

3GPP TSG CN Plenary Meeting #18
4th – 6th December 2002 New Orleans, USA.

NP-020586

Source: TSG CN WG4
Title: Corrections on IP-based Multimedia Services
Agenda item: 8.1
Document for: APPROVAL

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
23.003	057		N4-021233	Rel-5	Correction of the private user identity's form	F	5.4.0
23.003	059		N4-021386	Rel-5	Correction to the form of public user identity	F	5.4.0
23.008	061	1	N4-021507	Rel-5	Correction to the form of public user identity	F	5.2.0

CR-Form-v7

CHANGE REQUEST

⌘ **23.003 CR 057** ⌘ rev **-** ⌘ Current version: **5.4.0** ⌘

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 the private user identity's form		
Source:	⌘ CN4		
Work item code:	⌘ IMS-CCR	Date:	⌘ 17/09/2002
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 be found in 3GPP TR 21.900 .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

Reason for change:	⌘ The definition of the NAI form is not the same as in the referred clause 3 of IETF RFC2486.
Summary of change:	⌘ The "user@realm" is proposed to be corrected "username@realm" as it is in the ABNF definition of NAI in IETF RFC2486.
Consequences if not approved:	⌘

Clauses affected:	⌘ 13.3						
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"/>						
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	<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.

13.3 Private user identity

The private user identity shall take the form of an NAI, and shall have the form username@realm as specified in clause 3 of RFC2486 [25].

NOTE: It is possible for a representation of the IMSI to be contained within the NAI for the private identity.

If there is no ISIM application, the private user identity is not known. In this case, the private user identity is derived from the IMSI.

The following steps show how to build the private user identity out of the IMSI:

1. use the whole string of digits as the username part of the private user identity; and
2. the first digits of the IMSI, i.e. MNC and MCC, will be converted into a domain name, as described in subclause 13.2.

The result will be a private user identity of the form imsi@mnc.mcc."IMSI.3gppnetwork.org". For example: If the IMSI is 234150999999999 (MCC = 234, MNC = 15), the private user identity then takes the form 234150999999999@15.234.IMSI.3gppnetwork.org

CHANGE REQUEST

⌘ **23.003 CR 059** ⌘ rev **-** ⌘ Current version: **5.4.0** ⌘

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 the form of public user identity		
Source:	⌘ CN4		
Work item code:	⌘ IMS-CCR	Date:	⌘ 30/10/2002
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 be found in 3GPP <u>TR 21.900</u> .	Rel-4	(Release 4)
		Rel-5	(Release 5)
		Rel-6	(Release 6)

Reason for change:	⌘ Misalignment with TS 23.228 and TS 29.229.		
Summary of change:	⌘ The E.164 as a form of public user identity is changed to tel URL.		
Consequences if not approved:	⌘ The misalignment with other specifications.		

Clauses affected:	⌘ 1.1 and 13.4										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"></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	⌘ 23.008-061
Y	N										
X											
	X										
	X										
		Test specifications									
		O&M Specifications									
Other comments:	⌘										

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-----Beginning of first modified section-----

1.1 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 21.905: "3G Vocabulary".
- [2] 3GPP TS 23.008: "Organization of subscriber data".
- [3] 3GPP TS 23.060: "General Packet Radio Service (GPRS); Service description; Stage 2"
- [4] 3GPP TS 23.070: "Routeing of calls to/from Public Data Networks (PDN)".
- [5] 3GPP TS 24.008: "Mobile Radio Interface Layer 3 specification; Core Network Protocols; Stage 3".
- [6] 3GPP TS 29.060: "GPRS Tunnelling protocol (GPT) across the Gn and Gp interface".
- [7] 3GPP TS 43.020: "Security related network functions".
- [8] GSM 09.03: "Digital cellular telecommunications system (Phase 2+); Signalling requirements on interworking between the Integrated Services Digital Network (ISDN) or Public Switched Telephone Network (PSTN) and the Public Land Mobile Network (PLMN)".
- [9] GSM 11.11: "Digital cellular telecommunications system (Phase 2+); Specification of the Subscriber Identity Module - Mobile Equipment (SIM - ME) interface".
- [10] ITU-T Recommendation E.164: "The international public telecommunication numbering plan".
- [11] ITU-T Recommendation E.212: "The international identification plan for mobile terminals and mobile users".
- [12] ITU-T Recommendation E.213: "Telephone and ISDN numbering plan for land Mobile Stations in public land mobile networks (PLMN)".
- [13] ITU-T Recommendation X.121: "International numbering plan for public data networks".
- [14] RFC 791: "Internet Protocol".
- [15] RFC 2373: "IP Version 6 Addressing Architecture".
- [16] 3GPP TS 25.401: "UTRAN Overall Description".
- [17] 3GPP TS 25.413: "UTRAN Iu Interface RANAP Signalling".
- [18] RFC 2181: "Clarifications to the DNS Specification".
- [19] RFC 1035: "Domain Names - Implementation and Specification".
- [20] RFC 1123: "Requirements for Internet Hosts -- Application and Support".
- [21] RFC 2462: "IPv6 Stateless Address Autoconfiguration".
- [22] RFC 3041: "Privacy Extensions for Stateless Address Autoconfiguration in IPv6".

