

**Source:** Chairman CN3 ([norbert.klehn@siemens.com](mailto:norbert.klehn@siemens.com))  
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# 1. General

## 1.1 Last Meetings

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

- CN3#27bis: CN3 Ad Hoc meeting on "Interworking between the IM CN subsystem and CS networks" (TS 29.163): 1<sup>st</sup> – 2<sup>nd</sup> April, Sophia Antipolis, France, hosted by ETSI.
- CN3#28: 19<sup>th</sup> – 23<sup>rd</sup> May 2003, San Diego, U.S.A., hosted by the North American Friends of 3GPP including
  - A joint session with CN2 and CN4 on "1- or 2-step HLR interrogation for SCUDIF" on 21/05/03
  - A joint session with interested CN1 delegates on "Signalling interworking between the 3GPP profile of the Session Initiation Protocol (SIP) and non-3GPP SIP usage" (TR 29.962) on 21/05/03 and
  - A second joint session with CN4 on "1- or 2-step HLR interrogation for SCUDIF" on 23/05/03.

The detailed CN3 meeting reports are contained in **NP-030194** (CN3#27bis) and in **NP-030193** (CN3#28).

This status report [**NP-030192**] summarises the results from these meetings 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.

The CN WGs were asked to provide information on any overlapping work with OMA. CN3 could not identify any OMA dependencies at this time.

Elections of CN3 officials took place. CN3 elected Juha Räsänen, Nokia, as new CN3 Vice Chairman.

# 2. Work Items Rel-4 and earlier

## 2.1 Technical Enhancements and Improvements

### 2.1.1 Dynamic configuration of DNS server IPv6 addresses

CN3 has seen a Liaison Statement by SA2 that encouraged CN1 to align the R-99 and Rel-4 specifications with the Rel-5 specifications regarding the IPv6 DNS server discovery. Since CN3's specifications are also impacted by this feature, related CRs are also provided by CN3 in document **NP-030199** (N3-030307, 332, 333, 377, 379).

### 2.1.2 RADIUS protocol at GGSN

Length values for attributes needed for the RADIUS protocol at the GGSN have been corrected for TS 09.61 and 29.061 back to R98. The related CRs are included in document **NP-030200** (N3-030429 – 432).

### 2.1.3 Handling of Bearer Capability information elements

A discussion on 3G UEs not supporting 2G has taken place in CN1 and CN3. These UEs signal Bearer Capability information elements that do not contain parameters or parameter values for a possible fallback to any 2G configuration during the call. TS 24.008, 24.022, 27.001 and 29.007 needed an alignment. CN1 has already agreed related CRs to TS 24.008 at its last meeting that have been

approved at CN#19. CN3 is providing a bundle of CRs to this meeting. Also the negotiation rules of some parameters of the Bearer Capability information element, especially of the Fixed Network User Rate (FNUR) has been reviewed. The CRs handling these issues are contained in document **NP-030201** (N3-030257 – 262, 288 – 290, 383 – 385, 399, 433, 434) and **NP-030260** (N3-030380 – 382).

#### 2.1.4 Removal of S reference point in MS

Another set of CRs for TS 27.001 back to R99 in document **NP-030202** (N3-030449 – 451) provides corrections related to the removal of the S reference point in an MS.

#### 2.1.5 Removal of inconsistencies

One CN3 contribution (also presented to CN1) has identified inconsistencies between 24.008, 23.173, 27.001 and 29.007 regarding the handling of Bearer Capability information elements (BC-IEs) during call set-up, especially for CS multimedia calls. The inconsistencies are not only between different specifications, they exist also between different versions of the same specifications. Therefore, a solution is urgently required. The issue is as follows: In a circuit switched call the initiating side indicates the requested service by a BC-IE. The responding side can accept this BC-IE as it is e.g. by sending back no BC-IE in the confirmation message. This option was removed, when HSCSD was introduced and additional parameters for the BC-IE were defined. Since a responding side, if it does not support HSCSD, ignores these additional parameters, in particular the octet carrying the parameter FNUR the rule of accepting a service by returning no BC-IE was removed for those cases. With the introduction of CS multimedia the “no BC option” was again allowed although those BC-IEs carry the FNUR parameter. This is an inconsistency at stage 3 level of the specifications.

