3GPP TSG CT Meeting #28 **CP-050028**

1st - 3rd June 2005. Quebec, Canada.

Source: **Convenor CT3** (ragnar.huslende@ericsson.com)

Title: **CT3 Status Report to CT Plenary**

Agenda item: **6.2.1**

Document for: **INFORMATION**

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1. General

1.1 CT3 Officials

- Convenor: Ragnar Huslende (Ericsson LM)
- Secretary: Seung Don Han (MCC)

1.2 CT3 Meetings

One CT3 meeting has taken place since the last TSG-CN/CT plenary:

- CT3#36: 25th - 29th April, 2005, Cancun, Mexico. Hosted by the North American Friends of 3GPP

The detailed meeting report is contained in **CP-050029.** The present status report, **CP-050028**, summarises the results from the meeting and presents the current status of the work in CT3.

1.3 Administrative Work

CT3 has reviewed the 3GPP work plan to determine the status of work for every Rel-6 work item that is relevant to CT3.

Revised Terms of Reference has been discussed and agreed, as provided in **CP-050030.**

1.4 Overall status of Rel-6 work in CT3

In summary, all the three extensions,

- network initiated service upgrade with SCUDIF,
- Presence Pp interface, and
- tracing functionality via MBMS Gmb interface

that were previously granted for Rel-6, have been completed, and there is no known outstanding work on Rel-6 issues in CT3.

2. Work Items Rel-4 and earlier

2.1 TEI (CS Data Bearer Services)

CN#10 approved a CR to TS27.001 for R99 and Rel-4 stating that the default value for the parameter Data Compression shall be "compression not possible/allowed". However, due to incorrect implementation of the R99 CR, the default value was set to "compression possible/allowed" for R99.

Document **CP-050032** contains the following CRs to correct R99 and ensure compatibility for later releases:

- C3-050363: Correction to R99
- C3-050364: Correction to Rel-4
- C3-050365: Correction to Rel-5
- C3-050405: Correction to Rel-6

3. Work Items Rel-5

3.1 SCUDIF

The Bearer Capability in the Modify Reject-message is corrected to be speech instead of MuMe, please see the following agreed CRs in **CP-050033:**

- C3-050389: CR to TS 23.172, Rel-5
- C3-050390: CR to TS 23.172, Rel-6 mirror

4. Work Items Rel-6

4.1 Support of Presence Capability, Pp interface

CT3 is responsible for the standardisation of the Pp 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. A solution for the Pp interface, based on the Wi interface, is given in the CR to TS 29.161 in **CP-050041.**

CT3 considers this work item as complete.

4.2 MBMS Gmb interface

CT3 is responsible for the standardisation of the Gmb interface for MBMS (Multimedia Broadcast and Multicast Service). The following sets of CRs on Gmb have been agreed:

CP-050042:

- C3-050290: Unnecessary AVP (3GPP-IMSI) is removed from the Diameter RAR message at MBMS session start.
- C3-050292: Only when explicitely stated, a Gmb AVP can be considered as optional. To align with the general assumption within other WGs, the MBMS-Session-Identity AVP is specified to be optional within the Gmb interface.
- C3-050305: To align with a stage 2 CR, several parameters (IMEI-SV, RAT Type, User Location Information, MS Time Zone) for charging purposes are added to the Gmb interface
- C3-050311: The MBMS session identity is added to the Diameter RAR message at MBMS session start.
- C3-050361: To comply with an LS from SA2, the MBMS-Session-Duration AVP is made mandatory in the Gmb interface
- C3-050370: Rewording of the definition of the MBMS-2G-3G-Indicator AVP in order to be fully aligned with stage 2

CP-050043:

- It has previously been decided that the Gmb application shall have a specific Diameter application identifier. The standard way to signal this would be to use the Vendor-Specific-Application-Id AVP. However, the messages used for Gmb contains the Auth-Application-Id AVP and only one of these two AVPs are allowed in one message. To avoid defining a new Diameter message, the Auth-Application-Id AVP is used to carry the specific Gmb application identifier. Ref. outgoing LS in **CP-050031** (see C3-050424).

CT3 considers this work item as complete.

4.3 Interworking between the IM CN Subsystem and external IP networks

It is specified that the IMS-ALG behaves as a SIP B2BUA when interworking SIP messages and that the IMS-ALG shall forward all SIP messages transparently with respect to methods, result codes, headers and attachments with a few listed exceptions. The use of Record-Route header is deleted. See agreed CR to TS29.162 in **CP-050037**.

CT3 considers this work item as complete.

