS parameters	'FFFF'
'6F43'	SMS status	'FFFF'
'6F45'	CBMI	'FFFF'
6F45 '6F46'	Service provider name	Operator dependant
		00FFFF'
'6F47'	Short message status reports	
'6F48'	CBMID	'FFFF'
'6F49'	Service Dialling Numbers	'FFFF'
'6F4B'	Extension 2	'00FFFF'
'6F4C'	Extension 3	'00FFFF'

File Identification	Description	Value
'6F4D'	Barred Dialling Numbers	'FFFF'
'6F4E'	Extension 5	'00FFFF'
'6F4F'	Capability configuration parameters 2	'FFFF'
'6F50'	CBMIR	'FFFF'
'6F54'	SetUp Menu Elements	Operator dependant
'6F55'	Extension 4	'FFFF'
'6F56'	Enabled services table	Operator dependant
'6F57'	Access point name control list	'00FFFF'
'6F58'	Comparison method information	'FFFF'
'6F5B'	Initialisation value for Hyperframe number	'F0 00 00 F0 00 00'
'6F5C'	Maximum value of START	Operator dependant
'6F60'	User controlled PLMN selector with Access Technology	'FFFFF0000FFFFF0000'
'6F61'	Operator controlled PLMN selector with Access Technology	'FFFFF0000FFFFF0000'
'6F62'	HPLMN selector with Access Technology	'FFFFF60000FFFFF60000'
'6F65'	Reserved and shall not be used used Access Technology	'0000' <u>N/A</u>
'6F73'	Packet switched location information	'FFFFFFF FFFFFF xxxxx 0000 FF 01' (see note 2)
'6F78'	Access control class	Operator dependant
'6F7B'	Forbidden PLMNs	'FFFF'
'6F7E	Location information	'FFFFFFF xxxxx 0000 FF 01' (see note 2)
'6F80'	Incoming call information	'FFFF 000000 00 01FFFF'
'6F81'	Outgoing call information	'FFFF 000000 01FFFF'
'6F82'	Incoming call timer	'000000'
'6F83'	Outgoing call timer	'000000'
'6FAD'	Administrative data	Operator dependant
'6FB5'	EMLPP	Operator dependant
'6FB6'	AaeM	'00'
'6FB7'	Emergency call codes	Operator dependant
'6FC3'	Key for hidden phone book entries	'FFFF'
'6FC4'	Network Parameters	'FFFF'
'6FC5'	PLMN Network Name	Operator dependant
'6FC6'	Operator Network List	Operator dependant
'6FC7'	Mailbox Dialling Numbers	Operator dependant
'6FC8'	Extension 6	'00 FFFF'
'6FC9'	Mailbox Identifier	Operator dependant
'6FCA'	Message Waiting Indication Status	'00 00 00 00'
'6FCB'	Call Forwarding Indication Status	'xx 00 FFFF'
'6FCC'	Extension 7	'00 FFFF'
'6FCD'	Service Provider Display Information	
'6FCE'	MMS Notification	'00 00 00 FFFF'
'6FCF'	Extension 8	'FFFF'
'6FD0'	MMS Issuer Connectivity Parameters	'FFFF'
'6FD1'	MMS User Preferences	'FFFF'
'6FD2'	MMS User Connectivity Parameters	'FFFF'

- NOTE 1: The value '000000' means that ACMmax is not valid, i.e. there is no restriction on the ACM. When assigning a value to ACMmax, care should be taken not to use values too close to the maximum possible value 'FFFFFF', because the INCREASE command does not update EF<sub>ACM</sub> if the units to be added would exceed 'FFFFFF'. This could affect the call termination procedure of the Advice of Charge function.
- NOTE 2: xxxxxx stands for any valid MCC and MNC, coded according to TS 24.008 [9].

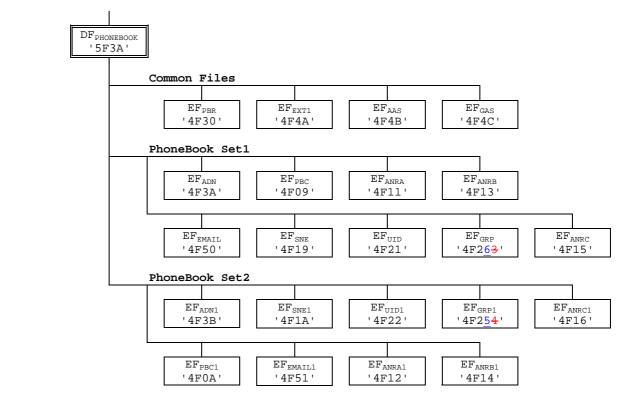
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## Annex G (informative): Phonebook Example

This example phonebook has more than 254 entries. Additional number (3 additional numbers) information, second name and e-mail information can be added to each ADN entry. In addition each entry has a 2 byte Unique ID (UID) attached to it. The phonebook also contains three files that are shared  $EF_{EXT1}$ ,  $EF_{AAS}$  and  $EF_{GAS}$ . These files are addressed from inside a file.  $EF_{EXT1}$  is addressed via  $EF_{ADN}$ ,  $EF_{ADN1}$ ,  $EF_{AAS}$  is addressed via  $EF_{ANRA1}$ ,  $EF_{ANRA1}$  and  $EF_{GAS}$  is addressed via  $EF_{GRP}$ . The phonebook supports two levels of grouping and hidden entries in  $EF_{PBC}$ .

Two records are needed in the phonebook reference file PBR '4F30' for supporting more than 254 entries. The content of the phonebook reference file PBR '4F30' records is as shown in table G.2. The structure of the  $DF_{PHONEBOOK}$  is shown in table G.1.

The content of phonebook entries in the range from 1-508 is described in the tables G.3 and G.4.



## Table G.1: Structure of EFs inside DFPHONEBOOK

Table G.2: Contents of EF<sub>PBR</sub>

 Rec 1
 Tag'A8'
 L='26'
 (for Phonebook Set1)

 Tag'C0'
 L='03'
 '4F3A'
 '01'
 Tag'C5'
 L='03'
 '4F09'
 '02'
 Tag'C6'
 L='02'
 '4F2<u>6</u>3'
 Tag'C4'
 L='02'
 '4F11'

 Tag'C4'
 L='02'
 '4F13'
 Tag'C4'
 L='02'
 '4F15'
 Tag'C3'
 L='02'
 '4F19'
 Tag'C9'
 L='02'
 '4F21'

 Tag'CA'
 L='02'
 '4F50'
 Tag'AA'
 L='0C'
 '4F50'
 Tag'AA'
 L='0C'
 '4F50'

Tag'C2' L='02' | '4F4A' | Tag'C7' | L='02' | '4F4B' | Tag'C8' | L='02' | '4F4C' |

Rec 2 Tag'A8' L='24' (for Phonebook Set 2)

Tag'C0' L='02' |'4F3B' Tag'C5' L='02' |'4F0A' Tag'C6' L='02' |'4F254' Tag'C4' L='02' |'4F12'

Tag'C4' L='02' | '4F14' Tag'C4' L='02' | '4F16' Tag'C3' L='02' | '4F1A' Tag'C9' L='02' | '4F22'

Tag'CA' L='02' '4F51'

Tag'AA' L='0C'

1

Tag'C2' L='02' |'4F4A' Tag'C7' L='02' |'4F4B' Tag'C8' L='02' |'4F4C | 'FF' | 'FF'

### Table G.3: Structure of the 254 first entries in the phonebook

Phone book entry	ADN '4F3A' SFI '01'		PBC '4F09' SFI '02'	GRP '4F2 <mark>6</mark> 3'	ANRA '4F11'	ANRB '4F13'	ANRC '4F15'	SNE '4F19'	UID '4F21'	EXT1 '4F4A'	AAS '4F4B'	GAS '4F4C'	EMAIL '4F50'
#1	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '02'	Hidden (AID rec N° 3)	Rec n°1 Rec n°3 '00'	ANRA Rec nº1	ANRB Rec n°1	ANRC Rec n°1	Second Name Alpha String	UID	Rec '02'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP	email address
#2	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '2A'	Not Hidden	Rec n°2 Rec n°1 Rec n°3	ANRA Rec n°2	ANRB Rec n°2	ANRC Rec n°2	Second Name Alpha String	UID	Rec '2A'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP	email address
#3													
:													
1													
:													
# 254													

## Table G.4: Structure of phone book entries 255 to 508 (Rec 1-254)

	Phone book entry	ADN1 '4F3B'		PBC1 '4F0A'	GRP1 '4F2 <mark>5</mark> 4'	ANRA1 '4F12'	ANRB1 '4F14'	ANRC1 '4F16'	SNE1 '4F1A'	UID1 '4F22'	EXT1 '4F4A'	AAS '4F4B'	GAS '4F4C'	EMAIL1 '4F51'
;	#255	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '02'	Hidden (AID Rec n° 3)	Rec n°1 Rec n°3 '00'	ANRA1 Rec n°1	ANRB1 Rec n°1	ANRC1 Rec n°1	Second Name Alpha String	UID	Rec '02'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP1	email address
;	#256	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '2A'	Not Hidden	Rec n°2 Rec n°1 Rec n°3	ANRA1 Rec n°2	ANRB1 Rec n°2	ANRC1 Rec n°2	Second Name Alpha String	UID	Rec '2A'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP1	email address
;	#257													
	:													
	:													
	:													
3	#508													

