3GPP TSG CN Meeting #27 **NP-050095**

9th - 11th March 2005. Tokyo, Japan.

Source: **Chairman CN3** (ragnar.huslende@ericsson.com)

Title: **CN3 Status Report to CN Plenary**

Agenda item: **6.3.1**

Document for: **INFORMATION**

---

1. General

1.1 CN3 Officials

- Chairman: Ragnar Huslende (Ericsson LM)
- Vice-chairs: Juha Räsänen, (Nokia Corp.)
  Thomas Belling (Siemens Ag)
- Secretary: Seung Don Han (MCC)

1.2 CN3 Meetings

One CN3 meeting has taken place since the last TSG-CN plenary:

- CN3#35: 14th - 18th February, 2005, Sydney, Australia. Hosted by NTT DoCoMo, Vodafone group, Fujitsu and NEC

The detailed meeting report is contained in **NP-050096.** The present status report, **NP-050095**, summarises the results from the meeting 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 CS Data Bearer Services

Packet transport and Mc Configuration are specified for Inter-MSC Handover GSM-to-UMTS and vice versa, and GSM-to-GSM. In the CRs, packet transport is described in a similar manner as for Inter-MSC Handover with Iu Interfaces, and Mc configuration parameters are provided. Missing PLMN-BC bandwidth parameter is added at A-MSC for non-64kbit transparent CS data calls.

Document **NP-050098** contains the following CRs for Rel-4:

- N3-050194: Corrections to TR 23.910
- N3-050198: Corrections to TS 29.007

3. Work Items Rel-5

3.1 CS Data Bearer Services

Packet transport and Mc Configuration are specified for Inter-MSC Handover GSM-to-UMTS and vice versa, and GSM-to-GSM. In the CRs, packet transport is described in a similar manner as for Inter-MSC Handover with Iu Interfaces, and Mc configuration parameters are provided. Missing PLMN-BC bandwidth parameter is added at A-MSC for non-64kbit transparent CS data calls.

For handover from A/Gb mode to Geran Iu mode, it is specified how the A-TRAU' protocol and the A-TRAU'' protocol are applicable for the various RAB subflows.

Document **NP-050099** contains the following agreed CRs

- N3-050197: Corrections to TR 23.910, Rel-5

- N3-050199: Corrections to TS 29.007, Rel-5
- N3-050201: Corrections to TS 29.007, Rel-6 mirror

3.2 Service Change and UDI Fallback

Missing HLR Interrogation Parameter (SS-List 2) for SCUDIF has been included, please see the following agreed CRs in **NP-050100:**

- N3-050097: CR to TS 23.172, Rel-5
- N3-050098: CR to TS 23.172, Rel-6 mirror

4. Work Items Rel-6

4.1 Interworking between the IM CN Subsystem and CS networks

Document **NP-050105** contains the following agreed CR to TS 29.163:

- N3-050152: The CR aligns with recent IETF clarifications to the AMR codec parameters in RFC 3267. The CR also aligns with changes that have been introduced to TS28.062, TS26.103 and TS23.153 in SA4 and CN4 to correct the handling of AMR codecs in OoBTC and TFO.

CN3 considers this work item as complete.

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

Document **NP-050106** contains the following CRs for the Gq interface:

CR to TS29.207:

- N3-050202: For security reasons, it is recommended that the GGSN IP address is not provided via the Gq interface in the inter-operator case

CRs to TS29.209:

- N3-050203: For security reasons, it is recommended that the GGSN IP address is not provided via the Gq interface in the inter-operator case
- N3-050053: The name of the Specific-Action AVP is corrected.

CN3 considers this work item as complete.

4.3 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-050108** has been agreed to complete the work on Gmb in TS 29.061, as follows:

- N3-050015: To align with stage 2 specifications, the TMGI is added to the Session Start message between the BM-SC and the GGSN

- N3-050157: To align with stage 2 specifications, a list of SGSNs is added to the Session Start message between the BM-SC and the GGSN. Applicable for MBMS broadcast services.
- N3-050163: It is stated that certain Gmb functions applies to MBMS multicast services only. Usage of Diameter message STR is corrected to align with IETF RFC 3588
- N3-050018: To align with recent stage 2 change, a new parameter is included in the Session Start message to indicate whether the MBMS bearer service will be used to deliver content in 2G coverage area, 3G coverage area or both.
- N3-050225: To align with stage 2 specifications MBMS session identity is added to the Gmb Session Start message
- N3-050159: IP multicast address and APN are added to the Gmb Session Start message for broadcast MBMS services
- N3-040046: Miscellaneous corrections, e.g. stating that several MBMS service areas may be indicated in the Session Start message.
- N3-050160: To align with stage 2 CR, the BM-SC is provided with approximate UE location information (Routing Area Identity) at MBMS context activation.
- N3-050171: To fulfill the requirement in an incoming LS from SA2 (S2-043864), an indefinite value is defined for an MBMS session duration.

