**3GPP TSG RAN WG1#104bis-e R1-21xxxxx**

**e-Meeting, 12th – 20th April, 2021**

**Title: [DRAFT]** LS to RAN4 on maximum UE conducted power and maximum UE EIRP for operation in the 52.6 – 71 GHz band

**Release:** Rel-17

**Work Item:** NR\_ext\_to\_71GHz

**Source: Moderator (Ericsson)** (->TSG RAN WG1)

**To:** TSG RAN WG4

**Contact person:** Stephen Grant

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# 1 Overall description

RAN1 has discussed the following objective from the WID for extending NR operation to 71 GHz:

* + Support enhancement for PUCCH format 0/1/4 to increase the number of RBs under PSD limitation in shared spectrum operation.

In order to determine the maximum number of RBs that can be configured, RAN1 has developed link budgets that account for regulatory limits on conducted power, power spectral density, and EIRP for various regulatory regions in the world. In addition to the regulatory limits, RAN1 has considered UE hardware limits on maximum conducted power and EIRP. So far, RAN1 has assumed the following UE hardware limits:

* Maximum UE Conducted Power = 21 dBm
* Maximum UE EIRP = 25 dBm

RAN1 is currently discussing whether or not values larger than these can be assumed considering different UE device types that are likely to operate in the 52.6 – 71 GHz band.

**Question to RAN4**: For operation in the 52.6 – 71 GHz band, RAN1 respectfully asks RAN4 whether or not RAN4 will specify UE power class(es) with larger values for maximum UE conducted power and maximum UE EIRP than the ones listed above? If so, what are the pair(s) of maximum values for conducted power and EIRP that are feasible?

# 2 Actions

**To TSG RAN WG4**

**ACTION:** RAN1 respectfully asks RAN4 to provide feedback on the above question as soon as possible.

# 3 Dates of next TSG RAN WG1 meetings

TSG RAN WG1 Meeting #105-e 19 – 27 May 2021 Online

TSG RAN WG1 Meeting #106-e 16 – 27 August 2021 Online