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## H.1 List of SFI Values at the USIM ADF Level

File Identification	SFI	Description
'6FB7'	'01'	Emergency call codes
'6F05'	'02'	Language indication
'6FAD'	'03'	Administrative data
'6F38'	'04'	USIM service table
'6F56'	'05'	Enabled services table
'6F78'	'06'	Access control class
'6F07'	'07'	IMSI
'6F08'	'08'	Ciphering and integrity keys
'6F09'	'09'	Ciphering and integrity keys for packet switched domain
'6F60'	'0A'	User PLMN selector
'6F7E	'0B'	Location information
'6F73'	'0C'	Packet switched location information
'6F7B'	'0D'	Forbidden PLMNs
'6F48'	'0E'	CBMID
'6F5B'	'0F'	Hyperframe number
'6F5C'	'10'	Maximum value of hyperframe number
'6F61'	'11'	Operator PLMN selector
'6F31'	'12'	HPLMN search period
'6F62'	'13'	Preferred HPLMN access technology
'6F80'	'14'	Incoming call information
'6F81'	'15'	Outgoing call information
'6F4F'	'16'	Capability configuration parameters 2
'6F06'	'17'	Access Rule Reference
'6F65'	'18'	Reserved and shall not be used RPLMN last used Access Technology
'6FC5'	'19'	PLMN Network Name
'6FC6'	'1A'	Operator Network List
'6FCD'	'1B'	Service Provider Display Information

All other SFI values are reserved for future use.

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			modification of	feature)			R98	(Releas	,	
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							Rel-6	(Releas	e 6)	
Reason for chang	ю <sup>.</sup> Ж	It has heer	n identified tha	t File FF.		- has	inconsistent	file ide	ntifiers	in the
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		that T3 ca	n delete the file	e from the	e spec	ificatio	ons. CN1 m	inutes s	tate the	<b>;</b>
		following r	egarding the L	S: "Note	d. CN1	agre	ed the propo	osal in p	rinciple	but no

	that T3 can delete the file from the specifications. CN1 minutes state the following regarding the LS: "Noted. CN1 agreed the proposal in principle but no CRs were presented to this meeting yet. CRs from interested companies were invited for the next CN1 meeting. TSG-T would like to delete USIM file RPLMN last used access technology since it seems to be needed only for GSM compact and the definition is incorrect anyway. If this is agreed then the outcome is that CN1 must change 23.122 to move this information storage from USIM to ME memory." The LS to CN1 noted that there may a corresponding change to TS 23.122.
	DF <sub>USIM</sub> is incorrect, it must read ADF <sub>USIM</sub> .
Summary of change:	The references to $EF_{RPLMNAcT}$ are deleted everywhere in the specification, and the values of the file identifiers are set to "reserved, not to be used". Change FID of GRP and GRP1. All references to $DF_{USIM}$ are change to $ADF_{USIM}$ .
Consequences if # not approved:	Inconsistencies within the specification, leading to confusion and misinterpretation.
Clauses affected: %	4.2.8, 4.2.56, 4.4.2, 4.6.2,4.7, 5.1.1.2, 5.1.2.2, 5.3.2.2, Annex A, Annex E, Annex G, Annex H1

Other specs affected:	ж	YX	N X X	Other core specifications # Test specifications O&M Specifications	TS 11.11, TS 51.011, TS 23.122
Other comments:	ж				

## . 4.2.8 EF<sub>UST</sub> (USIM Service Table)

This EF indicates which services are available. If a service is not indicated as available in the USIM, the ME shall not select this service.

Identif	ier: '6F38'	Stru	ucture: transparent		Mandatory
	SFI: '04'				
Files	size: X bytes, X >=	1	Update	activity	: low
Access Condit READ UPDAT		PIN ADM			
· · · · · ·	<b>TIVATE</b>	ADM ADM ADM			
Bytes		Description	1	M/O	Length
1	Services nº1 to n	°8		М	1 byte
2	Services n°9 to n	°16		0	1 byte
3	3 Services nº17 to			0	1 byte
4 Services n°25 to		n°32		0	1 byte
etc.					
Х	Services n°(8X-7	) to n°(8X)		0	1 byte

-Services Contents

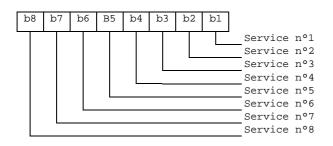
s:	Service n°1:	Local Phone Book
	Service n°2:	Fixed Dialling Numbers (FDN)
	Service n°3:	Extension 2
	Service n°4:	Service Dialling Numbers (SDN)
	Service n°5:	Extension3
	Service n°6:	Barred Dialling Numbers (BDN)
	Service n°7:	Extension4
	Service n°8:	Outgoing Call Information (OCI and OCT)
	Service n°9:	Incoming Call Information (ICI and ICT)
	Service n°10:	Short Message Storage (SMS)
	Service n°11:	Short Message Status Reports (SMSR)
	Service n°12:	Short Message Service Parameters (SMSP)
	Service n°13:	Advice of Charge (AoC)
	Service n°14:	Capability Configuration Parameters (CCP)
	Service n°15:	Cell Broadcast Message Identifier
	Service n°16:	Cell Broadcast Message Identifier Ranges
	Service n°17:	Group Identifier Level 1
	Service n°18:	Group Identifier Level 2
	Service n°19:	Service Provider Name
	Service n°20:	User controlled PLMN selector with Access Technology
	Service n°21:	MSISDN
	Service n°22:	Image (IMG)
	Service n°23:	Not used (reserved for SoLSA)
	Service n°24:	Enhanced Multi-Level Precedence and Pre-emption Service
	Service n°25:	Automatic Answer for eMLPP
	Service n°26:	RFU
	Service n°27:	GSM Access
	Service n°28:	Data download via SMS-PP
	Service n°29:	Data download via SMS-CB
	Service n°30:	Call Control by USIM
	Service n°31:	MO-SMS Control by USIM
	Service n°32:	RUN AT COMMAND command
	Service n°33:	shall be set to '1'
	Service n°34:	Enabled Services Table
	Service n°35:	APN Control List (ACL)
	Service n°36:	Depersonalisation Control Keys
	Service n°37:	Co-operative Network List
	Service n°38:	GSM security context
	Service n°39:	CPBCCH Information
	Service n°40:	Investigation Scan
	Service n°41:	MExE
	Service n°42:	Operator controlled PLMN selector with Access Technology
	Service n°43:	HPLMN selector with Access Technology
	Service n°44:	Extension 5
	Service n°45:	PLMN Network Name
	Service n°46:	Operator PLMN List
	Service n°47:	Mailbox Dialling Numbers
	Service n°48:	Message Waiting Indication Status
	Service n°49:	Call Forwarding Indication Status
	Service n°50:	Reserved and shall not be used RPLMN Last used Access Technology
	Service n°51:	Service Provider Display Information
	Service n°52	Multimedia Messaging Service (MMS)
	Service n°53	Extension 8
	Service n°54	Call control on GPRS by USIM
	Service n°55	MMS User Connectivity Parameters
		·

The EF shall contain at least one byte. Further bytes may be included, but if the EF includes an optional byte, then it is mandatory for the EF to also contain all bytes before that byte. Other services are possible in the future and will be coded on further bytes in the EF. The coding falls under the responsibility of the 3GPP.

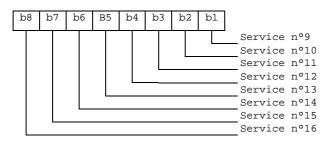
Coding:

1 bit is used to code each service: bit = 1: service available; bit = 0: service not available. Service available means that the USIM has the capability to support the service and that the service is available for the user of the USIM unless the service is identified as "disabled" in EF<sub>EST</sub>.
 Service not available means that the service shall not be used by the USIM user, even if the USIM has the capability to support the service.

First byte:



Second byte:



etc.

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## 4.2.56 VoidEF<sub>RPLMNACT</sub> (RPLMN Last used Access Technology)

This EF contains the last used access technology for the Registered PLMN, RPLMN. (see TS 23.122 [31]). This EF shall contain only one access technology.

NOTE: One access technology means that only one bit is set in the entire field.

