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1. General

1.1 Last Meetings

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

?? CN3#24 29th July – 2nd August 2002, Helsinki, Finland, hosted by Elisa, Ficora, the Finnet Group, Nokia, and Sonera.

The detailed CN3 meeting report is contained in **NP-020401**.

This status report [**NP-020400**] summarises the results from this meeting and presents the current status of work in CN3.

1.2 Administrative Work

CN3 has not reviewed the 3GPP work plan and the specification list provided by MCC due to the lack of time.

2. Work Items Rel-4 and earlier

2.1 GPRS

A set of CRs back to R99 is provided in document **NP-020403** (N3-020657 – 659) in order to align TS 27.060 with TS 23.107. If the application in the TE requires streaming or conversational QoS, then the MS shall at least explicitly request the traffic class and should explicitly request the guaranteed bit rate and the maximum bit rate. These changes were requested by SA2.

2.2 Circuit switched Data services

As agreed between CN3 and T2 some time ago, the S reference point was removed as the internal interface of a Mobile Station. This is not yet realised in some of the 3GPP specifications. CN3 has agreed some CRs against TS 43.010, 44.021 and 48.020 to implement this decision. The related CRs back to Rel-4 are contained in the document **NP-020405** (N3-020638, 662, 680, 681, 566, 682, 567 and 683).

Another CR corrects the handling of the M2 bit for handover of transparent CS data calls in UMTS. It was clarified that this bit is not used for synchronisation purposes, but is clamped to binary '0'. The CRs back to R99 are contained in the document **NP-020404** (N3-020548 – 550). They correct TR 23.910 and provide an alignment with TS 29.007.

Another a set of CRs against TS 29.007 and TR 23.910 corrects the description of the RAB parameters needed for non-transparent CS data calls. It is an alignment with TS 25.413 that specifies that the presence of the conditional parameter 'SDU error ratio' is not required when 'Delivery of erroneous SDUs' is set to 'no error detection consideration'. As this is the case, the parameter 'SDU error ratio' has been removed from RAB parameters of non-transparent services. The CRs back to R99 are also contained in **NP-020404** (N3-020597 – 602).

2.3 Bearer Independent Circuit switched Core Network

A set of CRs clarifies the specification of the Inter-MSC Handover for CS data calls via the Nb interface. These CRs against TS 29.007 and TR 23.910 back to Rel-4 are contained in document **NP-020406** (N3-020664, 665, 693 and 694).

3. Work Items Rel-5

3.1 *Circuit switched Data services*

When the CR against TS 29.007 on the rules for the call handling of circuit switched data calls was discussed at last CN#16 plenary meeting, it was found that there is a misalignment with TS 23.018 on basic call handling. We have decided to complete the rules in TS 29.007 and reference them in TS 23.018. A related CR against TS 29.007 provides the necessary changes. This CR is in document **NP-020407** (N3-020685).

An LS received from GERAN2 requests CN1 and CN3 to provide the necessary CRs to implement CS data services for GERAN Iu mode in the Rel-5 time frame. The impact on the network architecture was discussed in detail. SA2 has recommended providing a solution without any impact on the Iu interface and the Core network in order to keep the effort minimal. CN3 found that the best concept has some impact on the Core Network, but minimises the overall effort. Since this concept does not exactly match the recommendations by SA2, an endorsement of the concept by SA2 and GERAN2 is required. A related LS was sent to these groups. The corresponding CRs have been postponed to next CN3 meeting.

3.2 *GPRS*

A CR in **NP-020417** (N3-020716) against TS 29.061 specifies for Rel-5 the actions within the GGSN when interworking with IMS, that means for IMS parameters sent in the PDP context activation.

Another CR against TS 27.060 and 29.061 for Rel-5 implements the support for dynamic configuration of Domain Name System (DNS) server IPv6 addresses in an MS not supporting the DHCPv6 protocol. It introduces the possibility of dynamic configuration of Domain Name System (DNS) server IPv6 addresses via existing Session Management procedures by use of the protocol Configuration Options IE. These CRs are contained in **NP-020408** (N3-020669 and 688).

3.3 *End-to-end QoS: Go interface*

During the last CN3 meeting a lot of contributions were handled which updated, corrected and editorially improved the specifications dealing with the Go interface functionality. Beside many specific topics the following general issues were discussed.

Document **NP-020409** contains CRs (N3-020673 and 674) against TS 29.207 and 29.208 that clarify that the authorised data rate corresponds to the guaranteed bitrate for conversational and streaming PDP contexts.

It contains further a CR (N3-020689) that adds a new chapter to TS 27.060 describing IMS related functions for the UE (e.g. P-CSCF discovery, handling of binding information). The addition of the new chapter meant that the preliminary annex A in TS 29.207 could be deleted (N3-020607).

