3GPP TSG-T Meeting #23
Phoenix, USA, 10-12 March 2004

Tdoc ⌘T-040067

CR-Form-v7

CHANGE REQUEST

⌘ **TS 31 103 CR 013** ⌘**rev** **-** ⌘ Current version: **6.2.0** ⌘

*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⌘ [X] ME [X] Radio Access Network [ ] Core Network [ ]

Title:	⌘	New EF for P-CSCF Addresses in ISIM
Source:	⌘	T
Work item code:	⌘	ISIM
Date:	⌘	11/03/2004
Category:	⌘	**B**
Release:	⌘	Rel-6

Use one 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 one 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:	⌘	New parameter “P-CSCF Addresses” is needed for the following considerations: - 3GPP2 does not provide any mechanism other than DHCP for a mobile to obtain a P-CSCF address from the network. (3GPP uses a GPRS procedure for this purpose.) - A roaming 3GPP2 mobile cannot use DHCP to obtain the address of a P-CSCF in its home network for the cases of Simple IP or Mobile IP without reverse tunnelling. - IMS/MMD may need to inter-work with other types of access networks (e.g. WLAN) with similar constraints as above. Allowing a mobile to obtain P-CSCF addresses from its ISIM is a simple solution to the above problems.
Summary of change:	⌘	New EF for P-CSCF Addresses is added.
Consequences if not approved:	⌘	

Clauses affected:	⌘	4.2.X (New Section), 4.3, 5.1.1.2, 5.2.X, Annex A, Annex B, Annex C

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

⌘

Other comments:	⌘	A new service needs to be created in the ISIM service table

4.2.X $EF_{P\text{-}CSCF}$ (P-CSCF Address)

This EF does not apply for 3GPP and shall not be used by a terminal using a 3GPP access network.

NOTE: The current 3GPP procedures for P-CSCF discovery provide a flexible way for the UE to discover the P-CSCF address(es). Procedures include both GPRS PDP context based solution and a generic DHCP based approach that can be used for other access technologies.

This EF contains one or more Proxy Call Session Control Function addresses. The first record in the EF shall be considered to be of the highest priority. The last record in the EF shall be considered to be the lowest priority.

Identifier: '6Fxx'	Structure: linear fixed	Optional
Record length: X bytes	Update activity: low	

Access Conditions:

READ	PIN
UPDATE	ADM
DEACTIVATE	ADM
ACTIVATE	ADM

Bytes	Description	M/O	Length
1 to X	P-CSCF Address TLV data object	M	X bytes

- P-CSCF

Contents:

- Address of Proxy Call Session Control Function, in the format of a FQDN, an IPv4 address, or an IPv6 address.

Coding:

- The tag value of this P-CSCF address TLV data object shall be 'xx'. The format of the data object is as follows:

Field	Length (bytes)
Tag	1
Length	1

Address Type	1
P-CSCF Address	Address Length

Address Type: Type of the P-CSCF address.

This field shall be set to the type of the P-CSCF address according to the following:

Value	Name
0x00	FQDN
0x01	IPv4
0x02	IPv6
All other values are reserved	

P-CSCF Address: Address of the Proxy Call Session Control Function

This field shall be set to the address of the Proxy Call Session Control Function.

Unused bytes shall be set to 'FF'.

[Note to MCC: A service n°y called "P-CSCF address" must be added to the ISIM service table which would be created by another CR in a section 4.2.z]

4.3 ISIM file structure

This subclause contains a figure depicting the file structure of the ADF_{ISIM}. ADF_{ISIM} shall be selected using the AID and information in EF_{DIR}.

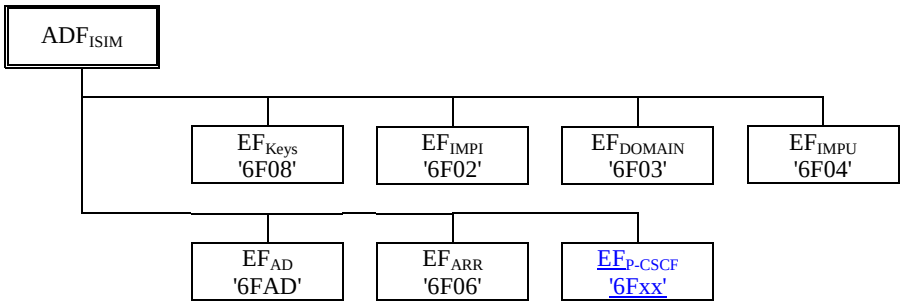

Figure 1: File identifiers and directory structures of ISIM

5.1.1.2 ISIM initialisation

The ISIM shall not indicate any language preference. It shall use the language indicated by any other application currently active on the UICC or by default, choose a language from EF_{PL} at the MF level according the procedure defined in 3GPP TS 31.101[3].

If the terminal does not support the languages of EF_{PL}, then the terminal shall use its own internal default selection.

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

Then the Terminal performs the administrative information request.

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

After the previous procedures have been completed successfully, the Terminal runs the following procedures:

- IMPI request.
- IMPU request.
- SIP Domain request.
- Cipher key and integrity key request.
- P-CSCF address request

After the ISIM initialisation has been completed successfully, the Terminal is ready for an ISIM session and shall indicate this to the ISIM by sending a particular STATUS command.

5.2.x P-CSCF address request

Requirement: USIM Service n°y "available".

Request: The ME performs the reading procedure with $EF_{P\text{-}CSCF}$.

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

This annex defines if changing the content of an EF by the network (e.g. by sending an SMS), or by a CAT Application [22], is advisable. Updating of certain EFs "over the air" could result in unpredictable behavior of the UE; these are marked "Caution" in the table below. Certain EFs are marked "No"; under no circumstances should "over the air" changes of these EFs be considered.

File identification	Description	Change advised
'6F08'	Ciphering and Integrity Keys for IMS	No
'6F02'	IMS private user identity	Caution (note)
'6F03'	Home Network Domain Name	Caution (note)
'6F04'	IMS public user identity	Caution (note)
'6FAD'	Administrative Data	Caution
'6F06'	Access Rule Reference	Caution
'xxxx'	P-CSCF address	Caution (note)
NOTE: If EF_{IMPI}, EF_{IMPU}, ~~or~~ EF_{DOMAIN} or P-CSCF are changed, the UICC should issue a CAT REFRESH command [22].		

Annex B (informative): Tags defined in 31.103

Tag	Name of Data Element	Usage
'80'	URI TLV data object	IMPI, IMPU, DOMAIN
'DB'	Successful IMS authentication	Response to AUTHENTICATE
'DC'	Synchronisation failure	Response to AUTHENTICATE
'xx'	P-CSCF TLV data object	P-CSCF

NOTE: the value 'FF' is an invalid tag value. For ASN.1 tag assignment rules see ISO/IEC 8825 [20]

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

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

File Identification	Description	Value
'6F08'	Ciphering and Integrity Keys for IMS	'07FF…FF'
'6F02'	IMS private user identity	'8000FF…FF'
'6F03'	Home Network Domain Name	'8000FF…FF'
'6F04'	IMS public user identity	'8000FF…FF'
'6FAD'	Administrative Data	Operator dependant
'6F06'	Access Rule Reference	Card issuer/operator dependant
'6Fxx'	P-CSCF address	Operator dependant