3GPP TSG-CN Meeting #26 **NP-040551**
Athens, Greece. 8th - 10th December 2004.

Source:	**Chairman CN3** (ragnar.huslende@ericsson.com)
Title:	**CN3 Status Report to CN Plenary**
Agenda item:	**6.3.1**
Document for:	**INFORMATION**

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1. General

1.1 CN3 Officials

•Chairman: Ragnar Huslende (Ericsson LM)
•Vice-chairs: Juha Räsänen, (NOKIA Corp.)
Thomas Belling (Siemens Ag)
•Secretary: David Boswarthick (CN3#33bis) / Seung Don Han (CN3#34)(MCC)

1.2 CN3 Meetings

Two CN3 meetings have taken place since the last TSG-CN plenary:

- CN3#33bis: 4th - 7th Oct-2004, Sophia Antipolis, France. Hosted by ETSI
- CN3#34: 15th - 19th Nov-2004, Seoul, Korea. Hosted by Samsung Electronics Co. Ltd.

The detailed meeting reports are contained in **NP-040552** and **NP-040553.** This status report **(NP-040551)** summarises the results from the meetings and presents the current status of work in CN3.

1.3 Administrative Work

CN3 has not reviewed the 3GPP work plan in detail, but has determined the status of work for every Rel-6 work item.

2. Work Items Rel-4 and earlier

2.1 Technical Enhancements and Improvements

None

3. Work Items Rel-5

3.1 End-to-end Quality of Service: Go interface

Some corrections for the Go interface are still necessary. Document **NP-040555** contains the following CRs for TS 29.208:

- N3-040814 (Rel-5): The "Authorize QoS resources" procedure applies at session establishment and modification. It is clarified that an authorization token is generated only at session establishment.
- N3-040815 (Rel-5) and N3-040893 (Rel-6): The conditions for triggering the “Removal of QoS commit” procedure are clarified to ensure that the SBLP gates are closed correctly when a session is modified.
- N3-040864 (Rel-5) and N3-040865 (Rel-6): The conditions for triggering of "Authorization of PDP context modification" and "Indication of PDP context modification" procedures are clarified to cover all cases when the change is initiated either by the UE or by the network.

4. Work Items Rel-6

4.1 Interworking between the IM CN Subsystem and IP networks

TS 29.162 v2.0.0 is presented to CN#26 for approval in **NP-040568**. Since the previous plenary, the specification of IPv4/v6 interworking has been completed and a number of editorial changes have been made.

CN3 considers this work item as complete.

4.2 Interworking between the IM CN Subsystem and CS networks

Document **NP-040556** contains agreed CRs to TS 29.163, as follows:

- N3-040873 states that it is possible to send the 'Precondition met' indication in any SDP offer depending on when the continuty signal is received.
- N3-040834 makes some corrections to EFR codec parameters
- N3-040859 adds procedures for signaling out-of-band DTMF from the CS network towards the IMS in order to align with recent stage 2 requirement.
- N3-040792 is an editorial correction.

CN3 considers this work item as complete.

4.3 Mn Interface

Document **NP-040557** contains the following agreed CR to TS 29.163:

- N3-040874: This CR specifies how the MGCF should use the RTCP bandwidth modifiers during the call establishment and when media are put on hold or resumed. This ensures alignment with an agreed SA4 CR to their specification TS 26.236.

CN3 considers this work item as complete.

4.4 End-to-end Quality of Service, Gq interface

Document **NP-040562** contains the following CRs for the Gq interface:

CRs to TS29.208:

- N3-040700 clarifies the mapping tables considering cases where the service information is updated
- N3-040895 allows the use of Application Identifier for IMS when policy decisions are made in PDF
- N3-040825 gives some corrections to the mapping tables related to early media handling

CRs to TS29.209:

- N3-040897 provides a correction of the procedure for resource reservation at PDF
- N3-040896 provides a correction of the bandwidth information derived from SDP to align with RFC3264.
- N3-040678 clarifies the semantics of updated Flow Description AVPs

- N3-040679 completes the rules for the Flow Grouping AVP, in particular concerning modification of service information
- N3-040680 contains various minor corrections to the text
- N3-040890 is an editorial update to make the Gq protocol more generic

CN3 considers this work item as complete.

