

Agenda Item: 5.3.3

Source: T3

Title: CRs to TS 31.102: Characteristics of the USIM Application

Document for: Approval

This document contains following change requests for TS 31.102 that is approved by 3GPP TSG T3 and forwarded to 3GPP TSG T#23 for approval:

Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Version-New	Doc-2nd-Level
31.102	200	-	R99	Correction of EFIAP coding	F	3.15.0	3.16.0	T3-040094
31.102	201	-	Rel-4	Correction of EFIAP coding	A	4.11.0	4.12.0	T3-040095
31.102	202	-	Rel-5	Correction of EFIAP coding	A	5.7.0	5.8.0	T3-040096
31.102	203	-	Rel-6	Correction of EFIAP coding	A	6.4.0	6.5.0	T3-040097
31.102	204	-	Rel-5	Correction to Annex G Phonebook Example	F	5.7.0	5.8.0	T3-040106
31.102	205	-	Rel-6	Correction to Annex G Phonebook Example	A	6.4.0	6.5.0	T3-040107
31.102	206	-	R99	CR 31.102 R99: introduction of a missing note regarding DTMF string	F	3.15.0	3.16.0	T3-040108
31.102	207	-	Rel-4	Adding missing note about DTMF string	A	4.11.0	4.12.0	T3-040109
31.102	208	-	Rel-5	Adding missing note about DTMF string	A	5.7.0	5.8.0	T3-040110
31.102	209	-	Rel-6	Adding missing note about DTMF string	A	6.4.0	6.5.0	T3-040111
31.102	210	-	Rel-6	CR 31.102 Rel-6: Support for transparency in images	C	6.4.0	6.5.0	T3-040112
31.102	211	-	Rel-6	Correction of references	F	6.4.0	6.5.0	T3-040079
31.102	212	-	R99	Correction of CHV1 to PIN	F	3.15.0	3.16.0	T3-040084
31.102	213	-	Rel-4	Correction of CHV1 to PIN	A	4.11.0	4.12.0	T3-040085
31.102	214	-	Rel-5	Correction of CHV1 to PIN	A	5.7.0	5.8.0	T3-040086
31.102	219	-	Rel-6	Moving EFSUME from the USIM specification to a SCP specification	F	6.4.0	6.5.0	T3-040144
31.102	220	-	Rel-6	Essential corrections use of Byte 2 and Byte 3 in EF_AD	F	6.4.0	6.5.0	T3-040093
31.102	221	-	Rel-6	Reservation of File IDs under ADFusim	F	6.4.0	6.5.0	T3-040160

CHANGE REQUEST

⌘ **31.102 CR 211** ⌘ rev **-** ⌘ Current version: **6.4.0** ⌘

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

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

Title:	⌘ Correction of references		
Source:	⌘ T3		
Work item code:	⌘ TEI	Date:	⌘ 10/02/2004
Category:	⌘ F	Release:	⌘ Rel-6
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)

Reason for change:	⌘ Correction of references		
Summary of change:	⌘ An incorrect reference to an annex has been corrected. CHV has been changed to PIN		
Consequences if not approved:	⌘ Inconsistencies in the document will remain		

Clauses affected:	⌘ 4.2.76, 4.4.1.1, Annex D														
Other specs affected:	<table border="1"> <tr> <td></td> <td>Y</td> <td>N</td> </tr> <tr> <td>⌘</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>		Y	N	⌘	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘	
	Y	N													
⌘	<input type="checkbox"/>	<input type="checkbox"/>													
	<input type="checkbox"/>	<input type="checkbox"/>													
	<input type="checkbox"/>	<input type="checkbox"/>													
Other comments:	⌘														

4.2.76 EF_{VBSS} (Voice Broadcast Service Status)

This EF contains the status of activation for the VBS group identifiers. The elementary file is directly related to the EF_{VBS}. This EF shall always be allocated if EF_{VBS} is allocated.

Identifier: '6FB4'		Structure: transparent		Optional
File size: 7 bytes		Update activity: low		
Access Conditions:				
READ		CHV4	PIN	
UPDATE		ADM		
INVALIDATE		ADM		
REHABILITATE		ADM		
Bytes	Description		M/O	Length
1 to 7	Activation/Deactivation Flags		M	7 bytes

- Activation/Deactivation Flags

Contents: Activation/Deactivation Flags of the appropriate Group IDs

Coding:

see coding of EF_{VGCS}

4.4.1.1 EF_{SAI} (SoLSA Access Indicator)

This EF contains the 'LSA only access indicator'. This EF shall always be allocated if DF_{SoLSA} is present.

If the indicator is set, the network will prevent terminated and/or originated calls when the MS is camped in cells that are not included in the list of allowed LSAs in EF_{SLL}. Emergency calls are, however, always allowed.

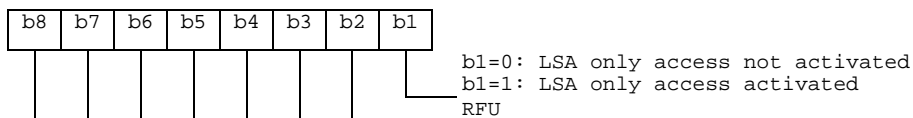
The EF also contains a text string which may be displayed when the MS is out of the served area(s).

Identifier: '4F30'		Structure: transparent		Optional
File size: X + 1 bytes		Update activity: low		
Access Conditions:				
READ		PIN		
UPDATE		ADM		
INVALIDATE		ADM		
REHABILITATE		ADM		
Bytes	Description		M/O	Length
1	LSA only access indicator		M	1 byte
2 to X+1	LSA only access indication text		M	X bytes

- LSA only access indicator

Contents: indicates whether the MS is restricted to use LSA cells only or not.

Coding:



- LSA only access indication text

Contents: text to be displayed by the ME when it's out of LSA area.

Coding: the string 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. Unused bytes shall be set to 'FF'; or
- one of the UCS2 coded options as defined in [the annex of ~~annex B~~ TS 31.101 \[11\]](#).

Annex D (informative): Tags defined in 31.102

Tag	Name of Data Element	Usage
'A0'	GSM cell information The following tags are encapsulated within 'A0': '80' GSM Camping Frequency data object '81' GSM Neighbour Frequency Information data object	Network Parameters (EF _{NETPAR})
'A1'	FDD cell information The following tags are encapsulated within 'A1': '80' FDD Intra Frequency data object '81' FDD Inter Frequency Information data object	Network Parameters (EF _{NETPAR})
'A2'	TDD cell information The following tags are encapsulated within 'A2': '80' TDD Intra Frequency data object '81' TDD Inter Frequency Information data object	Network Parameters (EF _{NETPAR})
'A3'	Service provider display information The following tags are encapsulated within 'A3': '80' Service provider PLMN list	Service Provider Display Information (EF _{SPDI})
'A8'	Indicator for type 1 EFs (amount of records equal to master EF) The following tags are encapsulated within 'A8': 'C0' EF _{ADN} data object 'C1' EF _{IAP} data object 'C3' EF _{SNE} data object 'C4' EF _{ANR} data object 'C5' EF _{PBC} data object 'C6' EF _{GRF} data object 'C9' EF _{UID} data object 'CA' EF _{EMAIL} data object	Phone Book Reference File (EF _{PBR})
'A9'	Indicator for type 2 EFs (EFs linked via the index administration file) The following tags are encapsulated within 'A9': 'C3' EF _{SNE} data object 'C4' EF _{ANR} data object 'CA' EF _{EMAIL} data object	Phone Book Reference File (EF _{PBR})
'AA'	Indicator for type 3 EFs (EFs addressed inside an object using a record identifier as a pointer) The following tags are encapsulated within 'AA': 'C2' EF _{EXT1} data object 'C7' EF _{AAS} data object 'C8' EF _{GAS} data object 'CB' EF _{CCP1} data object	Phone Book Reference File (EF _{PBR})
' AB ' <u>'AB'</u>	MMS Connectivity Parameters: The following are encapsulated under 'AB': '80' MMS Implementation Tag '81' MMS Relay/Server Tag '82' Interface to core network and bearer Tag '83' Gateway Tag	MMS Connectivity Parameters (EF _{MMSICP} / EF _{MMSUCP})
'DB'	Successful 3G authentication	Response to AUTHENTICATE
'DC'	Synchronisation failure	Response to AUTHENTICATE
'DD'	Access Point Name	APN Control List (EF _{ACL})

NOTE: the value 'FF' is an invalid tag value. For ASN.1 tag assignment rules see ISO/IEC 8825 [35]

CHANGE REQUEST⌘ **31.102 CR 212** ⌘ rev **-** ⌘ Current version: **3.15.0** ⌘For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.Proposed change affects: UICC apps ⌘ ME Radio Access Network Core Network

Title:	⌘ Correction of CHV1 to PIN		
Source:	⌘ T3		
Work item code:	⌘ TEI Date: ⌘ 10/02/2004		
Category:	⌘ F Release: ⌘ R99		
	<table border="0"> <tr> <td style="vertical-align: top;"> <p>Use <u>one</u> of the following categories:</p> <p>F (correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (addition of feature),</p> <p>C (functional modification of feature)</p> <p>D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p> </td> <td style="vertical-align: top;"> <p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>Rel-4 (Release 4)</p> <p>Rel-5 (Release 5)</p> <p>Rel-6 (Release 6)</p> </td> </tr> </table>	<p>Use <u>one</u> of the following categories:</p> <p>F (correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (addition of feature),</p> <p>C (functional modification of feature)</p> <p>D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	<p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>Rel-4 (Release 4)</p> <p>Rel-5 (Release 5)</p> <p>Rel-6 (Release 6)</p>
<p>Use <u>one</u> of the following categories:</p> <p>F (correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (addition of feature),</p> <p>C (functional modification of feature)</p> <p>D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	<p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>Rel-4 (Release 4)</p> <p>Rel-5 (Release 5)</p> <p>Rel-6 (Release 6)</p>		

Reason for change:	⌘ The abbreviation CHV1 has been replaced by PIN. One file still indicates CHV1 as access condition
Summary of change:	⌘ The access condition CHV1 has been replaced with PIN
Consequences if not approved:	⌘ Inconsistency in the document. The access condition CHV1 itself is not defined anywhere in the document, this may lead to misinterpretation of the specification

Clauses affected:	⌘ 4.2.62								
Other specs affected:	<table border="1"> <thead> <tr> <th>Y</th> <th>N</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘	Y	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Y	N								
<input type="checkbox"/>	<input type="checkbox"/>								
<input type="checkbox"/>	<input type="checkbox"/>								
<input type="checkbox"/>	<input type="checkbox"/>								
Other comments:	⌘								

4.2.62 EF_{VBSS} (Voice Broadcast Service Status)

This EF contains the status of activation for the VBS group identifiers. The elementary file is directly related to the EF_{VBS}. This EF shall always be allocated if EF_{VBS} is allocated.

Identifier: '6FB4'		Structure: transparent		Optional
File size: 7 bytes		Update activity: low		
Access Conditions:				
READ		CHV4PIN		
UPDATE		ADM		
INVALIDATE		ADM		
REHABILITATE		ADM		
Bytes	Description	M/O	Length	
1 to 7	Activation/Deactivation Flags	M	7 bytes	

- Activation/Deactivation Flags

Contents: Activation/Deactivation Flags of the appropriate Group IDs

Coding:

see coding of EF_{VGCS}

CHANGE REQUEST⌘ **31.102 CR 213** ⌘ rev **-** ⌘ Current version: **4.11.0** ⌘For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.Proposed change affects: UICC apps ⌘ ME Radio Access Network Core Network

Title:	⌘ Correction of CHV1 to PIN	
Source:	⌘ T3	
Work item code:	⌘ TEI	Date: ⌘ 10/02/2004
Category:	⌘ A	Release: ⌘ Rel-4
	Use <u>one</u> of the following categories:	Use <u>one</u> of the following releases:
	F (correction)	2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)	R96 (Release 1996)
	B (addition of feature),	R97 (Release 1997)
	C (functional modification of feature)	R98 (Release 1998)
	D (editorial modification)	R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .	Rel-4 (Release 4)
		Rel-5 (Release 5)
		Rel-6 (Release 6)

Reason for change:	⌘ The abbreviation CHV1 has been replaced by PIN. One file still indicates CHV1 as access condition
Summary of change:	⌘ The access condition CHV1 has been replaced with PIN
Consequences if not approved:	⌘ Inconsistency in the document. The access condition CHV1 itself is not defined anywhere in the document, this may lead to misinterpretation of the specification

Clauses affected:	⌘ 4.2.76	
Other specs affected:	⌘	Other core specifications
	⌘	Test specifications
	⌘	O&M Specifications
Other comments:	⌘	

4.2.76 EF_{VBSS} (Voice Broadcast Service Status)

This EF contains the status of activation for the VBS group identifiers. The elementary file is directly related to the EF_{VBS}. This EF shall always be allocated if EF_{VBS} is allocated.