The contribution proposed to remove the “no BC option” to confirm the offered service. This was not considered acceptable at least for SCUDIF. Especially, it was argued that this is a requirement in the stage 2 description (TS 23.172). It was further requested that the “no BC option” should also remain for all dual CS multimedia services. After intensive discussion CN3 came to the conclusion that the “no BC option” should remain for SCUDIF. Whether it should remain also for other services has to be investigated in more detail. It was requested to find ways to remove the inconsistencies with low impact as far as possible.

However, there was at least agreement to remove another inconsistency. This is the alignment of CS multimedia with all of the other circuit switched data services regarding of the optionality of the subscription check after receiving the Call Confirmed in the MSC for mobile terminated calls. The related CRs are contained in document **NP-030203** (N3-030396 – 398).

### 3. Work Items Rel-5

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

The CR in **NP-030204** (N3-030437) details the Service Change section for the Server to control the MGW in split architecture for a SCUDIF call in TS 23.172. The present Server-MGW behaviour for service change is not fully defined, so that misoperation may occur. These changes are related to CRs for TS 29.232 (CR#056) and TS 23.153 (CR#061) in CN4.

#### 3.2 *End-to-end QoS: Go interface*

A new QoS attribute ‘Signalling Indication’ has been specified in stage 2 specifications. The UE may set this attribute to request a prioritised handling of the PDP context. Related stage 3 CRs for 27.060 and 29.061 are contained in document **NP-030173** (N3-030386 and 308). CN1 provides related CRs for TS 24.008 (CR759) and 24.229 (CR377).

Document **NP-030174** contains CRs for TS 29.207 that: -

- Updates a reference to IETF RFC 3520: "Session Authorization Policy Element" which is now available (N3-030251);

- Provides an alignment with the latest version of the Framework PIB (N3-030253);
- Adds a missing definition of Authorization Token (N3-030387);
- Clarifies the handling of the Binding Information (N3-030388);
- Adds a definition of Client Handle (N3-030390); and that
- Adds some missing information for the Remove\_Decision message that are necessary according to the COPS-PR RFC (N3-030455).

Document **NP-030175** (N3-030436) contains a CRs that adds cases of Revoke\_authorization\_QoS procedure for session redirections initiated after bearer establishment that are not yet described in the TS 29.208.

CN3 discussed also CRs for the introduction of the RTCP bandwidth parameter according to the IETF draft-ietf-avt-rtcp-bw-05: “SDP Bandwidth Modifiers for RTCP Bandwidth” (RFC 3578 t.b.c). This impacts the rules defined in TS 29.208. An agreement has not been achieved at the meeting. Some further discussions and investigations are necessary until next CN3 meeting.

Also another CR has been postponed to next CN3 meeting. It proposes to change the granularity of the policy control from a media component (that may contain several IP flows) to the IP flows itself.

## **4. Work Items Rel-6**

### **4.1 *Interworking between the IM Subsystem and IP networks***

CN3 presents TR 29.962 (**NP-030197**) version 2.0.0 on interworking between the 3GPP profile of SIP, which mandates the SIP extensions “preconditions”, “update” and “100rel”, and SIP clients not supporting these extensions. CN3 would like to thank CN1 for the review and given support. This report has been sent to SA2 to study the architectural impact of possible solutions for the identified issues.

### **4.2 *Interworking between the IM Subsystem and CS networks***

Significant progress on TS 29.163 was made. An additional 2-day ad hoc meeting (CN2#27bis) was organised to speed up the work. CN3 has agreed 19 contributions proposing amendments for this TS. Among them are also contributions providing alignments with the related ITU-T work. Document **NP-030196** contains version 1.6.0 of TS 29.163 that is presented to CN#20 for information.