4.4 Interworking between the IM CN Subsystem and CS networks

Agreed CR to TS29.163, **CP-050038**, adds the use of re-INVITE to initiate Call Hold. Adds the situation where the second party of the call also places the call on hold after the first party invoked a call hold (dual call hold).

CT3 considers this work item as complete.

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

CT3 has agreed the following CRs related to the Gq interface:

CP-050039:

- C3-050291: Some missing AVP codes have been added
- C3-050312: Two references have been corrected and added
- C3-050357: Correction of the assignment of flow identifiers when forking has occurred
- C3-050367: Various corrections to TS29.208, e.g. alignment with TS29.209 in the way the authorized SBLP filters are derived
- C3-050402: Various corrections to TS29.209, e.g. adding the Gq application identifier assigned by IANA.

CP-050040:

- It has previously been decided that the Gq application shall have a specific Diameter application identifier. The standard way to signal this would be to use the Vendor-Specific-Application-Id AVP. However, the messages used for Gq contains the Auth-Application-Id AVP and only one of these two AVPs are allowed in one message. To avoid defining a new Diameter message, the Auth-Application-Id AVP is used to carry the specific Gq application identifier. Ref. outgoing LS in **CP-050031** (see C3-050424).

CT3 considers this work item as complete.

4.6 WLAN

CT3 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.

CT3 considers this work item as complete.

4.7 Technical Enhancements and Improvements

A dual mode UE supporting transparent bearer services, e.g. CS multimedia, in UMTS but not in GSM, attached in a GSM radio network, has no means to indicate to the network that it would like to set up a call in UMTS. Specific signalling to allow this is agreed in **CP-050049**. A related CR to TS24.008 has been agreed in CT1.

4.8 Other Rel-6 WIs

4.8.1 End-to-end Quality of Service

It is specified that the UE should use the authorized QoS to configure the PDP context in order to reduce signalling load and avoid interoperability problems. See **CP-050034.**

4.8.2 SCUDIF

Missing signalling flows for network-initiated service downgrade (multimedia to speech) have been added, see **CP-050035**.

Specification of network-initiated service upgrade (speech to multimedia) has been added. See **CP-050036.** This completes the CT3 work on SCUDIF for which an extension was granted at the previous plenary.

4.8.3 OAM Trace functionality

An extension was granted at the previous SA plenary in order to complete stage 2 and stage 3 specifications for trace functionality via the Gmb interface. Please find the CR to TS29.061 in **CP-050044.** Related CRs have been agreed in SA2, SA5 and CT4 in order to provide a complete function for Rel-6.

4.8.4 Flow Based Charging

CT3 is responsible for the stage 3 specifications of the Gx and Rx interfaces for Flow Based Charging. The CRs listed below have been agreed for TS29.210:

CP-050045:

- C3-050304: To align with stage 2, the TPF shall be able to signal to the CRF that a PLMN change has occurred.
- C3-050313: Reference to the Diameter Base Protocol, RFC3588, has been corrected.
- C3-050393: The use of Flows AVP is made conditional, dependendent of the presence of AF-Charging-Identifier (e.g. ICID).
- C3-050407: Various corrections, e.g. adding the application identifiers for Gx and Gx-over-Gy interfaces as assigned by IANA.
- C3-050418: Existing charging function address AVP codes are reused in TS29.210 to comply with a request from CT4.
- C3-050428: The concept of mapping of PDP contexts into Diameter Credit Contol (DCC) sub-sessions is removed in the Gx-over-Gy application in order to align with what has been agreed for Gy/Ro in SA5.

CP-050046:

It has previously been decided that the Gx application shall have a specific Diameter application identifier. The standard way to signal this would be to use the Vendor-Specific-Application-Id AVP. However, the messages used for Gx contains the Auth-Application-Id AVP and only one of these two AVPs are allowed in one message. To avoid defining a new Diameter message, the Auth-Application-Id AVP is used to carry the specific Gx application identifier. Ref. outgoing LS in **CP-050031** (see C3-050424).

The CRs listed below have been agreed for TS29.211:

CP-050047:

- C3-050317: The "Packet flow "is replaced by the term "IP flow" to ensure consistency and avoid confusion.
- C3-050318: Various corrections of the reference model figures, e.g. to align with stage 2.
- C3-050396: Removes an inconsistency in the timing of the Diameter AAA message in the Rx interface.
- C3-050398: Various corrections to Rx, e.g. adding IMSI and MSISDN as optional binding criteria.
- C3-050399: Media Component Description and Flow Grouping AVPs are removed from the Diameter RAA message.
- C3-050413: Unnecessary abbreviations are removed, missing abbreviations are added.
- C3-050414: It has been unclear how CRF should react on a new Rx session if session information is not received. Therefore, AF shall inform CRF about AF session establishment only after service information is available. Some duplicated text is removed.
- C3-050416: Correction in the binding of IP flows to PDP contexts when a PDP context is removed.
- C3-050439: Completion of the procedure for requesting Charging Rules via Gx interface.

