**3GPP TSG RAN WG2#116-e draft-** **R2-21xxxxx**

**Online meeting, August 09-27, 2021**

Title: [draft] LS reply on UE location aspects in NTN

Response to: R2-2109373/ S2-2106651

Release: Release 17

Source: Qualcomm Inc. [to be RAN2]

To: SA2

Cc: RAN3, CT1

**Contact Person:**

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

Attachments: None

**1. Overall Description:**

RAN2 would like to thank SA2 for the response. For now, RAN2 cannot provide their view on the different options for TAC reporting in the ULI identified by SA2.

However, as part of the discussion on TAC handling, RAN2 has discussed the signalling of multiple tracking area codes (TACs) per PLMN in the system information. In order to size this signalling, RAN2 would like to ask for feedback on the maximum number of TACs that can be broadcasted in a radio cell and expected size of earth-fixed tracking area.

Currently RAN2 assumes that depending on the size of the earth-fixed tracking area, up to 12 TACs per PLMN can be broadcast in a cell. In RAN2 understanding, a typical satellite beam (assuming typically up to 100 km diameter) could cover simultaneously a few tracking areas at a given time. When considering a region with several small countries, the standard should support up to 12 tracking areas per beam with several TACs per PLMN.

**2. Actions:**

**To** **SA2.**

**ACTION:** RAN2 kindly asks SA2 to take into account the above information and provide feedback on maximum number of TACs and expected size of the earth fixed tracking area.

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

TSG-RAN WG2#116-bis-e January 17th – January 25th, 2022 Online meeting