- Identif	<del>ier: '6F65'</del>	Structure:	transparent	optiona		
	<del>SFI: '18'</del>					
Ęi	<del>le size: 2+X bytes</del>		Update activ	<del>ity:</del>	<del>ligh</del>	
ccess Condit	ions:					
READ		PIN				
UPDA	TE	PIN				
		ADM				
ACTIV		ADM				
Bytes		Description	M/C	Ð	Length	
1 to 2	Access Technolo	gy of RPLMN	M		2 bytes	
<del>3 to 2+X</del>	RFU	~ /	θ		X bytes	

Access Technology

Coding:

#### NEXT REVISED SECTION

## 4.4.2 Contents of files at the DF PHONEBOOK level

The UICC may contain a global phonebook, or application specific phonebooks, or both in parallel. When both phonebook types co-exist, they are independent and no data is shared. In this case, it shall be possible for the user to select which phonebook the user would like to access.

It is recommended that the terminal searches for the global phonebook located under  $DF_{TELECOM}$  as its presence is not indicated anywhere in the USIM application.

The global phonebook is located in  $DF_{PHONEBOOK}$  under  $DF_{TELECOM}$ . Each specific USIM application phonebook is located in  $DF_{PHONEBOOK}$  of its respective Application  $\underline{A}DF_{USIM}$ . The organisation of files in  $DF_{PHONEBOOK}$  under  $\underline{A}DF_{USIM}$ and under  $DF_{TELECOM}$  follows the same rules. Yet  $DF_{PHONEBOOK}$  under  $\underline{A}DF_{USIM}$  may contain a different set of files than  $DF_{PHONEBOOK}$  under  $DF_{TELECOM}$ . All phonebook related EFs are located under their respective  $DF_{PHONEBOOK}$ . USIM specific phonebooks are dedicated to application specific entries. Each application specific phonebook is protected by the application PIN.

 $EF_{ADN}$  and  $EF_{PBR}$  shall always be present if the  $DF_{Phonebook}$  is present. If any phonebook file other than  $EF_{ADN}$  or  $EF_{EXTL}$  is used, then  $EF_{PBC}$  shall be present.

If a GSM application resides on the UICC, the EFs ADN and EXT1 from one  $DF_{PHONEBOOK}$  (defined at GSM application installation) are mapped to  $DF_{TELECOM}$ . Their file IDs are specified in TS 51.011 [18], i.e.  $EF_{ADN} = '6F3A'$  and  $EF_{EXT1} = '6F4A'$ , respectively.

If the UICC is inserted into a terminal accessing the ADN and EXT1 files under  $DF_{TELECOM}$ ; and a record in these files has been updated, a flag in the corresponding entry control information in the  $EF_{PBC}$  is set from 0 to 1 by the UICC. If the UICC is later inserted into a terminal that supports the 3G phonebook, the terminal shall check the flag in  $EF_{PBC}$  and if this flag is set, shall update the  $EF_{CC}$ , and then reset the flag. A flag set in  $EF_{PBC}$  results in a full synchronisation of the phonebook between an external entity and the UICC (if synchronisation is requested).

The EF structure related to the public phonebook is located under  $DF_{PHONEBOOK}$  in  $DF_{TELECOM}$ . A USIM specific phonebook may exist for application specific entries. The application specific phonebook is protected by the application PIN. The organisation of files in the application specific phonebook follows the same rules as the one specified for the public phone book under  $DF_{TELECOM}$ . The application specific phonebook may contain a different set of files than the one in the public area under  $DF_{TELECOM}$ .

NEXT REVISED SECTION

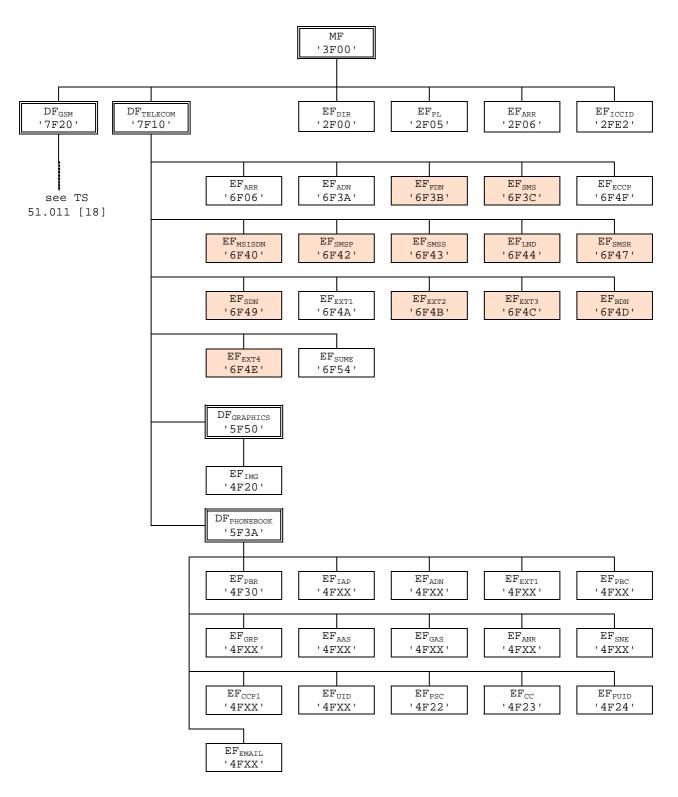
## 4.6.2 Contents of files at the DF<sub>PHONEBOOK</sub> under the DF<sub>TELECOM</sub>

This DF has the same structure as  $DF_{PHONEBOOK}$  under the <u>A</u>DF<sub>USIM</sub>.

NEXT REVISED SECTION

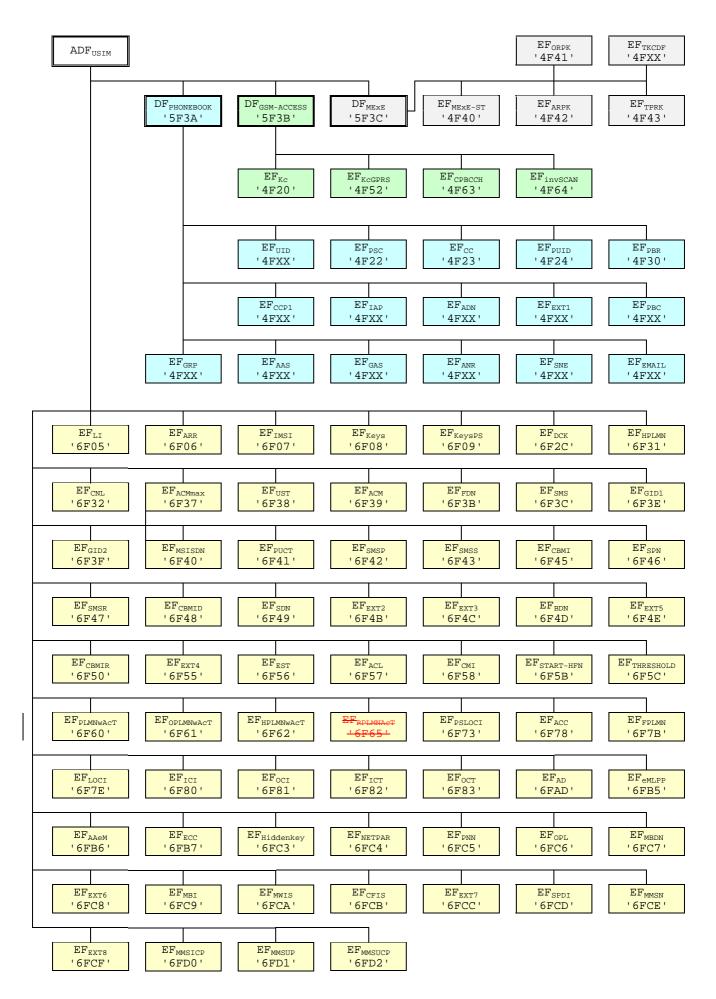
## 4.7 Files of USIM

This clause contains two figures depicting the file structure of the UICC and the  $ADF_{USIM}$ .  $ADF_{USIM}$  shall be selected using the AID and information in  $EF_{DIR}$ .



NOTE: Files under DF<sub>TELECOM</sub> with shaded background are defined in TS 51.011 [18].

### Figure 4.1: File identifiers and directory structures of UICC



### Figure 4.2: File identifiers and directory structures of USIM

DF '5F70' is reserved for SoLSA. EF '4F30' (EF<sub>SAL</sub>) and EF '4F31' (EF<sub>SLL</sub>) are reserved under DF '5F70' (SoLSA).

### NEXT REVISED SECTION

## 5.1.1.2 USIM initialisation

The ME requests the emergency call codes. For service requirements, see TS 22.101 [24].

