**3GPP TSG-RAN WG2 Meeting #116 electronic R2-2111525**

**Online, 1 - 12 November 2021, 2021**

**Title:** LS on UE Power Saving

**Response to:**

**Release:** Rel-17

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

**Source:** RAN2

**To:** SA2, CT1, RAN3, RAN1

**Cc:**

**Contact Person:**

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

**Attachments:** None

**1. Overall Description:**

RAN2 discussed UE paging subgrouping as part of the Rel-17 work on UE power saving enhancement (see RP-200938). Two subgrouping approaches have been agreed, namely CN-assigned subgrouping and UEID-based subgrouping. The following provides the detailed agreements below for the 2 approaches:

* Assume that one subgroup indication refer to either CN assigned subgroups or UE-ID based subgroup (no overlapping)
* Both UE ID based and CN based subgrouping can be supported simultaneously in a cell, it is allowed to just support one of them.
* The total number of CN-assigned subgroups that is used is not fixed can be configured up to 8 (e.g. OAM). No specification impact.
* RAN introduces a new parameter Nsg-UEID to indicate its support for CN assigned subgrouping and/or UE-ID based subgrouping. FFS for the signalling details.
* RAN does not support any type of subgrouping if its configuration for subgrouping is either absent or nullified (e.g. *subgroupsNumPerPO* is either absent or set to zero). FFS for the signalling details.

RAN2 also discussed the UE capability, and agreed to the following:

To be added.

RAN2 also discussed the UE PEI assistance information, and agreed to the following:

To be added based on [035, CMCC].

RAN2 also discussed whether to restrict PEI to the last used cell, and agreed to the following:

To be added based on [046, Ericsson].

**2. Actions:**

**To SA2, and CT1:**

RAN2 respectfully asks SA2, and CT1 to take the above information into account for their future work, and provide further information on the following issue once concluded:

* Add if there is any.

**To RAN3:**

RAN2 respectfully asks RAN3 to take the above information into account for their future work, and provide further information on the following issue once concluded:

* Signalling between AMF and gNB(s) to inform gNB(s) about the related subgroup information for paging a UE in RRC\_IDLE/RRC\_INACTIVE.

**To RAN1:**

RAN2 respectfully asks RAN1 to take the above information into account for their future work, and provide further information on the following issues once concluded:

* List of the parameters for PEI subgrouping configuration.

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

TSG RAN WG2 Meeting #116bis 17 January – 25 January, 2022 online meeting

TSG RAN WG2 Meeting #117 21 February – 3 March, 2022 online meeting