TSG-RAN Working Group 3 meeting #16
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SOURCE: TSG RAN WG3

TO: TSG RAN WG1

COPY: TSG RAN WG4, TSG RAN WG2

TITLE: RL TIMING ADJUSTMENT BY UTRAN

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RAN WG3 would like to thank RAN WG1 for their laision titled: "LS on issues related to UE timing".

Issue 4 listed in this liaison contained the following text:

4. PC combining

Although RAN-WG1 understands that the network is expected to ensure that every cell in the active set is received within the 876…1172 chip Rx-Tx range, it is possible that the network will momentarily not be able to meet the timing requirement due to unexpected conditions (load, measurement report errors, …). In such situations where the timing requirement is not met, RAN-WG1 assumptions on the UE power control behaviour are as follows:……….

This text seems to imply that WG1 assumes that the UTRAN supports some kind of Radio Link timing adjustment procedure to adjust the timing of a specific RL.

However up to now, RAN3 has not identified the need to support such a procedure. Instead it was considered sufficient for R99 to handle this situation by deleting the RL drifting outside the UE window (based on a measurement report from the UE) and afterwards, if needed, establishing a new RL with an improved timing. This solution will be accompanied by two active set update procedures signalled over RRC since the UTRAN supports maximum one RL to the same UE in one cell.

RAN3 recognises that the current solution is not very efficient and that a RL timing adjustment procedure could improve the performance of the timing adjustment.

RAN WG3 would kindly like to ask RAN WG1 on its opinion regarding this issue:

1) What is the expected rate of a Radio Link timing adjustment procedure ?

2) Does WG1 consider the current WG3 solution, whereby a RL is deleted and established again, sufficient for R99 or should the UTRAN support a RL timing adjustment procedure ?