**3GPP TSG-RAN3 Meeting #110-e R3-20xxxx**

**E-meeting, 2 – 12 Nov 2020**

Title: [DRAFT] Reply LS on NAS Non delivery for RRC\_INACTIVE state

Response to: Reply LS on NAS Non delivery for RRC Inactive state (R3-204239/ S2-2004452)

Release: 3GPP Rel-15/Rel-16

Work Item: NR\_newRAT-Core

Source: CATT (to be RAN3)

To: SA2

Cc: CT4

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

Attachments: -

**1. Overall Description:**

RAN3 thanks SA2 for the LS on NAS Non delivery for RRC Inactive state.

For the second answer, RAN3 further discussed how to inform AMF the non-delivery of the non-PDU session related NAS PDU received in the "PDU Session Resource Setup" and “Initial Context Setup".

For "PDU Session Resource Setup", some companies in RAN3 still doubt if the scenario is valid, especially considering the following statement in TS 23.502 section 4.2.3.2:

“If the Service Request procedure is triggered by the Network (as described in clause 4.2.3.3) while the UE is in CM-CONNECTED state, only N2 SM information received from SMF is included in the N2 Request.”

**Question 1:** For a UE in RRC\_INACTIVE state, is there any use case for AMF to piggyback a non-PDU session related NAS PDU in PDU SESSION RESOURE SETUP REQUEST?

For "Initial Context Setup”, the scenario is confirmed in RAN3, but we have not reached the consensus on how to inform AMF the non-delivery of the non-PDU session related NAS-PDU in the "Initial Context Setup Request". Here are two candidate solutions:

* Solution 1: Use NAS NON DELIVERY INDICATION message to indicate the failure of the NAS delivery.
* Solution 2: Use the "Initial Context Setup failure” to implicitly indicate the failure of the NAS delivery.

**Question 2:** Which solution is preferred to inform AMF the non-delivery of the non-PDU session related NAS-PDU in the "Initial Context Setup Request"?

**2. Actions:**

**To SA2 group:**

**ACTION: RAN3 would like to further ask SA2 the following questions:**

**Q1/** For a UE in RRC\_INACTIVE state, is there any use case for AMF to piggyback a non-PDU session related NAS PDU in PDU SESSION RESOURE SETUP REQUEST?

**Q2/** Which solution is preferred to inform AMF the non-delivery of the non-PDU session related NAS-PDU in the "Initial Context Setup Request"?

**3. Date of Next RAN3 Meetings:**

RAN3#111 25 Jan – 04 Feb 2020 Electronic