# 3GPP TSG CN WG3 Meeting #17 Puerto Rico, 14<sup>th</sup> - 18<sup>th</sup> May 2001

Tdoc N3-010229

Title: Liaison Statement on " Protocol Stack for an IP based lu-cs "

Source: TSG\_CN WG3

To: TSG\_RAN WG3

cc: TSG\_SA WG2, TSG\_CN WG4

**Contact Person:** 

Name: Tony Huynh-Quang

E-mail Address: tony.huynh-quang@alcatel.fr

**Tel. Number:** + 33 1 3077 8510

## 1. Overall Description:

TSG CN WG3 thank TSG RAN WG3 for their LS R3-011301 "Protocol Stack for an IP based lu-cs".

The arguments for choosing RTP as a transport protocol for the CS domain framing protocol are:

## Control plane:

- Convergence with already defined BICC standard, in particular with Bearer Control Protocol IPBCP, which is required for the establishment of RTP bearers.
- RTCP offers the possibility to communicate measured QoS parameters between peers, which allows for the
  possibility of centralised data collection and of corrective measures within the originating network element of
  an RTP stream.
- RTP (or UDP) are the only transport protocols, which can be described with SDP.

#### User plane:

- RTP/UDP/IP protocol stack is stable and efficient commercial implementations are available.
- The RTP/UDP/IP standard protocol stack has proven its capability for efficient switching.
- This protocol stack may reside in an MGW which is used by the IM CN SS or in an MGW used in fixed network.
- The RTP sequence number allows for the discovery and the possible correction of out of sequence delivery on a hop-by-hop basis
- The RTP time stamp allows for the measurement and possible correction of jitter on a hop-by-hop basis.
- The hop-by-hop QoS measurements allows for efficient network administration and planning

Additionally to the above arguments, see attached Tdoc N3-000574 which discusses several proposals for the use of a protocol stack on the Nb interface.

#### 2. Actions:

To TSG\_RAN WG3 group.

ACTION: TSG CN WG3 ask TSG\_RAN WG3 group to consider the above argumentation and would kindly

suggest that for Iu CS the same protocol stack is used as for the Nb protocol (including usage of RTP below the CS domain framing protocol). Definition of Nb protocol stack is given in TS 29.414

# 3. Date of Next CN3 Meeting:

CN3#18 9th – 13th July 2001 Dresden, Germany.

# 4. Attachments:

