Technical Specification Group Services and System Aspects***TSGS#17(02)0533***

Meeting #17, Biarritz, France, 9-12 September 2002

Source: **TSG SA WG2**
Title: **CRs on 23. 221**
Agenda Item: **7.2.3**

The following Change Requests (CRs) have been approved by TSG SA WG2 and are requested to be approved by TSG SA plenary #17.

Note: the source of all these CRs is now S2, even if the name of the originating company(ies) is still reflected on the cover page of all the attached CRs.

Tdoc #	Title	Spec	CR #	c a t	Rel eas e	WI	S2 meetin g
S2-021945	Change of reference to IPv6 host requirements	23.221	34r 1	F	R5	IMS-CCR	25

CR-Form-v7

CHANGE REQUEST

| ⌘ | **23.221** CR **34** | ⌘**rev** **1** ⌘ | Current version: | **5.5.0** | ⌘ |

*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 ☐

Title: ⌘	Change of reference to IPv6 host requirements	
Source: ⌘	Ericsson, Nokia	
Work item code: ⌘	IMS-CCR	***Date:*** ⌘ 26/06/02
Category: ⌘ **F**		***Release:*** ⌘ Rel-5

Use one of the following categories:	*Use one 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	*Rel-4 (Release 4)*
be found in 3GPP TR 21.900.	*Rel-5 (Release 5)*
	Rel-6 (Release 6)

Reason for change: ⌘	The IETF document draft-manyfolks-ipv6-cellular-host-02.txt: "Minimum IPv6 Functionality for a Cellular Host" has become an IPv6 WG document and finally got an RFC number allocated. The current available revision of the draft is draft-ietf-ipv6-cellular-host-03.txt: "IPv6 for Some Second and Third Generation Cellular Hosts". That revision was approved at the IESG and the RFC3316 will be available soon.
Summary of change: ⌘	The reference to the IPv6 cellular host requirement draft is updated. In addition, as part of IPsec is required for an IMS UE the Basic group of IPv6 specifications as specified in the draft is not sufficient to implement for an IMS UE. The Mobile IPv6 recommendations for Cellular hosts was removed from the IETF specification, i.e. the recommendation is removed.
Consequences if not approved: ⌘	Wrong specification will be used when implementing IPv6 in Cellular hosts.

Clauses affected: ⌘	2 and 5.6

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

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.

********* First Change *************

2 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 23.002: "Network Architecture".

[2]   3GPP TS 23.060: "General Packet Radio Service (GPRS) Service description; Stage 2".

[3]   3GPP TS 23.012: " Location management procedures"

[5]   3GPP TS 25.331: " Radio Resource Control (RRC) Protocol Specification"

[6]   3G TS 25.301: "Radio interface protocol architecture"

[7]   3G TS 25.303: "UE functions and inter-layer procedures in connected mode"

[8]   3GPP TR 21.905: "3G Vocabulary".

[9]   3GPP TS 25.413: " UTRAN Iu interface RANAP signalling"

[10]   3GPP TS 25.410: " UTRAN Iu Interface: General Aspects and Principles"

[11]   3G TS 23.228 "IP Multimedia Subsystem – Stage 2"

[12]   3G TS 43.051 "GERAN Overall Description"

[13]   3G TS 23.153 ,"Out of Band Transcoder Control - Stage 2".

[14]   3G TS 23.205, "Bearer Independent CS Core Network – Stage 2"

[15]   3G TR 25.931: " UTRAN Functions, examples on signalling procedures"

[16]   RFC2766 "Network Address Translation - Protocol Translation (NAT-PT)", G. Tsirtsis, P. Srisuresh. February 2000.

[17]   RFC2893 "Transition Mechanisms for IPv6 Hosts and Routers", R. Gilligan, E. Nordmark, August 2000.

[17a]   RFC 3041: "Privacy Extensions for Stateless Address Autoconfiguration in IPv6", T. Narten, R. Daves, January 2001.

[18]   3G TS 25.401 "UTRAN Overall Description"

[19]   3G TS 25.304: "UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode"

[20]   3G TS 45.008: "Radio subsystem link control"

[21]   RFC3316 "IPv6 for Some Second and Third Generation Cellular Hosts", June 2002~~draft-manyfolks-ipv6-cellular-host-02.txt: "Minimum IPv6 Functionality for a Cellular Host", Work in progress~~

~~Editor's NOTE: The above reference will need to be updated to reference the assigned RFC number, once the draft achieves RFC status within the IETF.~~

3   Definitions, symbols and abbreviations

********* Second Change *************

5.6   UE support of IPv6

The set of IPv6 functionality a 3GPP UE will require is dependent on the services (IMS, Packet Streaming etc.) it will use.

As a minimum, a 3GPP UE shall comply with the Basic IP group of specifications as defined in RFC3316 [21]. ~~follow the guidelines for implementing IPv6 functionality as specified in the Basic~~Core ~~IPv6 group of specifications as defined in [21].~~ This ~~Core~~ IPv6 functionality is sufficient to provide ~~IPv6 for IMS as well as~~ compatibility towards IPv6 entities external to 3GPP.

A 3GPP UE shall follow the recommendations for the IP Security ~~and the Mobility~~ set of functions in RFC3316 [21] when a specific service requires such functions.

According to the procedures defined in TS 23.060 [2], when a UE is assigned an IPv6 prefix, it can change the global IPv6 address it is currently using via the mechanism defined in RFC 3041 [17a], or similar means, without updating the PS domain. Any application that requires full IP address knowledge shall provide a mechanism to get the latest IPv6 address when the IPv6 address in the UE has been changed. An example of such means is defined in TS 23.228 [11].

Note: RFC3316 [21] does not make any recommendations on preferred transition and interoperability mechanisms between IPv4 and IPv6.

~~Editor's NOTE: [21] do not make any recommendations on preferred transition and interoperability mechanisms between IPv4 and IPv6. Any supports of such mechanisms needed by 3GPP UE(s) are FFS.~~

6   Mobility management