Identifier: '6FB4'		Structure: transparent		Optional	
File size: 7 bytes			Update activity: low		
Access Conditions:					
READ		CHV4PIN			
UPDATE		ADM			
INVALIDATE		ADM			
REHABILITATE		ADM			
Bytes	Description		M/O	Length	
1 to 7	Activation/Deactivation Flags		M	7 bytes	

- Activation/Deactivation Flags

Contents: Activation/Deactivation Flags of the appropriate Group IDs

Coding:

see coding of EF_{VGCS}

CHANGE REQUEST⌘ **31.102 CR 214** ⌘ rev **-** ⌘ Current version: **5.7.0** ⌘For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.Proposed change affects: UICC apps ⌘ ME Radio Access Network Core Network

Title:	⌘ Correction of CHV1 to PIN	
Source:	⌘ T3	
Work item code:	⌘ TEI	Date: ⌘ 10/02/2004
Category:	⌘ A	Release: ⌘ Rel-5
	Use <u>one</u> of the following categories:	Use <u>one</u> of the following releases:
	F (correction)	2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)	R96 (Release 1996)
	B (addition of feature),	R97 (Release 1997)
	C (functional modification of feature)	R98 (Release 1998)
	D (editorial modification)	R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .	Rel-4 (Release 4)
		Rel-5 (Release 5)
		Rel-6 (Release 6)

Reason for change:	⌘ The abbreviation CHV1 has been replaced by PIN. One file still indicates CHV1 as access condition
Summary of change:	⌘ The access condition CHV1 has been replaced with PIN
Consequences if not approved:	⌘ Inconsistency in the document. The access condition CHV1 itself is not defined anywhere in the document, this may lead to misinterpretation of the specification

Clauses affected:	⌘ 4.2.76	
Other specs affected:	⌘	Other core specifications
	⌘	Test specifications
	⌘	O&M Specifications
Other comments:	⌘	

4.2.76 EF_{VBS} (Voice Broadcast Service Status)

This EF contains the status of activation for the VBS group identifiers. The elementary file is directly related to the EF_{VBS}. This EF shall always be allocated if EF_{VBS} is allocated.

Identifier: '6FB4'		Structure: transparent		Optional	
File size: 7 bytes			Update activity: low		
Access Conditions:					
READ		CHV1PIN			
UPDATE		ADM			
INVALIDATE		ADM			
REHABILITATE		ADM			
Bytes	Description		M/O	Length	
1 to 7	Activation/Deactivation Flags		M	7 bytes	

- Activation/Deactivation Flags

Contents: Activation/Deactivation Flags of the appropriate Group IDs

Coding:

see coding of EF_{VGCS}

CR-Form-v7

CHANGE REQUEST

⌘ **31.102 CR 220** ⌘ rev **-** ⌘ Current version: **6.4.0** ⌘

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

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

Title:	⌘ Essential corrections use of Byte 2 and Byte 3 in EF_AD		
Source:	⌘ T3		
Work item code:	⌘ TEI	Date:	⌘ 10/02/2004
Category:	⌘ F	Release:	⌘ Rel-6
	<i>Use one of the following categories:</i> F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		<i>Use one of the following releases:</i> 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)

Reason for change:	⌘ The use of "Additional information" in Administrative Data (EF_AD) is unclear in the specification
Summary of change:	⌘ Deleted the OFM abbreviation. The coding for UE operation mode was clarified for the initial values. A description of the content of "Additional information" was added. The description of "Additional information" in Byte 2 and Byte 3 of Administrative Data (EF_AD) was changed regarding the description of referenced document TS 22.101. The description of ME manufacturer specific information was extended by the coding of byte 2 and byte 3.
Consequences if not approved:	⌘ The description and use of Administrative Data (EF_AD) is unclear in the specification

Clauses affected:	⌘ 3.3; 4.2.18						
Other specs Affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> </table> Other core specifications	Y	N	⌘	X	⌘	
Y	N						
⌘	X						
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> </table> Test specifications	⌘	X				
⌘	X						
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> </table> O&M Specifications	⌘	X				
⌘	X						

Other comments: ⌘ Section 14 of 22.101 is provided for information.

How to create CRs using this form:

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

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

3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

3GPP	3 rd Generation Partnership Project
AC	Access Condition
ACL	APN Control List
ADF	Application Dedicated File
AID	Application IDentifier
[...]	
OCI	Outgoing Call Information
OCT	Outgoing Call Timer
OFM	Operational Feature Monitor
PBID	Phonebook Identifier
PIN	Personal Identification Number
[...]	

4.2.18 EF_{AD} (Administrative Data)

This EF contains information concerning the mode of operation according to the type of USIM, such as normal (to be used by PLMN subscribers for 3G operations), type approval (to allow specific use of the ME during type approval procedures of e.g. the radio equipment), cell testing (to allow testing of a cell before commercial use of this cell), manufacturer specific (to allow the ME manufacturer to perform specific proprietary auto-test in its ME during e.g. maintenance phases).

It also provides an indication of whether some ME features should be activated during normal operation as well as information about the length of the MNC, which is part of the International Mobile Subscriber Identity (IMSI).

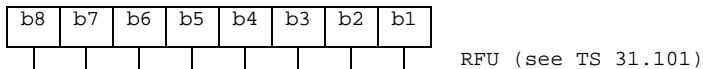
Identifier: '6FAD'		Structure: transparent		Mandatory
SFI: '03'				
File size: 4+X bytes		Update activity: low		
Access Conditions:				
READ		ALW		
UPDATE		ADM		
DEACTIVATE		ADM		
ACTIVATE		ADM		
Bytes	Description	M/O	Length	
1	UE operation mode	M	1 byte	
2 to 3	Additional information	M	2 bytes	
4	length of MNC in the IMSI	M	1 byte	
5 to 4+X	RFU	O	X bytes	

- UE operation mode:
 - Contents:
 - mode of operation for the UE
 - Coding:
 - Initial value
 - '00' normal operation.
 - '80' type approval operations.
 - '01' normal operation + specific facilities.
 - '81' type approval operations + specific facilities.
 - '02' maintenance (off line).
 - '04' cell test operation.
 - [All other values are RFU](#)
- Additional information:

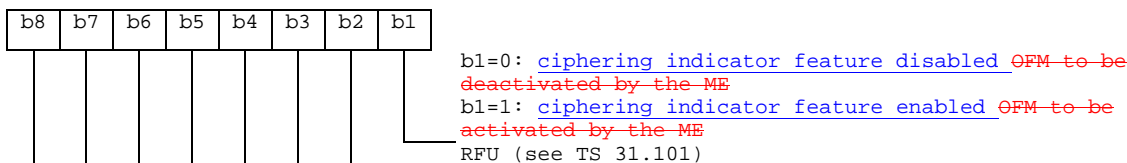
Contents:
additional information depending on the UE operation mode

Coding:
- specific facilities (if b1=1 in byte 1):

Byte 2 (first byte of additional information):



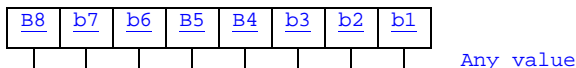
Byte 3 (second byte of additional information):



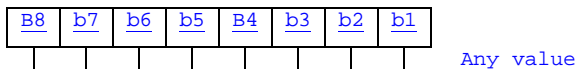
The OFM bit b1 is used to control the cCiphering indicator feature as specified in TS 22.101 [24].

- ME manufacturer specific information (if b2=1 in byte 1):

Byte 2 (first byte of additional information):



Byte 3 (second byte of additional information):

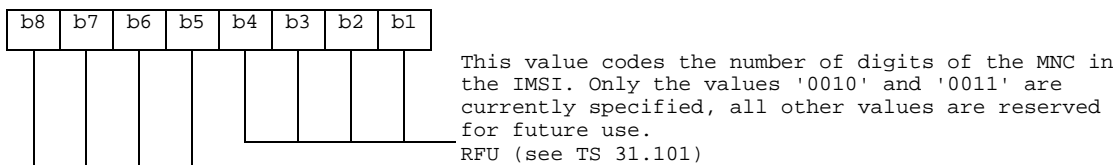


- Length of MNC in the IMSI:

Contents:
The length indicator refers to the number of digits, used for extracting the MNC from the IMSI

Coding:

Byte 4:



Extract from 3GPP TS 22.101 (V6.5.0 Rel-6):

14 Types of features of UEs

3GPP specifications should support a wide variety of user equipment, i.e. setting any limitations on terminals should be avoided as much as possible. For example user equipment like hand-portable phones, personal digital assistants and laptop computers can clearly be seen as likely terminals.

In order not to limit the possible types of user equipment they are not standardised. The UE types could be categorised by their service capabilities rather than by their physical characteristics. Typical examples are speech only UE, narrowband data UE, wideband data UE, data and speech UE, etc..

In order to enhance functionality split and modularity inside the user equipment the interfaces of UE should be identified. Interfaces like UICC-interface, PCMCIA-interface and other PC-interfaces, including software interfaces, should be covered by references to the applicable interface standards.

UEs have to be capable of supporting a wide variety of teleservices and applications provided in PLMN environment. Limitations may exist on UEs capability to support all possible teleservices and information types (speech, narrowband data, wideband data, video, etc.) and therefore functionality to indicate capabilities of a UE shall be specified.

The basic mandatory UE requirements are:

- Support for USIM. Optional support of GSM phase 2, 2+, 3GPP Release 99 and Release 4 SIM cards [34]. Phase 1, 5V SIM cards shall not be supported. Support for the SIM is optional for the UE, however, if it is supported, the mandatory requirements for SIM shall be supported in the UE;

Note 1: There is no Release 5 specification for the SIM, and therefore references to "SIM" apply to earlier releases.

Note 2: It is strongly recommended that manufacturers implement SIM support on terminals supporting GERAN until the population of SIMs in the market is reduced to a low level.

- Home environment and serving network registration and deregistration;
- Location update;
- Originating or receiving a connection oriented or a connectionless service;
- An unalterable equipment identification; IMEI, see 3GPP TS 22.016 [12];
- Basic identification of the terminal capabilities related to services such as; the support for software downloading, application execution environment/interface, MExE terminal class, supported bearer services.
- Terminals capable for emergency calls shall support emergency call without a SIM/USIM.
- Support for the execution of algorithms required for encryption, for CS and PS services. Support for non encrypted mode is required;
- Support for the method of handling automatic calling repeat attempt restrictions as specified in 3GPP TS 22.001 [4];
- At least one capability type shall be standardised for mobile terminals supporting the GERAN and UTRAN radio interfaces.
- Under emergency situations, it may be desirable for the operator to prevent UE users from making access attempts (including emergency call attempts) or responding to pages in specified areas of a network, see 3GPP TS 22.011 [11];
- Ciphering Indicator for terminals with a suitable display;

The **ciphering indicator feature** allows the UE to detect that ciphering is not switched on and to indicate this to the user. The **ciphering indicator feature** may be disabled by the home network operator setting data in the SIM/USIM. If this

feature is not disabled by the SIM/USIM, then whenever a connection is in place, which is, or becomes unenciphered, an indication shall be given to the user. Ciphering itself is unaffected by this feature, and the user can choose how to proceed;

- Support for PLMN selection.
- Support for handling of interactions between toolkits concerning the access to UE MMI input/output capabilities;

Whenever an application (e.g. a SAT/MExE/WAP application) requires the access to the UE MMI input/output capabilities (e.g. display, keyboard,...), the UE shall grant this access subject to the capabilities of the UE. This shall not cause the termination of any other applications (e.g. WAP browser or MExE/SAT application) which were previously using these UE resources. The UE shall give the user the ability to accept or reject the new application. In the case that the application request is rejected, the access to the UE MMI input/output capabilities is returned to the applications which were previously using these UE resources. If the user decides to continue with the new application, then when this new application is terminated, the access to the UE MMI input/output capabilities shall be returned to the UE to be re-allocated to applications (e.g. the preceding application which was interrupted). Subject to the capabilities of the UE, the user shall have the ability to switch the MMI input/output capabilities between applications.

Note: Rejecting a request to access the UE MMI input/output capabilities by an application does not necessarily mean that it is terminated, but only that the access to the UE MMI input/output capabilities are not granted to this application. Handling of rejection (termination, put on hold,...) is the responsibility of the application.

Annex A describes a number of features which may optionally be supported by the UE.

CR-Form-v7

CHANGE REQUEST

⌘ **31.102 CR 200** ⌘ rev **-** ⌘ Current version: **3.15.0** ⌘

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

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

Title:	⌘ Correction of EF _{IAP} coding		
Source:	⌘ T3		
Work item code:	⌘ TEI	Date:	⌘ 10/02/2004
Category:	⌘ F	Release:	⌘ R99
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)	2	(GSM Phase 2)
	A (corresponds to a correction in an earlier release)	R96	(Release 1996)
	B (addition of feature),	R97	(Release 1997)
	C (functional modification of feature)	R98	(Release 1998)
	D (editorial modification)	R99	(Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .	Rel-4	(Release 4)
		Rel-5	(Release 5)
		Rel-6	(Release 6)

Reason for change:	⌘ The amount of bytes in a record is equal to the number of files indicated in EF _{PBR} following tag 'A9'. On the contrary, file description indicates that at least three 'mandatory' bytes should be present in each record.
Summary of change:	⌘ - Only the first byte is indicated as 'mandatory' while all the others should be considered as 'conditional' - A note has been added in order to explain the meaning of 'C' field
Consequences if not approved:	⌘ Risk of misinterpretation of the specification leading to wrong implementations.