The ME requests the Language Indication. The preferred language selection shall always use the  $EF_{LI}$  in preference to the  $EF_{PL}$  at the MF unless any of the following conditions applies:

- if the  $EF_{LI}$  has the value 'FFFF' in its highest priority position, then the preferred language selection shall be the language preference in the  $EF_{PL}$  at the MF level according the procedure defined in TS 31.101[11];
- if the ME does not support any of the language codes indicated in  $EF_{LI}$ , or if  $EF_{LI}$  is not present, then the language selection shall be as defined in  $EF_{PL}$  at the MF level according the procedure defined in TS 31.101[11];
- if neither the languages of  $EF_{LI}$  nor  $EF_{PL}$  are supported by the terminal, then the terminal shall use its own internal default selection.

The ME then runs the user verification procedure. If the procedure is not performed successfully, the USIM initialisation stops.

The ME performs the administrative information request.

The ME performs the USIM Service Table request.

The ME performs the Enabled Services Table Request.

In case FDN is enabled, an ME which does not support FDN shall allow emergency calls but shall not allow MO-CS calls and MO-SMS.

If BDN is enabled, an ME which does not support Call Control shall allow emergency calls but shall not allow MO-CS calls.

If ACL is enabled, an ME which does not support ACL shall not send any APN to the network.

If all these procedures have been performed successfully then 3G session shall start. In all other cases 3G session shall not start.

Afterwards, the ME runs the following procedures if the ME and the USIM support the related services:

- IMSI request.
- Access control information request.
- HPLMN search period request.
- HPLMN selector with Access Technology request;
- User controlled PLMN selector with Access Technology request;
- Operator controlled PLMN selector with Access Technology request;
- GSM initialisation requests.

- Location Information request for CS-and/or PS-mode.
- Cipher key and integrity key request for CS- and/or PS-mode.
- Forbidden PLMN request.
- Initialisation value for hyperframe number request.
- Maximum value of START request.
- CBMID request.
- Depending on the further services that are supported by both the ME and the USIM the corresponding EFs have to be read.

After the USIM initialisation has been completed successfully, the ME is ready for a 3G session and shall indicate this to the USIM by sending a particular STATUS command.

NEXT REVISED SECTION

## 5.1.2.2 GSM termination procedures

If GSM access is enabled the following termination procedures shall be performed if the applicable service is enabled.

- CPBCCH information update (if the ME supports the GSM compact access technology);

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## 5.3.22 VoidRPLMN last used Access Technology

- Requirement: Service n°50 "available".

— Request: The ME performs the reading procedure with EF<sub>RPLMNAcT</sub>

Update: The ME performs the updating procedure with EF<sub>RPLMNAct</sub>-

NEXT REVISED SECTION

## Annex A (informative): EF changes via Data Download or USAT applications

This annex defines if changing the content of an EF by the network (e.g. by sending an SMS), or by a USAT Application, is advisable. Updating of certain EFs "over the air" such as EF<sub>ACC</sub> could result in unpredictable behaviour of the UE; these are marked "Caution" in the table below. Certain EFs are marked "No"; under no circumstances should "over the air" changes of these EFs be considered.

ile identification	Description	Change advised		
'2F00'	Application directory	Caution		
'2F05'	Preferred languages	Yes		
'2F06'	Access rule reference	Caution		
'2FE2'	ICC identification	No		
'4F20'	Image data	Yes		
'4F20'	GSM Ciphering key Kc	No		
'4FXX'	Image Instance data Files	Yes		
'4FXX'	Unique identifier	Yes		
'4F22'	Phone book synchronisation counter	Yes		
'4F23'	Change counter	Yes		
'4F24'	Previous unique identifier	Yes		
'4F30'	Phone book reference file	Yes		
'4FXX'	Capability configuration parameters 1	Yes		
'4F52'	GPRS Ciphering key KcGPRS	No		
'4F63'	CPBCCH Information	No		
'4F64'	Investigation Scan	Caution		
'4FXX'	Additional number alpha string	Yes		
'4FXX'	Additional number	Yes		
'4FXX'	Second name entry	Yes		
'4FXX'	Grouping information alpha string	Yes		
'4FXX'	Phone book control	Yes		
'4FXX'	E-mail addresses	Yes		
'4FXX'	Index administration phone book	Yes		
'4FXX'	Extension 1	Yes		
'4FXX'	Abbreviated dialling numbers	Yes		
'4FXX'	Grouping file	Yes		
'6F05'	Language indication	Yes		
'6F06'	Access rule reference (under ADF <sub>USIM</sub> and DF <sub>TELECOM</sub> )	Caution		
'6F07'	IMSI	Caution (Note 1		
'6F08'	Ciphering and integrity keys	No		
'6F09'	Ciphering and integrity keys for packet switched domain	No		
'6F2C'	De-personalization Control Keys	Caution		
'6F31'	HPLMN search period	Caution		
'6F32'	Co-operative network list	Caution		
'6F37'	ACM maximum value	Yes		
'6F38'	USIM service table	Caution		
'6F39'	Accumulated call meter	Yes		
'6F3B'	Fixed dialling numbers	Yes		
'6F3C'	Short messages	Yes		
'6F3E'	Group identifier level 1	Yes		
'6F3F'	Group identifier level 2	Yes		

File identification	Description	Change advise
'6F40'	MSISDN storage	Yes
'6F41'	PUCT	Yes
'6F42'	SMS parameters	Yes
'6F43'	SMS status	Yes
'6F45'	СВМІ	Caution
'6F46'	Service provider name	Yes
'6F47'	Short message status reports	Yes
'6F48'	CBMID	Yes
'6F49'	Service Dialling Numbers	Yes
'6F4B'	Extension 2	Yes
'6F4C'	Extension 3	Yes
'6F4D'	Barred dialling numbers	Yes
'6F4E'	Extension 5	Yes
'6F4F'	Capability configuration parameters 2	Yes
'6F50'	CBMIR	Yes
'6F54'	SetUp Menu Elements	Yes
'6F55'	Extension 4	Yes
'6F56'	Enabled services table	Caution
'6F57'	Access point name control list	Yes
'6F58'	Comparison method information	Yes
'6F5B'	Initialisation value for Hyperframe number	Caution
'6F5C'	Maximum value of START	Yes
'6F60'	User controlled PLMN selector with Access Technology	No
'6F61'	Operator controlled PLMN selector with Access	Caution
	Technology	oddion
'6F62'	HPLMN selector with Access Technology	Caution
'6F65'	RPLMN last used Access TechnologyReserved and	CautionN/A
	shall not be used	
'6F73'	Packet switched location information	Caution
'6F78'	Access control class	Caution
'6F7B'	Forbidden PLMNs	Caution
'6F7E'	Location information	No (Note 1)
'6F80'	Incoming call information	Yes
'6F81'	Outgoing call information	Yes
'6F82'	Incoming call timer	Yes
'6F83'	Outgoing call timer	Yes
'6FAD'	Administrative data	Caution
'6FB5'	Enhanced Multi Level Pre-emption and Priority	Yes
'6FB6'	Automatic Answer for eMLPP Service	Yes
'6FB7'	Emergency Call Codes	Caution
'6FC3'	Key for hidden phone book entries	No
'6FC4'	Network Parameters	No
'6FC5'	PLMN Network Name	Yes
'6FC6'	Operator Network List	Yes
'6FC7'	Mailbox Dialling Numbers	Yes
'6FC8'	Extension 6	Yes
'6FC9'	Mailbox Identifier	Caution
	Message Waiting Indication Status	Caution
'6FCB'	Call Forwarding Indication Status	Caution
'6FCC'	Extension 7	Yes
6FCC	Service Provider Display Information	
		Yes
'6FCE'	MMS Notification	Yes
<u>'6FCF'</u>	Extension 8	Yes
'6FD0'	MMS Issuer Connectivity Parameters	Yes
'6FD1' '6FD2'	MMS User Preferences	Yes
	MMS User Connectivity Parameters	Yes

# Annex E (informative): Suggested contents of the EFs at pre-personalization

If EFs have an unassigned value, it may not be clear from the main text what this value should be. This annex suggests values in these cases.