4.5 MBMS Gmb interface

CN3 is responsible for the standardisation of the Gmb interface for MBMS (Multimedia Broadcast and Multicast Service). The set of CRs in **NP-040561** has been agreed to complete the work on Gmb in TS 29.061, as follows:

- N3-040685 adds a table of reused AVPs with references to the specifications where these AVPs are defined.
- N3-040634 adds a new AVP in the session start message to indicate whether the actual service is a multicast or broadcast service.
- N3-040686, to align with Diameter rules, states that new error values for Gmb should be assigned to Experimental-Result-Code instead of Result-Code.
- N3-040687 clarifies that after an RAR-RAA exchange, no AAR is needed, to avoid confusion with the Nasreq specification.
- N3-040732 adds the serving network identity associated with the MSISDN (for a subscriber using MBMS) in signalling from the GGSN to the BM-SC for charging purposes. This fulfills a recent requirement received from SA2.
- N3-040731 The Gmb specific AVP codes and experimental error codes are introduced, using the number series assigned by CN4.

CN3 considers this work item as complete.

4.6 Support of Presence Capability, Pk interface

CN3 is responsible for the standardisation of the Pk interface for the support of the Presence Capability, but has not seen any contributions so far. CN3 assumes that very little work is required for this WI but no companies have been able to prioritize this work.

Companies are kindly encouraged to consider this work item and submit contributions. CN3 has not put a completion date on this WI.

4.7 WLAN

CN3 is responsible for a stage 3 description for the Wi interface that is required in scenario 3 of the WLAN interworking architecture. The TS 29.161 was approved at CN#25, and no further changes have been proposed.

CN3 considers this work item as complete.

4.8 Flow Based Charging

CN3 is responsible for the stage 3 specifications of the Gx and Rx interfaces for Flow Based Charging.

4.8.1 Gx Interface

The protocol for the Gx reference point is being specified as both as a "stand-alone" interface and a combined Gx/Gy interface. For the latter option, CN3 has specified a set of AVPs that can be added to the Gy interface specifications developed by SA5.

The Gx specification is contained in TS29.210 v2.0.0 which is submitted to CN#26 for approval. Please see **NP-040566**.

CN3 considers this work item as complete.

4.8.2 Rx Interface

The work on the Rx interface has been given high priority during the two recent CN3 meetings and the work has progressed well. A new TS29.211 v1.0.0 is submitted to CN#26 for information. Please see **NP-040567**.

CN3 has estimated this WI to be 65% complete. Estimated completion date is March 2005 (CN#27). CN3 would like to ask for an exception to the Rel-6 freeze timescale accordingly.

4.9 Technical Enhancements and Improvements

4.9.1 Enhanced Radius Gi interface

At CN#24 two CRs proposing extensions to the Gi Radius interface were discussed. The CRs proposed to include either the TFT filters or both the TFT filters and SBLP filters in the Radius interface. No agreement was reached at CN#24, therefore the issue was referred back to CN3 for further discussion. At CN#25, after an LS exchange with SA2, the issue was still not resolved. At the recent CN3#34 meeting in Seoul, CN3 finally managed to reach a conclusion. The following enhancements to the Radius Gi interface were agreed, please see **N3-040559**:

- N3-040846 specifies that packet filters optionally may be added to the Radius Gi interface
- N3-040847 specifies that the DSCP optionally may be added to the Radius Gi interface

Interested delegates can find a further explanation and justification for these CRs in the CN3 discussion paper N3-040754.

4.9.2 IP spoofing

CN3 has agreed the following CR aimed at preventing IP spoofing, please see **NP-040558**:

- N3-040869 states that if IP spoofing is to be prevented, the GGSN shall verify the source IP address of the IP packets from the UE and compare it against the address assigned during the PDP context activation procedure.

4.9.3 Service Based Local Policy

CN3 has agreed two CRs related to new stage 2 requirements for Rel-6. Please see the following CRs in **NP-040560**:

- N3-040863: GGSN allows the establishment of a non-realtime PDP Context without an Authorization Token.
- N3-040894 (editorial revision of N3-040892): PDF procedures related to session release have been corrected.

