

3GPP TSG CN Plenary Meeting #27
9th – 11th March 2005 Tokyo, JAPAN.

NP-050038

Source: TSG CN WG4
Title: Corrections on IMS2 Sh-interface
Agenda item: 9.1
Document for: APPROVAL

Doc-2nd-Level	Spec	CR	Rev	Phase	Subject	Cat	Ver_C
N4-050314	29.328	111	1	Rel-6	Clarification on requested identity set	F	6.4.0
N4-050461	29.328	122	2	Rel-6	Multiple Terminals in Sh	C	6.4.0

Sydney, Australia. 14th to 18th February 2005.

CR-Form-v7.1

CHANGE REQUEST⌘ **29.328** **CR 111** ⌘ rev **1** ⌘ 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:	⌘ Clarification on requested identity set	
Source:	⌘ CN4	
Work item code:	⌘ IMS2-CCR	Date: ⌘ 15/02/2005
Category:	⌘ F	Release: ⌘ Rel-6
	Use <i>one</i> 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 <i>one</i> of the following releases: Ph2 (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) Rel-7 (Release 7)

Reason for change:	⌘ To clarify that there is no dependency from the registration status when implicit identities are requested from the HSS by Sh-Pull. To clarify that the HSS shall return only non barred public ids.
Summary of change:	⌘ Clarify the HSS's action.
Consequences if not approved:	⌘ Misleading specification.

Clauses affected:	⌘ 6.1.1									
Other specs affected:	<table border="1"> <tr> <td>Y</td> <td>N</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><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 ⌘ Test specifications ⌘ O&M Specifications
Y	N									
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<input type="checkbox"/>	<input checked="" type="checkbox"/>									
<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.

6.1.1 Data read (Sh-Pull)

This procedure is used between the AS and the HSS. The procedure is invoked by the AS and is used:

- To read transparent and/or non-transparent data for a specified user from the HSS.

This procedure is mapped to the commands User-Data-Request/Answer in the Diameter application specified in 3GPP TS 29.329 [5]. Tables 6.1.1.1 and 6.1.1.2 detail the involved information elements.

Table 6.1.1.1: Sh-Pull

Information element name	Mapping to Diameter AVP	Cat.	Description
User Identity (See 7.1)	User-Identity	M	IMS Public Identity or MSISDN of the user for whom the data is required.
Requested data (See 7.3)	Data-Reference	M	This information element indicates the reference to the requested information. The set of valid reference values are defined in 7. 6.
Requested Identity set (See 7.11)	Identity-Set	O	<p>If Data-Reference indicates that IMS Public Identities is the requested data set to be downloaded, this information element should be included.</p> <p>When this information element takes the value IMPLICIT_IDENTITIES, the HSS shall provide all non-barred IMS Public Identities that belong to the same implicit registration set as are implicitly registered with the IMS Public Identity included in the message in the User-Identity AVP.</p> <p>When this information element takes the value REGISTERED_IDENTITIES, the HSS shall provide all non-barred IMS Public Identities whose state is registered, belonging to all Private Identities that the IMS Public Identity in the User-Identity AVP is associated with.</p> <p>When this information element takes the value ALL_IDENTITIES, the HSS shall provide all non-barred IMS Public Identities, belonging to all Private Identities that the IMS Public Identity in the User-Identity AVP is associated with.</p> <p>If Data-Reference indicates that IMS Public Identities is the requested data set to be downloaded and this information element is not included, the HSS shall download the set of IMS Public Identities that would be downloaded if the value of this information element had been ALL_IDENTITIES.</p>
Requested domain (See 7.2)	Requested-Domain	C	This information element indicates the domains to which the operation is applicable. Check table 7.6.1 to see when it is applicable.
Current Location (See 7.8)	Current-Location	C	This information element indicates whether an active location retrieval has to be initiated or not. It shall be present if Location Information is requested. If this information element takes the value InitiateActiveLocationRetrieval (1) the HSS shall indicate to the MSC/VLR and/or SGSN the need to initiate an active location retrieval.
Service Indication (See 7. 4)	Service-Indication	C	IE that identifies, together with the User-Identity and Data-Reference, the set of service related transparent data that is being requested..
Application Server Identity (See 7.9)	Origin-Host	M	IE that identifies the AS originator of the request and that is used to check the AS permission list.
Application Server Name	Server-Name	C	IE that is used, together with the user identity and Data-Reference, as key to identify the filter criteria. This element shall be present when the Data-Reference value is InitialFilterCriteria (13).

Table 6.1.1.2: Sh-Pull Resp

Information element name	Mapping to Diameter AVP	Cat.	Description
Result (See 7.5)	Result-Code / Experimental_ Result	M	Result of the request. Result-Code AVP shall be used for errors defined in the Diameter Base Protocol. Experimental-Result AVP shall be used for Sh errors. This is a grouped AVP which contains the 3GPP Vendor ID in the Vendor-Id AVP, and the error code in the Experimental-Result-Code AVP.
Data (See 7.6)	User-Data	O	Requested data.

CHANGE REQUEST

⌘ **29.328 CR 122** ⌘ rev **2** ⌘ 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:	⌘ Multiple Terminals in Sh		
Source:	⌘ CN4		
Work item code:	⌘ IMS2-CCR	Date:	⌘ 04/02/2005
Category:	⌘ F	Release:	⌘ Rel-6
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Reason for change:	⌘ It is unclear in the current Rel-6 Sh specification how the registration-state of a shared public-identity shall be indicated to an AS.
Summary of change:	⌘ The most registered state of public-id is indicated to AS as proposed by SA2 LS S2-050338.
Consequences if not approved:	⌘ Indicating the registration-state of a shared public-id remains unclear in the specification.

Clauses affected:	⌘ 7.6.3						
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="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 2px;"><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"/>					
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Test specifications	⌘				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	O&M Specifications	⌘				
Other comments:	⌘						

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7.6.3 IMS User State

This information element contains the IMS User State of the public identifier referenced. Its possible values are:

- REGISTERED,
- NOT_REGISTERED,
- AUTHENTICATION_PENDING,
- REGISTERED_UNREG_SERVICES.

If the Public User Identity is shared between multiple Private User Identities, HSS shall indicate the most registered state of the shared Public User Identity to an AS. The most registered state of a shared Public User Identity is defined as follows:

- If the shared Public User Identity is registered with any of the Private User Identities, the most registered state of the shared Public User Identity is REGISTERED.
- If the shared Public User Identity is not currently registered with any of the Private User Identities, but it is in state REGISTERED_UNREG_SERVICES, then the most registered state of the shared Public User Identity is REGISTERED_UNREG_SERVICES.
- If the shared Public User Identity is not currently registered with any of the Private User Identities, and it is not in state REGISTERED_UNREG_SERVICES, but it is in the process of being authenticated with any of the Private User Identities, then the most registered state of the shared Public User Identity is AUTHENTICATION_PENDING.
- If the shared Public User Identity is not currently registered with any of the Private User Identities, and it is not in state REGISTERED_UNREG_SERVICES, and it is not in the process of being authenticated with any of the Private User Identities, then the most registered state of the shared Public User Identity is NOT_REGISTERED.