TSG-RAN Working Group 3 meeting #2
Nynäshamn, Sweden, 15th - 19th March 1999

TSGW3#2(99)158

Agenda Item: 8 & 9

Source: Nortel Networks

Title: Suspend/Resume mechanism for RAB during SRNS relocation

Document for:

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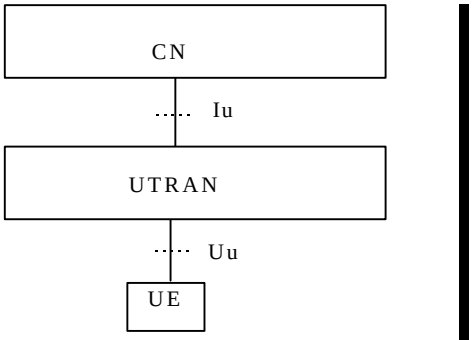
1 Introduction

UMTS allow the management of different QoS for different Radio Access Bearer. Amongst the different QoSs, for Lossless RABs, some mechanism has to exist to ensure lossless services even in the event of a SRNS relocation.
For RAB with loosely real-time constraints, a Suspend/Resume mechanism is the most straight forward to cope with disruption due to the relocation of the serving RNC.

2 Proposals

It is proposed to update the section "7.2.16.2 SRNC Relocation (UE connected to two CN nodes)" of [2] according to the following :



UTRAN UMTS Terrestrial Radio Access Network
CN Core Network
UE User Equipemet

8/9 Before sending the "Relocation proceeding 2" message to the Source RNC, the Core Network suspends the DL transmission for Radio Access Bearers which must ensure a lossless but not stringent Real-time contraint.
As a parameter of the Relocation proceeding 2 message, the Core Networks gives to the Source RNC the list of RAB for which the UL transmission shall be suspended.

10 The Source RNC requests the UE to suspend the UL transmission.
11 When all the UL and DL transmission has been suspended for the RAB that were required to, the Source RNC sends a SRNC Relocation commit to the Target RNC.
12 The Target RNC resumes the UL transmission for all the suspended RABs.

13 When the CN receives the Relocation Complete message, it resumes the DL transmission for all the suspended RABs.

It is also proposed to make the corresponding changes in [1] section " 8.1 Serving RNS relocation".

3 References

[1] S3.13 RANAP Specification, Source : Nokia (Editor)
[2] I3.01 RAN Functions, Examples on Signalling Procedures, Source CSELT (Editor)