**3GPP TSG-RAN WG3 #114bis-e** **R3-22xxxx**

**Online, 17-26 January, 2022**

**Title:** [DRAFT] LS on handling of DL non-SDT during SDT procedure

**Reply to:**

**Release:** Release 17

**Work Item:** NR\_SmallData\_INACTIVE

**Source:** CATT(to be RAN3)

**To:** RAN2

**Cc:**

**Contact Person:**

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**Attachments:** n/a

**1. Overall Description:**

RAN3 discussed how to handle the DL non-SDT during SDT procedure. Based on the discussion, it’s agreed that the anchor gNB could move the UE back to RRC Inactive by using RRCRelease message in case of SDT without anchor relocation. Then, the UE should re-initiate an RRC Resume procedure (UE will be resumed to RRC\_CONNECTED) for follow-up data transmission.

On how to trigger UE to re-initiate another RRC Resume procedure, two possible options were discussed in RAN3:

* Option 1: Use RAN paging to trigger the following-up RRC resume procedure after UE is moved to Inactive state.
* Option 2: Add specific cause value or Indication in *RRCRelease* message to indicate UE to trigger the follow-up resume procedure.

RAN3 assumes both of the options are feasible. The option 1 fully reuses the existing procedures defined for Inactive without any impact to RAN2 and RAN3. However, we see some benefits of the option 2, e.g. the RAN paging procedure could be saved, and the latency of the DL non-SDT is shorter than the option 1. Thus, RAN3 prefers to go for the option 2.

RAN3 assumes there’s some RAN2 impact to support the option 2. Therefore, RAN3 kindly request RAN2 to further check the options and work on the option 2 if feasible.

**2. Actions:**

**To RAN2 working group.**

**ACTION:** RAN3 respectfully requests RAN2 to further check the two options on handling of DL non-SDT during SDT without anchor relocation, and do corresponding specification work for the option 2 if feasible.

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

RAN3#115-e 21 February - 3 March, 2022 Online

RAN3#116-e 16 - 27 May, 2022 Online