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1. General

1.1 Last Meetings

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

?? CN3#29: 25th – 29th August 2003, Sophia Antipolis, France, hosted by ETSI, including

?? A joint session with CN2 and CN4 on “1- or 2-step HLR interrogation for SCUDIF” on 27/08/03

The detailed CN3 meeting report is contained in **NP-030324**.

This status report [**NP-030323**] summarises the results from this meeting and presents the current status of work in CN3.

1.2 Administrative Work

CN3 has reviewed the 3GPP work plan and has provided related comments to MCC.

CN3 has also reviewed the list of specifications that under it's responsibility and ensured that rapporteurs are allocated to each of the specifications.

1.3 Move of the charging work from SA5 SWG B to CN

CN3 has considered a possible move of the charging work from SA5 SWG B to CN. CN3 agrees with the CN Chairmen's position document. CN3 felt that a separate Liaison Statement (from CN3) is not necessary.

2. Work Items Rel-4 and earlier

2.1 Bearer Independent Circuit Switched Core Network

TS 29.007 and TR 23.910 contain contradicting statements with respect to the handling of non-transparent CS data services at the Nb interface after inter-MSC relocation at the access side of the IWF. The provided CRs in **NP-030327** (N3-030637 – 640) remove the contradictions. Since a transit MSC is not capable of discriminating between transparent and non-transparent CS data calls, and since it is also not able to determine at which side of the IWF it is located, the same PDU size and transmission interval shall always be used, as already described in Clause 11.3 of TS 29.007.

2.2 Technical Enhancements and Improvements

2.2.1 Interpretation of “no BC-IE” in CALL PROCEEDING/CONFIRMED Messages

The BC-IE for CS multimedia calls carries also the parameter FNUR. The rules regarding the interpretation of a missing BC-IE in the CALL PROCEEDING or CALL CONFIRMED messages, respectively, are different for CS multimedia calls and for calls carrying the FNUR, but are not consistently described. This CR removes these inconsistencies by removing the “no BC-IE option” to confirm a requested service for CS multimedia services. The related CRs for TS 23.172, TS 27.001 and TS 29.007 are provided by CN3 in document **NP-030328** (N3-030652, 656 – 658, 649 – 651). CN1 provides related CRs for TS 24.008.

2.2.2 Alignment of Negotiation Rules between UE and MSC/IWF

The rules for the negotiation of BC-IE parameter values between UE and MSC/IWF needed an alignment between TS 27.001 and TS 29.007. The related CRs are included in document **NP-030329** (N3-030570 – 572).

3. Work Items Rel-5

3.1 Service Change and UDI fall back for CS multimedia (SCUDIF)

The joint session between CN2, CN3 and CN4 has agreed with the principle of a 1-step instead of a 2-step HLR interrogation for mobile terminated SCUDIF calls. A concerning CR for TS 23.172 (N3-030614) was agreed in CN3. Related CRs implement the interactions with supplementary services (N3-030644) and the algorithm for subscription checking (N3-030662). All these CRs are contained in **NP-030330**.

The CR in **NP-030331** (N3-030627) details the call flows for Service Change during the active state for SCUDIF calls. The present specification of the Service change does not cover enough detail for the Server to control the MGW in split architecture for a SCUDIF call, so that wrong operations may occur.

The provision of solutions for the outstanding issues completes the work on SCUDIF for Rel-5. All controversial issues seem to be resolved.

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

CN3 was able to agree with a set of CRs that proposes to clarify that the granularity of the policy control is an IP flow, rather than a media component (that may contain several IP flows). The CRs for TS 27.060, TS 29.207 and TS 29.208 are contained in **NP-030332** (N3-030619, 620 and 623).

CN3 discussed also CRs for the introduction of the RTCP bandwidth parameter according to the IETF RFC 3556: "Session Description Protocol (SDP) Bandwidth Modifiers for RTP Control Protocol (RTCP) Bandwidth". This impacts the rules for the determination of the maximal needed data rate defined in TS 29.208, but it also impacts TS 29.207. Related CRs are contained in document **NP-030334** (N3-030579 and 635).

Gate control for the "media on hold" case is missing from TS 29.207 and TS 29.208. Two CRs have been agreed to specify the closing of the gate if a media is set on hold in order to bring these specifications in alignment with the stage 2 specification TS 23.207. The CRs are contained in document **NP-030335** (N3-030580 and 581).

The Go interface specifications do not comply with the relevant IETF RFC on COPS-PR with regard to the necessity of a response to each and every Decision message (DEC) with a corresponding solicited Report message (RPT). The CRs in document **NP-030336** (N3-030621 and 537) implement the relevant Report (RPT) message as a response to the Remove_decision (DEC) message for the Go interface.

Document **NP-030337** contains further CRs for TS 29.207 that:-

- ?? correct the definitions of flow identifier (N3-030577) and
- ?? include a definition for binding information (N3-030578).

