**3GPP TSG-RAN WG2 Meeting #129 *R2-25xxxxx***

**Athens, Greece, February 17th –21th , 2025**

**Title: [draft]** LS on paging enhancement in R19 NES

**Response to:** -

**Release:** Release 19

**Work Item:** Netw\_Energy\_NR\_enh-Core

**Source:** Xiaomi (to be TSG RAN WG2)

**To:** TSG RAN WG3, TSG CT WG1

**Cc:** TSG RAN WG1

**Contact person:** Shukun Wang

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

**Attachments:** None

# 1 Overall description

RAN2 discussed R19 NES paging enhancement and agreed “*b) extend the values of N to have increased interval between PFs (e.g. T/64, T/128 ...) and compensating decrease in number of PFs by increasing POs per PF*.” In addition, RAN2 agreed that Rel-19 UEs only monitor the PO(s) according to Rel-19 paging configuration and a new UE capability is added for R19 NES paging enhancement. When gNB deliver the paging, the gNB should know the UE capability for paging enhancement in order to deliver the paging DCI for UE in corresponding PF/PO.

**Agreements on paging enhancement**

1. Select option-b as baseline for R19 NES paging enhancement.
2. R2 should aim at signaling overhead minimization (e.g., Ns=8 and FFS for other larger values)
3. Allowing legacy and R19 UEs to co-ex in the same PF/PO is possible, based on NW configuration.
4. Legacy UE is not barred.
5. Rel-19 UEs only monitor the PO(s) according to Rel-19 paging configuration.
6. For N, values smaller than T/32 are not supported.
7. The maximum possible value for Ns is 8.
8. Introduce a separate PEI configuration.
9. Paging adaptations are configured semi-statically and updated via system information update notification.
10. A new UE capability is added for R19 NES paging enhancement, and the new capability is included in UE-RadioPagingInfo. FFS on whether we have a common capability for all NES features.

# 2 Actions

**To TSG RAN3, CT1**

**ACTION:** RAN2 respectfully requests RAN3/CT1 to take into account of RAN2 agreements in their future work.

# 3 Dates of next TSG RAN WG2 meetings

TSG-RAN WG2 Meeting #129bis April 2025 China

TSG-RAN WG2 Meeting #130 May 2025 Malta