

**3GPP TSG-T (Terminals) Meeting #23  
Phoenix, USA  
10 - 12 March, 2004**

**TP-040072**

**Title:** LS on the harmonization of ISIM for 3GPP2

**Response to:**

**Release:**

**Work Item:**

**Source:** 3GPP-TSG-T

**To:** 3GPP2-TSG-C, 3GPP TSG SA2

**Cc:** 3GPP TSG T3

**Contact Person:**

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**Attachments:** Tdoc T-040067

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**1. Overall Description:**

3GPP TSG T would like to inform 3GPP2-TSG-C that 3GPP TSG T has agreed the attached CR on harmonization of the ISIM for 3GPP2. See Tdoc T-040067 attached. This CR is derived from the original proposal from 3GPP2-TSG-C.

T would like to inform 3GPP2 that it is felt by 3GPP that a P-CSCF file within the ISIM is not felt necessary when accessing IMS through a 3GPP network.

3GPP T (and 3GPP TSG T3) would welcome any further harmonization request from 3GPP2-TSG-C.

**2. Actions**

**To 3GPP2-TSG-C:**

- 1) Inform 3GPP-TSG-T if they have any remark about the proposed CR
- 2) Inform 3GPP-TSG-T3 about all future modifications to the ISIM that would be needed for 3GPP2 needs

**To 3GPP SA2:**

3GPP SA2 is asked to consider the attached CR, noting that it does not allow a UE to use the field when the terminal is using a 3GPP access network, and indicate to TSG T and TSG T3 whether:

- 1) A 3GPP I-WLAN is considered to be a 3GPP access network
- 2) the CR affects any aspect of WLAN interworking in the 3GPP.

**3. Date of Next TSG-T and TSG T3 Meetings:**

Meeting	Date	Location
3GPP-T3#31	27-30 April 2004	Berlin, Germany
3GPP-T#24	2-4 June 2004	Seoul, South Korea

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  ME  Radio Access Network  Core Network

<b>Title:</b>	# New EF for P-CSCF Addresses in ISIM		
<b>Source:</b>	# T		
<b>Work item code:</b>	# ISIM	<b>Date:</b>	# 11/03/2004
<b>Category:</b>	# <b>B</b>	<b>Release:</b>	# Rel-6
	<i>Use one of the following categories:</i> <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .		<i>Use one of the following releases:</i> <b>2</b> (GSM Phase 2) <b>R96</b> (Release 1996) <b>R97</b> (Release 1997) <b>R98</b> (Release 1998) <b>R99</b> (Release 1999) <b>Rel-4</b> (Release 4) <b>Rel-5</b> (Release 5) <b>Rel-6</b> (Release 6)

<b>Reason for change:</b>	# New parameter "P-CSCF Addresses" is needed for the following considerations: <ul style="list-style-type: none"> <li>- 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.)</li> <li>- 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.</li> <li>- IMS/MMD may need to inter-work with other types of access networks (e.g. WLAN) with similar constraints as above.</li> </ul> <p style="text-align: center;">Allowing a mobile to obtain P-CSCF addresses from its ISIM is a simple solution to the above problems.</p>
<b>Summary of change:</b>	# New EF for P-CSCF Addresses is added.
<b>Consequences if not approved:</b>	#

<b>Clauses affected:</b>	# 4.2.X (New Section), 4.3, 5.1.1.2, 5.2.X, Annex A, Annex B, Annex C										
<b>Other specs affected:</b>	<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;">#</td> </tr> <tr> <td style="text-align: center;">#</td> <td style="text-align: center;">#</td> </tr> <tr> <td style="text-align: center;">#</td> <td style="text-align: center;">#</td> </tr> </table>	Y	N	#	#	#	#	#	#	Other core specifications Test specifications O&M Specifications	#
Y	N										
#	#										
#	#										
#	#										
<b>Other comments:</b>	# A new service needs to be created in the ISIM service table										

### 4.2.X EF<sub>P-CSCF</sub> (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.

<u>Identifier: '6Fxx'</u>		<u>Structure: linear fixed</u>		<u>Optional</u>	
<u>Record length: X bytes</u>		<u>Update activity: low</u>			
<u>Access Conditions:</u>					
<u>READ</u>		<u>PIN</u>			
<u>UPDATE</u>		<u>ADM</u>			
<u>DEACTIVATE</u>		<u>ADM</u>			
<u>ACTIVATE</u>		<u>ADM</u>			
<u>Bytes</u>	<u>Description</u>			<u>M/O</u>	<u>Length</u>
<u>1 to X</u>	<u>P-CSCF Address TLV data object</u>			<u>M</u>	<u>X bytes</u>

#### - 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:

<u>Field</u>	<u>Length (bytes)</u>
<u>Tag</u>	<u>1</u>
<u>Length</u>	<u>1</u>

<u>Address Type</u>	<u>1</u>
<u>P-CSCF Address</u>	<u>Address Length</u>

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:

<u>Value</u>	<u>Name</u>
<u>0x00</u>	<u>FQDN</u>
<u>0x01</u>	<u>IPv4</u>
<u>0x02</u>	<u>IPv6</u>
<u>All other values are reserved</u>	

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

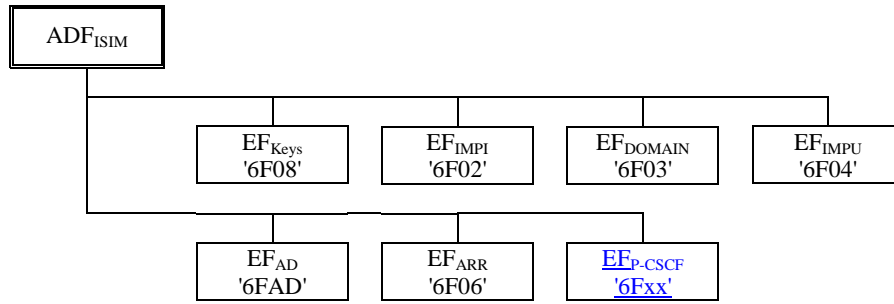
This field shall be set to the address of the Proxy Call Session Control Function.

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<sub>PL</sub> at the MF level according the procedure defined in 3GPP TS 31.101[3].

If the terminal does not support the languages of EF<sub>PL</sub>, 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<sub>P-CSCF</sub>.

## 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
'6Fxx'	<a href="#">P-CSCF address</a>	<a href="#">Caution (note)</a>
NOTE: If EF <sub>IMPI</sub> , EF <sub>IMPU</sub> , <del>or</del> EF <sub>DOMAIN</sub> or <a href="#">P-CSCF</a> are changed, the UICC should issue a CAT REFRESH command [22].		



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## 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'	<a href="#">P-CSCF TLV data object</a>	<a href="#">P-CSCF</a>

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

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## 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'	<a href="#">P-CSCF address</a>	<a href="#">Operator dependant</a>