Clauses affected:	⌘ 4.4.2.2										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">X</td> </tr> </table>	Y	N	-	X	-	X	-	X	Other core specifications	⌘
Y	N										
-	X										
-	X										
-	X										
		Test specifications									
		O&M Specifications									
Other comments:	⌘ Equivalent CRs needed for further releases										

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

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

4.4.2.2 EF_{IAP} (Index Administration Phone book)

This file is present if Tag 'A9' is indicated in the reference file.

The EF contains pointers to the different records in the files that are part of the phone book. The index administration file record number/ID is mapped one to one with the corresponding EF_{ADN} (shall be record to record). The index administration file contains the same amount of records as EF_{ADN}. The order of the pointers in an EF_{IAP} shall be the same as the order of file IDs that appear in the TLV object indicated by Tag 'A9' in the reference file record. The amount of bytes in a record is equal to the number of files indicated the EF_{PBR} following tag 'A9'.

The value 'FF' is an invalid record number/ID and is used in any location in to indicate that no corresponding record in the indicated file is available.

The content of EF_{IAP} is set to 'FF' at the personalisation stage.

Index administration file EF_{IAP} structure

Identifier: '4FXX'		Structure: linear fixed		Conditional (see Note)	
SFI: 'YY'					
Record Length: X bytes			Update activity: low		
Access Conditions:					
READ		PIN			
UPDATE		PIN			
DEACTIVATE		ADM			
ACTIVATE		ADM			
Bytes	Description	M/O	Length		
1	Record number of the first object indicated after Tag 'A9'	M	1 byte		
2	Record number of the second object indicated after Tag 'A9'	C M	1 byte		
X	Record number of the x th object indicated after Tag 'A9'	C M	1 byte		
NOTE 1: This file is mandatory if and only if type 2 files are present.					
NOTE 2: x th -field marked with 'C' is mandatory if x th -object indicated following tag 'A9' is present in EF _{PBR}					

CR-Form-v7

CHANGE REQUEST

⌘ **31.102 CR 201** ⌘ rev **-** ⌘ Current version: **4.11.0** ⌘

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

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

Title:	⌘ Correction of EF _{IAP} coding		
Source:	⌘ T3		
Work item code:	⌘ TEI	Date:	⌘ 10/02/2004
Category:	⌘ A	Release:	⌘ Rel-4
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)	2	(GSM Phase 2)
	A (corresponds to a correction in an earlier release)	R96	(Release 1996)
	B (addition of feature),	R97	(Release 1997)
	C (functional modification of feature)	R98	(Release 1998)
	D (editorial modification)	R99	(Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .	Rel-4	(Release 4)
		Rel-5	(Release 5)
		Rel-6	(Release 6)

Reason for change:	⌘ The amount of bytes in a record is equal to the number of files indicated in EF _{PBR} following tag 'A9'. On the contrary, file description indicates that at least three 'mandatory' bytes should be present in each record.
Summary of change:	⌘ - Only the first byte is indicated as 'mandatory' while all the others should be considered as 'conditional' - A note has been added in order to explain the meaning of 'C' field
Consequences if not approved:	⌘ Risk of misinterpretation of the specification leading to wrong implementations.

Clauses affected:	⌘ 4.4.2.2										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">X</td> </tr> </table>	Y	N	-	X	-	X	-	X	Other core specifications	⌘
Y	N										
-	X										
-	X										
-	X										
		Test specifications	⌘								
		O&M Specifications	⌘								
Other comments:	⌘ Equivalent CRs needed for further releases										

How to create CRs using this form:

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

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- 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.

4.4.2.2 EF_{IAP} (Index Administration Phone book)

This file is present if Tag 'A9' is indicated in the reference file.

The EF contains pointers to the different records in the files that are part of the phone book. The index administration file record number/ID is mapped one to one with the corresponding EF_{ADN} (shall be record to record). The index administration file contains the same amount of records as EF_{ADN}. The order of the pointers in an EF_{IAP} shall be the same as the order of file IDs that appear in the TLV object indicated by Tag 'A9' in the reference file record. The amount of bytes in a record is equal to the number of files indicated the EF_{PBR} following tag 'A9'.

The value 'FF' is an invalid record number/ID and is used in any location in to indicate that no corresponding record in the indicated file is available.

The content of EF_{IAP} is set to 'FF' at the personalisation stage.

Index administration file EF_{IAP} structure

Identifier: '4FXX'		Structure: linear fixed		Conditional (see Note)
SFI: 'YY'				
Record Length: X bytes			Update activity: low	
Access Conditions: READ PIN UPDATE PIN DEACTIVATE ADM ACTIVATE ADM				
Bytes	Description	M/O	Length	
1	Record number of the first object indicated after Tag 'A9'	M	1 byte	
2	Record number of the second object indicated after Tag 'A9'	C	1 byte	
X	Record number of the x th object indicated after Tag 'A9'	C	1 byte	
NOTE 1: This file is mandatory if and only if type 2 files are present. NOTE 2: x th -field marked with 'C' is mandatory if x th -object indicated following tag 'A9' is present in EF _{PBR}				

CR-Form-v7

CHANGE REQUEST

⌘ **31.102 CR 202** ⌘ rev **-** ⌘ Current version: **5.7.0** ⌘

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

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

Title:	⌘ Correction of EF _{IAP} coding		
Source:	⌘ T3		
Work item code:	⌘ TEI	Date:	⌘ 10/02/2004
Category:	⌘ A	Release:	⌘ Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)	2	(GSM Phase 2)
	A (corresponds to a correction in an earlier release)	R96	(Release 1996)
	B (addition of feature),	R97	(Release 1997)
	C (functional modification of feature)	R98	(Release 1998)
	D (editorial modification)	R99	(Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .	Rel-4	(Release 4)
		Rel-5	(Release 5)
		Rel-6	(Release 6)

Reason for change:	⌘ The amount of bytes in a record is equal to the number of files indicated in EF _{PBR} following tag 'A9'. On the contrary, file description indicates that at least three 'mandatory' bytes should be present in each record.
Summary of change:	⌘ - Only the first byte is indicated as 'mandatory' while all the others should be considered as 'conditional' - A note has been added in order to explain the meaning of 'C' field
Consequences if not approved:	⌘ Risk of misinterpretation of the specification leading to wrong implementations.

Clauses affected:	⌘ 4.4.2.2										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">X</td> </tr> </table>	Y	N	-	X	-	X	-	X	Other core specifications	⌘
Y	N										
-	X										
-	X										
-	X										
		Test specifications									
		O&M Specifications									
Other comments:	⌘ Equivalent CRs needed for further releases										

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- 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.

4.4.2.2 EF_{IAP} (Index Administration Phone book)

This file is present if Tag 'A9' is indicated in the reference file.

The EF contains pointers to the different records in the files that are part of the phone book. The index administration file record number/ID is mapped one to one with the corresponding EF_{ADN} (shall be record to record). The index administration file contains the same amount of records as EF_{ADN}. The order of the pointers in an EF_{IAP} shall be the same as the order of file IDs that appear in the TLV object indicated by Tag 'A9' in the reference file record. The amount of bytes in a record is equal to the number of files indicated the EF_{PBR} following tag 'A9'.

The value 'FF' is an invalid record number/ID and is used in any location in to indicate that no corresponding record in the indicated file is available.

The content of EF_{IAP} is set to 'FF' at the personalisation stage.

Index administration file EF_{IAP} structure

Identifier: '4FXX'		Structure: linear fixed		Conditional (see Note)	
SFI: 'YY'					
Record Length: X bytes			Update activity: low		
Access Conditions:					
READ		PIN			
UPDATE		PIN			
DEACTIVATE		ADM			
ACTIVATE		ADM			
Bytes	Description	M/O	Length		
1	Record number of the first object indicated after Tag 'A9'	M	1 byte		
2	Record number of the second object indicated after Tag 'A9'	C	1 byte		
X	Record number of the x th object indicated after Tag 'A9'	C	1 byte		
NOTE 1: This file is mandatory if and only if type 2 files are present.					
NOTE 2: x th -field marked with 'C' is mandatory if x th -object indicated following tag 'A9' is present in EF _{PBR}					

CR-Form-v7
CHANGE REQUEST
⌘ 31.102 CR 203 ⌘ rev - ⌘ Current version: 6.4.0 ⌘

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

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

Title:	⌘ Correction of EF _{IAP} coding		
Source:	⌘ T3		
Work item code:	⌘ TEI	Date:	⌘ 10/02/2004
Category:	⌘ A	Release:	⌘ Rel-6
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

Reason for change:	⌘ The amount of bytes in a record is equal to the number of files indicated in EF _{PBR} following tag 'A9'. On the contrary, file description indicates that at least three 'mandatory' bytes should be present in each record.
Summary of change:	⌘ - Only the first byte is indicated as 'mandatory' while all the others should be considered as 'conditional' - A note has been added in order to explain the meaning of 'C' field
Consequences if not approved:	⌘ Risk of misinterpretation of the specification leading to wrong implementations.

Clauses affected:	⌘ 4.4.2.2								
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">X</td> </tr> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘	Y	N	-	X	-	X	-	X
Y	N								
-	X								
-	X								
-	X								
Other comments:	⌘ Equivalent CRs needed for further releases								

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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 <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

4.4.2.2 EF_{IAP} (Index Administration Phone book)

This file is present if Tag 'A9' is indicated in the reference file.

The EF contains pointers to the different records in the files that are part of the phone book. The index administration file record number/ID is mapped one to one with the corresponding EF_{ADN} (shall be record to record). The index administration file contains the same amount of records as EF_{ADN}. The order of the pointers in an EF_{IAP} shall be the same as the order of file IDs that appear in the TLV object indicated by Tag 'A9' in the reference file record. The amount of bytes in a record is equal to the number of files indicated the EF_{PBR} following tag 'A9'.

The value 'FF' is an invalid record number/ID and is used in any location in to indicate that no corresponding record in the indicated file is available.

The content of EF_{IAP} is set to 'FF' at the personalisation stage.

Index administration file EF_{IAP} structure

Identifier: '4FXX'		Structure: linear fixed		Conditional (see Note)	
SFI: 'YY'					
Record Length: X bytes			Update activity: low		
Access Conditions:					
READ		PIN			
UPDATE		PIN			
DEACTIVATE		ADM			
ACTIVATE		ADM			
Bytes	Description	M/O	Length		
1	Record number of the first object indicated after Tag 'A9'	M	1 byte		
2	Record number of the second object indicated after Tag 'A9'	C	1 byte		
X	Record number of the x th object indicated after Tag 'A9'	C	1 byte		
NOTE 1: This file is mandatory if and only if type 2 files are present.					
NOTE 2: x th -field marked with 'C' is mandatory if x th -object indicated following tag 'A9' is present in EF _{PBR}					

3GPP TSG-T3 Meeting #30
 Sophia Antipolis, France, 9-13 February 2004

Tdoc T3-040106

CR-Form-v7
CHANGE REQUEST
⌘ 31.102 CR 204 ⌘ rev - ⌘ Current version: 5.7.0 ⌘

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

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

Title:	⌘ Correction to Annex G Phonebook Example
Source:	⌘ T3
Work item code:	⌘ TEI Date: ⌘ 10/02/2004
Category:	⌘ F Release: ⌘ Rel-5 Use <u>one</u> of the following categories: Use <u>one</u> of the following releases: F (correction) 2 (GSM Phase 2) A (corresponds to a correction in an earlier release) R96 (Release 1996) B (addition of feature), R97 (Release 1997) C (functional modification of feature) R98 (Release 1998) D (editorial modification) R99 (Release 1999) Detailed explanations of the above categories can Rel-4 (Release 4) be found in 3GPP TR 21.900 . Rel-5 (Release 5) Rel-6 (Release 6)

Reason for change:	⌘ Inconsistency in the Phonebook example in Annex G. 1. In Table G.4 content of ADN1 and EXT1 is wrong 2. Errors in the description for EF _{AAS}
Summary of change:	⌘ In Table G.4 content of ADN1 and EXT1 is changed. Description of files addressing EF _{AAS} changed
Consequences if not approved:	⌘ Wrong example remains on the specification. It could lead to wrong implementation.

