

Agenda Item: 20
Source: RAN2
To: TSG RAN WG4, TSG RAN WG1
Cc:
Title: Proposed liaison statement on impact of gated DPCCH, at cell boundaries.

TSG RAN WG2 understands that Gated DPCCH transmission was adopted as a working assumption at TSG RAN WG1 meeting #7. A proposal for the associated signalling requirements has been presented in TSG RAN WG2, but it has not been possible yet to agree on the support of Gated transmission because of the requirement for RRC signalling during gated DPCCH operation for which some issues were raised.

The proponent of Gated DPCCH transmission has stated that no transition is required from gated to non-gated mode for the sending of RRC signalling, as sufficient resources could be reserved for such signalling during the initial transition to gated mode. The DPDCH carrying RRC signalling would be transmitted at an increased power during gated DPCCH mode, in order to overcome degradation due to the lower frequency of associated pilot symbols and received TPC commands.

Concern was raised in TSG RAN WG2 that during gated DPCCH operation at cell boundaries, the UE would not be able to increase the transmit power of the DPDCH, as it would have to exceed its permitted maximum output power in order for the signalling to be correctly received at Node B. If that was the case, it would be necessary for the UE to revert to non-gated mode which would require upper layer signalling, leading to the RRC becoming blocked at a time when such blocking would be unacceptable (e.g. during handover).

TSG RAN WG2 therefore, seeks guidance on whether the possibility to send RRC signalling can be maintained during gated transmission, and on the potential impact of using the proposed increase of the DPDCH power for the transport of RRC signalling messages, in particular during gated DPCCH operation at cell boundaries.