**3GPP TSG-RAN WG2 Meeting #113bis-e *R2-21xxxxx***

**Online, April 12 – 20, 2021**

**Title: [DRAFT]** LS to RAN3 to clarify paging DRX cycle

**Response to:** -

**Release:** Rel-16

**Work Item:** LTE\_eMTC5-Core

**Source:** ZTE[To be TSG RAN WG2]

**To:** RAN3

**Cc:** -

**Contact Person:**

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

**Attachments:** -

**1. Overall Description:**

In Rel-16, RRC\_INACTIVE is supported for eMTC UE, and the determination of DRX cycle(T) is updated. For example, an related description in TS 36.304 is as following: “*….in RRC\_INACTIVE state when extended DRX is configured by upper layers, T is determined by the shortest of the RAN paging cycle, the UE specific paging cycle, if allocated by upper layers and the default paging cycle during the PTW as defined in 7.3, and by the RAN paging cycle outside the PTW…..*”. Specifically, if eDRX cycle is configured, the calculation of the DRX cycle (T) during the PTW might be different from the calculation of DRX cycle (T) outside the PTW.

Moreover, in TS 36.304, DRX cycle (T) is involved in the calculation of PF, i\_s, PNB and wg (index of the WUS group) for WUS. In order to correctly determine DRX cycle (T) and calculate PNB, i\_s and wg, other ng-eNB(s) (except the anchor ng-eNB)need the Paging eDRX information, possible UE specific DRX cycle and RAN paging cycle information separately. If not, other ng-eNB(s) cannot calculate the correct value for PNB, PF, i\_s and wg and paging would be failed.

According to the current XnAP specification, only one DRX parameter (e.g. *Paging DRX*) is included in *RAN PAGING* message. RAN2 understands this *Paging DRX* parameter may be not enough to correctly determine the DRX cycle (T) during the PTW and outside the PTW, and also the DRX cycle (T) for the paging radio resources calculation.

**2. Actions:**

**To 3GPP RAN3**

**ACTION:** RAN2 respectfully asks RAN3 to take the above information into account and to see whether change to specification is needed.

**3. Date of Next TSG-RAN WG2 Meetings:**

3GPP RAN2#114-e May 2021, Online

3GPP RAN2#115 August 2021, Toulouse, FR