Document **NP-030338** contains further CRs for TS 29.208 that:-

- ?? clarify the procedures for placing media on hold (N3-030655),
- ?? provide examples of deriving the Maximum Authorized parameters from the SDP parameters (N3-030628),
- ?? specify the handling of the message SIP CANCEL request (N3-030583), and
- ?? describe the handling of the SIP 200 OK message with inactive media (N3-030664).

Document **NP-030339** contains a CR (N3-030573) for TS 29.061 that provides an alignment of this specification with TS 29.207 regarding the behaviour at the GGSN when binding information is present at a Create PDP Context.

Document **NP-030340** contains a CR (N3-030574) for TS 27.060 that provides an alignment of this specification with TS 29.207 and TS 29.208 regarding the authorization of QoS parameters.

3.3 Technical Enhancements and Improvements

3.3.1 Usage of RLP version

The RLP protocol used for circuit switched non-transparent data services comprises 3 versions. There are certain rules that define the conditions for the applicability of these RLP versions. These rules are important for A/Gb mode and GERAN Iu mode operations because they determine the RLP version depending on the need for a single-link or multi-link operation. These rules are an unnecessary burden for UTRAN Iu mode operations. The CR in **NP-030342** (N3-030653) implements a solution that allows any RLP entity to request the use of any RLP version in UTRAN Iu mode.

4. Work Items Rel-6

4.1 Interworking between the IM Subsystem and IP networks

Document **NP-030343** (N3-030594) contains a CR with some editorial changes for TR 29.962 in order to finalise the work on this TR.

The TR 29.962 on interworking between the 3GPP profile of SIP, which mandates the SIP extensions “preconditions”, “update” and “100rel”, and SIP clients not supporting these extensions has been used by SA2 in order to study the architectural impacts of the proposed solutions. SA2 has decided the solution based on a B2BUA as a signalling interworking function should no longer be pursued. 3GPP adopts the so-called modified end-to-end call flow as a basis for SIP interworking. The decision has to be implemented in stage 3 specifications. Contributions are expected after the implementation of related stage 2 CRs in SA2.

Some progress has been made in stage 2 also regarding the IPv4/IPv6 interworking by SA2, and the related CRs referred to CN3’s TS 29.162 for stage 3 work. Related CRs for TS 29.162 are to be expected to the next CN3 meetings.

4.2 Interworking between the IM Subsystem and CS networks

CN3 has agreed 13 contributions proposing amendments for TS 29.163. Version 2.0.0 of TS 29.163 is presented to CN#21 for approval in document **NP-030326**.

4.3 Mn Interface

CN3 has agreed 3 contributions proposing amendments for the parts on Mn signalling interactions and procedures in TS 29.163. They are incorporated in version 2.0.0 of the TS [**NP-030326**].

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

The stage 3 specification on Policy control over Gq interface has been allocated the TS number 29.209. An initial version 0.0.1 has been made available on the 3GPP Server. The discussion over the structure, in particular within Clause 5, is to be continued over the CN3 email explorer.

CN3 discussed possible protocols for this interface, among them COPS, Diameter, XML. Diameter was selected as working assumption. However, the final decision is expected at the next CN3 meeting.

4.5 MBMS, Gmb interface

CN3 is responsible for the standardisation of the Gmb interface for MBMS (Multimedia Broadcast and Multicast Service).

CN3 discussed a possible application of the protocols Radius and Diameter for this interface, since SA2 requested an AAA protocol. Diameter was selected as working assumption. However, the final decision is expected at the next CN3 meeting.

