3GPP TSG CN Plenary Meeting #25 **NP-040413**
8th – 10th August 2004 Palm Springs, US.

Source: TSG CN WG4

Title: Corrections on WLAN

Agenda item: 9.17

Document for: APPROVAL

Spec	CR	Rev	Doc-2nd-Level N4-040	Phase	Subject	Cat	Ver_C
23.003	090	2	827	Rel-6	Decorated NAI format	B	6.3.0
23.003	091	1	1145	Rel-6	Introduction of temporary identities	B	6.3.0

3GPP TSG-CN4 Meeting #23bis **Tdoc N4-040827**

Helsinki, Finland 21-23 June 2004

CR-Form-v7

CHANGE REQUEST

⌘ **23.003** **CR** **090** ⌘ **rev** **2** ⌘ Current version: **6.3.0** ⌘

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

Title:	⌘	Decorated NAI format
Source:	⌘	CN4
Work item code:	⌘	WLAN
Date:	⌘	21/06/2004
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:	⌘	The format of Decorated NAI was still FFS in TS 23.003 since discussions on the format were still going on in IETF. Now the format has been specified in a new draft IETF Internet-Draft: 'The Network Access Identifier'.draft-arkko-roamops-rfc2486bis-00 and therefore the format can already be defined in 3GPP.
Summary of change:	⌘	Format of Decorated NAI has been added to clause 14.4 according to the format defined in IETF Internet-Draft: 'The Network Access Identifier'.draft-arkko-roamops-rfc2486bis-00. Reference to the draft has been added.
Consequences if not approved:	⌘	Uncomplete specification. No mechanism available for the WLAN UE to indicate to the network the selected PLMN through which the routing of authentication signalling must be performed.

Clauses affected:	⌘	14.4, 1.1.1

		Y	N		
Other specs affected:	⌘		X	Other core specifications	⌘
			X	Test specifications	
			X	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:

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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.

FIRST CHANGE

14.4 Decorated NAI

~~Editor's note: it is FFS whether selected VPLMN(s) will be indicated in a prefix (i.e. vplmn1.com/vplmn2.com/username@home realm) or in a suffix format (i.e. username@vplmn1.vplmn2.home realm). See draft-adrangi-eap-network-discovery-and-selection [49].~~

The Decorated NAI shall take the form of a NAI and shall have the form 'homerealm!username@otherrealm' as specified in clause 3 of ~~RFC~~ the IETF draft 2486-bis [xx].

The realm part of Decorated NAI consists of ~~'homerealm' and~~ 'otherrealm', see the IETF draft ~~RFC~~ 2486-bis [xx]. 'Homerealm' is the realm as specified in clause 14.2, using the HPLMN ID ('homeMCC' + 'homeMNC)'. 'Otherrealm' is the realm built using the PLMN ID (visitedMCC + visited MNC) of the PLMN selected as a result of WLAN PLMN selection (see 3GPP TS 24.234 [48]).

The username part format of the Root NAI shall comply with draft-arkko-pppext-eap-aka [50] when EAP AKA authentication is used and with draft-haverinen-pppext-eap-sim [51], when EAP SIM authentication is used.

When the username part of Decorated NAI includes the IMSI, it shall be built following the same steps specified for Root NAI in clause 14.3.

The result will be a decorated NAI of the form:

"wlan.mnc<homeMNC>.mcc<homeMCC>.3gppnetwork.org !0<IMSI>@<visitedMNC>.<visitedMCC>", for EAP AKA authentication and " wlan.mnc<homeMNC>.mcc<homeMCC>.3gppnetwork.org !1<IMSI>@<visitedMNC>.<visitedMCC>", for EAP SIM authentication

For example, for EAP AKA authentication: If the IMSI is 234150999999999 (MCC = 234, MNC = 15) and the PLMN ID of the Selected PLMN is MCC = 610, MNC = 71 then the Decorated NAI takes the form wlan.mnc015.mcc234.3gppnetwork.org!0234150999999999@071.610.

SECOND CHANGE

1.1 References

1.1.1 Normative 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.
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[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: "Digital cellular telecommunications system (Phase 2+); Security related network functions".

[8] void

[9] 3GPP TS 51.011: " 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] void

[29] 3GPP TS 44.118: "Radio Resource Control (RRC) Protocol, Iu Mode".

