**3GPP TSG RAN WG2#117-e R2-2204114**

**e-Meeting, 21st February - 3rd March, 2022**

Title: Draft LS on measurement gaps enhancements for NTN

**Release: Rel-17**

**Work Item: NR\_NTN\_solutions, NR\_MG\_enh-Core**

Source: Intel {To be RAN2}

To: RAN4

Cc:

**Contact Person:**

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Attachments:

**1. Overall Description:**

In NR NTN WI, aiming to address the issues associated with the different/larger propagation delays with different satellites, RAN2 has agreed that the network can configure up to 4 SMTCs to be used in parallel, if the UE supports.

Also considering the coordination between NR NTN WI and MGE WI, RAN2 has agreed “In NR NTN, RAN2 follows the restriction on the maximum number of gaps that could be configured simultaneously for each gap type (per-UE /per-FR1/per-FR2) confirmed in MGE WI”, i.e., at most 2 simultaneous measurement gaps for each gap type can be supported in NR NTN.

In MGE WI, for concurrent gap RAN4 indicates in LS R4-2115343 that “one frequency layer can only be associated to a single MG”. But for NTN, in gap-assisted scenarios, in order to up to 4 SMTCs, RAN2 would like to ask RAN4 the following question:

Is it feasible/possible, for NR NTN, that two measurement gaps are associated with the same frequency layer?

Is it feasible/possible, for NR NTN, that one frequency layer can also be associated to both concurrent measurement gaps?

**2. Actions:**

**To RAN4**

**ACTION:** RAN2 kindly asks RAN4 to provide feedback on the above question.

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

RAN2#118-e 09 May – 20 May 2022 Electronic meeting