4.9 Other Rel-6 WIs

4.10.1 Circuit-switched Data Communication

CN3 has previously developed a document, TR 23.910 that has been used as a stage 2 specification for circuit-switched data bearer services. CN3 has now transformed this TR into a proper TS for Rel-6. This has involved mainly editorial work, and removing some overlap with existing stage 3 specifications. The new specification, TS23.202 v1.0.0 is submitted to CN#26 for information and approval. Please see **NP-040565**.

CN3 agreed that TR23.910 is not to be carried over to Rel-6.

A new WID for this work is provided in **NP-040563.**

A corresponding CR to TS29.007 Rel-6 is provided in **NP-040564:**

- N3-040885: A general update of TS 29.007, e.g. it introduces a reference to the new TS23.202, and copies some normative text from TR23.910.

CN3 considers this WI as complete.

5. Work Items Rel-7

5.1 Diameter on the PDG -Wi interface

This Work Item will introduce support for Diameter on the WLAN Wi interface. In Rel-6 the Wi interface is based on Radius. The work has not yet started.

Planned approval date: September 2005

5.2 Diameter on the GGSN Gi interface

This Work Item will introduce support for Diameter on the GPRS Gi interface. Currently, the Gi interface is based on Radius. The work has not yet started.

Planned approval date: September 2005

6. Output Documents

6.1 Change Requests

CN#26 doc#	CN3 doc#	Title	Spec	CR	R	Cat	Rel	Ver.	Work Item
NP-040564	N3-040885	Transfer of information from TR 23.910	29.007	106	1	B	Rel-6	5.10.0	[new WID]
NP-040555	N3-040814	Authorize QoS resources with no generation of authorization token at session modification	29.208	077	1	F	Rel-5	5.8.0	E2EQoS
	N3-040815	Removal of QoS commit for session modification	29.208	081	1	F	Rel-5	5.8.0	
	N3-040864	Modification of PDP contexts	29.208	089	1	F	Rel-5	5.8.0	

CN#26 doc#	CN3 doc#	Title	Spec	CR	R	Cat	Rel	Ver.	Work Item
	N3-040865	Modification of PDP contexts	29.208	090	1	A	Rel-6	6.1.0	
	N3-040893	Removal of QoS commit for session modification	29.208	082	3	A	Rel-6	6.1.0	
NP-040556	N3-040792	Editorial mistake in Table 12	29.163	059		D	Rel-6	6.4.0	IMS-CCR-IWCS
	N3-040834	Corrections to EFR codec parameters	29.163	056	1	F	Rel-6	6.4.0	
	N3-040859	DTMF towards IM CN subsystem	29.163	057	2	C	Rel-6	6.4.0	
	N3-040873	Mapping of continuity signal	29.163	054	3	F	Rel-6	6.4.0	
NP-040557	N3-040874	Clarifications for Mn procedures for call hold	29.163	058	2	F	Rel-6	6.4.0	IMS-CCR -Mn
NP-040561	N3-040634	Gmb. New AVP to indicate Multicast or Broadcast service	29.061	129		F	Rel-6	6.2.0	MBMS
	N3-040685	Gmb. Table with reused AVPs	29.061	128	1	F	Rel-6	6.2.0	
	N3-040686	Gmb. Correction to the Result-Code AVP	29.061	130	1	F	Rel-6	6.2.0	
	N3-040687	Gmb. General corrections and clarification on the use of RAR	29.061	131	1	F	Rel-6	6.2.0	
	N3-040731	Gmb. Update of AVPs codes and permanent failures codes.	29.061	133		F	Rel-6	6.2.0	
	N3-040732	Gmb. Serving Network identity	29.061	134		F	Rel-6	6.2.0	
NP-040562	N3-040678	semantics of updated Flow-Description AVP(s)	29.209	001	1	F	Rel-6	6.0.0	QoS1
	N3-040679	Flow grouping AVPs in modified service information	29.209	002	1	F	Rel-6	6.0.0	
	N3-040680	Smaller corrections to avoid misinterpretations	29.209	003	1	F	Rel-6	6.0.0	
	N3-040700	Clarification on Mapping Table 7.1.1.1	29.208	075	2	F	Rel-6	6.1.0	
	N3-040895	Allowing the use of Application identifier for IMS	29.208	076	3	C	Rel-6	6.1.0	
	N3-040896	Bandwidth attributes	29.209	009	1	F	Rel-6	6.0.0	
	N3-040825	Correcting Mapping Table[Update to existing CR 074 against 29.208]	29.208	074	3	F	Rel-6	6.1.0	
	N3-040897	Resource reservation at PDF	29.209	008	3	F	Rel-6	6.0.0	
	N3-040890	Modifications to Gq protocol to make it more generic	29.209	010		D	Rel-6	6.0.0	
NP-040559	N3-040846	RADIUS Enhancements on the Gi interface to enable QoS correlation (Packet Filters)	29.061	139	1	B	Rel-6	6.2.0	TEI6
	N3-040847	RADIUS Enhancements on the Gi interface for QoS information (Negotiated DSCP)	29.061	138	1	B	Rel-6	6.2.0	
NP-040558	N3-040869	IP spoofing for Early IMS security	29.061	137	3	F	Rel-6	6.2.0	TEI6
NP-040560	N3-040863	SBLP and non-real-time PDP Contexts	29.207	138	2	F	Rel-6	6.1.0	TEI6
	N3-040894	QoS procedure at session release	29.207	142	3	F	Rel-6	6.1.0	

