**3GPP TSG-RAN WG2 Meeting #123bis *R2-231xxxxx***

**Xiamen, China, 9th – 13th October 2023**

**Title: LS on UE Location Information for NB-IoT NTN**

**Release: Rel-18**

**Work Item: IoT\_NTN\_enh**

**Source: RAN2**

**To: CT1, SA2**

**Cc: RAN3**

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# 1 Overall description

RAN2 has opened the previous discussion on the solutions to support UE location reporting in the granularity of a terrestrial cell size following the urgency of basic regulatory compliance for the NB-IoT NTN deployments. The RAN2 considers the current LPP mechanism is optional and is not supported by most of the NB-IoT UEs.

AS-based solution of reporting UE coarse location report does not work for NB-IoT UEs using control plane optimization due to privacy concern. RAN2 would like to ask CT1/SA2 if UE’s location reporting via NAS message, can be considered in Rel-18.

# 2 Actions

**To CT1**

**ACTION:** RAN2 asks SA2 and CT1 to take the above into account, to confirm the feasibility and, if feasible, to study and specify a NAS layer based solution for an NB-IoT UE in NTN to report its location to the network.

# 3 Dates of next TSG RAN WG2 meetings

RAN2#124 13th – 17th November 2023 F2F meeting

RAN2#125 26th February – 1st March 2024 F2F meeting