CN3 considers this work item as complete.

4.4 Support of Presence Capability, Pk interface

CN3 is responsible for the standardisation of the Pk interface for the support of the Presence Capability. At the previous CN plenary an extension was granted in order to complete this interface for Rel-6. This is now covered by a CR to TS 29.061 included in **NP-050107.**

CN3 considers this work item as complete.

4.5 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.

4.6 Flow Based Charging

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

4.6.1 Gx Interface

The following agreed CRs to TS 29.210 are included in **NP-050109**:

- N3-050219: Specifies that charging rules that are statically configured in GGSN need to have a value that is unique for the whole system
- N3-050222: Completes the specification of the application id behaviour
- N3-050174: Specifies how bearer termination is signalled
- N3-050226: Specifies the usage of TFTs
- N3-050209: Corrects the definition of Application Function and removes the term “bearer session”.

- N3-050221: Aligns the definition of the Diameter RAT-Type AVP with the definition of the corresponding Radius parameter

CN3 considers this work item as complete.

4.6.2 Rx Interface

The work on the Rx interface has been given high priority during the recent CN3 meetings and the work has progressed well. At the previous plenary, an extension was requested in order to complete this WI for Rel-6. The following documents are provided:

- **NP-050114** contains an agreed CR to TS 29.209. This CR makes an AVP used by the Gq interface more generic so that it can be re-used by the Rx interface.
- The new TS29.211 v2.0.1 is submitted to CN#27 for approval. Please see **NP-050118**.

CN3 considers that the functionality of this work item is complete and can be included in Rel-6. There are no known outstanding issues. However, minor corrections may be expected, so the TS 29.211 is estimated as 95% complete.

4.7 Technical Enhancements and Improvements

4.7.1 Service Change and UDI Fallback

Network-initiated service change is corrected to align with RANAP procedures. Network-initiated downgrade from video to speech is covered. However, detailed specification of network-initiated upgrade from speech to video is indicated as being FFS. Please see CR to TS 23.172, Rel-6, in **NP-050101**.

At the CN3#35 meeting there was a request from several companies to also complete the specification of network-initiated upgrade from speech to video in Rel-6. A request to extend this work till the June 2005 plenaries is given in **NP-050104**.

4.7.2 Replacement of obsolete RFC

Reference to the obsoleted IETF RFC 2002 is replaced by a reference to the new RFC 3344. Please see CR to TS29.061 in **NP-050102**. This is aligned with a recent stage 2 CR.

4.8 Other Rel-6 WIs

4.8.1 Circuit-switched Data Communication

References to Iu and Nb user plane have been corrected. The related CR to TS 23.202 is included in **NP-050110**.

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

Some corrections for the Go interface are still necessary. Document **NP-040103** contains the following agreed CRs to TS 29.208:

- N3-050144: To avoid confusion over missing signalling flows, it is stated that the scope of the specification is to cover the most common signalling flows, not being exhaustive.

- N3-050223: Update of packet classifiers in "Session modification initiated SBLP authorization decision" procedure is corrected.

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 rapporteur, Stefan Koppenberg, T-Mobile, has announced that he is no longer able to continue his work in CN3. *Companies are therefore kindly requested to propose a new rapporteur.*

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 rapporteur, Stefan Koppenberg, T-Mobile, has announced that he is no longer able to continue his work in CN3. *Companies are therefore kindly requested to propose a new rapporteur.*

The work has not yet started. Planned approval date: September 2005

6. Output Documents

6.1 Change Requests

CN#27 doc#	CN3 doc#	Title	Spec	CR	R	Cat	Rel	Ver.	Work Item
NP-050098	N3-050194	Nb transport for handover between UMTS and GSM	23.910	049	2	F	Rel-4	4.8.0	CS Data
	N3-050198	Nb transport for handover between UMTS and GSM	29.007	107	3	F	Rel-4	4.11.0	
NP-050099	N3-050197	Nb transport for handover between UMTS and GSM	23.910	050	3	F	Rel-5	5.4.0	CS Data
	N3-050199	Nb transport for handover between UMTS and GSM	29.007	108	2	F	Rel-5	5.10.0	
	N3-050201	Nb transport for handover between UMTS and GSM	29.007	109	3	A	Rel-6	6.0.0	
NP-050100	N3-050097	Inclusion of Missing HLR Interrogation Parameter for SCUDIF	23.172	030	-	F	Rel-5	5.4.0	SCUDIF
	N3-050098	Inclusion of Missing HLR Interrogation Parameter for SCUDIF	23.172	031	-	A	Rel-6	6.1.0	
NP-050101	N3-050231	Correction to Network-initiated SCUDIF	23.172	029	3	F	Rel-6	6.1.0	TEI-6
NP-050102	N3-050142	Update of IETF related references	29.061	155	1	F	Rel-6	6.3.1	TEI-6
NP-050103	N3-050144	Essential clarification of the Scope for call flows	29.208	095	1	F	Rel-6	6.2.1	E2EQoS
	N3-050223	Change of port number	29.208	097	1	F	Rel-6	6.2.1	

