

3GPP TSG CN Plenary Meeting #13
Beijing, China, 19th-21st September 2001

NP-010432

Source: MCC, CN3
Title: LS PACK – of all LSs sent from CN3 since NP#12
Agenda item: 4.3.1
Document for: INFORMATION

The following Liaison Statements were agreed by CN3:

TDoc #	Tdoc Title	LS to	LS cc	LS Attachment	Sent
<u>N3-010311</u>	LS on User Plane protocol stacks for IMS to PSTN Interworking	SA2		none	17/07/01
<u>N3-010324</u>	LS on the RADIUS Solution for information delivery (Response to LS IN T2-010606)	T2 SWG3	SA2	none	17/07/01
<u>N3-010328</u>	LS on Requirement for QoS for CS IW.	SA2		none	17/07/01
<u>N3-010330</u>	LS on IMS to IP Networks Interworking Functions	SA2		none	17/07/01

Title: Liaison Statement on User Plane for IMS to PSTN Interworking
Source: TSG_CN WG3
To: TSG SA2
cc:
Contact Person:
Name: Nigel Holland
E-mail Address: Nigel.holland@bt.com
Tel. Number: +44 1473 605446

1. Overall Description:

CN3 has responsibility to progress the work on IMS to CS network interworking. In order to do this, CN3 has a requirement to understand the user plane protocol stack between the UE and the MGW, for the support of basic voice calls to the PSTN. It is understood that the AMR codec shall be used as the default codec for basic voice calls in the IMS, and this will be transcoded in the IM MGW to G.711 in order to interconnect to legacy PSTN networks. CN3's working assumption for the user plane protocol stack is shown in Figure 1.

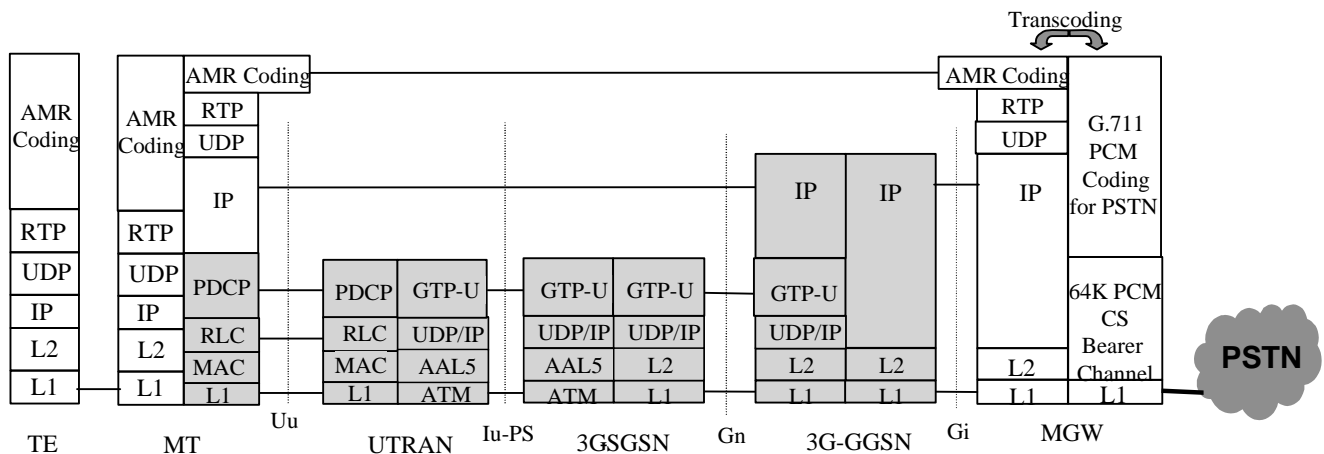


Figure 1: User Plane for IM to PSTN MO Basic Voice Call
 Fixed Rate AMR Coding (i.e. 12.2k) over Header Compression of RTP/UDP/IP used

CN3 assumes that AMR encoding is performed as defined in the IETF Draft "draft-ietf-avt-rtp-amr-10.txt". Conformation of this working assumption is important from both a signalling and transport point of view. CN1 appears to be using this working assumption in TS 24.228.

2. Actions:

To SA2 group.

ACTION: TSG CN WG3 asks SA2 to review the CN3 working assumption user plane protocol stack and to provide guidance on the transport protocol stack in MGW.

3. Date of Next CN3 Meeting:

CN3_19 15th – 19th October 2001 U.K.

Title: Liaison Statement [Re. T2-010606] on "Standard method for information delivery between GPRS and an external PDN using RADIUS"

Source: CN3

To: T2 SWG3

cc: SA2

Contact Person:
Name: Graham Heaton
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1. Overall Description:

The MMS group (3GPP TSG T2 SWG3) found out a problem described in an LS (T2M010093) resulting from the T2 MMS adhoc meeting. They found that there is no standardised solution for a GGSN to deliver a mobile user's identity to, for example, a WAP Gateway or an MMS Relay/Server. In addition, other application server(s) may also need this mapping, for example, to charge for a WAP session. A dynamic IP address is not enough and the MSISDN (or IMSI) is needed.