e Identification '2F00'	Description Application directory	Value Card issuer/operator dependant
'2F05'	Preferred languages	'FFFF'
2F05 '2F06'	Access rule reference	Card issuer/operator dependant
'2FE2'	ICC identification	operator dependant
'4F20'	Image data	00FFFF'
4F20'	GSM Ciphering key Kc	'FFFF07'
4F20 '4FXX'		'FFFF'
4FXX'	Image instance data files Unique identifier	'0000'
4F^7		'0000000'
4F22 '4F23'	Phone book synchronisation counter	
	Change counter Previous unique identifier	'0000' '0000'
'4F24'		
'4F30'	Phone book reference file	Operator dependant
'4FXX'	Capability configuration parameters 1	'FFFF'
'4F52'	GPRS Ciphering key KcGPRS	'FFFF07'
'4F63'	CPBCCH Information	'FFFF'
'4F64'	Investigation PLMN scan	'00'
'4FXX'	E-mail addresses	'FFFF'
'4FXX'	Additional number alpha string	'FFFF'
'4FXX'	Second name entry	'FFFF'
'4FXX'	Abbreviated dialling numbers	'FFFF'
'4FXX'	Grouping file	'0000'
'4FXX'	Grouping information alpha string	'FFFF'
'4FXX'	Phone book control	'0000'
'4FXX'	Index administration phone book	'FFFF'
'4FXX'	Additional number	'FFFF'
'4FXX'	Extension 1	'00FFFF'
'6F05'	Language indication	'FFFF'
'6F06'	Access rule reference (under ADF <sub>USIM</sub> and DF <sub>TELECOM</sub> )	Card issuer/operator dependant
'6F07'	IMSI	Operator dependant
'6F08'	Ciphering and integrity keys	'07FFFF'
'6F09'	Ciphering and integrity keys for packet switched domain	'07FFFF'
'6F2C'	De-personalization control keys	'FFFF'
'6F31'	HPLMN search period	'FF'
'6F32'	Co-operative network list	'FFFF'
'6F37'	ACM maximum value	'000000' (see note 1)
'6F38'	USIM service table	Operator dependant
'6F39'	Accumulated call meter	'000000'
'6F3B'	Fixed dialling numbers	'FFFF'
'6F3C'	Short messages	'00FFFF'
'6F3E'	Group identifier level 1	Operator dependant
'6F3F'	Group identifier level 2	Operator dependant
'6F40'	MSISDN storage	'FFFF'
'6F41'	PUCT	'FFFFF0000'
'6F42'	SMS parameters	'FFFF'
'6F43'	SMS status	'FFFF'
'6F45'	CBMI	'FFFF'
6F45 '6F46'	Service provider name	Operator dependant
		00FFFF'
'6F47'	Short message status reports	
'6F48'	CBMID	'FFFF'
'6F49'	Service Dialling Numbers	'FFFF'
'6F4B'	Extension 2	'00FFFF'
'6F4C'	Extension 3	'00FFFF'

File Identification	Description	Value				
'6F4D'	Barred Dialling Numbers	'FFFF'				
'6F4E'	Extension 5	'00FFFF'				
'6F4F'	Capability configuration parameters 2	'FFFF'				
'6F50'	CBMIR	'FFFF'				
'6F54'	SetUp Menu Elements	Operator dependant				
'6F55'	Extension 4	'FFFF'				
'6F56'	Enabled services table	Operator dependant				
'6F57'	Access point name control list	'00FFFF'				
'6F58'	Comparison method information	'FFFF'				
'6F5B'	Initialisation value for Hyperframe number	'F0 00 00 F0 00 00'				
'6F5C'	Maximum value of START	Operator dependant				
'6F60'	User controlled PLMN selector with Access Technology	'FFFFF0000FFFFF0000'				
'6F61'	Operator controlled PLMN selector with Access Technology	'FFFFF0000FFFFF0000'				
'6F62'	HPLMN selector with Access Technology	'FFFFF60000FFFFF60000'				
'6F65'	Reserved and shall not be used used Access Technology	'0000' <u>N/A</u>				
'6F73'	Packet switched location information	'FFFFFFF FFFFFF xxxxx 0000 FF 01' (see note 2)				
'6F78'	Access control class	Operator dependant				
'6F7B'	Forbidden PLMNs	'FFFF'				
'6F7E	Location information	'FFFFFFF xxxxx 0000 FF 01' (see note 2)				
'6F80'	Incoming call information	'FFFF 000000 00 01FFFF'				
'6F81'	Outgoing call information	'FFFF 000000 01FFFF'				
'6F82'	Incoming call timer	'000000'				
'6F83'	Outgoing call timer	'000000'				
'6FAD'	Administrative data	Operator dependant				
'6FB5'	EMLPP	Operator dependant				
'6FB6'	AaeM	'00'				
'6FB7'	Emergency call codes	Operator dependant				
'6FC3'	Key for hidden phone book entries	'FFFF'				
'6FC4'	Network Parameters	'FFFF'				
'6FC5'	PLMN Network Name	Operator dependant				
'6FC6'	Operator Network List	Operator dependant				
'6FC7'	Mailbox Dialling Numbers	Operator dependant				
'6FC8'	Extension 6	'00 FFFF'				
'6FC9'	Mailbox Identifier	Operator dependant				
'6FCA'	Message Waiting Indication Status	'00 00 00 00'				
'6FCB'	Call Forwarding Indication Status	'xx 00 FFFF'				
'6FCC'	Extension 7	'00 FFFF'				
'6FCD'	Service Provider Display Information					
'6FCE'	MMS Notification	'00 00 00 FFFF'				
'6FCF'	Extension 8	'FFFF'				
'6FD0'	MMS Issuer Connectivity Parameters	'FFFF'				
'6FD1'	MMS User Preferences	'FFFF'				
'6FD2'	MMS User Connectivity Parameters	'FFFF'				

- NOTE 1: The value '000000' means that ACMmax is not valid, i.e. there is no restriction on the ACM. When assigning a value to ACMmax, care should be taken not to use values too close to the maximum possible value 'FFFFFF', because the INCREASE command does not update EF<sub>ACM</sub> if the units to be added would exceed 'FFFFFF'. This could affect the call termination procedure of the Advice of Charge function.
- NOTE 2: xxxxxx stands for any valid MCC and MNC, coded according to TS 24.008 [9].

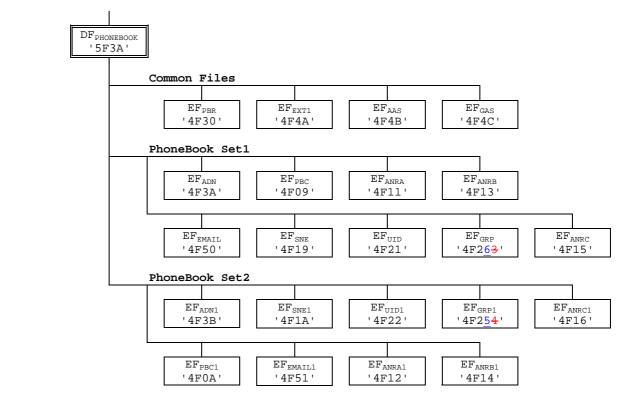
NEXT REVISED SECTION

## Annex G (informative): Phonebook Example

This example phonebook has more than 254 entries. Additional number (3 additional numbers) information, second name and e-mail information can be added to each ADN entry. In addition each entry has a 2 byte Unique ID (UID) attached to it. The phonebook also contains three files that are shared  $EF_{EXT1}$ ,  $EF_{AAS}$  and  $EF_{GAS}$ . These files are addressed from inside a file.  $EF_{EXT1}$  is addressed via  $EF_{ADN}$ ,  $EF_{ADN1}$ ,  $EF_{AAS}$  is addressed via  $EF_{ANRA1}$ ,  $EF_{ANRA1}$  and  $EF_{GAS}$  is addressed via  $EF_{GRP}$ . The phonebook supports two levels of grouping and hidden entries in  $EF_{PBC}$ .

Two records are needed in the phonebook reference file PBR '4F30' for supporting more than 254 entries. The content of the phonebook reference file PBR '4F30' records is as shown in table G.2. The structure of the  $DF_{PHONEBOOK}$  is shown in table G.1.

The content of phonebook entries in the range from 1-508 is described in the tables G.3 and G.4.



## Table G.1: Structure of EFs inside DFPHONEBOOK

Table G.2: Contents of EF<sub>PBR</sub>

 Rec 1
 Tag'A8'
 L='26'
 (for Phonebook Set1)

 Tag'C0'
 L='03'
 '4F3A'
 '01'
 Tag'C5'
 L='03'
 '4F09'
 '02'
 Tag'C6'
 L='02'
 '4F2<u>6</u>3'
 Tag'C4'
 L='02'
 '4F11'

 Tag'C4'
 L='02'
 '4F13'
 Tag'C4'
 L='02'
 '4F15'
 Tag'C3'
 L='02'
 '4F19'
 Tag'C9'
 L='02'
 '4F21'

 Tag'CA'
 L='02'
 '4F50'
 Tag'AA'
 L='0C'
 '4F50'
 Tag'AA'
 L='0C'
 '4F50'

Tag'C2' L='02' | '4F4A' | Tag'C7' | L='02' | '4F4B' | Tag'C8' | L='02' | '4F4C' |

Rec 2 Tag'A8' L='24' (for Phonebook Set 2)

Tag'C0' L='02' |'4F3B' Tag'C5' L='02' |'4F0A' Tag'C6' L='02' |'4F254' Tag'C4' L='02' |'4F12'

Tag'C4' L='02' | '4F14' Tag'C4' L='02' | '4F16' Tag'C3' L='02' | '4F1A' Tag'C9' L='02' | '4F22'

Tag'CA' L='02' '4F51'

Tag'AA' L='0C'

1

Tag'C2' L='02' |'4F4A' Tag'C7' L='02' |'4F4B' Tag'C8' L='02' |'4F4C | 'FF' | 'FF'