[30] 3GPP TS 23.073: "Support of Localised Service Area (SoLSA); Stage 2"

[31] 3GPP TS 29.002: "Mobile Application Part (MAP) specification"

[32] 3GPP TS 22.016: "International Mobile Equipment Identities (IMEI)"

[33] void

[34] void

[35] 3GPP TS 45.056: "CTS-FP Radio Sub-system"

[36] 3GPP TS 42.009: "Security aspects" [currently not being raised to rel-5 – Pete H. looking into it]

[37] 3GPP TS 25.423: "UTRAN Iur interface RNSAP signalling"

[38] 3GPP TS 25.419: "UTRAN Iu-BC interface: Service Area Broadcast Protocol (SABP)"

[39] 3GPP TS 25.410: "UTRAN Iu Interface: General Aspects and Principles"

[40] ISO/IEC 7812: "Identification cards - Numbering system and registration procedure for issuer identifiers"

[41] 3GPP TS 31.102 "Characteristics of the USIM Application"

[42] 3GPP TS 33.102 "3G security; Security architecture"

[43] 3GPP TS 43.130: "Iur-g interface; Stage 2"

[45] RFC 2806: "URLs for Telephone Calls"

[46] 3GPP TS 44.068: "Group Call Control (GCC) protocol".

[47] 3GPP TS 44.069: "Broadcast Call Control (BCC) Protocol ".

[48] 3GPP TS 24.234: "3GPP System to WLAN Interworking; UE to Network protocols; Stage 3".

[49] IETF Internet-Draft: "Network Discovery and Selection within the EAP Framework". draft-adrangi-eap-network-discovery-and-selection-00, work in progress.

[50] IETF Internet-Draft: “EAP AKA Authentication”. draft-arkko-pppext-eap-aka-11, work in progress.

[51] IETF Internet-Draft: “EAP SIM Authentication”. draft-haverinen-pppext-eap-sim-12, work in progress.

[52] 3GPP TS 23.246: "Multimedia Broadcast/Multicast Service (MBMS); Architechture and functional description"

[xx] IETF Internet-Draft: 'The Network Access Identifier'.draft-arkko-roamops-rfc2486bis-00, work in progress.

3GPP TSG CN WG4 Meeting #24 ***N4-041145***
Sophia Antipolis, France, 16-20 August 2004

CR-Form-v7

CHANGE REQUEST

⌘ **23.003** **CR** **091** ⌘ **rev** **1** ⌘ Current version: **6.3.0** ⌘

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

Title:	⌘	Introduction of temporary identities
Source:	⌘	CN4
Work item code:	⌘	WLAN
Date:	⌘	29/06/2004
Category:	⌘	**B**
Release:	⌘	Rel-6

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Reason for change:	⌘	CN1 has agreed on contributions on temporary identities and the “deleted” value that are now implemented in TS 24.234. It’s the CN1 understanding that the temporary identies format has to be included in TS 23.003 into the clause 14 for I-WLAN parameters (see Editor’s Note on 24.234 section 6.1.1.2.2).
Summary of change:	⌘	New sub-clause is introduced in order to specify the temporary identities and what value (FF) is used to indicate no existance of the temporary identity.
Consequences if not approved:	⌘	Temporary identities remains not being defined in the appropriate specification (i.e. TS 23.003). Misalignment with CN1 specification on I-WLAN (i.e. TS 24.234) remains.

Clauses affected:	⌘	1.1.1, New sub-clause 14.X

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

Other comments:	⌘	

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[51] IETF Internet-Draft: "EAP SIM Authentication". draft-haverinen-pppext-eap-sim-12, work in progress.

[52] 3GPP TS 23.246: "Multimedia Broadcast/Multicast Service (MBMS); Architechture and functional description".

[xx] IETF RFC 2279: "UTF-8, a transformation format of ISO 10646".

[xy] 3GPP TS 33.234: "Wireless Local Area Network (WLAN) interworking security".

[xz] IETF Internet-Draft: 'The Network Access Identifier'.draft-arkko-roamops-rfc2486bis-00, work in progress.

Next change

14.X Temporary identities

The Temporary identities (Pseudonyms and re-authentication identities) shall take the form of a NAI username as specified in clause 3 of the IETF draft 2486-bis [xz].

Temporary identity shall be generated as specified in subclause 6.4.1 of 3GPP TS 33.234 [xy]. This part of the temporary identity shall follow the UTF-8 transformation format specified in RFC 2279 [xx] except for the following reserved hexadecimal octet value:

FF.

When the temporary identity username is coded with FF, this reserved value is used to indicate the special case when no valid temporary identity exists in the WLAN UE (see 3GPP TS 24.234 [48]). The network shall not allocate a temporary identity with the whole username coded with the reserved hexadecimal value FF.