Clauses affected:	⌘ Annex G								
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘	Y	N	⌘	X	⌘	X	⌘	X
Y	N								
⌘	X								
⌘	X								
⌘	X								
Other comments:	⌘								

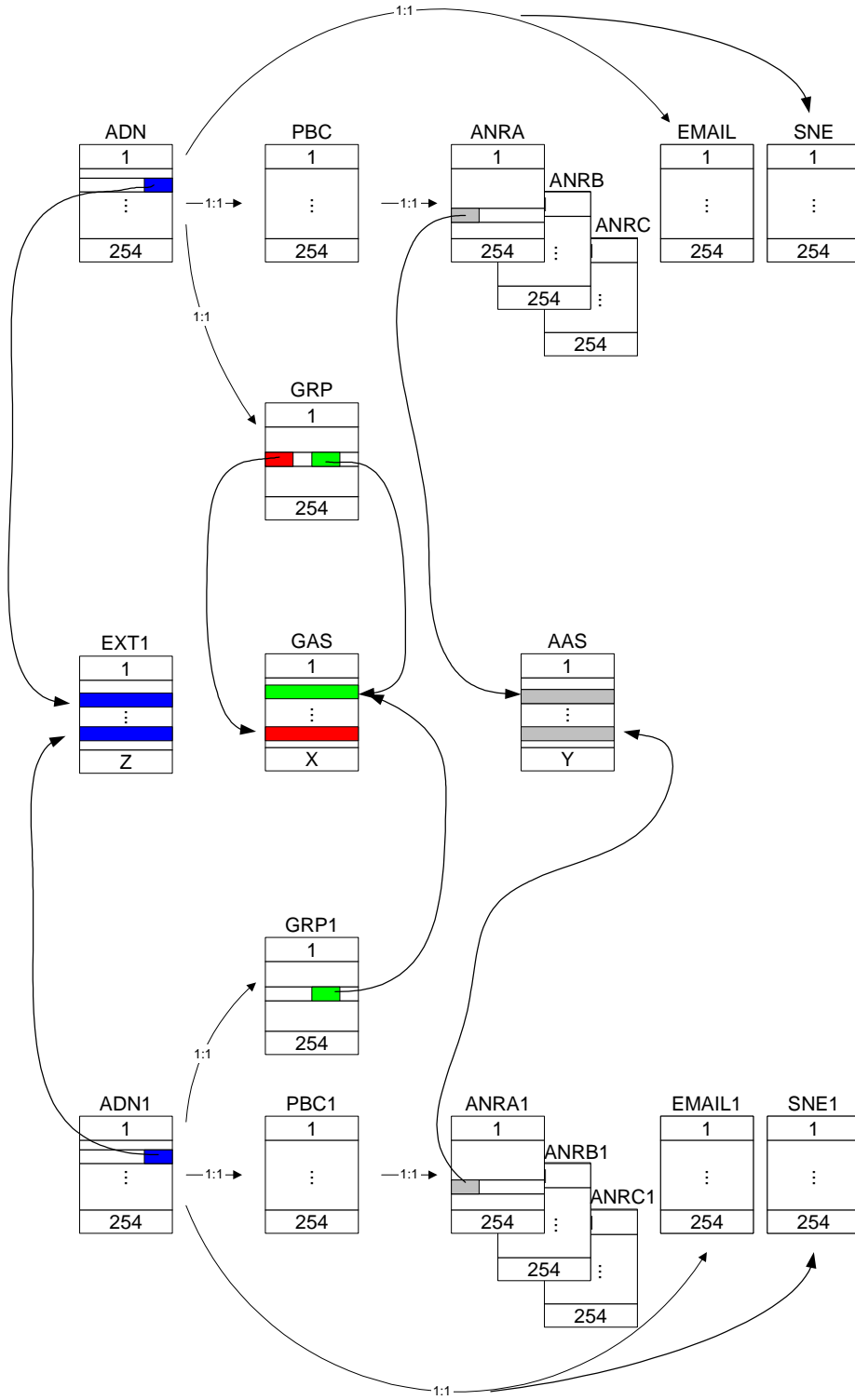


Figure G.1: Structure and Relations of the Example Phone Book

3GPP TSG-T3 Meeting #30
Sophia Antipolis, France, 9-13 February 2004

T3-040107

CR-Form-v7
CHANGE REQUEST
⌘ 31.102 CR 205 ⌘ rev - ⌘ Current version: 6.4.0 ⌘

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

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

Title:	⌘ Correction to Annex G Phonebook Example		
Source:	⌘ T3		
Work item code:	⌘ TEI Date: ⌘ 10/02/2004		
Category:	⌘ A Release: ⌘ Rel-6 Use <u>one</u> of the following categories: <table style="width: 100%; margin-top: 5px;"> <tr> <td style="width: 50%; vertical-align: top;"> F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) </td> <td style="width: 50%; vertical-align: top;"> Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) </td> </tr> </table> Detailed explanations of the above categories can be found in 3GPP TR 21.900 .	F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)	Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)
F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)	Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)		

Reason for change:	⌘ Inconsistency in the Phonebook example in Annex G. <ol style="list-style-type: none"> 1. In Table G.1 EF_GRP1 FID is set to '4F27'. But in Table G.2 and G.4 it is set to '4F25'. 2. In Table G.2 Rec.2 EF_GRP1 SFI value is set to '18' (Tag 'C6' L='03' '4F25' '18') but in Table G.4 '0C' is used. 3. In Table G.2 some SFIs are not coded as hexadecimal values. 4. In Table G.4 content of ADN1 and EXT1 is wrong 5. Errors in the description for EF_{AAS}
Summary of change:	⌘ In Table G.2 the FID of EF_GRP1 is changed to '4F27' and the SFI is changed to '0C' In Table G.4 the FID of EF_GRP1 is changed to '4F27' In Table G.2 coding of some SFIs changed to hexadecimal values. In Table G.4 content of ADN1 and EXT1 is changed. Description of files addressing EF _{AAS} changed
Consequences if not approved:	⌘ Wrong example remains on the specification. It could lead to wrong implementation.

Clauses affected:	⌘ Annex G												
Other specs affected:	<table style="border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px; text-align: center;">Y</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">N</td> <td rowspan="3" style="padding-left: 10px;">Other core specifications</td> <td rowspan="3" style="padding-left: 20px;">⌘</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; text-align: center;">X</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">X</td> <td>Test specifications</td> <td></td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; text-align: center;">X</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">X</td> <td>O&M Specifications</td> <td></td> </tr> </table>	Y	N	Other core specifications	⌘	X	X	Test specifications		X	X	O&M Specifications	
Y	N	Other core specifications	⌘										
X	X					Test specifications							
X	X			O&M Specifications									
Other comments:	⌘												

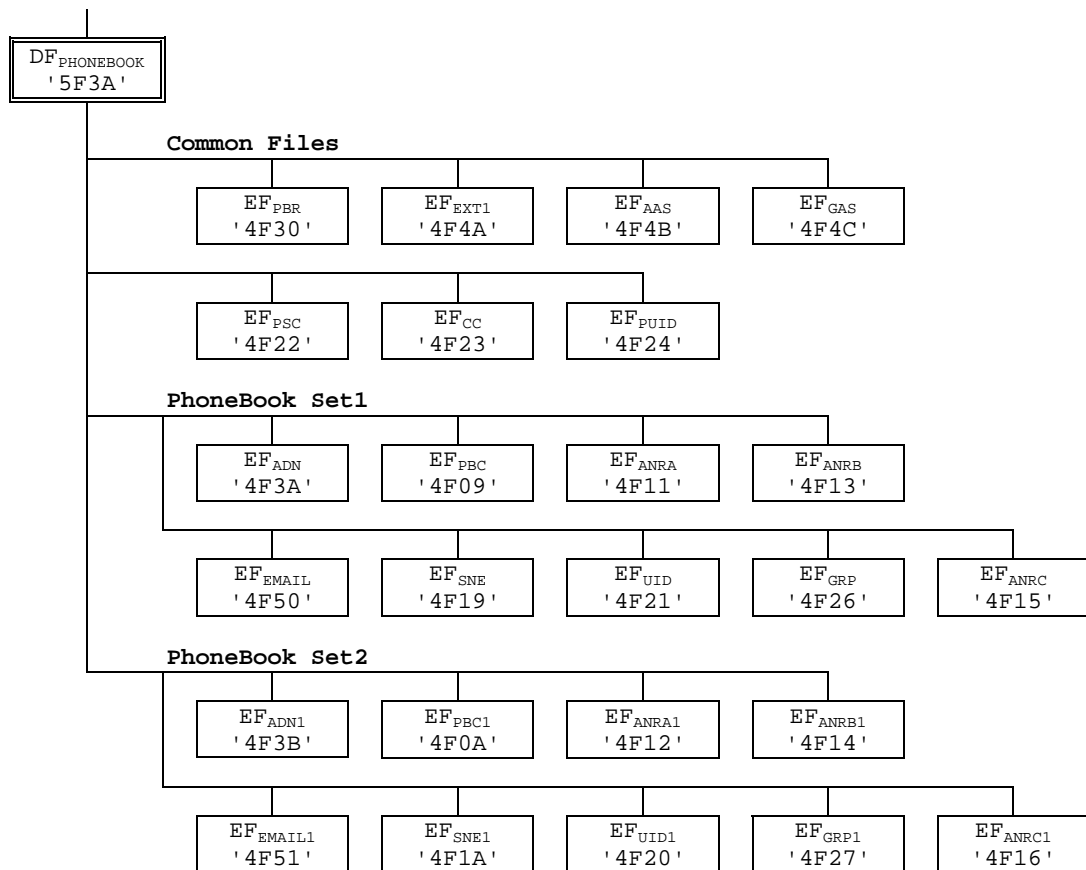
Annex G (informative): Phonebook Example

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_{ANRA}, EF_{ANRA1}, [EF_{ANRB}](#), [EF_{ANRB1}](#), [EF_{ANRC}](#), [EF_{ANRC1}](#) and EF_{GAS} is addressed via EF_{GRP}, EF_{GRP1}. 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 DF_{PHONEBOOK}



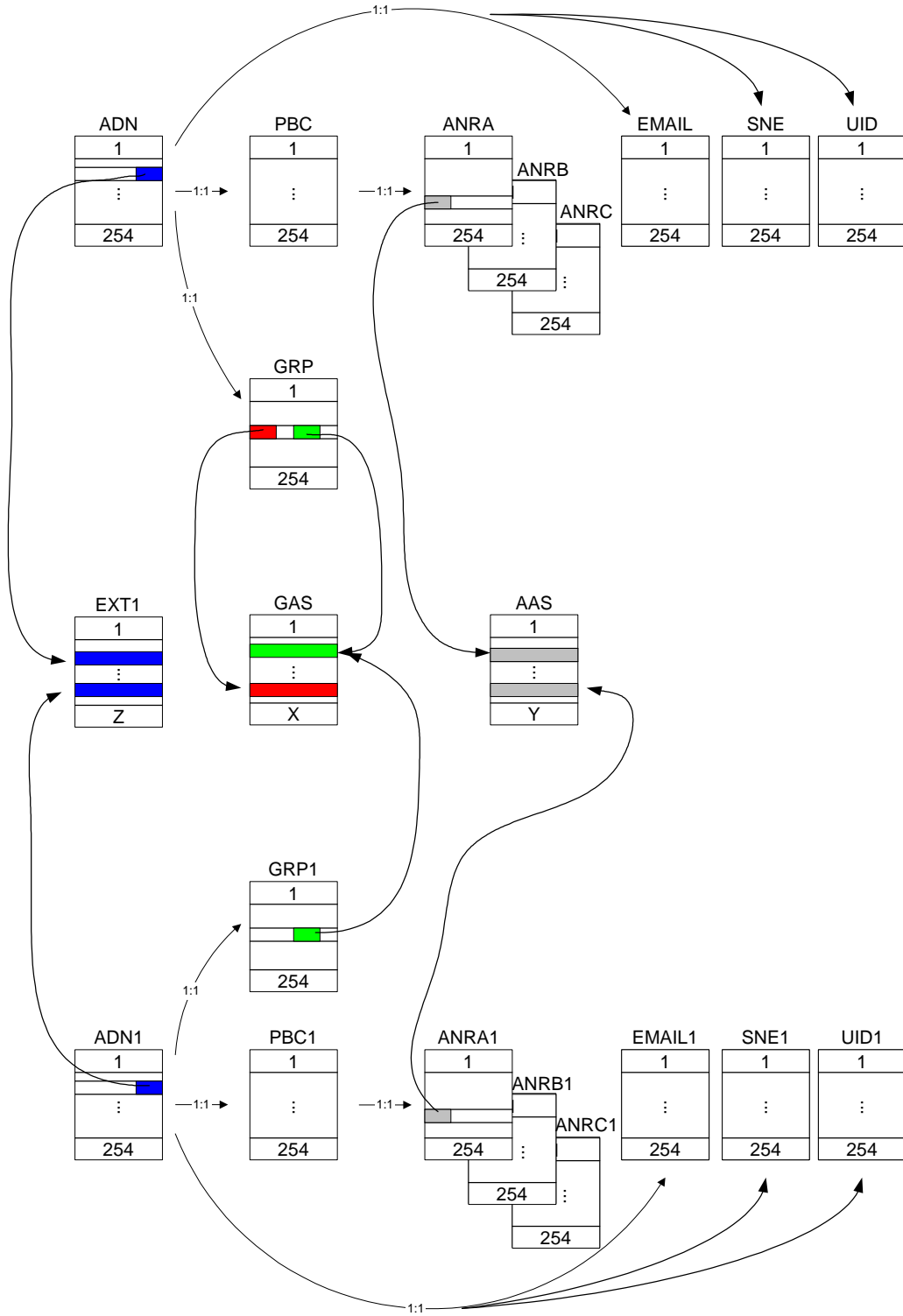


Figure G.1: Structure and Relations of the Example Phone Book

[...]