Other CRs (N3-020613 and 676) in this document align TS 27.060 and TS 29.207 with TS 23.207 regarding the description of SBLP packet filter handling. Packet processing against SBLP supplied filters shall be applied before the packet is processed against UE supplied filters. The UE supplied TFT shall be ignored when binding information is provided.

A set of CRs is provided in **NP-020410** (N3-020719, N3-020720, N3-020729, N3-020742) to support SIP sessions which are forked outside the IMS. Each forked response influences the resource reservation step. The UE is requested to set-up the bearers in a way that allows all potential sessions to be established. On the other hand only the minimum amount of resources should be used and will be authorised.

Document **NP-020411** contains some CRs against TS 29.207: -

- ?? that improve the revoke authorisation procedure which is used to enforce a bearer deactivation in case of SIP session termination or removal of a media component (N3-020622);

- ?? that provide a revised version of the 3GPP Go PIB (N3-020677) and that align it with the functionality currently described in textual part of TS 29.207;
- ?? that introduce a minimum set of Go related error codes (N3-020679) which allow an indication to the UE in case of missing or invalid binding information and failed authorisation;
- ?? that describe the initialisation and maintenance of the Go interface (N3-020686);
- ?? that improve the description for the derivation of flow identifiers (N3-020690);
- ?? that describe the use of gate decision message (N3-020696);
- ?? that describe the actions in the GGSN upon a receipt of a gate decision message from the PCF namely the opening or closing of the identified gates (N3-020702);
- ?? that specify the R-Type and M-Type for the Authorization_Failure event (N3-020708);
- ?? that provide editorial improvements (N3-020715);
- ?? that remove the incomplete RSVP function (N3-030726) and
- ?? that update the Go message descriptions (N3-020727).

Document **NP-020412** contains some CRs against TS 29.208 regarding the QoS parameter mapping: -

- ?? The mapping tables for the authorised traffic class is updated (N3-020717) because some scenarios were not possible, e.g. conversational traffic class for unidirectional audio/video.
- ?? For the authorised data rate a new mapping table is also proposed (N3-020744).
- ?? The general mapping framework is updated (N3-020743).

It also contains some minor CRs against TS 29.208;

- ?? Correction of a reference (N3-020633) and
- ?? Removal of the incomplete and unspecified functions (N3-020711)

Open and pending issues:

The open issues are listed in document **NP-020415** for TS 29.207 and in **NP-020416** for TS 29.208. CN is asked to give guidance how to proceed with the open issues, especially what issues still have to be solved for Rel-5 and what issues can be moved to Rel-6.

CN3 was not able to find consensus about the presented solution for the DiffServ edge function. Up to now DiffServ edge function is understood as the ability of the GGSN to mark IP packets depending on the UMTS QoS parameter traffic class. A dynamic control of this DiffServ edge function via the Go interface was proposed and discussed. Some companies expressed strong concerns because they consider the presented specification as immature. Therefore a CR is presented that removes all text related to the DiffServ edge function in TS 29.207 for Rel-5. This is contained in document **NP-020413**.

A possibility to populate the source address field in the downlink packet filters is introduced by a CR against TS 29.207 in **NP-020414** (N3-020731). However, the proposed solution depends on a change in TS 23.207 by SA2. A corresponding LS was sent to SA2 (N3-020738 in **NP-020402**). CN3 has agreed the CR under the condition that SA2 agrees with the related CR. A response LS from SA2 is already available and is forwarded to CN Plenary in **NP-020388**.

Also, a problem has been identified in the mapping tables. Different understandings exist as to whether the SDP bandwidth parameter includes the overhead coming from RTCP or not. This needs to be clarified within 3GPP because different mechanisms are based on the SDP bandwidth parameter, such as the bearer authorisation and the inclusion of the overhead is beneficial. An LS has been sent by CN3 to SA4 with copy to SA2 and CN1 (N3-020733 in **NP-020402**) that identifies this problem. At the moment CN3 follows SA4's working assumption that the overhead is not included.

Although some LSs were received, the details of the IMS charging id (ICID) have not yet been specified.

The split of RTP and RTCP flows regarding the transport in different PDP contexts to optimise RABs was discussed. Since TS 23.228 gives place for different interpretations, an LS was prepared to clarify the intention of SA2 (N3-020741 in **NP-020402**).

4. Work Items Rel-6

4.1 Interworking between the IM Subsystem and CS networks

There were no contributions for this work item at CN3#24.

4.2 Interworking between the IM Subsystem and IP networks

A new version of the TR on 3GPP SIP profile interworking was presented. There was no time to discuss the content in detail.

