3GPP TSG SA WG 2 Meeting 146E TDoc RP-212592

Electronic, August 16-27 2021

**Title: DRAFT LS on EPS support for IoT NTN in Rel-17**

**Response to: (RP-212493/S2-2106679) LS on EPS support for IoT NTN in Rel-17**

**Release: Rel-17**

**Work Item: LTE\_NBIOT\_eMTC\_NTN**

**Source: RAN**

**To: SA2, SA, CT, CT1**

**Cc: -**

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

**Attachments:** -

# 1 Overall description

TSG RAN would like to thank TSG SA2 for their LS on EPS support for IoT NTN in Rel-17.

TSG RAN notes that SA2 does not plan to define new functionality in Rel-17 to support discontinuous coverage. TSG RAN would like to emphasize that support for discontinuous coverage (incl. related impact on paging, (e)DRX, PSM, and PLMN search) is considered minimum essential functionality in TSG RAN with work under way in RAN WGs. Bearing in mind the scope of SA2 WID, TSG RAN would like to ask:

- TSG SA, SA2 to reconsider supporting new functionality to support discontinuous coverage;

- TSG CT/CT1 to consider whether low-hanging fruit solutions are feasible at NAS relying on *existing* functionality to support discontinuity in coverage, or, should TSG SA, SA2 decide to introduce new functionality to support discontinuous coverage, to align with TSG SA, SA2.

- TSG SA/SA2/CT/CT1 to inform TSG RAN on the outcome of the discussion above.

TSG RAN may adjust the scope of its Work Item depending on the outcome of the above discussions in TSG SA, SA2, CT, CT1.

TSG RAN notes that SA2 decided not to support WUS, assuming it was not discussed in RAN for Rel-17 IoT NTN. TSG RAN would like to emphasize that work to support WUS in IoT NTN is indeed ongoing, with RAN2 concluding the existing WUS mechanism can be reused without enhancement (except for minor enhancements if needed to support discontinuous coverage). TSG RAN would therefore like to ask TSG SA, SA2, CT and CT1 to ensure WUS is not excluded.

# 2 Actions

**To SA, SA2, CT, CT1**

**ACTION:** TSG RAN would like to ask TSG SA, SA2, CT and CT1 to take note of the information above.

**To SA, SA2**

**ACTION:** (Discontinuous Coverage): TSG RAN would like to ask TSG SA, SA2 to reconsider supporting new functionality to support discontinuous coverage.

**To CT, CT1**

**ACTION:** (Discontinuous Coverage) TSG RAN would like to ask TSG CT, CT1 to consider whether low-hanging fruit solutions are feasible at NAS relying on *existing* functionality to support discontinuity in coverage, or should TSG SA, SA2 decide to introduce new functionality to support discontinuous coverage, to align with TSG SA, SA2.

**To SA, SA2, CT, CT1**

**ACTION:** (Discontinuous Coverage): TSG RAN would like to ask TSG SA, SA2, CT and CT1 to inform TSG RAN on the outcome of the discussion above.

**To SA, SA2, CT, CT1**

**ACTION:** (WUS) TSG RAN would like to ask TSG SA, SA2, CT and CT1 to ensure WUS is not excluded.

# 3 Dates of next TSG RAN meetings

TSG RAN#94e 6 – 17 December, 2021

TSG RAN#95e 14 – 17 March, 2022