**3GPP TSG-RAN WG2 #113-e draft R2-2102036**

**e-meeting, 25th January – 5th February 2021**

Title: [DRAFT] LS about location requirements for NTN

Release: Release 17

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

Source: Thales [to be RAN2]

To: SA2, SA3-LI, RAN3, SA3

Cc:

**Contact Person:**

Name: Nicolas Chuberre

Tel. Number:

E-mail Address: nicolas.chuberre@thalesaleniaspace.com

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

Attachments: None

**1. Overall Description:**

As part of the WI NR-NTN-solutions, RAN2 has been discussing

requirement to verify the UE’s location against the UE’s selection of the PLMN. A UE which accesses an 5GS via non-terrestrial NR access will select the PLMN based on broadcast information and the knowledge of its current position. It is also assumed that the network shall be able to verify the UE’s PLMN selection, possibly only after (initial) access was granted.

To further develop related NG-RAN and UE functions, RAN2 would first like to receive feedback from SA2 and SA3-LI on the basic assumptions described above, especially regarding regulatory requirements.

With regards to the accuracy with which the networks verification of the UE’s current position has to be performed, following aspects have to be clarified:

* **Question 1: RAN2 would like to ask RAN3 and SA2 whether finer granularity for UE location information than achievable by the network’s knowledge of the beam position and knowledge gained from UE’s mobility measurement is needed for ~~some~~ some Non-Terrestrial Networks whose cell size ~~may be~~ is larger than the typical cell size of terrestrial networks.**
* **Question 2: RAN2 would like to ask SA3 and SA3-LI if, in NTN scenarios, the UE location information in Location Service Response computed either at network side using A-GNSS based on measurements provided by UE, or by UE as defined in TS 38.305, can be considered reliable.**

**2. Actions:**

**To** **SA WG2 and SA WG3-LI.**

**ACTION:** RAN2 respectfully asks SA2**, RAN WG3, SA WG3** and SA3-LI to answer the questions above.

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

RAN2#113-bis-e 12th – 20th April 2021 Electronic meeting

RAN2#114-e 19th – 27th May 2021 Electronic meeting