**3GPP TSG-SA3 Meeting #107-e *S3-221063-r1***

e-meeting, 16 - 20 May 2022

**Title: LS reply on UE location in connected mode in NTN**

**Response to: LS S3-220665/R2-2204257 on LS on UE location in connected mode in NTN from RAN2**

**Release: Rel-17**

**Source:** **Ericsson (to be SA3)**

**To:** **RAN2**

**Cc: SA2, RAN3, CT1**

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

**Attachments:** None

# 1 Overall description

SA3 would like to thank RAN2 for the LS on UE location in connected mode in NTN.

The RAN2 LS states the following:

*RAN2 assumes a normative solution for user consent framework of TS 33.501 to specifically cover NTN will not be agreed upon in Rel-17 by SA3. In case other methods of obtaining user consent (e.g., subscription based) at NG-RAN would not be possible in Rel-17, RAN2 is then considering the solution where, upon network request, after AS security in connected mode is established, a UE can report a coarse UE location information (X most Significant Bits of its GNSS coordinates with accuracy around 2km level) to the NG-RAN without a new explicit "NTN specific" user consent.*

*Specifically for Rel-17, RAN2 is considering the implicit user consent approach where:*

*- in connected mode, the network can request the UE to provide its coarse GNSS coordinates without receiving any prior user consent*

*- then, if "user consent" is available at the UE, the UE will report the information (implicitly giving the consent). If it's not present, the UE will respond that "no coarse GNSS location available" (implicitly refusing the consent).*

SA3 would like to observe the following:

1) Even after AS security is established, the GNSS measurements are not reliable since GNSS signals can be spoofed without the UE being able to detect such signal modifications. As a result, the network needs to take this into consideration.

2) With respect to the coarse-grained GNSS location reporting by the UE with an accuracy of 2km without explicit consent, it is up to local regulations whether it is acceptable or not. In case explicit user consent is required by local regulation it is up to proprietary mechanisms for Rel-17.

3) SA3 will study potential solutions for User Consent for the NTN use case in Rel-18. With respect to the implicit user consent approach which is considered by RAN2 for Rel-17, SA3 would like to suggest that it shall be the network that decides whether there is a user consent for the aforementioned location request (based on subscription-based means or proprietary mechanisms) and not the UE. In other words, the network should request for the location if there is user consent (based on subscription-based or proprietary mechanisms) and the network should not request for the location if there is no user consent. The UE should provide the location information (if available) if the network request for it.

SA3 is kindly requesting RAN2 to take the above information into account.

# 2 Actions

**To RAN2**

**ACTION: SA3 is kindly requesting RAN2 to take the above information into account.**

# 3 Dates of next TSG SA WG 3 meetings

SA3#107e-Bis 27 June - 1 July 2022 electronic meeting

SA3#108e 22 -26 August 2022 Goteborg, Sweden