### **4.3 *Mn Interface***

CN3 has agreed 4 contributions proposing amendments for the parts on Mn signalling interactions and procedures in TS 29.163. They are incorporated in version 1.6.0 of this TS.

### **4.4 *End-to-end Quality of Service, stage 3***

CN3 presents a new WID for the Gq interface specification for Dynamic Policy control enhancements, stage 3 in document **NP-030198**.

## 5. Output Documents

### 5.1 Change Request

CN Doc #	CN3 Doc #	Tdoc Title	Spec	CR #	Rev	CAT	Rel	WI
NP-030199	N3-030307	Clean-up of references	29.061	086		F	Rel-5	TEI
NP-030199	N3-030332	Configuration of Domain Name System (DNS) server IPV6 addresses	27.060	082		F	R99	TEI
NP-030199	N3-030333	Configuration of Domain Name System (DNS) server IPV6 addresses	27.060	083		A	Rel-4	TEI
NP-030199	N3-030377	Configuration of Domain Name System (DNS) server IPV6 addresses	29.061	084	1	F	R99	TEI
NP-030199	N3-030379	Configuration of Domain Name System (DNS) server IPV6 addresses	29.061	085	1	A	Rel-4	TEI
NP-030200	N3-030429	Attribute corrections	09.61	A050	1	F	R98	TEI
NP-030200	N3-030430	Attribute corrections	29.061	089	1	A	R99	TEI
NP-030200	N3-030431	Attribute corrections	29.061	090	1	A	Rel-4	TEI
NP-030200	N3-030432	Attribute corrections	29.061	091	1	A	Rel-5	TEI
NP-030201	N3-030257	Negotiation of fixed network user rate (FNUR)	27.001	086		F	R99	TEI
NP-030201	N3-030258	Negotiation of fixed network user rate (FNUR)	27.001	087		A	Rel-4	TEI
NP-030201	N3-030259	Negotiation of fixed network user rate (FNUR)	27.001	088		A	Rel-5	TEI
NP-030201	N3-030260	Negotiation of fixed network user rate (FNUR)	29.007	068		F	R99	TEI
NP-030201	N3-030261	Negotiation of fixed network user rate (FNUR)	29.007	069		A	Rel-4	TEI
NP-030201	N3-030262	Negotiation of fixed network user rate (FNUR)	29.007	070		A	Rel-5	TEI
NP-030201	N3-030288	Determination of the RLP version by the signalled Bearer Capability IE	24.022	009		F	R99	TEI
NP-030201	N3-030289	Determination of the RLP version by the signalled Bearer Capability IE	24.022	010		A	Rel-4	TEI
NP-030201	N3-030290	Determination of the RLP version by the signalled Bearer Capability IE	24.022	011		A	Rel-5	TEI
NP-030201	N3-030383	Use of single or multislot configurations	29.007	076		F	R99	TEI
NP-030201	N3-030384	Use of single or multislot configurations	29.007	077		A	Rel-4	TEI
NP-030201	N3-030385	Use of single or multislot configurations	29.007	071	1	A	Rel-5	TEI
NP-030201	N3-030399	Use of single or multislot configurations	27.001	097		F	R99	TEI
NP-030201	N3-030433	Use of single or multislot configurations	27.001	098	1	A	Rel-4	TEI
NP-030201	N3-030434	Use of single or multislot configurations	27.001	099	1	A	Rel-5	TEI
NP-030202	N3-030449	Removal of S interface in the MS	27.001	089	1	F	R99	TEI
NP-030202	N3-030450	Removal of S interface in the MS	27.001	090	1	A	Rel-4	TEI
NP-030202	N3-030451	Removal of S interface in the MS	27.001	091	1	A	Rel-5	TEI
NP-030203	N3-030396	Subscription check after Call Confirmed	29.007	078		F	R99	TEI
NP-030203	N3-030397	Subscription check after Call Confirmed	29.007	079		A	Rel-4	TEI
NP-030203	N3-030398	Subscription check after Call Confirmed	29.007	073	1	A	Rel-5	TEI
NP-030204	N3-030437	Call flows for Service change during the active state	23.172	012	2	F	Rel-5	SCUDIF
NP-030173	N3-030386	PDP context used for IMS signalling	27.060	084	1	F	Rel-5	E2eQoS
NP-030173	N3-030308	Application level 'Signalling Indication' in the QoS IE	29.061	087		F	Rel-5	E2eQoS
NP-030174	N3-030251	Update Reference [11]	29.207	089		F	Rel-5	E2eQoS
NP-030174	N3-030253	Alignment with the latest version of Framework PIB	29.207	090		F	Rel-5	E2eQoS
NP-030174	N3-030387	Definition of Authorization token	29.207	091	1	F	Rel-5	E2eQoS
NP-030174	N3-030388	Clarification to Binding Info Handling	29.207	094	1	F	Rel-5	E2eQoS
NP-030174	N3-030390	Definition of Client Handle	29.207	099	1	F	Rel-5	E2eQoS
NP-030174	N3-030455	Remove Decision	29.207	075	3	F	Rel-5	E2eQoS
NP-030175	N3-030436	Revoke QoS authorization procedure for session redirection and final error releases initiated after bearer establishment	29.208	034	2	F	Rel-5	E2eQoS