CN#27 doc#	CN3 doc#	Title	Spec	CR	R	Cat	Rel	Ver.	Work Item
NP-050105	N3-050152	Corrections to AMR codec parameters	29.163	060	1	F	Rel-6	6.5.0	IMS-CCR-IWCS
NP-050106	N3-050053	Correction to Specific-Action AVP terminology	29.209	011	-	F	Rel-6	6.1.0	QoS1
	N3-050202	Clarification on charging identifier(s) exchange.	20.207	150	3	F	Rel-6	6.2.0	
	N3-050203	Clarification on charging identifier(s) exchange.	29.209	012	3	F	Rel-6	6.1.0	
NP-050107	N3-050156	Pk Interface	29.061	157	1	B	Rel-6	6.3.1	PRESNC
NP-050108	N3-050015	Adding the TMGI to the Session Start message	29.061	141	-	F	Rel-6	6.3.1	MBMS
	N3-050157	Adding list of downstream nodes in the Session Start message	29.061	142	1	F	Rel-6	6.3.1	
	N3-050163	Various corrections of Gmb	29.061	143	1	F	Rel-6	6.3.1	
	N3-050018	Adding in the 2G/3G indicator to the Session Start message	29.061	144	-	F	Rel-6	6.3.1	
	N3-050225	Adding the MBMS session id to the Gmb Session Start message	29.061	145	2	F	Rel-6	6.3.1	
	N3-050159	Adding the multicast address and the APN to the Gmb Session Start message	29.061	146	1	F	Rel-6	6.3.1	
	N3-050046	Text correction and multiple MBMS-Service-Area	29.061	147	-	F	Rel-6	6.3.1	
	N3-050160	Providing the BM-SC with approximate UE location information at MBMS context activation.	29.061	148	1	F	Rel-6	6.3.1	
	N3-050171	Indefinite MBMS session duration	29.061	158	1	F	Rel-6	6.3.1	
NP-050109	N3-050219	Extend the Rule Name uniqueness to the whole system	29.210	001	3	F	Rel-6	6.0.0	CH-FBC
	N3-050222	Clarification on the use of the application-ids on NOT_APPLICABLE notifications	29.210	003	2	F	Rel-6	6.0.0	
	N3-050174	Clarifications for Indication of Bearer Termination	29.210	005	1	F	Rel-6	6.0.0	
	N3-050226	TFT filter clarifications	29.210	006	3	F	Rel-6	6.0.0	
	N3-050209	Correction of AF Definition	29.210	007	2	F	Rel-6	6.0.0	
	N3-050221	RAT Type AVP definition	29.210	009	2	F	Rel-6	6.0.0	
NP-050110	N3-050121	References for Iu and Nb User Plane	23.202	001	-	F	Rel-6	6.0.0	CS Data
NP-050114	N3-050218	Specific Action AVP update	29.209	013	3	F	Rel-6	6.1.0	CH-FBC

6.2 Liaison Statements

The following Liaison Statements are contained in **NP-050097:**

Tdoc	Title	LS To	LS Cc	Attachments
N3-050205 *Note 1*	Tracing information for MBMS services	SA	SA5	-

N3-050135	Allocation of 3GPP specific AVP numbers and Experimental Result codes for Gx	CN4		-
N3-050193	Removal of Ry reference point	SA, SA2		-
N3-050151	Completion of network initiated SCUDIF support	RAN3	RAN, CN	-

Note 1: CN3 has discussed the need to introduce tracing information for MBMS services over the Gmb interface specified in Rel-6. However, at present there is no stage 2 requirement for this. CN3 asks SA to grant an exemption for Rel-6 for the completion of work to introduce tracing capability to the Gmb interface. The exemption would extend the timescales for this work to June 2005.

6.3 Technical Reports and Technical Specifications

6.3.1 Specifications for approval

CN3 provides the following technical specification to CN#27 for approval:

Tdoc #	Number	Version	Rel	Title	Rapporteur	Company
NP-050118	29.211	2.0.1	Rel-6	Rx interface and Rx/Gx signalling flows	Javier Gonzalez Gallego	Nortel Networks

6.3.2 Specifications for information

CN3 provides no technical specifications to CN#27 for information.

7. Next Meetings

The next CN3 meetings are scheduled as follows:

Meeting	Date	Location
CN3#36	25th – 29th April, 2005	Cancun, Mexico
CN3#37	29th Aug – 2nd Sept, 2005	London, UK

8. Acknowledgements

I would like to thank the delegates for their contribution to the meeting and NTT DoCoMo, Vodafone group, Fujitsu and NEC for hosting the meeting. I would also like to thank the secretary Mr. Seung Don Han for providing excellent secretarial services before, during and after the meeting.