6.2 Liaison Statements

The following Liaison Statements are contained in **NP-040554:**

Tdoc	Title	LS To	LS Cc	Attachments
N3-040681	Clarifications on the Rx interface	SA2		
N3-040725	LS on Diameter codes and identifiers	CN4		TS 29.210 V1.1.0
N3-040849	Reply LS on MBMS information Elements	RAN3, GERAN2	SA2, SA4, CN1, CN4, RAN2	
N3-040867	LS on CN3 assumption on the scope of FBC for Rel6	SA2		
N3-040868	Reply on LS on completion of network initiated SCUDIF support	RAN3	CN4, CN1, SA2	
N3-040872	Reply LS on Cooperation on TISPAN NGN	ETSI, TISPAN	SA1, SA2, CN1	
N3-040884 (Note 1)	CN3 impacts on Early IMS security	SA3	CN	N3-040881 and N3-040882

Note 1: N3-040884, which is copied for information to the CN plenary, deals with Early IMS Security. To ensure technical correctness, CN3 has reviewed two proposed CRs to TS29.061 on this topic, but has not agreed to adopt these CRs in TS29.061. CN3 has forwarded these CRs together with an LS to SA3 saying that CN3 has a preference for the inclusion of this information in TR33.878, but asks SA3 to decide where the documentation of GGSN interaction impacts as a result of Early IMS Security is best addressed.

6.3 Work Items

CN3 provides the following Work Item Description sheet to CN#26 for approval:

Tdoc#	Title	Rapporteur	Company	Status
NP-040563	Draft WID on Reorganization of CS data specifications.	Thomas Belling	Siemens	New

6.4 Technical Reports and Technical Specifications

6.4.1 Specifications for approval

CN3 provides the following technical specifications to CN#25 for approval:

Tdoc #	Number	Version	Rel	Title	Rapporteur	Company
NP-040565	23.202	1.0.0	Rel-6	Circuit switched data bearer services (for information and approval)	Thomas Belling	Siemens
NP-040566	29.210	2.0.0	Rel-6	Charging rule provisioning over Gx interface	Juha Räsänen	Nokia

NP-040568	29.162	2.0.0	Rel-6	Interworking between the IM CN subsystem and IP networks	Nigel Holland	O2

6.4.2 Specifications for information

CN3 provides the following technical specification to CN#25 for information:

Tdoc #	Number	Version	Rel	Title	Rapporteur	Company
NP-040567	29.211	1.0.0	Rel-6	Rx interface and Rx/Gx signalling flows	Javier Gonzalez Gallego	Nortel Networks

7. Next Meetings

The next CN3 meetings are scheduled as follows:

Meeting	Date	Location
CN3#35	14th – 18th February, 2005	Sidney, Australia
CN3#36	25th – 29th April, 2005	Cancun, Mexico

8. Acknowledgements

I would like to thank the delegates for their contribution to the meeting and ETSI and Samsung Electronics for hosting the meetings. David Boswarthick, MCC, deserves special thanks for his long and faithful service for CN3. David's last meeting was CN3#33bis, but he has been helpful as always even in the transition period and in training the new secretary Mr. Seung Don Han. I would also like to thank Seung Don for very good work during his first meeting, the very busy CN3#34 meeting in Seoul.