### Table G.3: Structure of the 254 first entries in the phonebook

Phone book entry	'4F	DN 3A' '01'	PBC '4F09' SFI '02'	GRP '4F2 <mark>6</mark> 3'	ANRA '4F11'	ANRB '4F13'	ANRC '4F15'	SNE '4F19'	UID '4F21'	EXT1 '4F4A'	AAS '4F4B'	GAS '4F4C'	EMAIL '4F50'
#1	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '02'	Hidden (AID rec N° 3)	Rec n°1 Rec n°3 '00'	ANRA Rec nº1	ANRB Rec n°1	ANRC Rec n°1	Second Name Alpha String	UID	Rec '02'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP	email address
#2	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '2A'	Not Hidden	Rec n°2 Rec n°1 Rec n°3	ANRA Rec n°2	ANRB Rec n°2	ANRC Rec n°2	Second Name Alpha String	UID	Rec '2A'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP	email address
#3													
:													
1													
:													
# 254													

## Table G.4: Structure of phone book entries 255 to 508 (Rec 1-254)

	Phone book entry	AD '4F		PBC1 '4F0A'	GRP1 '4F2 <mark>5</mark> 4'	ANRA1 '4F12'	ANRB1 '4F14'	ANRC1 '4F16'	SNE1 '4F1A'	UID1 '4F22'	EXT1 '4F4A'	AAS '4F4B'	GAS '4F4C'	EMAIL1 '4F51'
;	#255	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '02'	Hidden (AID Rec n° 3)	Rec n°1 Rec n°3 '00'	ANRA1 Rec n°1	ANRB1 Rec n°1	ANRC1 Rec n°1	Second Name Alpha String	UID	Rec '02'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP1	email address
;	#256	ADN Content Bytes (1- (X+13))	EXT1 Ident. (Byte X+14): Rec '2A'	Not Hidden	Rec n°2 Rec n°1 Rec n°3	ANRA1 Rec n°2	ANRB1 Rec n°2	ANRC1 Rec n°2	Second Name Alpha String	UID	Rec '2A'	Record numbers as defined in the ANRs	Record no.'s as defined in GRP1	email address
;	#257													
	:													
	:													
	:													
3	#508													

## NEXT REVISED SECTION

## H.1 List of SFI Values at the USIM ADF Level

File Identification	SFI	Description
'6FB7'	'01'	Emergency call codes
'6F05'	'02'	Language indication
'6FAD'	'03'	Administrative data
'6F38'	'04'	USIM service table
'6F56'	'05'	Enabled services table
'6F78'	'06'	Access control class
'6F07'	'07'	IMSI
'6F08'	'08'	Ciphering and integrity keys
'6F09'	'09'	Ciphering and integrity keys for packet switched domain
'6F60'	'0A'	User PLMN selector
'6F7E	'0B'	Location information
'6F73'	'0C'	Packet switched location information
'6F7B'	'0D'	Forbidden PLMNs
'6F48'	'0E'	CBMID
'6F5B'	'0F'	Hyperframe number
'6F5C'	'10'	Maximum value of hyperframe number
'6F61'	'11'	Operator PLMN selector
'6F31'	'12'	HPLMN search period
'6F62'	'13'	Preferred HPLMN access technology
'6F80'	'14'	Incoming call information
'6F81'	'15'	Outgoing call information
'6F4F'	'16'	Capability configuration parameters 2
'6F06'	'17'	Access Rule Reference
'6F65'	'18'	Reserved and shall not be used RPLMN last used Access Technology
'6FC5'	'19'	PLMN Network Name
'6FC6'	'1A'	Operator Network List
'6FCD'	'1B'	Service Provider Display Information

All other SFI values are reserved for future use.

		CHA	NGE R	EQUE	EST		CR-Fi	orm-v4
¥	<mark>31.10</mark> 2	2 CR 138	ж	ev _	ж	Current vers	<sup>sion:</sup> 3.11.0 <sup>೫</sup>	
For <u>HELP</u> on us	ing this fo	orm, see botton	n of this pa	ge or look	at the	e pop-up text	over the X symbols	S.
Proposed change at	fects: ೫	(U)SIM X	ME/UE	Rad	dio Ac	cess Networ	k Core Networ	rk
Title: ೫	CR to ma	ake EF-EXT1 o	optional in t	he USIM	Phone	ebook		
Source: ೫	Т3							
Work item code: ೫	TEI					Date: ೫	14.02.03	
	Jse <u>one</u> of F (co A (cc B (ac C (fu D (ec Detailed ex	f the following ca rrection) orresponds to a c Idition of feature, nctional modificati kplanations of the o 3GPP <u>TR 21.90</u>	correction in ), ation of featu on) e above cate	ıre)		2	R99 the following releases (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5)	S:
Reason for change:	Mor lead USI MSI	eover, if EF-E> ds to a problem M uses EF-EX ISDN cannot be ifficant disadva	KT1 exists i I: In the SIM T5 for that e mapped b	n the USI 4, EF-EXT same pur petween th	M, it r 1 is u pose. ne SIN	nust exist in t used to exten Thus, if EF-I M and the US	SIM Phonebook. the SIM as well, whi d EF-MSISDN, while EXT1 exists, EF- actually do not need	e the
Summary of change	ະສ <mark>EF-</mark>	EXT1 is made	optional					
Consequences if not approved:		pping of EF-MS eccesarily was					sible. UICC memory	y is
Clauses affected:	<b>೫ <mark>4.4</mark>.</b>	2.4						
Other specs affected:	N T	Other core spec Test specification D&M Specification	ons	ж				
Other comments:	ж							

## How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: <u>http://www.3gpp.org/3G\_Specs/CRs.htm</u>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked **#** contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

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

## 4.4.2.4 EF<sub>EXT1</sub> (Extension1)

This EF contains extension data of an ADN/SSC. .. This EF shall always be present if the DF<sub>Phonebook</sub> is present.

Extension data is caused by:

- an ADN/SSC which is greater than the 20 digit capacity of the ADN/SSC Elementary File or where common digits are required to follow an ADN/SSC string of less than 20 digits. The remainder is stored in this EF as a record, which is identified by a specified identification byte inside the ADN/SSC Elementary File. The EXT1 record in this case is specified as additional data;
- an associated called party subaddress. The EXT1 record in this case is specified as subaddress data.

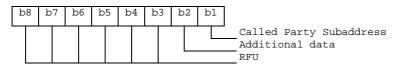
Identifie	er: '4FXX'	Str	ucture: linear fixed		Optional
SF	I: 'YY'				
Reco	ord length: 13 byte	S	Update	e activity	r: low
Access Condit	ions:				
READ		PIN			
UPDA	UPDATE				
DEACT	ΓΙVΑΤΕ	ADM			
ACTIV	ATE	ADM			
	T				
Bytes		Descriptio	n	M/O	Length
1	Record type			М	1 byte
2 to 12	Extension data			М	11 bytes
13	Identifier			М	1 byte

• Record type.

Contents:

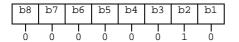
- type of the record.

Coding:



- b3-b8 are reserved and set to 0;
- a bit set to 1 identifies the type of record;
- only one type can be set;
- '00' indicates the type "unknown".

The following example of coding means that the type of extension data is "additional data":



- Extension data.
  - Contents:

additional data or Called Party Subaddress depending on record type.

Coding:

Case 1, Extension1 record is additional data:

- The first byte of the extension data gives the number of bytes of the remainder of ADN/SSC. The coding of remaining bytes is BCD, according to the coding of ADN/SSC. Unused nibbles at the end shall be set

to 'F'. It is possible if the number of additional digits exceeds the capacity of the additional record to chain another record inside the EXT1 Elementary File by the identifier in byte 13.

Case 2, Extension1 record is Called Party Subaddress:

- The subaddress data contains information as defined for this purpose in TS 24.008 [9]. All information defined in TS 24.008, except the information element identifier, shall be stored in the USIM. The length of this subaddress data can be up to 22 bytes. In those cases where two extension records are needed, these records are chained by the identifier field. The extension record containing the first part of the called party subaddress points to the record which contains the second part of the subaddress.
- Identifier.
- Contents:

identifier of the next extension record to enable storage of information longer than 11 bytes.

Coding:

record number of next record. 'FF' identifies the end of the chain.

- Example of a chain of extension records being associated to an ADN/SSC. The extension1 record identifier (Byte 14+X) of ADN/SSC is set to 3.

No of Record	Туре	Extension Data	Next	Record
:	:	:	:	
:	:	:	:	
Record 3	'02'	xxxx	'06'	
Record 4	ʻxx'	xxxx	ʻxx'	
Record 5	'01'	xxxx	'FF'	◀────
Record 6	'01'	xxxx	'05'	◀
:	:	:	:	
:	:	:	:	

In this example ADN/SSC is associated to additional data (record 3) and a called party subaddress whose length is more than 11 bytes (records 6 and 5).

