

**TSG-RAN Working Group 1 meeting No. 16
October 10– 13, Pusan, Korea**

TSGR1-00-1285

Source : TSG RAN WG1
Title: LS of Concern on RRC Blocking in Gated DPCCH
Transmission
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In the last TSG RAN#9 plenary meeting in Hawaii, the technical report on “Terminal Power Saving Features” was presented, however some concerns were expressed regarding the RRC blocking in gated DPCCH transmission scheme. TSG RAN WG1 would like to clarify those concerns.

For the convenience of TSG RAN WG2, the concerns addressed are summarised first.

- 1) Possibility of RRC blocking due to reduced power control rate
- 2) UE Power limitation in cell boundary

Regarding point 1), the effect of reduced power control rate is compensated by increasing the transmit power. However, the data rate of the RRC signaling is low (usually few kbps i.e. much lower than AMR 12.2 kbps mode) and therefore the additional required power is no more than 1~2dB. If the transmit power of the RRC signaling can be increased during gated DPCCH transmission, then the received performance is equivalent to the case without gated DPCCH transmission. Consequently, RRC blocking due to reduced power control rate is not an issue of concern provided that the additional power can be assigned properly to the transmission.

Regarding point 2), it is relevant to the comment 1) because the issue is that, in cell boundary additional power might not be allocated to the transmission due to the maximum power limitation. According to answer to comment 1) even in cell boundary UE has sufficient capability to boost up the power to compensate the impact of gating if network is planned to fully provide AMR of 12.2 kbps service. If that kind of situation occurs, there is a signaling message to report the current transmission power of UE, and UTRAN can order UE to terminate gating prior to the reach of the maximum transmit power limit.

Consequently, in TSG RAN WG1's view, although the two comments are important and necessary to be considered, they have negligible impacts on proper operation of RRC. TSG RAN WG1 kindly requests TSG RAN WG2 to proceed with the discussion on gated DPCCH transmission as a solution of terminal power saving features as well as a solution for interference reduction. TSG RAN WG1 will provide revised technical report as soon as it is prepared.