Sophia Antipolis, France, 9th – 13th February 2004

CR-Form-v7

CHANGE REQUEST⌘ **31.102 CR 206** ⌘ rev **-** ⌘ Current version: **3.15.0** ⌘For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	⌘ CR 31.102 R99: introduction of a missing note regarding DTMF string
Source:	⌘ T3
Work item code:	⌘ TEI Date: ⌘ 04/02/2004
Category:	⌘ F Release: ⌘ R99
Use <u>one</u> of the following categories:	
F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)	
Detailed explanations of the above categories can be found in 3GPP TR 21.900 .	
Use <u>one</u> of the following releases:	
2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)	

Reason for change:	⌘ Alignment of 31.102 with 11.11 – Note has “fallen out”
Summary of change:	⌘ Re-introduce missing note regarding DTMF strings
Consequences if not approved:	⌘ values ‘D’, ‘E’ and ‘F’ as DTMF digits are reserved in 11.11 and not in 31.102, but 31.102 does not provide any interpretation of those digits.

Clauses affected:	⌘ 4.4.2.3												
Other specs affected:	<table border="1"> <tr> <td>Y</td> <td>N</td> <td></td> </tr> <tr> <td></td> <td><input checked="" type="checkbox"/></td> <td>Other core specifications</td> </tr> <tr> <td></td> <td><input checked="" type="checkbox"/></td> <td>Test specifications</td> </tr> <tr> <td></td> <td><input checked="" type="checkbox"/></td> <td>O&M Specifications</td> </tr> </table>	Y	N			<input checked="" type="checkbox"/>	Other core specifications		<input checked="" type="checkbox"/>	Test specifications		<input checked="" type="checkbox"/>	O&M Specifications
Y	N												
	<input checked="" type="checkbox"/>	Other core specifications											
	<input checked="" type="checkbox"/>	Test specifications											
	<input checked="" type="checkbox"/>	O&M Specifications											
Other comments:	⌘												

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

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

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

4.4.2.3 EF_{ADN} (Abbreviated dialling numbers)

This EF contains Abbreviated Dialling Numbers (ADN) and/or Supplementary Service Control strings (SSC). In addition it contains identifiers of associated network/bearer capabilities and identifiers of extension records. It may also contain an associated alpha-tagging.

Identifier: '4FXX'		Structure: linear fixed		Conditional (see Note)	
SFI: 'YY'					
Record length: X+14 bytes			Update activity: low		
Access Conditions:					
READ		PIN			
UPDATE		PIN			
DEACTIVATE		ADM			
ACTIVATE		ADM			
Bytes	Description	M/O	Length		
1 to X	Alpha Identifier	O	X bytes		
X+1	Length of BCD number/SSC contents	M	1 byte		
X+2	TON and NPI	M	1 byte		
X+3 to X+12	Dialling Number/SSC String	M	10 bytes		
X+13	Capability/Configuration1 Identifier	M	1 byte		
X+14	Extension1 Record Identifier	M	1 byte		
NOTE: This file is mandatory if and only if DF _{PHONEBOOK} is present.					

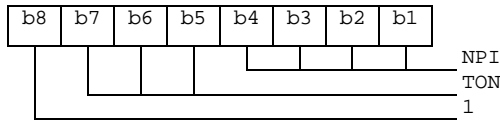
- Alpha Identifier.
Contents:
 - Alpha-tagging of the associated dialling number.
 Coding:
 - this alpha-tagging shall use either:
 - the SMS default 7-bit coded alphabet as defined in TS 23.038 [5] with bit 8 set to 0. The alpha identifier shall be left justified. Unused bytes shall be set to 'FF'.
 - or:
 - one of the UCS2 coded options as defined in the annex of TS 31.101 [11].

NOTE 1: The value of X may be from zero to 241. Using the command GET RESPONSE the ME can determine the value of X.

- Length of BCD number/SSC contents.
Contents:
 - this byte gives the number of bytes of the following two data items containing actual BCD number/SSC information. This means that the maximum value is 11, even when the actual ADN/SSC information length is greater than 11. When an ADN/SSC has extension, it is indicated by the extension1 identifier being unequal to 'FF'. The remainder is stored in the EF_{EXT1} with the remaining length of the additional data being coded in the appropriate additional record itself (see clause 4.4.2.4).
 Coding:
 - according to TS 24.008 [9].
- TON and NPI.
Contents:
 - Type of number (TON) and numbering plan identification (NPI).
 Coding:

- according to TS 24.008 [9]. If the Dialling Number/SSC String does not contain a dialling number, e.g. a control string deactivating a service, the TON/NPI byte shall be set to 'FF' by the ME (see note 2).

NOTE 2: If a dialling number is absent, no TON/NPI byte is transmitted over the radio interface (see TS 24.008 [9]). Accordingly, the ME should not interpret the value 'FF' and not send it over the radio interface.



- Dialling Number/SSC String

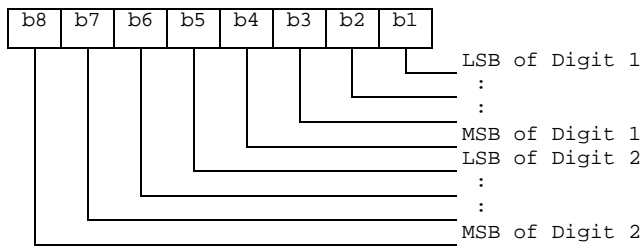
Contents:

- up to 20 digits of the telephone number and/or SSC information.

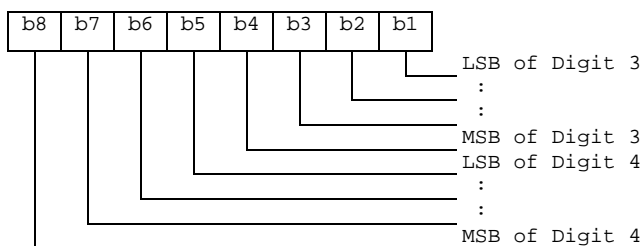
Coding:

- according to TS 24.008 [9], TS 22.030 [4] and the extended BCD-coding (see table 4.4). If the telephone number or SSC is longer than 20 digits, the first 20 digits are stored in this data item and the remainder is stored in an associated record in the EF_{EXT1}. The record is identified by the Extension1 Record Identifier. If ADN/SSC require less than 20 digits, excess nibbles at the end of the data item shall be set to 'F'. Where individual dialled numbers, in one or more records, of less than 20 digits share a common appended digit string the first digits are stored in this data item and the common digits stored in an associated record in the EF_{EXT1}. The record is identified by the Extension 1 Record Identifier. Excess nibbles at the end of the data item shall be set to 'F'.

Byte X+3



Byte X+4:



etc.

- Capability/Configuration1 Identifier.

Contents:

- capability/configuration identification byte. This byte identifies the number of a record in the EF_{CCP1} containing associated capability/configuration parameters required for the call. The use of this byte is optional. If it is not used it shall be set to 'FF'.

Coding:

- binary.

- Extension1 Record Identifier.

Contents:

- extension1 record identification byte. This byte identifies the number of a record in the EF_{EXT1} containing an associated called party subaddress or additional data. The use of this byte is optional. If it is not used it shall be set to 'FF'.
- if the ADN/SSC requires both additional data and called party subaddress, this byte identifies the additional record. A chaining mechanism inside EF_{EXT1} identifies the record of the appropriate called party subaddress (see clause 4.4.2.4).

Coding:

- binary.

NOTE 3: EF_{ADN} in the public phone book under DF_{TELECOM} may be used by USIM, GSM and also other applications in a multi-application card. If the non-GSM application does not recognise the use of Type of Number (TON) and Number Plan Identification (NPI), then the information relating to the national dialling plan shall be held within the data item dialling number/SSC and the TON and NPI fields set to UNKNOWN. This format would be acceptable for 3G operation and also for the non-GSM application where the TON and NPI fields shall be ignored.

EXAMPLE: SIM storage of an International Number using E.164 [22] numbering plan.

	TON	NPI	Digit field.
USIM application	001	0001	abc...
Other application compatible with 3G	000	0000	xxx...abc...

where "abc..." denotes the subscriber number digits (including its country code), and "xxx..." denotes escape digits or a national prefix replacing TON and NPI.

NOTE 4: When the ME acts upon the EF_{ADN} with a SEARCH RECORD command in order to identify a character string in the alpha-identifier, it is the responsibility of the ME to ensure that the number of characters used as SEARCH RECORD parameters are less than or equal to the value of X if the MMI allows the user to offer a greater number.

Table 4.4: Extended BCD coding

BCD Value	Character/Meaning
'0'	"0"
:	:
'9'	"9"
'A'	"*"
'B'	"#"
'C'	DTMF Control digit separator (see TS 22.101 [24]).
'D'	"Wild" value. This will cause the MMI to prompt the user for a single digit (see TS 22.101 [24]).
'E'	RFU.
'F'	Endmark e.g. in case of an odd number of digits.

BCD values 'C', 'D' and 'E' are never sent across the radio interface.

[NOTE 5: The interpretation of values 'D', 'E' and 'F' as DTMF digits is for further study.](#)

NOTE 6: A second or subsequent 'C' BCD value will be interpreted as a 3 second PAUSE (see TS 22.101 [24]).

CR-Form-v7

CHANGE REQUEST

⌘ **31.102 CR 207** ⌘ rev **-** ⌘ Current version: **4.11.0** ⌘

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

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

Title:	⌘ Adding missing note about DTMF string		
Source:	⌘ T3		
Work item code:	⌘ TEI	Date:	⌘ 10/02/2004
Category:	⌘ A	Release:	⌘ Rel-4
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

Reason for change:	⌘ Alignment of 31.102 with 11.11 – Note has “fallen out”		
Summary of change:	⌘ Re-introduce missing note regarding DTMF strings		
Consequences if not approved:	⌘ values ‘D’, ‘E’ and ‘F’ as DTMF digits are reserved in 11.11 and not in 31.102, but 31.102 does not provide any interpretation of those digits.		

Clauses affected:	⌘ 4.4.2.3										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> </table>	Y	N	⌘	X	⌘	X	⌘	X	Other core specifications Test specifications O&M Specifications	⌘
Y	N										
⌘	X										
⌘	X										
⌘	X										
Other comments:	⌘										

How to create CRs using this form:

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- 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.

4.4.2.3 EF_{ADN} (Abbreviated dialling numbers)

This EF contains Abbreviated Dialling Numbers (ADN) and/or Supplementary Service Control strings (SSC). In addition it contains identifiers of associated network/bearer capabilities and identifiers of extension records. It may also contain an associated alpha-tagging.

Identifier: '4FXX'		Structure: linear fixed		Conditional (see Note)	
SFI: 'YY'					
Record length: X+14 bytes			Update activity: low		
Access Conditions:					
READ		PIN			
UPDATE		PIN			
DEACTIVATE		ADM			
ACTIVATE		ADM			
Bytes	Description	M/O	Length		
1 to X	Alpha Identifier	O	X bytes		
X+1	Length of BCD number/SSC contents	M	1 byte		
X+2	TON and NPI	M	1 byte		
X+3 to X+12	Dialling Number/SSC String	M	10 bytes		
X+13	Capability/Configuration1 Identifier	M	1 byte		
X+14	Extension1 Record Identifier	M	1 byte		
NOTE: This file is mandatory if and only if DF _{PHONEBOOK} is present.					

- Alpha Identifier.

Contents:

- Alpha-tagging of the associated dialling number.

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. Unused bytes shall be set to 'FF'.
- or:
 - one of the UCS2 coded options as defined in the annex of TS 31.101 [11].

NOTE 1: The value of X may be from zero to 241. Using the command GET RESPONSE the ME can determine the value of X.

- Length of BCD number/SSC contents.

Contents:

- this byte gives the number of bytes of the following two data items containing actual BCD number/SSC information. This means that the maximum value is 11, even when the actual ADN/SSC information length is greater than 11. When an ADN/SSC has extension, it is indicated by the extension1 identifier being unequal to 'FF'. The remainder is stored in the EF_{EXT1} with the remaining length of the additional data being coded in the appropriate additional record itself (see clause 4.4.2.4).

Coding:

- according to TS 24.008 [9].

- TON and NPI.