5. Output Documents

5.1 Change Request

CN tdoc #	CN3 tdoc #	Title	Spec	CR #	Rev	Cat	Rel	Work Item
NP-030327	N3-030637	Clarification of Handover description	29.007	083	2	F	Rel-4	CSSPLIT
NP-030327	N3-030638	Clarification of Handover description	29.007	084	2	A	Rel-5	CSSPLIT
NP-030327	N3-030639	Clarification of Handover description	23.910	046	1	F	Rel-4	CSSPLIT
NP-030327	N3-030640	Clarification of Handover description	23.910	047	1	A	Rel-5	CSSPLIT
NP-030328	N3-030652	Interpretation "no BC-IE option in CALL PROC/CONF messages"	23.172	018	1	F	Rel-5	TEI
NP-030328	N3-030651	Interpretation of "no BC-IE in CALL PROC/CONF messages"	29.007	080	2	A	Rel-5	TEI
NP-030328	N3-030650	Interpretation of "no BC-IE in CALL PROC/CONF messages"	29.007	088		A	Rel-4	TEI
NP-030328	N3-030649	Interpretation of "no BC-IE in CALL PROC/CONF messages"	29.007	087		F	R99	TEI
NP-030328	N3-030656	Interpretation of "no BC-IE in CALL PROC/CONF messages"	27.001	102	1	F	R99	TEI
NP-030328	N3-030657	Interpretation of "no BC-IE in CALL PROC/CONF messages"	27.001	103	1	A	Rel-4	TEI
NP-030328	N3-030658	Interpretation of "no BC-IE in CALL PROC/CONF messages"	27.001	100	3	A	Rel-5	TEI
NP-030329	N3-030570	Alignment of negotiation rules with 27.001	29.007	085		F	R99	TEI
NP-030329	N3-030571	Alignment of negotiation rules with 27.001	29.007	086		A	Rel-4	TEI
NP-030329	N3-030572	Alignment of negotiation rules with 27.001	29.007	081	1	A	Rel-5	TEI
NP-030330	N3-030662	Repeat subscription checking in MO SCUDIF call	23.172	015	4	F	Rel-5	SCUDIF
NP-030330	N3-030644	Supplementary service interaction with SCUDIF calls	23.172	014	3	F	Rel-5	SCUDIF
NP-030330	N3-030614	HLR Interrogation for SCUDIF calls	23.172	016	2	F	Rel-5	SCUDIF
NP-030331	N3-030627	Callflows for Service change during the active state	23.172	017	1	F	Rel-5	SCUDIF
NP-030332	N3-030620	Correcting concept description from media level to IP level	29.207	101	2	F	Rel-5	E2eQoS
NP-030332	N3-030619	Correcting concept description from media level to IP level	27.060	086	2	F	Rel-5	E2eQoS
NP-030332	N3-030623	Correcting concept description from media level to IP level	29.208	039	2	F	Rel-5	E2eQoS
NP-030334	N3-030579	Corrections regarding RTP/RTCP bandwidth	29.207	104	1	F	Rel-5	E2eQoS
NP-030334	N3-030635	Correcting the calculation of RTCP bandwidth	29.208	040	3	F	Rel-5	E2eQoS
NP-030335	N3-030581	Closing the gate at HOLD	29.208	043	1	F	Rel-5	E2EQoS
NP-030335	N3-030580	Closing the gate at HOLD	29.207	105	1	F	Rel-5	E2EQoS
NP-030336	N3-030621	Response to remove decision	29.207	106	2	F	Rel-5	E2EQoS
NP-030336	N3-030537	Response to remove decision	29.208	044		F	Rel-5	E2EQoS
NP-030337	N3-030578	Definition of binding information	29.207	103	1	F	Rel-5	E2eQoS
NP-030337	N3-030577	Correcting definition of flow id	29.207	102	1	F	Rel-5	E2eQoS
NP-030338	N3-030583	Handling of SIP CANCEL Request	29.208	045	1	F	Rel-5	E2EQoS
NP-030338	N3-030655	Clarification on the use of the inactive attribute at the beginning of the call	29.208	036	2	F	Rel-5	E2EQoS
NP-030338	N3-030628	Examples of deriving the Maximum Authorized parameters from the SDP parameters	29.208	041	2	F	Rel-5	E2eQoS
NP-030338	N3-030664	Handling of SIP 200 OK with inactive media	29.208	047	4	F	Rel-5	E2eQoS
NP-030339	N3-030573	Alignment of 29.061 with 29.207	29.061	093	1	F	Rel-5	E2EQoS
NP-030340	N3-030574	Correcting that SBLP is needed for applying functions	27.060	087	1	F	Rel-5	E2eQoS
NP-030342	N3-030653	Usage of RLP version	24.022	012	2	F	Rel-5	TEI
NP-030343	N3-030594	Editorial Corrections	29.962	001	1	A	Rel-6	IMS-CCR-IWIP

5.2 Liaison Statements

The following Liaison Statements are contained in NP-030325.

Tdoc #	Tdoc Title	LS to	LS cc	Attachment
N3-030659	Interworking of PSTN-initiated hold and resume supplementary service at the MGCF and IM-MGW	SA2	-	-

5.3 Work Items

CN3 does not provide any new Work Item Description sheet to CN#21.

5.4 Technical Reports and Technical Specifications

CN3 provides the following technical specification to CN#21 for approval.

Tdoc #	Number	Version	Rel	Title	Rapporteur	Company
NP-030326	29.163	2.0.0	Rel-6	Interworking between the IM CN subsystem and CS networks	Brendan McWilliams	Vodafone

6. Next Meetings

Next CN3 meetings are scheduled as follows:

Meeting	Date	Location, Host
TSG-CN3#30	27 th – 31 st Oct 2003	Bangkok, Thailand, Japanese Friends of 3GPP
TSG-CN3#31	16 th – 20 th Feb 2004	t.b.d.

7. Acknowledgements

I would like to thank the delegates for their contribution to the meetings, ETSI for hosting the meeting. David Boswarthick, MCC, deserves special thanks for the support during and between the meetings.