- [23] 3GPP TS 23.236: "Intra Domain Connection of RAN Nodes to Multiple CN Nodes".
- [24] 3GPP TS 23.228: "IP Multimedia (IM) Subsystem – Stage 2"
- [25] RFC 2486: "The Network Access Identifier"
- [26] RFC 3261: "SIP: Session Initiation Protocol"
- [27] 3GPP TS 31.102: "Characteristics of the USIM Application."
- [28] RFC 1035: "Domain names – implementation and specification"
- [29] 3GPP TS 44.118: "Radio Resource Control (RRC) Protocol, Iu Mode"
- [30] RFC 2806: "URLs for Telephone Calls".

-----End of first modified section-----

-----Beginning of second modified section-----

13.4 Public user identity

The public user identity shall take the form of either a SIP URI, see RFC3261[26] or a tel URL, see RFC 2806 [30]~~E.164 number~~. A SIP URI shall take the form "sip:user@domain".

If there is no ISIM application to host the public user identity, a temporary public user identity shall be derived, based on the IMSI. The temporary public user identity shall be of the form "user@domain" and shall therefore be equal to the private user identity. The private user identity is derived as per subclause 13.2. That is, the private user identity will be appended to the string "sip:"

EXAMPLE: "sip:23415099999999@15.234.IMSI.3gppnetwork.org".

-----End of second modified section-----

CHANGE REQUEST

⌘ **23.008 CR 061** ⌘ rev **1** ⌘ Current version: **5.2.0** ⌘

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

Title:	⌘ Correction to the form of public user identity		
Source:	⌘ CN4		
Work item code:	⌘ IMS-CCR	Date:	⌘ 11/11/2002
Category:	⌘ F	Release:	⌘ Rel-5
	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:	⌘ Misalignment with TS 23.228 and TS 29.229.
Summary of change:	⌘ The term public identity changed to term public user identity. The references to RFCs are replaced with a single reference to the TS 23.003.
Consequences if not approved:	⌘ The misalignment with other specifications.

Clauses affected:	⌘ 0.1 and 3.1.2										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"></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	⌘ 23.003-059	
Y	N										
X											
	X										
	X										
Other comments:	⌘										

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- [1] 3GPP TR 21.905: "3G Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 22.002: "Bearer Services (BS) supported by a GSM PLMN".
- [3] 3GPP TS 22.003: "Circuit Teleservices supported by a Public Land Mobile Network (PLMN)".
- [4] 3GPP TS 22.004: "General on supplementary services".
- [5] 3GPP TS 23.003: "Numbering, addressing and identification".
- [6] 3GPP TS 23.007: "Restoration procedures".
- [7] 3GPP TS 23.009: "Handover procedures".
- [8] 3GPP TS 23.012: "Location registration procedures".
- [9] 3GPP TS 23.015: "Technical realization of operator determined barring (ODB)".
- [10] 3GPP TS 23.040: "Technical realization of the Short Message Service (SMS) Point-to-Point".
- [11] 3GPP TS 22.060: "General Packet Radio Service (GPRS); Stage 1".
- [12] 3GPP TS 23.067: "Enhanced Multi-Level Precedence and Preemption service (EMLPP) - Stage 2".
- [13] 3GPP TS 23.078: "Customised Applications for Mobile network Enhanced Logic (CAMEL) - Stage 2".
- [14] 3GPP TS 23.081: "Line identification Supplementary Services - Stage 2".
- [15] 3GPP TS 23.082: "Call Forwarding (CF) Supplementary Services - Stage 2".
- [16] 3GPP TS 23.083: "Call Waiting (CW) and Call Hold (HOLD) Supplementary Services - Stage 2".
- [17] 3GPP TS 23.084: "Multi Party (MPTY) Supplementary Service - Stage 2".
- [18] 3GPP TS 23.085: "Closed User Group (CUG) Supplementary Service - Stage 2".
- [19] 3GPP TS 23.086: "Advice of Charge (AoC) Supplementary Service - Stage 2".
- [20] 3GPP TS 23.088: "Call Barring (CB) Supplementary Service - Stage 2".
- [21] 3GPP TS 23.060: "General Packet Radio Service (GPRS) Service Description; Stage 2".
- [22] 3GPP TS 23.078: "CAMEL, stage2".
- [23] 3GPP TS 23.090: "Unstructured Supplementary Service Data (USSD) - Stage 2".
- [24] 3GPP TS 23.116: "Super-Charger Technical Realisation; Stage 2".

