**3GPP TSG-RAN WG3 Meeting #113-eR3-21xxxx**

**E-meeting, 16 – 26 August, 2021**

**Title:** [Draft] Reply LS on UE location aspects in NTN

**Response to:** New LS on UE location aspects in NTN (R2-2106543/R3-213116);

LS on UE location aspects in NTN from SA3 (R3-213133);

**Release:** Rel-17

Work Item: NR\_NTN\_solutions-Core, 5GSAT\_ARCH

Source: CATT (to be RAN3)

To: RAN2, SA2, SA3, SA3-LI

CC: CT1

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**1. Overall Description:**

RAN3 thanks SA3 and RAN2 for the LS on UE location aspects in NTN.

**To the questions of SA3:**

We would like to draw SA3’s attention to the fact that core network selection by the RAN (including NNSF) is in RAN3 scope. The corresponding text is already present in the RAN3 BL CR for NG interface Stage 2 (TS 38.410), R3-211486: “When the NG-RAN node is configured to ensure that the selected AMF serves the country where the UE is located, as described in TS 23.501 [8], the NG-RAN node takes into account UE location information, if available, when determining the AMF”.

Today, the A-GNSS based measurements is only used by the applied UE positioning method during LCS procedure, not in a different procedure, e.g. the selection of core network. And there is no agreement on enhamcement of useage of A-GNSS based measurements in NTN Rel-17.

Therefore, whether and how to apply the A-GNSS based measurements in NR NTN Rel-17 is up to RAN2.

**To the LS of RAN2:**

RAN3 discussed the assumptions of RAN2 in the new coming LS, and we have the following observations:

1. NG-RAN does the CGI mapping base on the received UE location info, how to do the mapping is pre-configured (e.g., up to operator’s policy) or up to implementation.
2. For UE’s initial access, the reported UE location with “~2km” accuracy should be sufficient for CGI mapping. If it’s considered insufficient, the core network may initiate UE location procedure after registration in some cases.
3. After AS security is activated, the reported UE location with “~2km” accuracy is insufficient for NG-RAN to do accurate CGI mapping. More accurate accuracy of the UE location reporting may be required.

**2. Actions:**

**To RAN2, SA2, SA3, SA3-LI group**

**ACTION:** RAN3 kindly asks RAN2, SA2, SA3 and SA3-LI to take above info into consideration.

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

RAN3#114-e 1st Nov. – 11th Nov. 2021 Online

RAN3#115-e 21st Feb. – 25th Feb. 2022 Athens, GR