CP-050048:

It has previously been decided that the Rx application shall have a specific Diameter application identifier. The standard way to signal this would be to use the Vendor-Specific-Application-Id AVP. However, the messages used for Rx contains the Auth-Application-Id AVP and only one of these two AVPs are allowed in one message. To avoid defining a new Diameter message, the Auth-Application-Id AVP is used to carry the specific Rx application identifier. Ref. outgoing LS in **CP-050031** (see C3-050424).

CT3 considers the work on Flow Based Charging as complete for Rel-6.

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 has announced that he is no longer able to continue his work in CT3. Companies are therefore kindly asked 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 has announced that he is no longer able to continue his work in CT3. Companies are therefore kindly asked to propose a new rapporteur.

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

5.3 Cooperation with TISPAN

CT3 is responsible for Clause 7 (Gq interface) and Clause 8 (Interworking towards CS networks) in the new TR24.819.

CT3 received input from TISPAN on three issues:

- CR on the TISPAN Reason header. CT3 has agreed to this as a CR against TR 29.819
- CR on the TISPAN NGN simulation service "Anonymous Communication Rejection". The CR was not seen as technically stable enough for TR 29.819.
- CR on the TISPAN NGN simulation service "Communication Diversion" was noted with limited discussion, pending receipt of a version agreed by TISPAN.

CT3 has sent an LS to TISPAN with a number of questions and comments on the above issues. See **CP-050031**.

At the CT3#36 meeting CT3 delegates expressed an interest in participating in the joint TISPAN/3GPP meeting in July. After discussions with the TISPAN chairman and the TISPAN WG3 chairman, it was concluded that this would be pre-mature/impractical this time. Rather, an email discussion between CT3 delegates and TISPAN WG3 delegates on some technical issues related to IMS-CS interworking was triggered.

6. Output Documents

6.1 Change Requests

CT#28 tdoc#	CT3#36 tdoc#	Title	Spec	CR	Rev	Cat	Rel	C_Ver	Work Item
CP-050032	C3-050363	Correction of NA value for Data Compression	27.001	111	1	F	R99	3.15.0	TEI
	C3-050364	Alignment to R99 correction of NA value for Data Compression	27.001	112	1	A	Rel-4	4.12.0	
	C3-050365	Alignment to R99 correction of NA value for Data Compression	27.001	113	1	A	Rel-5	5.8.0	
	C3-050405	Alignment to R99 correction of NA value for Data Compression	27.001	114	2	A	Rel-6	6.0.0	
CP-050033	C3-050389	Wrong Bearer Capability in MODIFY REJECT message	23.172	035	1	F	Rel-5	5.5.0	SCUDIF
	C3-050390	Wrong Bearer Capability in MODIFY REJECT message	23.172	036	1	A	Rel-6	6.2.0	
CP-050034	C3-050401	UE QoS Mapping	29.208	100	1	F	Rel-6	6.3.0	E2EQoS
CP-050035	C3-050409	Network initiated downgrade procedures for SCUDIF, signaling flows	23.172	038	1	F	Rel-6	6.2.0	SCUDIF
CP-050036	C3-050434	Network-initiated upgrade for SCUDIF	23.172	040	4	F	Rel-6	6.2.0	SCUDIF
CP-050037	C3-050431	ALG transparency	29.162	002	2	F	Rel-6	6.0.0	IMS-CCR-IWIP
CP-050038	C3-050379	Call Hold corrections	29.163	064	1	F	Rel-6	6.6.0	IMS-CCR-IWCS
CP-050039	C3-050291	Correction to missing AVP code values	29.209	015		F	Rel-6	6.2.0	QoS1
	C3-050312	Correction of references	29.209	016		F	Rel-6	6.2.0	
	C3-050357	Corrections to Flow identifiers for Forking	29.207	151		F	Rel-6	6.3.0	
	C3-050367	Various Corrections	29.208	098	2	F	Rel-6	6.2.0	