A solution has been developed by CN3 that provisions for RADIUS Authentication and Accounting messages between the GGSN and an AAA server. It is assumed that the delegates in the CN3 email approval discussions have informed their company colleagues represented in other groups of the CR (s) and as such they are not attached. To be informative a brief description of the solution is described:

RADIUS Authentication

RADIUS Authentication shall be used according to RFC2865. The GGSN acts like a RADIUS client which sends the authentication information to a RADIUS authentication server configured in the APN provisioning when receiving a create PDP context request. This server checks that the user can be accepted. The response (when positive) may contain also network information, such as an IP address for the user. RADIUS Authentication is only applicable to the primary PDP context. The GGSN accepts the PDP context activation request when an Access-Accept has been received. If Access-Reject or no response is received, the GGSN rejects the PDP context activation

RADIUS Accounting

RADIUS Accounting shall be used according to RFC 2866. The GGSN acts like a RADIUS client that sends information to a RADIUS accounting proxy configured in the APN provisioning. The RADIUS accounting proxy may store this information and use it to automatically identify the subscriber. This information can be trusted, as the GPRS network has already authenticated the subscriber (i.e. SIM card). RADIUS Accounting is not used for charging purposes in GPRS network. The use of Accounting Stop, Accounting ON, and Accounting OFF messages ensures that information stored in the RADIUS proxy is synchronised with the GGSN information. RADIUS Accounting START and STOP message may be used with both primary and secondary PDP context.

2. Actions:

ACTION: TSG CN WG3 has developed a solution based on Radius for information delivery between GPRS and external PDN. The solution has been incorporated into a CR and is currently going through email approval. During CN3 discussions it was expressed that the solution *should be* incorporated into Releases '97, '98, '99, and Rel 4, since the solution provides the ability for 3rd party applications to be able to authenticate the requested service.

3. Date of Next CN3 Meetings:

CN3_19 15th – 19th October 2001 U.K.

4. Attachments:

None.

Title: LS requesting Clarification on Quality of Service for the Interworking between the IMS and CS networks.

Source: CN3

To: SA2

Cc:

Contact Person: Kamel Shaheen
kamel.shaheen@interdigital.com

1. Overall Description:

CN3 has reviewed the work effort for the development of “end-to-end QoS Stage 3” specifications for Rel-5, and identified an open issue concerning the requirement of End-to-end QoS involving interworking between the IMS and CS networks.

It is not currently clear whether end-to-end QoS is required for this interworking case.

If it is required, additional work will be necessary, such as the specification of the interworking between IMS and CS (e.g., termination of RSVP within UMTS, ensuring the QoS reservation required to interwork with the basic speech call provided over CS leg).

2. Actions:

To SA2

ACTION:

SA2 are asked to clarify to CN3 if end to end QoS is required for the case of interworking between the IMS and CS networks

3. Date of Next CN3 Meetings:

CN3_19 15th – 19th October 2001 Brighton, UK

4. Attachments:

None

Title: Liaison Statement on IMS to IP Networks Interworking Functions

Source: TSG_CN WG3

To: TSG SA2

cc:

Contact Person:

Name: Nigel Holland
E-mail Address: Nigel.holland@bt.com
Tel. Number: +44 1473 605446

1. Overall Description:

CN3 has responsibility to progress the work on IMS to IP network interworking.

CN3 has recognised that interworking between IM call control protocols in the IP networks such as H.323 and SIP has to be provided. CN3 requires guidance on which network entities will provide the functions necessary to interwork the call control messages sent between IMS and external IP networks.

Also, CN3 has recognised that transcoding may be required if the two end points in an IMS to IP network session do not agree on a common codec (i.e. AMR codec is default for voice in IMS and G.711 is mandatory codec in H.323). CN3 requires guidance from SA2 on whether transcoding is required for Rel 5 IM session between IMS and IP networks, and also which network entities will be involved in providing this function.

CN3's understanding is that for IM to CS network interworking, then the MGCF and MGW might provide these functions in the Rel 5 IM Architecture also for the interworking to an external IP network.

2. Actions:

To SA2 group.

ACTION: TSG CN WG3 asks SA2 to provide guidance on the network entities providing interworking of the control plane messages (i.e. SIP to H.323) and possibly user plane for IMS to IP network sessions. TSG CN WG3 also asks SA2 for a confirmation that user plane transcoding (possible transcoding of AMR to other codecs) should be addressed.

3. Date of Next CN3 Meetings:

CN3_19 15th – 19th October 2001 U.K.