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Source : Samsung Electronics Co., Ltd.
Title: Draft LS on Terminal Power Saving Features
To: TSG RAN WG2
CC: TSG RAN WG3, TSG RAN WG4
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TSG RAN WG1 would like to inform TSG RAN WG2, WG3, and WG4 that following the last RAN WG1 #15 meeting, a Technical Report was created for the Terminal Power Saving Features work item. Gated DPCCCH transmission was approved as part of the aforementioned work item and is included in the technical report. TSG RAN WG2, WG3, and WG4 are kindly requested to review the attached technical report (Tdoc R1-00-1166) and start related works as soon as possible.

The Technical Report will address a number of issues among which TSG RAN WG1 is kindly requesting TSG RAN WG2's advice on:

1. Indication of termination of gating
Higher layer signaling or TFCI could be used as an indicator for termination of gated DPCCCH transmission. The disadvantage of higher layer signaling for that purpose is the additional delay required. If TFCI is used for that purpose, fast termination of gating is feasible but a specific TFCI should be reserved. The problem is TFCI's is that it is already short of resources. One possible solution is to change the TFCI mapping conditionally to gating being applied. That is, TFCI is defined differently during gating for informing that the gating should be terminated. Is such a proposal acceptable by the RAN WG2 members?
2. (Conditional to 1.) Length of TFCI
If it is possible to change the mapping of TFCI conditionally, then what should be the length of TFCI to indicate termination of gating? Should it be the length of TTI (10ms, 20ms, 40ms, or 80ms) or 10ms frame?
3. Changing requirement of handover measurement during gating
In Gated DPCCCH transmission UE battery saving is accomplished by turning off the transmitter intermittently. In addition to that, there is a proposal (See attached Tdoc R1-00-1079) to get additional UE battery saving by turning off the receiver. The analysis accompanying the proposal clearly shows the benefits of receiver gating as well as transmitter gating. In receiver gating the UE is turning its receiver on every K-th frame. However, the problem of turning off the receiver is that the UE cannot fulfil the handover measurement requirement. The proposed solution is to loose the handover measurement requirement and permit the UE to measure only cells that already included in the Candidate Set. Is such a proposal found reasonable and acceptable?