5. Output Documents

5.1 Change Request

CN Doc #	CN3 Doc #	Tdoc Title	Spec	CR #	Rev	CAT	Rel	Vers	WI
NP-020403	N3-020657	QoS in case of Streaming and Conversational	27.060	025	-	F	R99	3.6.0	TEI
NP-020403	N3-020658	QoS in case of Streaming and Conversational	27.060	026	-	A	Rel-4	4.1.0	TEI
NP-020403	N3-020659	QoS in case of Streaming and Conversational	27.060	027	-	A	Rel-5	5.1.0	TEI
NP-020404	N3-020548	Handling of M2 Bit for Handover	23.910	033	-	F	R99	3.5.0	CS Data
NP-020404	N3-020549	Handling of M2 Bit for Handover	23.910	034	-	A	Rel-4	4.4.0	CS Data
NP-020404	N3-020550	Handling of M2 Bit for Handover	23.910	035	-	A	Rel-5	5.0.0	CS Data
NP-020404	N3-020600	Removal of SDU error ratio for NT services	23.910	036	-	F	R99	3.5.0	TEI
NP-020404	N3-020601	Removal of SDU error ratio for NT services	23.910	037	-	A	Rel-4	4.4.0	TEI
NP-020404	N3-020602	Removal of SDU error ratio for NT services	23.910	038	-	A	Rel-5	5.0.0	TEI
NP-020404	N3-020597	Removal of SDU error ratio for NT services	27.001	078	-	F	R99	3.10.0	TEI
NP-020404	N3-020598	Removal of SDU error ratio for NT services	27.001	079	-	A	Rel-4	4.7.0	TEI
NP-020404	N3-020599	Removal of SDU error ratio for NT services	27.001	080	-	A	Rel-5	5.2.0	TEI
NP-020405	N3-020638	Correction of Rate Adaptation Functions and removal of S Reference Point in MS	43.010	006	1	A	Rel-5	5.0.0	CS Data
NP-020405	N3-020662	Correction of Rate Adaptation Functions and removal of S Reference Point in MS	43.010	008	-	F	Rel-4	4.0.0	CS Data
NP-020405	N3-020681	Correction of Rate Adaptation Functions and removal of S Reference Point in MS	44.021	005	-	F	Rel-4	4.0.0	CS Data
NP-020405	N3-020680	Correction of Rate Adaptation Functions and removal of S Reference Point in MS	44.021	002	3	A	Rel-5	5.0.0	CS Data
NP-020405	N3-020683	Correction of protocol stacks in annex A	44.021	006	-	F	Rel-4	4.0.0	CS Data
NP-020405	N3-020567	Correction of protocol stacks in annex A	44.021	003	-	A	Rel-5	5.0.0	CS Data
NP-020405	N3-020682	Correction of Rate Adaptation Functions	48.020	004	-	F	Rel-4	4.0.0	CS Data

