**3GPP TSG-RAN WG2 Meeting #114-e draft** R2-210xxxx

**Electronic meeting, 2021-05-19 – 2021-05-27**

**Title: draft** New LS on UE location aspects in NTN

**Response to:** -

**Release:** Release 17

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

**Source:** CATT [to be: RAN2]

**To:** RAN3, SA2, SA3, SA3-LI, CT1

**Cc:** -

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**1. Overall Description:**

As a follow-up information on top of what already indicated in the previous LS in R2-2102055 on UE location aspects in NTN, RAN2 would like to inform RAN3, SA2, SA3, SA3-LI and CT1 that RAN2 will be discussing a solution to ensure that the CGI constructed by NG-RAN corresponds to a fixed geographical area with a size comparable with a TN cell with a radius of ~2km for both connected mode and during initial access. In other words, RAN2 intends to develop a solution to report the UE location to the gNB, also before AS security is activated, with a guaranteed accuracy of an area of ~2km radius (and no better than that).

This “~2km” is not to be understood as a recommended cell size for NTN, but rather as an achievable accuracy for initial UE location estimation for this particular use case.

Since the intention is to ensure this in connected mode and during initial access, this may be applicable also before AS security is activated.

RAN2 would like to ask SA3 whether a UE can report reporting the location information with ~2km accuracy without privacy concern before AS security is enabled established, e.g., during initial access is feasible or not.

**2. Actions:**

**To SA WG3**

**ACTION:** RAN2 would like to ask SA3 whether a UE can report the location information to NG-RAN with ~2km radius accuracy before AS security is established, e.g. during initial access.

**To RAN WG3, SA WG2, SA WG3-LI and CT WG1**

**ACTION:** RAN2 kindly asks the above groups to take the above information into account and provide any feedback if needed.

**3. Date of Next RAN2 Meetings:**

3GPP RAN2#115-e 16th – 27th August 2021 Electronic Meeting

3GPP RAN2#116-e 1st – 12th November 2021 Electronic Meeting