

TSG-RAN Working Group 3, meeting #4TSG R3#4(99)xxx
Warwick, UK, June 1st-4th, 1999.

Source: 3GPP TSG RAN WG3

To: 3GPP TSG RAN WG2, 3GPP TSG RAN WG1

Title: Separate delivery of Transport Blocks within a Transport Block Set by MAC-d to L1

UMTS is required to support high rate synchronous services like a 384 kbps UDI service. Two characteristics of such a service are that it will normally require a long transmission time interval (TTI), due to high reliability requirements, and that the data arrives on the Iu interface more or less as a bitstream.

Assuming that there is more than one Transport Block (TB) per TTI for such services, R3 has identified a possible need for delivery by MAC-d to L1 of each TB separately.

This in order to:

- even out the load on Iub which will result in a more efficient transport;
- limit the delay for these services;
Assuming that the TBS is delivered as a whole from MAC-d to L1, the node-B will receive the TBS after the whole TBS is transported in the UTRAN. However in case TB's are delivered separately, the delay due to UTRAN internal transport will only be the transport delay for the last TB.

Therefore R3 kindly requests R2 and R1 to consider the following questions:

1. What are the maximum and minimum size of the TB for such services ? As a result, is it likely to have more than 1 TB per TTI for such services ?
2. If this kind of services use a TBS consisting of more than 1 TB, is it possible to deliver to layer 1 a TB before the TBS is completed?