CN Doc #	CN3 Doc #	Tdoc Title	Spec	CR #	Rev	CAT	Rel	WI
NP-030260	N3-030380	BC-IE alignment with 24.008	27.001	094	2	F	R99	TEI
NP-030260	N3-030381	BC-IE alignment with 24.008	27.001	095	1	A	Rel-4	TEI
NP-030260	N3-030382	BC-IE alignment with 24.008	27.001	097	1	A	Rel-5	TEI

## 5.2 Liaison Statements

The following Liaison Statements are contained in **NP-030195**.

Tdoc #	Tdoc Title	LS to	LS cc	Attachment
N3-030452	Response LS on Radio Access Bearer for PS conversational testing	SA4	CN	-
N3-030461	LS to SA2 on SIP signalling interworking between IM CN subsystem entities and SIP network entities external to the IN CN subsystem	SA2	CN1	N3-030460
N3-030413	LS on IMS Session Hold and Resume stage 2 and 3 descriptions	SA2, CN1, SA5	-	N3-030189
N3-030414	LS on Handling of SIP redirect messages (3xx responses)	SA2	-	-

## 5.3 Work Items

CN3 provides the following Work Item Description sheet to CN#20 for approval:

Tdoc #	Title	Rapporteur	Company	Status
NP-030198	Gq interface specification for Dynamic Policy control enhancements	Anna Sillanpää	Nokia	new
NP-030xxx	Interworking between IM CN subsystem and circuit switched networks.	Brendan McWilliams	Vodafone UK	update

## 5.4 Technical Reports and Technical Specifications

CN3 provides the following technical specification to CN#20 for information.

Tdoc #	Number	Version	Rel	Title	Rapporteur	Company
NP-030196	29.163	1.6.0	Rel-6	Interworking between the IM CN subsystem and CS networks	Brendan McWilliams	Vodafone

CN3 provides the following technical report to CN#20 for approval.

Tdoc #	Number	Version	Rel	Title	Rapporteur	Company
NP-030197	29.962	2.0.0	Rel-6	Signalling Interworking between the 3GPP Profile of SIP and non-3GPP SIP Usage	Thomas Belling	Siemens

## 6. Next Meetings

Next CN3 meetings are scheduled as follows:

Meeting	Date	Location, Host
TSG-CN3#29	25th – 29th Aug 2003	Sophia Antipolis, France, ETSI
TSG-CN3#30	27th – 31st Oct 2003	t.b.d.

CN3 agreed with the meeting dates for co-located meetings proposed by CN2 and CN4 for 2004. Regarding the options, CN3 has a preference for the November meeting instead of the October meeting.

## 7. Acknowledgements

I would like to thank the delegates for their contribution to the meetings, ETSI and the North American Friends of 3GPP for hosting the meetings. David Boswarthick, MCC, deserves special thanks for the support during and between the meetings.