3GPP TSG-RAN WG2 Meeting #128 R2-24xxxxx

Orlando, USA, Nov 18th – 22nd, 2024

**Title: [draft]LS on emergency services and eDRX**

**Response to:**

**Release: Rel-17**

**Work Item: [NR\_newRAT-Core], NR\_redcap-Core**

**Source: ZTE Corporation [To be RAN2]**

**To: SA2, CT1**

**Cc: RAN3**

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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

In RAN2#128, companies discussed the UE behaviour when UE is configured with eDRX and has PDU session associated with emergency services. RAN2 notice the below description in TS 23.501 states that Idle eDRX should not be used by the UE when the it has PDU session associated with emergency services. However, it is unclear whether RAN configured eDRX should be used in this case.

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| 5.31.7.2 Extended Discontinuous Reception (DRX) for CM-IDLE and CM-CONNECTED with RRC-INACTIVE  5.31.7.2.1 Overview  *// skipped irrelevant part*  When the UE has PDU Session associated with emergency services, the UE and AMF follow regular discontinuous reception as defined in clause 5.4.5 and shall not use the extended idle mode DRX. Extended idle mode DRX parameters may be negotiated while the UE has PDU Session associated with emergency services. When the PDU Session associated with emergency services is released, the UE and AMF shall reuse the negotiated extended idle mode DRX parameters in the last Registration Update procedure.  *// skipped irrelevant part* |

Based on current specification, RAN eDRX is configured by RAN node when releasing the UE to RRC\_INACTIVE state, RAN node will only configure RAN eDRX if the UE is configured with Idle eDRX by CN. For UE in RRC\_INACTIVE state with emergency PDU session, if the UE should also ignore RAN configured eDRX in addition to CN configured Idle eDRX, then RAN node is expected to follow the same behavior (e.g. sending Paging message using regular DRX configuration). Otherwise, UE’s power consumption will increase unnecessarily and RAN paging is going to be delayed due to the mismatch of used paging cycle at RAN node and UE side.

However, based on current signalling design, RAN node is unaware whether a UE is configured with PDU session for emergency services, thus, it is difficult for RAN node to not configure RAN eDRX when releasing the UE, or to not use RAN eDRX when sending Paging message.

RAN2 would like to ask whether standard solution is needed to address above issue, and whether RAN2 needs to capture in spec that RRC\_INACTIVE UE should ignore RAN eDRX when the UE has emergency PDU session associated with emergency services.

# 2 Actions

**To SA2, CT1 group**

**ACTION:** RAN2 kindly asks SA2 and CT1 whether RAN2 needs to capture in spec that RRC\_INACTIVE UE should ignore RAN eDRX when the UE has emergency PDU session associated with emergency services, and whether any standard solution is needed, e.g. to inform RAN node about the setup of PDU session associated with emergency services?

# 3 Dates of next TSG-RAN WG2 meetings

TSG-RAN2 Meeting #129 17 - 21 February 2025 Athens, GR

TSG-RAN2 Meeting #129bis 07 - 11 April 2025 China, CN