- [25] 3GPP TS 23.135: "Multicall supplementary service; Stage 2"
- [26] 3GPP TS 24.008: "Mobile radio interface layer 3 specification; Core Network Protocols - Stage 3".
- [27] 3GPP TS 29.002: "Mobile Application Part (MAP) specification".
- [28] 3GPP TS 29.007: "General requirements on interworking between the Public Land Mobile Network (PLMN) and the Integrated Services Digital Network (ISDN) or Public Switched Telephone Network (PSTN)".
- [29] 3GPP TS 29.060: "GPRS Tunnelling protocol (GTP) across the Gn and Gp interface".
- [30] 3GPP TS 42.032: "Digital cellular telecommunications system (Phase 2+); Immediate Service Termination (IST) Service Description - Stage 1".
- [31] 3GPP TS 43.020: "Digital cellular telecommunications system (Phase 2+); Security related network functions".
- [32] 3GPP TS 43.035: "Digital cellular telecommunications system (Phase 2+); Immediate Service Termination (IST) Stage 2".
- [33] 3GPP TS 43.068: "Digital cellular telecommunications system (Phase 2+); Voice Group Call Service (VGCS) - Stage 2".
- [34] 3GPP TS 43.069: "Digital cellular telecommunications system (Phase 2+); Voice Broadcast Service (VBS) - Stage 2".
- [35] 3GPP TS 23.071: "Location Services (LCS); Functional Description; Stage 2".
- [36] GSM 12.03: "Digital cellular telecommunications system (Phase 2); Security management".
- [37] GSM 12.08: "Digital cellular telecommunications system (Phase 2); Subscriber and Equipment Trace".
- [38] ITU-T Recommendation Q.763: "Specifications of Signalling System No.7; Formats and codes".
- [39] ANSI T1.113: "Signalling System No7 (SS7) Integrated Services Digital Network (ISDN) User Part"[40] 3GPP TS 32.005 "Telecommunications Management; Charging and billing: GSM call and event data for the Circuit Switched (CS) domain"
- [41] 3GPP TS 32.015 "Telecommunications Management; Charging and billing: GSM call and event data for the Packet Switched (PS) domain"
- [42] 3GPP TS 23.228: "IP Multimedia (IM) Subsystem - Stage 2".
- [43] 3GPP TS 29.228 "IP Multimedia Subsystem Cx interface; signalling flows and message contents"
- [44] 3GPP TS 29.229 "Cx Interface based on the Diameter protocol; Protocol details"
- [45] IETF RFC 3261: "SIP: Session Initiation Protocol";
- [46] IETF RFC 2396: "Uniform Resource Identifiers (URI): generic syntax"
- [47] ~~ITU-T Recommendation E.164: "Numbering plan for the ISDN era"~~
- [48] IETF RFC 2486: "The Network Access Identifier"
- [49] 3GPP TS 33.203 "Access security for IP-based services"
- [50] 3GPP TS 23.002 "Network architecture"
- [51] draft-ietf-aaa-diameter-08.txt: "Diameter Base Protocol", work in progress
- [52] 3GPP TS 33.102 "Security architecture"
- [53] 3GPP TS 23.218 "IP Multimedia (IM) call model"

- [54] 3GPP TS 29.328 "IP Multimedia (IM) Subsystem Sh Interface; Signalling flows and message contents (Release 5)"
- [55] 3GPP TS 23.278 "Customised Applications for Mobile Network Enhanced Logic (CAMEL) Phase 4-Stage 2 IM CN Interworking "

-----End of first modified section-----

-----Beginning of second modified section-----

3.1.2 Public User Identities

The ~~Public~~ Public User Identities contains one or several instances of Public User Identity, which is defined in 3GPP TS 23.003 [5], each of which can be either in a form of a SIP URL (with the format defined in draft ietf sip rfc2543bis 05 [45] and RFC 2396 [46]) or an E.164 number [47].

The Public User Identities ~~is~~ are permanent subscriber data and ~~is~~ are stored in HSS and in S-CSCF.

-----End of second modified section-----