TSG-RAN Working Group 3 meeting #4

Warwick, 1 – 4 June 1999

To:	**TSG SA WG2**
Cc:	**RAN WG2, TSG RAN**
Source:	**RAN WG3**
Title:	**LS on Comments on QoS report**

INTRODUCTION

RAN WG3 thanks for the opportunity to comment on the QoS concept and the proposed RAB parameters. This is considered as a very crucial part of the system for the further specification of UTRAN functions and interfaces. Therefore RAN WG3 is happy to note the progress on this issue, and agrees on an overall level on the proposed QoS concepts. RAN WG3 has however a number of questions and comments on the detailed level. RAN WG3 may come back with additional comments after further studies.

DETAILED COMMENTS

Chapter 6.1.2:

- The paragraph on Radio Access Bearer seems to indicate that the NAS signalling over Uu is carried on a RAB. On the contrary, RAN3 has the understanding that the RAB is only used to denote the service in the userplane. NAS signalling is carried in the controlplane through the Access Stratum and is thus not carried on a RAB.

- It would be beneficial to state what the RAB represents. Proposal (first sentence taken from R3-99221, Vocabulary for the UTRAN):
  "The Radio Access Bearer is the service that the Access Stratum provides to the Non-Access Stratum for transfer of user data between User Equipment and CN. The Radio Access Bearer is used to hide the radio specific details from the CN. It thus represents an abstraction of the radio channels and other radiospecific functions in the UTRAN and the UE."

Chapter 6.1.3:

- In the understanding of RAN WG3, the Radio Bearer and Iu Bearer are only representing the two halves of a Radio Access Bearer. Therefore it should not be needed to specify QoS parameters on another level. Mapping to transport layer attributes over the Iu interface, and to radio channel parameters, is done by the SRNC based on the RAB attributes.

Chapter 6.2:

- Is this chapter needed? The function split is already specified in other documents.

Chapter 6.4.3.1:

- It could be clarified that the traffic class also defines the applicability and meaning of the other attributes.

- RAN WG3 considers that there are two major types of Conversational RABs, which are handled quite differently in UTRAN. One is a RAB with "Predefined SDU   ,where the CN can provide the SDU size information at RAB Assignment. The other is a RAB with "Variable SDU formats", where the UTRAN cannot operate with transparent RLC. RAN WG3 would appreciate if this distinction could be

made clear at the RAB-type level.

- It is stated that the Traffic Class could be used to allocate buffer capacity for downlink traffic. However, RAN WG3 understands that the source traffic characteristics is not necessarily known just because a certain RAB type is used. How can UTRAN allocate downlink buffer capacity for the Interactive and Background traffic classes? Is there a need for an additional parameter to indicate the needed capacity?

- SDU size information: For RABs with this specified, also the periodicity of the SDU delivery (e.g. every 20 ms) need to be specified. RAN WG3 is currently working on how this is represented in the RANAP signalling.

- RAN WG3 sees benefit in UTRAN receiving information on the source characteristics for enhanced statistical multiplexing, which would be useful in particular in the case of a speech service. What is the status on this issue in SA WG2?

6.4.3.3

- Split the conversational class into the "Predefined SDU Formats" and the "Variable SDU
  size information is only relevant for the former class. Reliability and Guaranteed Bitrate information may be specified differently.

- Interactive and Background classes are very similar. From the UTRAN point of view, we understand that the Background traffic could be considered as Interactive traffic with the lowest traffic handling priority level. Is this correct?