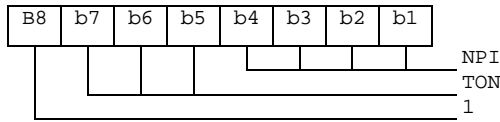
Contents:

- Type of number (TON) and numbering plan identification (NPI).

Coding:

- according to TS 24.008 [9]. If the Dialling Number/SSC String does not contain a dialling number, e.g. a control string deactivating a service, the TON/NPI byte shall be set to 'FF' by the ME (see note 2).

NOTE 2: If a dialling number is absent, no TON/NPI byte is transmitted over the radio interface (see TS 24.008 [9]). Accordingly, the ME should not interpret the value 'FF' and not send it over the radio interface.



- Dialling Number/SSC String

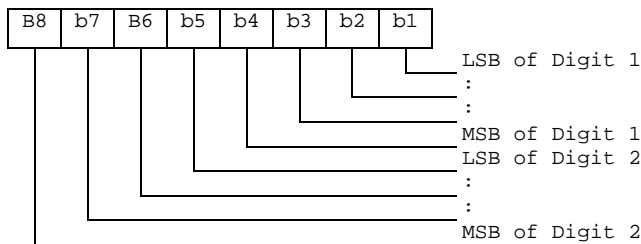
Contents:

- up to 20 digits of the telephone number and/or SSC information.

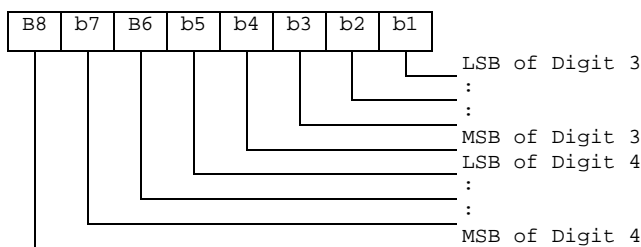
Coding:

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Byte X+3



Byte X+4:



etc.

- Capability/Configuration1 Identifier.

Contents:

- capability/configuration identification byte. This byte identifies the number of a record in the EF_{CCP1} containing associated capability/configuration parameters required for the call. The use of this byte is optional. If it is not used it shall be set to 'FF'.

Coding:

- binary.

- Extension1 Record Identifier.

Contents:

- extension1 record identification byte. This byte identifies the number of a record in the EF_{EXT1} containing an associated called party subaddress or additional data. The use of this byte is optional. If it is not used it shall be set to 'FF'.
- if the ADN/SSC requires both additional data and called party subaddress, this byte identifies the additional record. A chaining mechanism inside EF_{EXT1} identifies the record of the appropriate called party subaddress (see clause 4.4.2.4).

Coding:

- binary.

NOTE 3: EF_{ADN} in the public phone book under DF_{TELECOM} may be used by USIM, GSM and also other applications in a multi-application card. If the non-GSM application does not recognise the use of Type of Number (TON) and Number Plan Identification (NPI), then the information relating to the national dialling plan shall be held within the data item dialling number/SSC and the TON and NPI fields set to UNKNOWN. This format would be acceptable for 3G operation and also for the non-GSM application where the TON and NPI fields shall be ignored.

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	TON	NPI	Digit field.
USIM application	001	0001	abc...
Other application compatible with 3G	000	0000	xxx...abc...

where "abc..." denotes the subscriber number digits (including its country code), and "xxx..." denotes escape digits or a national prefix replacing TON and NPI.

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Table 4.4: Extended BCD coding

BCD Value	Character/Meaning
'0'	"0"
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'A'	"*"
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'C'	DTMF Control digit separator (see TS 22.101 [24]).
'D'	"Wild" value. This will cause the MMI to prompt the user for a single digit (see TS 22.101 [24]).
'E'	RFU.
'F'	Endmark e.g. in case of an odd number of digits.

BCD values 'C', 'D' and 'E' are never sent across the radio interface.

[NOTE 5: The interpretation of values 'D', 'E' and 'F' as DTMF digits is for further study.](#)

NOTE 65: A second or subsequent 'C' BCD value will be interpreted as a 3 second PAUSE (see TS 22.101 [24]).

CR-Form-v7

CHANGE REQUEST

⌘ **31.102 CR 208** ⌘ rev **-** ⌘ Current version: **5.7.0** ⌘

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

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

Title:	⌘ Adding missing note about DTMF string		
Source:	⌘ T3		
Work item code:	⌘ TEI	Date:	⌘ 10/02/2004
Category:	⌘ A	Release:	⌘ Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

Reason for change:	⌘ Alignment of 31.102 with 11.11 – Note has “fallen out”		
Summary of change:	⌘ Re-introduce missing note regarding DTMF strings		
Consequences if not approved:	⌘ values ‘D’, ‘E’ and ‘F’ as DTMF digits are reserved in 11.11 and not in 31.102, but 31.102 does not provide any interpretation of those digits.		

Clauses affected:	⌘ 4.4.2.3						
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table>	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other core specifications	⌘
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Test specifications			
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	O&M Specifications			
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
Other comments:	⌘						

How to create CRs using this form:

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

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

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

4.4.2.3 EF_{ADN} (Abbreviated dialling numbers)

This EF contains Abbreviated Dialling Numbers (ADN) and/or Supplementary Service Control strings (SSC). In addition it contains identifiers of associated network/bearer capabilities and identifiers of extension records. It may also contain an associated alpha-tagging.

Identifier: '4FXX'		Structure: linear fixed		Conditional (see Note)	
SFI: 'YY'					
Record length: X+14 bytes			Update activity: low		
Access Conditions:					
READ		PIN			
UPDATE		PIN			
DEACTIVATE		ADM			
ACTIVATE		ADM			
Bytes	Description	M/O	Length		
1 to X	Alpha Identifier	O	X bytes		
X+1	Length of BCD number/SSC contents	M	1 byte		
X+2	TON and NPI	M	1 byte		
X+3 to X+12	Dialling Number/SSC String	M	10 bytes		
X+13	Capability/Configuration1 Identifier	M	1 byte		
X+14	Extension1 Record Identifier	M	1 byte		
NOTE: This file is mandatory if and only if DF _{PHONEBOOK} is present.					

- Alpha Identifier.

Contents:

- Alpha-tagging of the associated dialling number.

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. Unused bytes shall be set to 'FF'.
- or:
 - one of the UCS2 coded options as defined in the annex of TS 31.101 [11].

NOTE 1: The value of X may be from zero to 241. Using the command GET RESPONSE the ME can determine the value of X.

- Length of BCD number/SSC contents.

Contents:

- this byte gives the number of bytes of the following two data items containing actual BCD number/SSC information. This means that the maximum value is 11, even when the actual ADN/SSC information length is greater than 11. When an ADN/SSC has extension, it is indicated by the extension1 identifier being unequal to 'FF'. The remainder is stored in the EF_{EXT1} with the remaining length of the additional data being coded in the appropriate additional record itself (see clause 4.4.2.4).

Coding:

- according to TS 24.008 [9].

- TON and NPI.

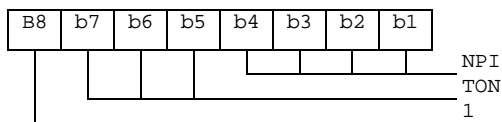
Contents:

- Type of number (TON) and numbering plan identification (NPI).

Coding:

- according to TS 24.008 [9]. If the Dialling Number/SSC String does not contain a dialling number, e.g. a control string deactivating a service, the TON/NPI byte shall be set to 'FF' by the ME (see note 2).

NOTE 2: If a dialling number is absent, no TON/NPI byte is transmitted over the radio interface (see TS 24.008 [9]). Accordingly, the ME should not interpret the value 'FF' and not send it over the radio interface.



- Dialling Number/SSC String

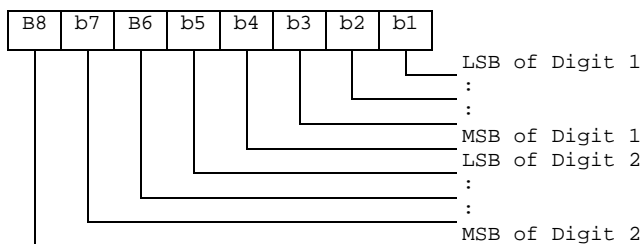
Contents:

- up to 20 digits of the telephone number and/or SSC information.

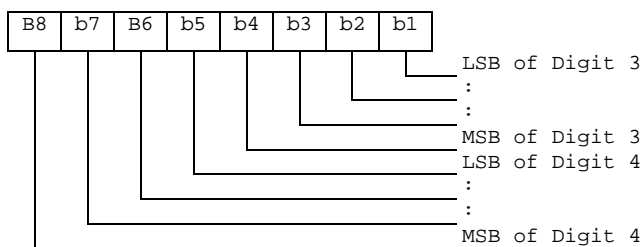
Coding:

- according to TS 24.008 [9], TS 22.030 [4] and the extended BCD-coding (see table 4.4). If the telephone number or SSC is longer than 20 digits, the first 20 digits are stored in this data item and the remainder is stored in an associated record in the EF_{EXT1}. The record is identified by the Extension1 Record Identifier. If ADN/SSC require less than 20 digits, excess nibbles at the end of the data item shall be set to 'F'. Where individual dialled numbers, in one or more records, of less than 20 digits share a common appended digit string the first digits are stored in this data item and the common digits stored in an associated record in the EF_{EXT1}. The record is identified by the Extension 1 Record Identifier. Excess nibbles at the end of the data item shall be set to 'F'.

Byte X+3



Byte X+4:



etc.

- Capability/Configuration1 Identifier.

Contents:

- capability/configuration identification byte. This byte identifies the number of a record in the EF_{CCP1} containing associated capability/configuration parameters required for the call. The use of this byte is optional. If it is not used it shall be set to 'FF'.

Coding:

- binary.

- Extension1 Record Identifier.

Contents:

- extension1 record identification byte. This byte identifies the number of a record in the EF_{EXT1} containing an associated called party subaddress or additional data. The use of this byte is optional. If it is not used it shall be set to 'FF'.
- if the ADN/SSC requires both additional data and called party subaddress, this byte identifies the additional record. A chaining mechanism inside EF_{EXT1} identifies the record of the appropriate called party subaddress (see clause 4.4.2.4).

Coding:

- binary.

NOTE 3: EF_{ADN} in the public phone book under DF_{TELECOM} may be used by USIM, GSM and also other applications in a multi-application card. If the non-GSM application does not recognise the use of Type of Number (TON) and Number Plan Identification (NPI), then the information relating to the national dialling plan shall be held within the data item dialling number/SSC and the TON and NPI fields set to UNKNOWN. This format would be acceptable for 3G operation and also for the non-GSM application where the TON and NPI fields shall be ignored.

EXAMPLE: SIM storage of an International Number using E.164 [22] numbering plan.

	TON	NPI	Digit field.
USIM application	001	0001	abc...
Other application compatible with 3G	000	0000	xxx...abc...

where "abc..." denotes the subscriber number digits (including its country code), and "xxx..." denotes escape digits or a national prefix replacing TON and NPI.

NOTE 4: When the ME acts upon the EF_{ADN} with a SEARCH RECORD command in order to identify a character string in the alpha-identifier, it is the responsibility of the ME to ensure that the number of characters used as SEARCH RECORD parameters are less than or equal to the value of X if the MMI allows the user to offer a greater number.

Table 4.4: Extended BCD coding

BCD Value	Character/Meaning
'0'	"0"
:	:
'9'	"9"
'A'	"*"
'B'	"#"
'C'	DTMF Control digit separator (see TS 22.101 [24]).
'D'	"Wild" value. This will cause the MMI to prompt the user for a single digit (see TS 22.101 [24]).
'E'	RFU.
'F'	Endmark e.g. in case of an odd number of digits.

BCD values 'C', 'D' and 'E' are never sent across the radio interface.

[NOTE 5: The interpretation of values 'D', 'E' and 'F' as DTMF digits is for further study.](#)

NOTE 6: A second or subsequent 'C' BCD value will be interpreted as a 3 second PAUSE (see TS 22.101 [24]).

CHANGE REQUEST

⌘ **31.102 CR 209** ⌘ rev **-** ⌘ Current version: **6.4.0** ⌘

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

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

Title:	⌘ Adding missing note about DTMF string		
Source:	⌘ T3		
Work item code:	⌘ TEI	Date:	⌘ 10/02/2004
Category:	⌘ A	Release:	⌘ Rel-6
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

Reason for change:	⌘ Alignment of 31.102 with 11.11 – Note has “fallen out”		
Summary of change:	⌘ Re-introduce missing note regarding DTMF strings		
Consequences if not approved:	⌘ values ‘D’, ‘E’ and ‘F’ as DTMF digits are reserved in 11.11 and not in 31.102, but 31.102 does not provide any interpretation of those digits.		

Clauses affected:	⌘ 4.4.2.3										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Y</td> <td style="padding: 2px;">N</td> </tr> <tr> <td style="padding: 2px;"><input type="checkbox"/></td> <td style="padding: 2px;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;"><input type="checkbox"/></td> <td style="padding: 2px;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;"><input type="checkbox"/></td> <td style="padding: 2px;"><input checked="" type="checkbox"/></td> </tr> </table>	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other core specifications	⌘
	Y	N									
	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
<input type="checkbox"/>	<input checked="" type="checkbox"/>										
<input type="checkbox"/>	<input checked="" type="checkbox"/>										
Test specifications	⌘										
O&M Specifications	⌘										
Other comments:	⌘										

How to create CRs using this form:

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

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

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

4.4.2.3 EF_{ADN} (Abbreviated dialling numbers)

This EF contains Abbreviated Dialling Numbers (ADN) and/or Supplementary Service Control strings (SSC). In addition it contains identifiers of associated network/bearer capabilities and identifiers of extension records. It may also contain an associated alpha-tagging.

Identifier: '4FXX'		Structure: linear fixed		Conditional (see Note)	
SFI: 'YY'					
Record length: X+14 bytes			Update activity: low		
Access Conditions:					
READ		PIN			
UPDATE		PIN			
DEACTIVATE		ADM			
ACTIVATE		ADM			
Bytes	Description	M/O	Length		
1 to X	Alpha Identifier	O	X bytes		
X+1	Length of BCD number/SSC contents	M	1 byte		
X+2	TON and NPI	M	1 byte		
X+3 to X+12	Dialling Number/SSC String	M	10 bytes		
X+13	Capability/Configuration1 Identifier	M	1 byte		
X+14	Extension1 Record Identifier	M	1 byte		
NOTE: This file is mandatory if and only if DF _{PHONEBOOK} is present.					

- Alpha Identifier.

Contents:

- Alpha-tagging of the associated dialling number.

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. Unused bytes shall be set to 'FF'.
- or:
 - one of the UCS2 coded options as defined in the annex of TS 31.101 [11].

NOTE 1: The value of X may be from zero to 241. Using the command GET RESPONSE the ME can determine the value of X.

- Length of BCD number/SSC contents.

Contents:

- this byte gives the number of bytes of the following two data items containing actual BCD number/SSC information. This means that the maximum value is 11, even when the actual ADN/SSC information length is greater than 11. When an ADN/SSC has extension, it is indicated by the extension1 identifier being unequal to 'FF'. The remainder is stored in the EF_{EXT1} with the remaining length of the additional data being coded in the appropriate additional record itself (see clause 4.4.2.4).

Coding:

- according to TS 24.008 [9].

- TON and NPI.

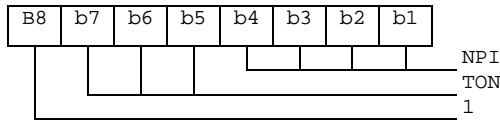
Contents:

- Type of number (TON) and numbering plan identification (NPI).

Coding:

- according to TS 24.008 [9]. If the Dialling Number/SSC String does not contain a dialling number, e.g. a control string deactivating a service, the TON/NPI byte shall be set to 'FF' by the ME (see note 2).

NOTE 2: If a dialling number is absent, no TON/NPI byte is transmitted over the radio interface (see TS 24.008 [9]). Accordingly, the ME should not interpret the value 'FF' and not send it over the radio interface.



- Dialling Number/SSC String

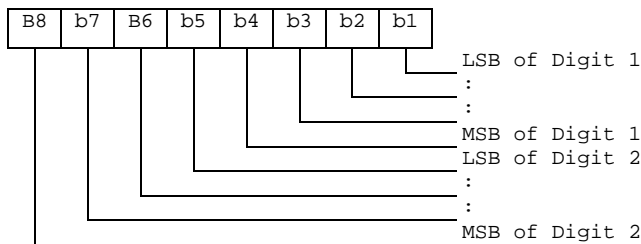
Contents:

- up to 20 digits of the telephone number and/or SSC information.

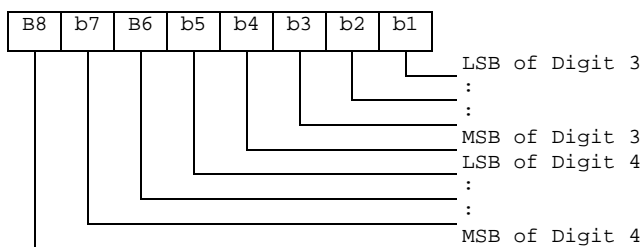
Coding:

- according to TS 24.008 [9], TS 22.030 [4] and the extended BCD-coding (see table 4.4). If the telephone number or SSC is longer than 20 digits, the first 20 digits are stored in this data item and the remainder is stored in an associated record in the EF_{EXT1}. The record is identified by the Extension1 Record Identifier. If ADN/SSC require less than 20 digits, excess nibbles at the end of the data item shall be set to 'F'. Where individual dialled numbers, in one or more records, of less than 20 digits share a common appended digit string the first digits are stored in this data item and the common digits stored in an associated record in the EF_{EXT1}. The record is identified by the Extension 1 Record Identifier. Excess nibbles at the end of the data item shall be set to 'F'.

Byte X+3



Byte X+4:



etc.

- Capability/Configuration1 Identifier.

Contents:

- capability/configuration identification byte. This byte identifies the number of a record in the EF_{CCP1} containing associated capability/configuration parameters required for the call. The use of this byte is optional. If it is not used it shall be set to 'FF'.

Coding:

- binary.

- Extension1 Record Identifier.

Contents:

- extension1 record identification byte. This byte identifies the number of a record in the EF_{EXT1} containing an associated called party subaddress or additional data. The use of this byte is optional. If it is not used it shall be set to 'FF'.
- if the ADN/SSC requires both additional data and called party subaddress, this byte identifies the additional record. A chaining mechanism inside EF_{EXT1} identifies the record of the appropriate called party subaddress (see clause 4.4.2.4).

Coding:

- binary.

NOTE 3: EF_{ADN} in the public phone book under DF_{TELECOM} may be used by USIM, GSM and also other applications in a multi-application card. If the non-GSM application does not recognise the use of Type of Number (TON) and Number Plan Identification (NPI), then the information relating to the national dialling plan shall be held within the data item dialling number/SSC and the TON and NPI fields set to UNKNOWN. This format would be acceptable for 3G operation and also for the non-GSM application where the TON and NPI fields shall be ignored.

EXAMPLE: SIM storage of an International Number using E.164 [22] numbering plan.

	TON	NPI	Digit field.
USIM application	001	0001	abc...
Other application compatible with 3G	000	0000	xxx...abc...

where "abc..." denotes the subscriber number digits (including its country code), and "xxx..." denotes escape digits or a national prefix replacing TON and NPI.

NOTE 4: When the ME acts upon the EF_{ADN} with a SEARCH RECORD command in order to identify a character string in the alpha-identifier, it is the responsibility of the ME to ensure that the number of characters used as SEARCH RECORD parameters are less than or equal to the value of X if the MMI allows the user to offer a greater number.

Table 4.4: Extended BCD coding

BCD Value	Character/Meaning
'0'	"0"
:	:
'9'	"9"
'A'	"*"
'B'	"#"
'C'	DTMF Control digit separator (see TS 22.101 [24]).
'D'	"Wild" value. This will cause the MMI to prompt the user for a single digit (see TS 22.101 [24]).
'E'	RFU.
'F'	Endmark e.g. in case of an odd number of digits.

BCD values 'C', 'D' and 'E' are never sent across the radio interface.

[NOTE 5: The interpretation of values 'D', 'E' and 'F' as DTMF digits is for further study.](#)

NOTE 65: A second or subsequent 'C' BCD value will be interpreted as a 3 second PAUSE (see TS 22.101 [24]).

Sophia Antipolis, France, 9th – 13th February 2004

CR-Form-v7	
CHANGE REQUEST	
⌘ 31.102 CR 210 ⌘ rev - ⌘ Current version: 6.4.0 ⌘	

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

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

Title:	⌘ CR 31.102 Rel-6: Support for transparency in images		
Source:	⌘ T3		
Work item code:	⌘ TEI	Date:	⌘ 10/02/2004
Category:	⌘ C	Release:	⌘ Rel-6
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)

Reason for change:	⌘ In the presently standardized codings for image instances, it is not possible to define transparency – which means that images will always appear as square on the phone display. The present CR introduces transparency in a simple and backwards compatible way.
Summary of change:	⌘ Addition of a new Image coding scheme '22', in which entry number C-1 in the Colour Look-Up Table (CLUT) is defined to be the transparent "colour".
Consequences if not approved:	⌘ It is not possible to have images with transparency, or images with transparency are done in a non-standardized way.

Clauses affected:	⌘ 4.6.1.1, Appendix B										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘	Y	N		X		X		X		
Y	N										
	X										
	X										
	X										
Other comments:	⌘										

How to create CRs using this form:

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

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

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

4.6.1 Contents of files at the DF_{GRAPHICS} level

The EFs in the Dedicated File DF_{GRAPHICS} contain graphical information.

4.6.1.1 EF_{IMG} (Image)

Each record of this EF identifies instances of one particular graphical image, which graphical image is identified by this EF's record number.

Image instances may differ as to their size, having different resolutions, and the way they are coded, using one of several image coding schemes.

As an example, image *k* may represent a company logo, of which there are *i* instances in the UICC, of various resolutions and perhaps encoded in several image coding schemes. Then, the *i* instances of the company's logo are described in record *k* of this EF.

Identifier: '4F20'		Structure: linear fixed		Optional
Record length: 9n+1 or 9n+2 bytes		Update activity: low		
Access Conditions:				
READ		PIN		
UPDATE		ADM		
DEACTIVATE		ADM		
ACTIVATE		ADM		
Bytes	Description	M/O	Length	
1	Number of Actual Image Instances	M	1 byte	
2 to 10	Descriptor of Image Instance 1	M	9 bytes	
11 to 19	Descriptor of Image Instance 2	O	9 bytes	
9(n-1)+2 to 9n+1	Descriptor of Image Instance n	O	9 bytes	
9n + 2	RFU (see TS 31.101 [11])	O	1 byte	

- Number of Actual Image Instances.

Contents:

- this byte gives the number of actual image instances described in the following data items (i.e. unused descriptors are not counted).

Coding:

- binary.

- Image Instance Descriptor

Contents:

- a description of an image instance.

Coding:

- Byte 1: Image Instance Width

Contents:

- this byte specifies the image instance width, expressed in raster image points.

Coding:

- binary.

Byte 2: Image Instance Height.

Contents:

- this byte specifies the image instance height, expressed in raster image points.

Coding:

- binary.

Byte 3: Image Coding Scheme.

Contents:

- this byte identifies the image coding scheme that has been used in encoding the image instance.

Coding:

- '11' - basic image coding scheme as defined in annex B;
 - '21' - colour image coding scheme as defined in annex B;
 - ['22' - colour image coding scheme with transparency as defined in annex B;](#)
- other values are reserved for future use.

Bytes 4 and 5: Image Instance File Identifier.

Contents:

- these bytes identify an EF which is the image instance data file (see clause 4.6.1.2), holding the actual image data for this particular instance.

Coding:

- byte 4: high byte of Image Instance File Identifier;
- byte 5: low byte of Image Instance File Identifier.

Bytes 6 and 7: Offset into Image Instance File.

Contents:

- these bytes specify an offset into the transparent Image Instance File identified in bytes 4 and 5.

Coding:

- byte 6: high byte of offset into Image Instance File;
- byte 7: low byte of offset into Image Instance File.

Bytes 8 and 9: Length of Image Instance Data.

Contents:

- these bytes yield the length of the image instance data, starting at the offset identified in bytes 6 and 7.

Coding:

- byte 8: high byte of Image Instance Data length;
- byte 9: low byte of Image Instance Data length.

NOTE: Transparent image instance data longer than 256 bytes may be read using successive READ BINARY commands.

[...]

Annex B (normative): Image Coding Schemes

The following image coding schemes are applicable to rectangular raster images. Raster image points are assumed to be of square shape. They are numbered sequentially from 1 onwards, starting at the upper left corner, proceeding line by line downwards, each line in turn proceeding from left to right, and ending at the image's lower right corner.

The following example illustrates the numbering scheme for raster image points by showing how the corner points are numbered, assuming an image length of x points and an image height of y points.



