**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 corresponding country and therefore it may select an incorrect AMF.

If this happens, the UE will get disconnected by the incorrect AMF which will inform NG-RAN with a specific NGAP cause value. On subsequent network access attempt by the same UE, the NG-RAN may be able to select the right AMF, especially if UE location is reported after AS security is activated This translates into a risk of extended connection set-up, but only in extreme cases of large radio cell covering multiple countries, and only at initial attach or after significant UE movement.

In addition, the 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