3GPP TSG RAN WG2 Meeting #116bis-e R2-21xxxx

Electronic meeting, 17th-25th January 2022

**Title:** [draft] LS on RAN3 impacts for CCCH based solution for non-SDT handling

**Release:** Rel-17

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

**Source:** Intel Corporation (to be RAN2)

**To:** RAN3

**Cc:** SA3, CT1

**Contact person:** Marta Martinez Tarradell

**Contact email:** marta.m.tarradell <at> intel <dot> com

# 1 Overall description

During the ongoing SDT session with anchor relocation, the UE context is transferred from the anchor gNB to the serving gNB. For the CCCH solution, when there is data for a non-SDT radio bearer, the UE aborts the ongoing SDT session before the network would have sent a *RRCRelease* message with new I-RNTI or security key information. In this case, the UE will send a second *RRCResumeRequest* message using the I-RNTI that was issued by the old anchor gNB and performs horizontal key derivation. The *ResumeMAC-I* is expected to be updated as discussed in [Reference to SA3 LS].

RAN2 would like to ask RAN3:

* **Q1:** Which node (old anchor gNB or serving gNB) will process the second *RRCResumeRequest* message with I-RNTI associated to the old anchor gNB and will perform *ResumeMAC-I* verification and key derivation?
* **Q2:** When UE autonomously terminates the ongoing SDT session and sends second *RRCResumeRequest* message, can the buffered DL data from the previous ongoing SDT session in the serving gNB be sent without loss after the UE gets RRC\_CONNECTED?

# 2 Actions

**To RAN3**

**ACTION:**

RAN3 is respectfully requested to provide a response and any additional feedback on the proposed CCCH based solution, above questions (Q1 and Q2) and any network handling of the second *RRCResumeRequest* message.

# 3 Dates of next TSG RAN WG2 meetings

RAN2#117-e 21st February to 03 March 2022, E-meeting

RAN2#118-e 16th to 27th May 2022, E-meeting