

Title: Reply to LS on "IP version inter-working on the transport plane" from SA2 (S2-020291)
Source: SA5
To: SA2
Cc: CN4, CN2, SA3, SA5 and RAN3
Response to: SA2 LS (S2-020291/ S5-020112)

Contact Person:

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Attachments: S5-024024: CR on "Alignment of CDRs' IPv4 versus IPv6 address usage with architectural principles".

1. Overall Description

TSG SA5 thanks TSG SA2 for the Liaison Statement S5-020112 (S2-020291) on "IP version inter-working on the transport plane" which was copied to CN4, CN2, SA3, SA5 and RAN3.

SA5 SWG-B addressed the action requested of SA5, and investigated the implications on charging specifications, of SA2's architectural principles. Architectural principle #3 "The Charging, CAMEL and LI services shall use the IPv4 address of the GGSN for correlation purposes (at least for the initial migration period)" was determined as being relevant to the GPRS charging specification. Based on this principle, SA5 agreed to implement the following necessary change:

- If a GSN provided both an IPv4 and an IPv6 address, then the IPv4 would be populated in the CDR (note that current CDRs have sufficient space to accommodate one IPv6 address).

This change resulted in a CR (S5-024024) which affects TS 32.215, sections 5.14 and 5.35. The CR is attached for your benefit.

SA5 looks forward to continued co-operation with SA2.

2. Actions

None.

3. Dates of future SA5 meetings

Meeting	Dates	Location	Host
SA5#28	20-24 May 2002	Sophia Antipolis, FRANCE	ETSI
SA5#29	24-28 Jun 2002	Beijing, CHINA	Nortel Networks
SA5#30	19-23 Aug 2002	Tampere, FINLAND	Nokia
SA5#31	7-11 Oct 2002	Phoenix, AZ, USA	NA Friends
SA5#32	18-22 Nov 2002	Sophia Antipolis, FRANCE	ETSI
SA5#33	20-24 Jan 2003	Sophia Antipolis, FRANCE	ETSI

CHANGE REQUEST

⌘ **32.215** CR ⌘ rev - ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Alignment of CDRs' IPv4 versus IPv6 address usage with architectural principles		
Source:	⌘ SWG-B		
Work item code:	⌘ OAM-CH	Date:	⌘ 05/04/2002
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)

Reason for change:	⌘ It is currently not specified which addresses the GSNs shall include in the CDRs if both IPv4 and IPv6 addresses are available.
Summary of change:	⌘ This CR adds requirements for the GSNs to always use the IPv4 addresses in the CDRs in cases where both IPv4 and IPv6 addresses are available. The introduction of this rule aligns the GPRS charging specification with architectural principles defined by SA2 and communicated in LS S2-020291 (=S5-020112).
Consequences if not approved:	⌘ Potential contradictory behaviour of different vendors' GSN nodes with respect to the use of IP addresses in CDRs, resulting in charging errors. Misalignment of the GPRS charging TS with the GPRS architecture.

Clauses affected:	⌘ 5.14, 5.35		
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications	⌘	
	<input type="checkbox"/> Test specifications		
	<input type="checkbox"/> O&M Specifications		
Other comments:	⌘		

5.14 GGSN Address Used

These fields are the current serving GGSN IP Address for the Control Plane. [If both an IPv4 and an IPv6 address of the GGSN are available, the GSNs shall include the IPv4 address in the CDR.](#)

5.35 SGSN Address

These fields contain one or several IP addresses of SGSN. The IP address of the SGSN can be either control plane address or user plane address.

The S-CDR fields contain single address of current SGSN and GGSN used.

The G-CDR fields contain the address of the current GGSN and a list of SGSNs addresses, which have been connected during the record (SGSN change due to inter SGSN Routing Area update).

The M-CDR fields only contain the address of the current SGSN. It does not provide any information related to active PDP context(s) and thus the connected (used) GGSN(s) cannot be identified.

[If both an IPv4 and an IPv6 address of the SGSN are available, the GSNs shall include the IPv4 address in the CDR.](#)

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Other specs affected:	<input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> 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/3G_Specs/CRs.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.

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