**3GPP TSG RAN WG2#115 -e R3-22xxxx**

**Online meeting, February 21st – March 3rd, 2022**

Title: LS on UE location during initial access in NTN

Response to: R3-221357 / R2-2201881

Release: Release 17

Source: Thales (to be RAN3)

To: RAN2

Cc: CT1, SA3, SA2

**Contact Person:**

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

Attachments: None

**1. Overall Description:**

RAN3 thanks RAN2 for its Liaison in which the following questions was submitted:

Is it acceptable that no UE location information is reported at the NG-RAN in a NTN network during initial access ?

RAN3’s response can be found below:

Without knowledge of the UE location during the initial access, the gNB may not be able to determine the right AMF and therefore it may select an incorrect AMF.

If this happens, the incorrect AMF may de-register the UE and ask the UE to re-register. On subsequent network access attempt by the UE, the NG-RAN may be able to select the right AMF based on the information from the UE This translates into a risk of extended UE registration (or connection set-up), but only in extreme cases of large radio cell covering more than 1 country, and only at the transition to RRC CONNECTED state or after significant UE movement.

In addition, the initial mapped cell reported over NGAP may not be able to provide the level of granularity that has been requested by SA groups, but it has previously been clarified that this is acceptable at initial access.

There are no significant impacts in RAN3 specifications resulting from this change.

Overall RAN3 confirms that this constraint is acceptable from RAN3 point of view.

**2. Actions:**

**To** **RAN2**

**ACTION:** RAN3 kindly asks RAN2 to take into account the response above.

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

TSG-RAN WG3#116- e May 16th – 27th, 2022 Online meeting