**3GPP TSG-RAN WG2 Meeting #123bis *R2-2311326***

**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**

**Contact person: Luca Lodigiani**

 **luca.lodigiani@inmarsat.com**

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

# 1 Overall description

Based on input from NTN operators, RAN2 has re-opened the previous discussion on solutions to support UE location reporting at least with the granularity of a terrestrial cell size, to address a number of requirements, including the urgency of basic regulatory compliance for NB-IoT NTN deployments. RAN2 considers that current LPP mechanisms are optional and not supported by most of the NB-IoT UEs, therefore are not suitable for all scenarios.

No consensus could be reached in RAN2 as to whether an AS-based solution of reporting UE coarse location for NB-IoT UEs using control plane optimization could be supported, due to privacy and security concerns raised by some companies.

RAN2 would thus like to ask SA2 and CT1 if UE location reporting via NAS message can be considered in Rel-18, to satisfy this operator requirement.

# 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 as early as possible during the initial registration procedure.

# 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