		C	HANC	GE R	EQI	JES	т			CR-Form-v4
¥	<mark>31.10</mark> 2	2 CR	139	Ħ	ev	- #	Curre	ent versio	on: <b>4.7.0</b>	Ħ
For <u>HELP</u> on us	ing this f	orm, see	bottom of	this pag	ge or l	ook at	the pop-	up text o	over the X sy	mbols.
Proposed change at	fects: a	€ (U)S	SIM X	ME/UE		Radio	Access I	Network	Core N	etwork
Title: ដ	CR to m	lake EF-I	EXT1 optic	onal in th	ne US	IM Pho	nebook			
Source: ೫	T3									
Work item code: #	TEI						D	Date:	14.02.03	
	Jse <u>one</u> c F (co A (co B (a C (fu D (e Detailed e	prrection) prrespond ddition of unctional r ditorial mo xplanation	wing categories to a correct feature), modification odification) ns of the ab (R 21.900).	ection in a	re)		Use 2 ase)         	e <u>one</u> of th 2 (1 R96 (4 R97 (4 R98 (4 R98 (4 R99 (4 REL-4 (4	REL-4 he following rel GSM Phase 2) Release 1996) Release 1998) Release 1999) Release 4) Release 4) Release 5)	
Reason for change: # There is no reason for EF-EXT1 to be mandatory in the USIM Phonebook. Moreover, if EF-EXT1 exists in the USIM, it must exist in the SIM as well, w leads to a problem: In the SIM, EF-EXT1 is used to extend EF-MSISDN, w USIM uses EF-EXT5 for that same purpose. Thus, if EF-EXT1 exists, EF- MSISDN cannot be mapped between the SIM and the USIM, which is a significant disadvantage at least for those operators who actually do not ne EXT1.							l, which while the F-			
Summary of change	∷ ೫ EF	-EXT1 is	made opti	ional						
Consequences if not approved:			EF-MSISE					s imposs	ible. UICC m	emory is
Clauses affected:	쁐 <mark>4.4</mark>	.2.4								
Other specs affected:	N	Test spec	re specifica cifications ecifications		ж					
Other comments:	¥									

## How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: <u>http://www.3gpp.org/3G\_Specs/CRs.htm</u>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

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

## 4.4.2.4 EF<sub>EXT1</sub> (Extension1)

This EF contains extension data of an ADN/SSC. This EF shall always be present if the DF<sub>Phonebook</sub> is present.

Extension data is caused by:

- an ADN/SSC which is greater than the 20 digit capacity of the ADN/SSC Elementary File or where common digits are required to follow an ADN/SSC string of less than 20 digits. The remainder is stored in this EF as a record, which is identified by a specified identification byte inside the ADN/SSC Elementary File. The EXT1 record in this case is specified as additional data;
- an associated called party subaddress. The EXT1 record in this case is specified as subaddress data.

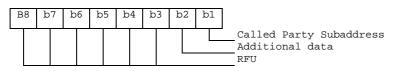
Identifie	er: '4FXX'	Sti	ucture: linear fixed		Optional
SF	I: 'YY'				
Reco	ord length: 13 byte	S	Update a	activity	: low
Access Condit READ UPDAT DEACT ACTIV	ΓΕ ΓΙVATE	PIN PIN ADM ADM			
Bytes		Descriptio	n	M/O	Length
1	Record type			М	1 byte
2 to 12	Extension data			М	11 bytes
13	Identifier			М	1 byte

- Record type.

Contents:

- type of the record.

Coding:



- b3-b8 are reserved and set to 0;
- a bit set to 1 identifies the type of record;
- only one type can be set;
- '00' indicates the type "unknown".

The following example of coding means that the type of extension data is "additional data":

ſ	B8	b7	b6	b5	b4	b3	b2	b1
	0	0	0	0	0	0	1	0

- Extension data.

Contents:

additional data or Called Party Subaddress depending on record type.

Coding:

- Case 1, Extension1 record is additional data:
- The first byte of the extension data gives the number of bytes of the remainder of ADN/SSC. The coding of remaining bytes is BCD, according to the coding of ADN/SSC. Unused nibbles at the end shall be set

to 'F'. It is possible if the number of additional digits exceeds the capacity of the additional record to chain another record inside the EXT1 Elementary File by the identifier in byte 13. In this case byte 2 (first byte of the extension data) of all records for additional data within the same chain indicates the number of bytes ('01' to '0A') for ADN/SSC (respectively MSISDN, LND) within the same record unequal to 'FF'. Case 2, Extension1 record is Called Party Subaddress:

- The subaddress data contains information as defined for this purpose in TS 24.008 [9]. All information defined in TS 24.008, except the information element identifier, shall be stored in the USIM. The length of this subaddress data can be up to 22 bytes. In those cases where two extension records are needed, these records are chained by the identifier field. The extension record containing the first part of the called party subaddress points to the record which contains the second part of the subaddress.

- Identifier.

Contents:

identifier of the next extension record to enable storage of information longer than 11 bytes.

#### Coding:

record number of next record. 'FF' identifies the end of the chain.

- Example of a chain of extension records being associated to an ADN/SSC. The extension1 record identifier (Byte 14+X) of EF<sub>ADN</sub> is set to 3.

						E	F <sub>EX</sub>	Г1					
	Byte: 1	2	3	4	5	6	7	8	9	10	11	12	13
	Record Type					Exte	ension	data					Identifier
			<u> </u>	<u> </u>				<u> </u>			<u> </u>	<u> </u>	-
Record 1	01	хх	хх	хх	хх	xx	хх	хх	хх	хх	хх	хх	FF
Record 2	xx	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх
Record 3	02	0A	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	04
Record 4	02	04	хх	хх	хх	хх	FF	FF	FF	FF	FF	FF	06
Record 5	xx	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх
Record 6	01	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	01
•													
•													

In this example, ADN/SSC is associated to additional data (records 3 and 4) which represent the last 27 or 28 digits of the whole ADN/SSC (the first 20 digits are stored in  $EF_{ADN}$ ) and a called party subaddress whose length is more than 11 bytes (records 6 and 1).

			С	HAN	GE F	REC	UE	ST				CR-Form-v4
ж	<mark>31.1</mark>	<mark>02</mark> (	CR <mark>1</mark>	40	ж	ev	-	Ħ	Current ver	sion:	5.3.0	ж
For <u>HELP</u> on us	ing thi	s form	n, see k	ottom o	f this p	age ol	<sup>.</sup> look	at the	e pop-up tex	t over	the X syr	nbols.
Proposed change af	fects:	ж	(U)SI	MX	ME/U	E	Rad	io Ac	cess Networ	·k 📃	Core Ne	etwork
Title: ೫	CR to	make	e EF-E	XT1 opti	ional in	the U	SIM F	Phone Phone	ebook			
Source: ೫	T3											
Work item code: ೫	TEI								<i>Date:</i> ଖ	3 <mark>14.</mark>	02.03	
C	Jse <u>on</u> F A B C D Detailed	(corre (corre (additi (functi (edito) d expla	ction) sponds ion of fe ional mod rial mod anations	to a correction of the correct	ection i n of fea	ture)			Release: # Use <u>one</u> or 2 e) R96 R97 R98 R99 REL-4 REL-5	f the fo (GSN (Rele (Rele (Rele (Rele (Rele		eases:
Reason for change:	N Id N S	Aoreo eads t JSIM ASISE	ver, if E to a pro uses E DN can cant dis	EF-EXT1 blem: In F-EXT5 not be m	1 exists the S for tha napped	in the IM, EF t sam betwe	e USIN -EXT e purp een th	M, it r 1 is u bose. le SIN	atory in the L nust exist in ised to exter Thus, if EF- A and the US erators who	the Sl id EF- EXT1 SIM, w	M as well MSISDN, exists, EF /hich is a	, which while the 
Summary of change	: Ж <mark>Е</mark>	F-EX	T1 is n	nade opt	tional							
Consequences if not approved:				F-MSIS / wasted					SIM is impos led.	ssible.	UICC me	emory is
Clauses affected:	ж <mark>4</mark>	1.4.2.4	ŀ									
Other specs affected:	ж N N	Oth Tes	er core t speci	specific fications cification	i	\$	£					
Other comments:	ж											

## How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: <u>http://www.3gpp.org/3G\_Specs/CRs.htm</u>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked **#** contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

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

## 4.4.2.4 EF<sub>EXT1</sub> (Extension1)

This EF contains extension data of an ADN/SSC. This EF shall always be present if the DF<sub>Phonebook</sub> is present.

Extension data is caused by:

- an ADN/SSC which is greater than the 20 digit capacity of the ADN/SSC Elementary File or where common digits are required to follow an ADN/SSC string of less than 20 digits. The remainder is stored in this EF as a record, which is identified by a specified identification byte inside the ADN/SSC Elementary File. The EXT1 record in this case is specified as additional data;
- an associated called party subaddress. The EXT1 record in this case is specified as subaddress data.