CN Doc #	CN3 Doc #	Tdoc Title	Spec	CR #	Rev	CAT	Rel	Vers	WI
		and removal of S Reference Point in MS							
NP-020405	N3-020566	Correction of Rate Adaptation Functions and removal of S Reference Point in MS	48.020	002	-	A	Rel-5	5.0.0	CS Data
NP-020406	N3-020665	Handling of CSD calls and Inter-MSC Relocation	23.910	040	-	F	Rel-4	4.4.0	BICSN
NP-020406	N3-020694	Handling of CSD calls and Inter-MSC Relocation	23.910	041	-	A	Rel-5	5.0.0	BICSN
NP-020406	N3-020664	Handling of CSD calls and Inter-MSC Relocation	29.007	054	1	F	Rel-4	4.4.0	BICSN
NP-020406	N3-020693	Handling of CSD calls and Inter-MSC Relocation	29.007	055	1	A	Rel-5	5.2.0	BICSN
NP-020407	N3-020685	Determining the basic service for MT calls	29.007	053	3	F	Rel-5	5.2.0	TEI
NP-020408	N3-020669	Configuration of Domain Name System (DNS) server IPv6 addresses	27.060	023	2	F	Rel-5	5.1.0	TEI
NP-020408	N3-020688	Configuration of Domain Name System (DNS) server IPv6 addresses	29.061	061	2	F	Rel-5	5.2.0	TEI
NP-020409	N3-020613	Align TS 27.060 with TS 23.207 changes according to contribution S2-022001	27.060	021	-	F	Rel-5	5.1.0	E2EQoS
NP-020409	N3-020676	Align TS 29.207 with TS 23.207 changes according to contribution S2-022001	29.207	012	1	F	Rel-5	5.0.0	E2E QoS
NP-020409	N3-020689	IMS related functions for the UE	27.060	024	2	F	Rel-5	5.1.0	E2EQoS
NP-020409	N3-020607	Removal of Annex A	29.207	021	-	F	Rel-5	5.0.0	E2E QoS
NP-020409	N3-020673	Authorized QoS vs. Guaranteed and maximum bit rates	29.207	006	1	F	Rel-5	5.0.0	E2E QoS
NP-020409	N3-020674	Authorized QoS vs. Guaranteed and maximum bit rates	29.208	006	1	F	Rel-5	5.0.0	E2E QoS
NP-020410	N3-020719	Support for forking in the UE	27.060	020	1	F	Rel-5	5.1.0	E2EQoS
NP-020410	N3-020729	Support for forking in 29.207	29.207	016	4	F	Rel-5	5.0.0	E2E QoS
NP-020410	N3-020742	Session modification initiated decision	29.207	033	2	F	Rel-5	5.0.0	E2E QoS
NP-020410	N3-020720	Support for forking in 29.208	29.208	007	1	F	Rel-5	5.0.0	E2EQoS
NP-020411	N3-020677	Clean-up of the PIB	29.207	005	1	F	Rel-5	5.0.0	E2E QoS
NP-020411	N3-020715	Editorial improvements in the specification	29.207	007	2	F	Rel-5	5.0.0	E2E QoS
NP-020411	N3-020696	SBLP Gate Decision	29.207	010	1	F	Rel-5	5.0.0	E2EQoS
NP-020411	N3-020702	User Plane Operation	29.207	014	1	F	Rel-5	5.0.0	E2E QoS
NP-020411	N3-020727	Message Descriptions	29.207	017	2	F	Rel-5	5.0.0	E2E QoS
NP-020411	N3-020690	Derivation of flow identifiers from SDP	29.207	018	1	F	Rel-5	5.0.0	E2E QoS
NP-020411	N3-020622	Revoke Authorization Procedure	29.207	019	-	F	Rel-5	5.0.0	E2E QoS
NP-020411	N3-020679	Go related error codes to UE	29.207	020	1	F	Rel-5	5.0.0	E2E QoS
NP-020411	N3-020686	Initialisation and maintenance / Security considerations	29.207	025	1	F	Rel-5	5.0.0	E2E QoS
NP-020411	N3-020726	Remove incomplete RSVP function	29.207	030	-	F	Rel-5	5.0.0	E2E QoS
NP-020411	N3-020708	R-Type and M-Type for Authorization_Failure event	29.207	032	-	F	Rel-5	5.0.0	E2E QoS
NP-020412	N3-020717	Service Class Mapping in the PCF	29.208	001	2	F	Rel-5	5.0.0	E2EQoS
NP-020412	N3-020744	Data Rate Mapping in the PCF	29.208	002	3	F	Rel-5	5.0.0	E2EQoS
NP-020412	N3-020633	Correction of Reference [6]	29.208	003	-	D	Rel-5	5.0.0	E2E QoS
NP-020412	N3-020743	QoS Parameter Mapping between IMS and GPRS	29.208	004	2	F	Rel-5	5.0.0	E2E QoS

CN Doc #	CN3 Doc #	Tdoc Title	Spec	CR #	Rev	CAT	Rel	Vers	WI
NP-020412	N3-020711	Removal of incomplete function	29.208	008	1	F	Rel-5	5.0.0	E2E QoS
NP-020413	N3-020725	Remove incomplete DS function	29.207	011	1	F	Rel-5	5.0.0	E2E QoS
NP-020414	N3-020731	Source Address filtering over the Go interface	29.207	022	2	F	Rel-5	5.0.0	E2E QoS
NP-020417	N3-020716	Actions within the GGSN for IMS parameters sent in PDP context activation	29.061	057	8	F	Rel-5	5.2.0	TEI

5.2 Liaison Statements

The Liaison Statements are contained in **NP-020402**.

Tdoc #	Tdoc Title	LS to	LS cc	Attachment
N3-020660	Re. LS on "Requested QoS in case of Streaming and Conversational"	SA2	-	N3-020657, N3-020658, N3-020659
N3-020666	Re. LS on Multiple Codecs	SA5, CN1, SA2	-	N3-020564
N3-020733	LS on RTCP overhead in SDP bandwidth parameter	SA4	CN1, SA2	-
N3-020738	LS on Proposed solutions for the identification of source IP address information over the Go interface	SA2, CN1	-	Potential CRv2, and N3-020731
N3-020740	Re. LS on CS data services in GERAN Iu Mode	SA2, GERAN2, CN1	-	N3-020641
N3-020741	LS on RTP / RTCP split for release 5	SA2	-	-

5.3 Work Items

There are no new Work Item Description sheets.

5.4 TRs and TSs

There are no new specifications.

6. Next Meetings

Next CN3 meetings are scheduled as follows:

Meeting	Date	Location, Host
TSG-CN3#25	23 rd - 27 th September 2002	Miami Beach, USA, NA Friends of 3GPP
TSG-CN3#26	11 th - 15 th November 2002	Bangkok, Thailand, Japanese Friends of 3GPP

7. Acknowledgements

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