**3GPP TSG-RAN WG2 Meeting #113bis electronic R2-210xxxx**

**Online, April 12 – April 20, 2021**

**Title: [Draft]** Reply LS on UE Sub-grouping for Paging Enhancement

**Response to:** R2-2102621 (R1-2102136)

**Release:** Rel-17

**Work Item:** NR\_UE\_pow\_sav\_enh-Core

**Source:** RAN2, MediaTek Inc.

**To:** RAN1

**Cc:**

**Contact Person:**

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**Send any reply LS to: 3GPP Liaisons Coordinator,** [**mailto:3GPPLiaison@etsi.org**](mailto:3GPPLiaison@etsi.org)

**Attachments:** None

**1. Overall Description:**

RAN2 would like to thank RAN1 for their LS on UE sub-grouping for paging enhancements. RAN2 discussed this topic and agreed to the following:

* We adopt network controlled subgrouping (based on individual UE characteristics, not specified or limited to paging probability as EUTRA, possibly with additional randomization).
* If the network chooses to not provide specific subgrouping information, there will be configuration option where subgrouping can be supported by randomization (by UE-ID).

RAN2 also briefly discussed the number of UE subgroups per PO, and, considering it depends on which and how many UE characteristics above network controlled subgrouping will support, RAN2 could only provide as preliminary indication that the maximum number of UE subgroups per PO could be at least 8. However, RAN2 understands that it should also depend on observed power saving gain and the signalling method for indicating the subgroups (PEI and/or paging DCI) and so, potentially on the PEI design itself, therefore RAN2 leaves it to RAN1 to decide the final value.

**2. Actions:**

**To RAN1:**

RAN2 respectfully asks RAN1 to take the above information into account for RAN1’s future work.

**3. Date of Next RAN2 Meetings:**

TSG RAN WG2 Meeting #114-e 12 May - 27 May, 2021 e-Meeting

TSG RAN WG2 Meeting #115-e 16 August - 27 August, 2021 e-Meeting