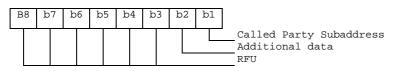
Identifie	er: '4FXX'	Sti	ucture: linear fixed		Optional
SF	I: 'YY'				
Reco	ord length: 13 byte	s	Update a	activity	: low
Access Condit READ UPDAT DEACT ACTIV	ΓΕ ΓΙVATE	PIN PIN ADM ADM			
Bytes		Descriptio	n	M/O	Length
1	Record type			М	1 byte
2 to 12	Extension data			М	11 bytes
13	Identifier			М	1 byte

- Record type.

Contents:

- type of the record.

Coding:



- b3-b8 are reserved and set to 0;
- a bit set to 1 identifies the type of record;
- only one type can be set;
- '00' indicates the type "unknown".

The following example of coding means that the type of extension data is "additional data":

ſ	B8	b7	b6	b5	b4	b3	b2	b1
	0	0	0	0	0	0	1	0

- Extension data.

Contents:

additional data or Called Party Subaddress depending on record type.

Coding:

- Case 1, Extension1 record is additional data:
- The first byte of the extension data gives the number of bytes of the remainder of ADN/SSC. The coding of remaining bytes is BCD, according to the coding of ADN/SSC. Unused nibbles at the end shall be set

to 'F'. It is possible if the number of additional digits exceeds the capacity of the additional record to chain another record inside the EXT1 Elementary File by the identifier in byte 13. In this case byte 2 (first byte of the extension data) of all records for additional data within the same chain indicates the number of bytes ('01' to '0A') for ADN/SSC (respectively MSISDN, LND) within the same record unequal to 'FF'. Case 2, Extension1 record is Called Party Subaddress:

- The subaddress data contains information as defined for this purpose in TS 24.008 [9]. All information defined in TS 24.008, except the information element identifier, shall be stored in the USIM. The length of this subaddress data can be up to 22 bytes. In those cases where two extension records are needed, these records are chained by the identifier field. The extension record containing the first part of the called party subaddress points to the record which contains the second part of the subaddress.

- Identifier.

Contents:

identifier of the next extension record to enable storage of information longer than 11 bytes.

#### Coding:

record number of next record. 'FF' identifies the end of the chain.

- Example of a chain of extension records being associated to an ADN/SSC. The extension1 record identifier (Byte 14+X) of EF<sub>ADN</sub> is set to 3.

						E	F <sub>EX</sub>	Г1					
	Byte: 1	2	3	4	5	6	7	8	9	10	11	12	13
	Record Type					Exte	ension	data					Identifier
			<u> </u>	<u> </u>				<u> </u>			<u> </u>	<u> </u>	-
Record 1	01	хх	хх	хх	хх	xx	хх	хх	хх	хх	хх	хх	FF
Record 2	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх
Record 3	02	0A	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	04
Record 4	02	04	хх	хх	хх	хх	FF	FF	FF	FF	FF	FF	06
Record 5	xx	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх
Record 6	01	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	01
•													
•													

In this example, ADN/SSC is associated to additional data (records 3 and 4) which represent the last 27 or 28 digits of the whole ADN/SSC (the first 20 digits are stored in  $EF_{ADN}$ ) and a called party subaddress whose length is more than 11 bytes (records 6 and 1).

		C	HANG	E R	EQ	UE	ST				CR-Form-v4
¥	<mark>31.10</mark> 2	2 CR	141	ж	ev	-	Ħ	Current vers	sion:	6.0.0	ж
For <u>HELP</u> on us	ing this f	orm, see	bottom of th	is pag	je or	look	at the	e pop-up text	t over	the  syn	nbols.
Proposed change at	ffects: 3	€ (U)S	SIM X M	E/UE		Rad	io Ac	cess Networ	·k	Core Ne	etwork
Title: ೫	CR to m	ake EF-E	EXT1 option	al in th	ne US	SIM F	hone	ebook			
Source: ೫	T3										
Work item code: 🕷	TEI							<i>Date:</i>	3 <mark>14.</mark>	02.03	
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Reason for change:	Mo lea US MS	reover, if ds to a pr IM uses I ISDN car hificant d	EF-EXT1 ex oblem: In th EF-EXT5 for nnot be map	xists in e SIM that s ped b	h the l, EF same etwe	USIN EXT purp en th	Λ, it r 1 is τ oose. e SIN	atory in the L nust exist in used to exten Thus, if EF- M and the US perators who	the SI Id EF- EXT1 SIM, w	M as well, MSISDN, exists, EF hich is a	, which while the 
Summary of change	e: ೫ EF	EXT1 is	made optior	nal							
Consequences if not approved:			EF-MSISDN ly wasted if					ISIM is impos ded.	ssible.	UICC me	emory is
Clauses affected:	<mark>೫ 4.4</mark>	.2.4									
Other specs affected:	N	Fest spec	e specificati cifications cifications	ons	Ħ						
Other comments:	Ħ										

## How to create CRs using this form:

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

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

## 4.4.2.4 EF<sub>EXT1</sub> (Extension1)

This EF contains extension data of an ADN/SSC. This EF shall always be present if the DF<sub>Phonebook</sub> is present.

Extension data is caused by:

- an ADN/SSC which is greater than the 20 digit capacity of the ADN/SSC Elementary File or where common digits are required to follow an ADN/SSC string of less than 20 digits. The remainder is stored in this EF as a record, which is identified by a specified identification byte inside the ADN/SSC Elementary File. The EXT1 record in this case is specified as additional data;
- an associated called party subaddress. The EXT1 record in this case is specified as subaddress data.

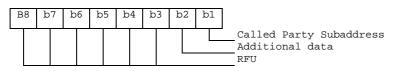
Identifie	er: '4FXX'	Sti	ucture: linear fixed		Optional
SF	I: 'YY'				
Reco	ord length: 13 byte	s	Update a	activity	: low
Access Condit READ UPDAT DEACT ACTIV	ΓΕ ΓΙVATE	PIN PIN ADM ADM			
Bytes		Descriptio	n	M/O	Length
1	Record type			М	1 byte
2 to 12	Extension data			М	11 bytes
13	Identifier			М	1 byte

- Record type.

Contents:

- type of the record.

Coding:



- b3-b8 are reserved and set to 0;
- a bit set to 1 identifies the type of record;
- only one type can be set;
- '00' indicates the type "unknown".

The following example of coding means that the type of extension data is "additional data":

ſ	B8	b7	b6	b5	b4	b3	b2	b1
	0	0	0	0	0	0	1	0

- Extension data.

Contents:

additional data or Called Party Subaddress depending on record type.

Coding:

- Case 1, Extension1 record is additional data:
- The first byte of the extension data gives the number of bytes of the remainder of ADN/SSC. The coding of remaining bytes is BCD, according to the coding of ADN/SSC. Unused nibbles at the end shall be set

to 'F'. It is possible if the number of additional digits exceeds the capacity of the additional record to chain another record inside the EXT1 Elementary File by the identifier in byte 13. In this case byte 2 (first byte of the extension data) of all records for additional data within the same chain indicates the number of bytes ('01' to '0A') for ADN/SSC (respectively MSISDN, LND) within the same record unequal to 'FF'. Case 2, Extension1 record is Called Party Subaddress:

- The subaddress data contains information as defined for this purpose in TS 24.008 [9]. All information defined in TS 24.008, except the information element identifier, shall be stored in the USIM. The length of this subaddress data can be up to 22 bytes. In those cases where two extension records are needed, these records are chained by the identifier field. The extension record containing the first part of the called party subaddress points to the record which contains the second part of the subaddress.

- Identifier.

Contents:

identifier of the next extension record to enable storage of information longer than 11 bytes.

#### Coding:

record number of next record. 'FF' identifies the end of the chain.

- Example of a chain of extension records being associated to an ADN/SSC. The extension1 record identifier (Byte 14+X) of EF<sub>ADN</sub> is set to 3.

						E	F <sub>EX</sub>	Г1					
	Byte: 1	2	3	4	5	6	7	8	9	10	11	12	13
	Record Type					Exte	ension	data					Identifier
			<u> </u>	<u> </u>				<u> </u>			<u> </u>	<u> </u>	-
Record 1	01	хх	хх	хх	хх	xx	хх	хх	хх	хх	хх	хх	FF
Record 2	xx	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх
Record 3	02	0A	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	04
Record 4	02	04	хх	хх	хх	хх	FF	FF	FF	FF	FF	FF	06
Record 5	xx	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх
Record 6	01	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	хх	01
•													
•													

In this example, ADN/SSC is associated to additional data (records 3 and 4) which represent the last 27 or 28 digits of the whole ADN/SSC (the first 20 digits are stored in  $EF_{ADN}$ ) and a called party subaddress whose length is more than 11 bytes (records 6 and 1).