3GPP TSG-RAN WG3 #116-e R3-22xxxx

Online, May 9-19, 2022

Title: [Draft] Reply LS on Positioning in RRC\_INACTIVE State

Response to: LS (R3-223032) on LS on Positioning in RRC\_INACTIVE State from SA2

Release: Release 17

Work Item: NR\_pos\_enh/5G\_eLCS\_Ph2

Source: CATT (to be RAN3)

To: SA2

Cc: RAN2

**Contact Person:**

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

Attachments: n/a

**1. Overall Description:**

RAN3 thanks SA2 for the LS on Positioning in RRC\_INACTIVE State.

RAN3 found that the highlighted text in the Reply LS below is not aligned with RAN3’s understanding.

SA2 thanks RAN2 for the LS on Positioning in RRC\_INACTIVE State.

SA2 has discussed the agreed solution indicated in the LS annex part, i.e. “Low Power Periodic and Triggered 5GC-MT-LR Procedures with SDT” for DL-only and RAT-Independent positioning, for UL-only positioning, and for UL+DL positioning, and agrees to capture all the three solutions in TS 23.273.

Attached is the agreed CR documenting the procedures in TS 23.273.

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In Rel-17 SDT WI, two main use cases are supported, SDT with anchor relocation and SDT without anchor relocation.

* For SDT with anchor relocation, the UL/DL NAS PDU and/or NRPPa message can be directly exchanged between the receiving gNB (i.e. the new serving gNB) and AMF after N2 Path Switch procedure. In this case, DL-only and RAT-Independent positioning, UL-only positioning, and UL+DL positioning are all supported
* For SDT without anchor relocation, the UL/DL NAS PDU can be forwarded between receiving gNB and the anchor gNB. However, the NRPPa message can not be fowarded between the receiving gNB and the anchor gNB, which means UL-only positioning and UL+DL positioning are not supported in case of SDT without anchor relocation in R17.

Above all, in Positioning Rel-17, UL-only positioning and UL+DL positioning for RRC\_INACTIVE UE are not supported in case of SDT without anchor relocation..

However, RAN3 agreed to discuss INACTIVE positioning in case of "without anchor relocation" in the R18.

We kindly request SA2 to take above into account.

**2. Actions:**

**To SA2 group.**

**ACTION:** RAN3 asks SA2 group to take the above information into account.

**3. Date of Next RAN WG3 Meetings:**

RAN3 Meeting #117-e August 15 – 25, 2022 Electronic Meeting

RAN3 Meeting #117bis-e October 10 – 18, 2022 Electronic Meeting