B.1 Basic Image Coding Scheme

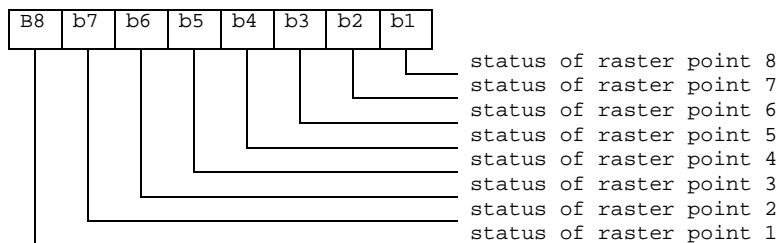
This coding scheme applies to rectangular raster images made up of raster points that are either set or not set. This coding scheme does not support any notion of colour. Image data are coded as follows:

Byte(s)	Description	Length
1	image width = X	1
2	image height = Y	1
3 to K+2	image body	K

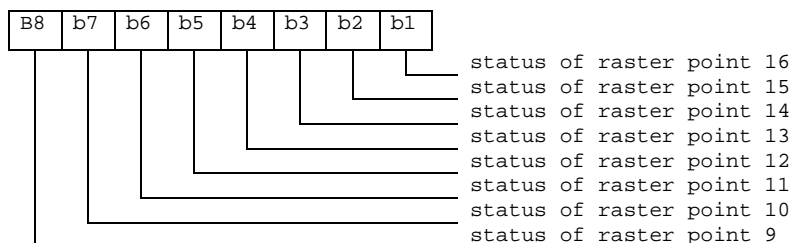
Coding of image body:

- The status of each raster image point is coded in one bit, to indicate whether the point is set (status = 1) or not set (status = 0).

Byte 1:



Byte 2:



etc.

Unused bits shall be set to 1.

B.2 Colour Image Coding Scheme

This coding scheme applies to coloured rectangular raster images. Raster image point colours are defined as references into a colour look-up table (CLUT), which contains a subset of the red-green-blue colour space. The CLUT in turn is located in the same transparent file as the image instance data themselves, at an offset defined within the image instance data.

Image data are coded as follows:

Byte(s)	Description	Length
1	Image width = X	1
2	Image height = Y	1
3	Bits per raster image point = B	1
4	Number of CLUT entries = C	1
5 to 6	Location of CLUT (Colour Look-up Table)	2
7 to K+6	Image body	K

Bits per raster image point:

Contents:

- the number B of bits used to encode references into the CLUT, thus defining a raster image point's colour. B shall have a value between 1 and 8.

Coding:

- binary.

Number of entries in CLUT:

Contents:

- the number C of entries in the CLUT which may be referenced from inside the image body. CLUT entries are numbered from 0 to C-1. C shall have a value between 1 and $2^{*}B$.

Coding:

- binary. The value 0 shall be interpreted as 256.

Location of CLUT:

Contents:

- this item specifies where the CLUT for this image instance may be found. The CLUT is always located in the same transparent file as the image instance data themselves, at an offset determined by these two bytes.

Coding:

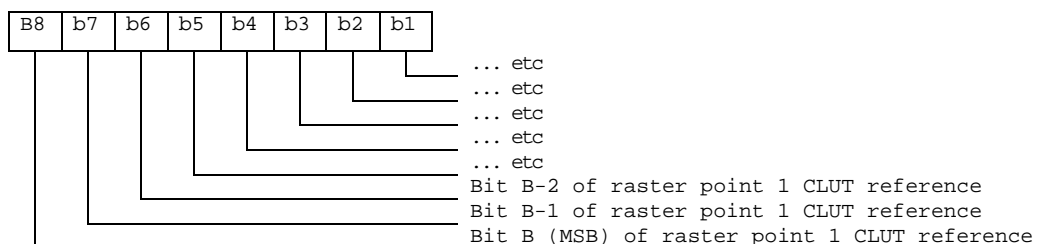
- Byte 1: high byte of offset into Image Instance File.
- Byte 2: low byte of offset into Image Instance File.

Image body:

Coding:

- each raster image point uses B bits to reference one of the C CLUT entries for this image instance. The CLUT entry being thus referenced yields the raster image point's colour. The image body is arrayed as for the Basic Colour Image Coding Scheme, that is, starting with the highest bit of the first raster image point's colour information.

Byte 1:



etc.

Unused bits shall be set to 1.

The CLUT (Colour Look-up Table) for an image instance with C colours is defined as follows:

Contents:

- C CLUT entries defining one colour each.

Coding:

- the C CLUT entries are arranged sequentially:

Byte(s) of CLUT	CLUT Entry
1-3	entry 0
...	...
$3*(C-1) + 1$ to $3*C$	Entry C-1

Each CLUT entry in turn comprises 3 bytes defining one colour in the red-green-blue colour space:

Byte(s) of CLUT entry	Intensity of Colour
1	Red
2	Green
3	Blue

A value of 'FF' means maximum intensity, so the definition 'FF' '00' '00' stands for fully saturated red.

NOTE 1: Two or more image instances located in the same file can share a single CLUT.

NOTE 2: Most MEs capable of displaying colour images are likely to support at least a basic palette of red, green, blue and white.

B.X Colour Image Coding Scheme with Transparency

This coding scheme is identical to the Colour Image Coding Scheme as defined in appendix B.2, with the following exception:

- Entry number C-1 in the colour look-up table (CLUT), where C is the number of entries in the CLUT, defines transparency. Raster image points which point to this entry are transparent, so that the underlying colour in the display is shown.

The three colour-coding bytes of entry number C-1 in the CLUT are of no importance when referenced from images using the '22' coding scheme.

NOTE: Two different descriptors in the EF_{IMG} file with Image Coding Scheme '21' and '22' may point to the same actual image instance. In that case, the descriptor with Image Coding Scheme '21' would describe an image where a raster image point pointing to entry number C-1 in the CLUT would have the colour described in that CLUT entry, while the descriptor with Image Coding Scheme '22' would describe an image where a raster image point pointing to entry number C-1 in the CLUT is transparent.

CHANGE REQUEST

⌘ **31.102 CR 219** ⌘ rev **-** ⌘ Current version: **6.4.0** ⌘

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

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

Title:	⌘ Moving EF _{SUME} from the USIM specification to a SCP specification		
Source:	⌘ T3		
Work item code:	⌘ TEI	Date:	⌘ 12/02/2004
Category:	⌘ F	Release:	⌘ REL-6
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

Reason for change:	⌘ The EF _{SUME} file is used to set the title of the toolkit menu: it is defined as Administrative File in TS 102 222.
Summary of change:	⌘ Add the reference to TS 102 222
Consequences if not approved:	⌘ Risk of misalignment of specifications, avoiding duplication of text in two specifications.

Clauses affected:	⌘ 2, 4.5.4								
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="width: 20px; height: 15px;"></td> <td style="width: 20px; height: 15px;"></td> </tr> <tr> <td style="width: 20px; height: 15px;"></td> <td style="width: 20px; height: 15px;"></td> </tr> </table>	Y	N					Other core specifications	⌘
Y	N								
		Test specifications							
		O&M Specifications							
Other comments:	⌘								

2 References

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

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TS 21.111: "USIM and IC Card Requirements".
- [2] 3GPP TS 22.011: "Service accessibility".
- [3] 3GPP TS 22.024: "Description of Charge Advice Information (CAI)".
- [4] 3GPP TS 22.030: "Man-Machine Interface (MMI) of the User Equipment (UE)".
- [5] 3GPP TS 23.038: "Alphabets and language".
- [6] 3GPP TS 23.040: "Technical realization of the Short Message Service (SMS)".
- [7] 3GPP TS 23.060: "General Packet Radio Service (GPRS); Service description; Stage 2".
- [8] 3GPP TS 22.067: "enhanced Multi Level Precedence and Pre-emption service (eMLPP) - Stage 1".
- [9] 3GPP TS 24.008: "Mobile Radio Interface Layer 3 specification; Core Network Protocols; Stage 3".
- [10] 3GPP TS 24.011: "Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface".
- [11] 3GPP TS 31.101: "UICC-Terminal Interface, Physical and Logical Characteristics".
- [12] 3GPP TS 31.111: "USIM Application Toolkit (USAT)".
- [13] 3GPP TS 33.102: "3GPP Security; Security Architecture".
- [14] 3GPP TS 33.103: "3GPP Security; Integration Guidelines".
- [15] 3GPP TS 22.086: "Advice of charge (AoC) Supplementary Services - Stage 1".
- [16] 3GPP TS 23.041: "Technical realization of Cell Broadcast (CB)".
- [17] 3GPP TS 02.07: "Mobile Stations (MS) features".
- [18] 3GPP TS 51.011: "Specification of the Subscriber Identity Module – Mobile Equipment (SIM – ME) interface".
- [19] ISO 639 (1988): "Code for the representation of names of languages".
- [20] ISO/IEC 7816-4 (1995): "Identification cards - Integrated circuit(s) cards with contacts, Part 4: Interindustry commands for interchange".
- [21] ISO/IEC 7816-5 (1994): "Identification cards - Integrated circuit(s) cards with contacts, Part 5: Numbering system and registration procedure for application identifiers".
- [22] ITU-T Recommendation E.164: "The international public telecommunication numbering plan".

- [23] 3GPP TS 23.073: "Support of Localised Service Area (SoLSA); Stage 2".
- [24] 3GPP TS 22.101: "Service aspects; service principles".
- [25] 3GPP TS 23.003: "Numbering, Addressing and Identification".
- [26] ISO/IEC 7816-9 (2000): "Identification cards - Integrated circuit(s) cards with contacts, Part 9: Additional Interindustry commands and security attributes".
- [27] 3GPP TS 22.022: "Personalisation of Mobile Equipment (ME); Mobile functionality specification".
- [28] 3GPP TS 44.018 "Mobile Interface Layer3 Specification, Radio Resource control protocol"
- [29] 3GPP TS 23.022: "Functions related to Mobile Station (MS) in idle mode and group receive mode".
- [30] 3GPP TS 23.057: "Mobile Execution Environment (MExE);Functional description; Stage 2".
- [31] 3GPP TS 23.122: "NAS Functions related to Mobile Station (MS) in idle mode"
- [32] ISO/IEC 7816-6 (1996): "Identification cards -- Integrated circuit(s) cards with contacts -- Part 6: Interindustry data elements".
- [33] 3GPP TS 25.101: "UE Radio Transmission and Reception (FDD)"
- [34] 3GPP TS 45.005: "Radio Transmission and Reception"
- [35] ISO/IEC 8825 (1990): "Information technology; Open Systems Interconnection; Specification of Basic Encoding Rules for Abstract Syntax Notation One (ASN.1)"
- [36] 3GPP TS 23.097: "Multiple Subscriber Profile (MSP)"
- [37] ETSI TS 102 221 "Smart cards; UICC-Terminal interface; Physical and logical characteristics (Release 4)"
- [38] 3GPP TS 23.140: "Multimedia Messaging Service (MMS); Functional description; stage 2".
- [XX] [ETSI TS 102 222 "Administrative commands for telecommunications applications "](#)

....

4.5.4 EF_{SUME} (SetUpMenu Elements)

~~This EF contains Simple TLVs related to the menu title to be used by a UICC when issuing a SET UP MENU proactive command.~~

Identifier: '6F54'	Structure: transparent	Optional	
File size: X+Y bytes		Update activity: low	
Access Conditions:			
— READ		ADM	
— UPDATE		ADM	
— DEACTIVATE		ADM	
— ACTIVATE		ADM	
Bytes	Description	M/O	Length
1 to X	Title Alpha Identifier	M	X bytes
1+X to X+Y	Title Icon Identifier	O	Y bytes

~~—Title Alpha Identifier.~~

~~Contents:~~

~~—this field contains the Alpha Identifier Simple TLV defining the menu title text.~~

~~Coding:~~

~~—according to TS 31.111 [12].~~

~~—Title Icon Identifier~~

~~Contents:~~

~~—this field contains the Icon Identifier Simple TLV defining the menu title icon.~~

~~Coding:~~

~~—according to TS 31.111 [12]. If not present the field shall be set to 'FF'.~~

~~—Unused bytes of this file shall be set to 'FF'.~~

[This File is defined in TS 102 222\[XX\], and has the file identifier '6F54'.](#)

CHANGE REQUEST

⌘ **TS 31.102 CR 221** ⌘ rev **-** ⌘ Current version: **6.4.0** ⌘

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

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

Title:	⌘ Reservation of File IDs under ADFusim		
Source:	⌘ T3		
Work item code:	⌘ TEI	Date:	⌘ 13/02/2004
Category:	⌘ F	Release:	⌘ Rel-6
	<i>Use <u>one</u> of the following categories:</i> F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		<i>Use <u>one</u> of the following releases:</i> 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)

Reason for change:	⌘ File IDs '6F1X', '5F1X' and '5F2X' under ADFusim have voluntarily been left unused. However, they are not stated as 'reserved' anywhere in the specifications.
Summary of change:	⌘ Mention that File IDs '6F1X', '5F1X' and '5F2X' under ADFusim are reserved for administrative use
Consequences if not approved:	⌘

Clauses affected:	⌘ 4.2						
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Other core specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Test specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> O&M Specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
Other comments:	⌘						

4.2 Contents of files at the USIM ADF (Application DF) level

The EFs in the USIM ADF contain service and network related information.

[The File IDs '6F1X' \(for EFs\), '5F1X' and '5F2X' \(for DFs\) with X ranging from '0' to 'F' are reserved under the USIM ADF for administrative use by the card issuer.](#)