CT#28 tdoc#	CT3#36 tdoc#	Title	Spec	CR	Rev	Cat	Rel	C_Ver	Work Item
	C3-050402	Various Corrections	29.209	014	3	F	Rel-6	0.0.1	
CP-050040	C3-050385	Gq Auth-Application-Id AVP use	29.209	017	1	F	Rel-6	6.2.0	QoS1
CP-050041	C3-050417	Pp Interface	29.161	002	2	B	Rel-6	6.0.0	PRESNC
CP-050042	C3-050290	Unnecessary IMSI information	29.061	160		F	Rel-6	6.4.0	MBMS
	C3-050292	MBMS-Session-Identity is optional	29.061	161		F	Rel-6	6.4.0	
	C3-050305	Correction to charging information for MBMS	29.061	162		F	Rel-6	6.4.0	
	C3-050311	Correction of MBMS-Session-Identity	29.061	165		F	Rel-6	6.4.0	
	C3-050361	MBMS-Session-Duration is mandatory	29.061	167		F	Rel-6	6.4.0	
	C3-050370	Correction to MBMS-2G-3G-Indicator AVP	29.061	159	1	F	Rel-6	6.4.0	
CP-050043	C3-050384	Correction to the use of Auth-Application-Id in Gmb	29.061	166	1	F	Rel-6	6.4.0	MBMS
CP-050044	C3-050411	Tracing information for MBMS	29.061	163	4	F	Rel-6	6.4.0	OAM-Trace
CP-050045	C3-050304	Addition of the PLMN change value in the Event-Trigger AVP	29.210	016		F	Rel-6	6.1.0	CH-FBC
	C3-050313	Correction of reference	29.210	017		F	Rel-6	6.1.0	
	C3-050393	Flow AVP only needed when ICID present	29.210	013	1	F	Rel-6	6.1.0	
	C3-050407	Various Corrections	29.210	010	1	F	Rel-6	6.1.0	
	C3-050418	Code allocation for Gx interface	29.210	011	3	F	Rel-6	6.1.0	
	C3-050428	Removal of DCC sub-sessions	29.210	015	2	F	Rel-6	6.1.0	
CP-050046	C3-050383	Gx Auth-Application-Id AVP use	29.210	018	1	F	Rel-6	6.1.0	CH-FBC
CP-050047	C3-050317	Rx Packet Flows	29.211	003		F	Rel-6	6.0.0	CH-FBC
	C3-050318	Rx Reference Model	29.211	004		F	Rel-6	6.0.0	
	C3-050396	Sending AAA after CR provisioning	29.211	007	1	F	Rel-6	6.0.0	
	C3-050398	Clarifications on Binding	29.211	009	1	F	Rel-6	6.0.0	
	C3-050399	Unnecessary AVPs in RAA	29.211	010	1	F	Rel-6	6.0.0	
	C3-050413	Rx Abbreviations	29.211	002	2	F	Rel-6	6.0.0	
	C3-050414	Provision of Service Information at session establishment	29.211	008	2	F	Rel-6	6.0.0	
	C3-050416	Re-binding of IP Flows at Bearer Removal	29.211	011	3	F	Rel-6	6.0.0	
	C3-050439	Rx Request of Charging Rule flow	29.211	005	3	F	Rel-6	6.0.0	
CP-050048	C3-050386	Rx Auth-Application-Id AVP use	29.211	006	1	F	Rel-6	6.0.0	CH-FBC
CP-050049	C3-050432	Transparent data call request in dual mode case	27.001	110	3	C	Rel-6	6.0.0	TEI6

6.2 Liaison Statements

The following Liaison Statements, contained in **CP-050031,** have been approved by CT3:

Tdoc	Title	LS To	LS Cc	Attachment
C3-050424	LS on use of the Auth-Application-Id AVP	CT4	SA5, CT	

Tdoc	Title	LS To	LS Cc	Attachment
C3-050435	Charging Implications of SCUDIF	SA1	SA5 SWGB	
C3-050436	Reply LS on tracing information for MBMS services	SA5	CT4	
C3-050438	LS on IMS support of TISPAN NGN supplementary services	ETSI TISPAN	CT1, CT4, SA2	C3-050421, C3-050372, C3-050302
C3-050440	Reply LS on network-initiated SCUDIF support	RAN3		

6.3 Technical Reports and Technical Specifications

6.3.1 Specifications for approval

CT3 provides no technical specifications to CT#28 for approval.

6.3.2 Specifications for information

CT3 provides no technical specifications to CT#28 for information.

6.4 Terms of Reference for CT3

Updated Terms of Reference is provided in **CP-050030**, as discussed and agreed in CT3. The merger with the T WGs did not have any significant impact on CT3 ToR.

7. Next Meetings

The next CT3 meetings are scheduled as follows:

Meeting	Date	Location
CT3#37	29 Aug - 2 Sept 2005	London, UK
CT3#38	31 Oct - 4 Nov 2005	Berlin, Germany

8. Acknowledgements

I would like to thank the delegates for their contribution to the CT3#36 meeting and the North American Friends of 3GPP 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.