3GPP TSG RAN WG5 Meeting #95-e draft2\_R5-22xxxx

Electronic Meeting, 9th – 20th May 2022

**Title: LS to RAN4 on TT work for NR FR1 TRP TRS**

**Response to: -**

**Release: Rel-17**

**Work Item: NR\_FR1\_TRP\_TRS-Perf (911210)**

**Source: RAN5**

**To: RAN4**

**Cc: RAN**

**Contact person: Jose M. Fortes**

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

**Attachments:** -

# 1 Overall description

Following the finalization of the RAN4 R17 NR FR1 TRP TRS WI core part, during RAN5#95-e a new WID has been reviewed and endorsed to start a work item to deliver conformance test cases for NR FR1 TRP and TRS requirements [1]. As part of the objective of this new WI, it is stated that RAN5 has primary responsibility for Measurement Uncertainty (MU) assessment for FR1 TRP/TRS for which a preliminary/placeholder MU table has been added in Annex B of TR 38.834, further optimizing and finalizing MU values and then determine Test Tolerance (TT) for the defined test requirements.

As part of this work, any optimization of the MU assessment will be captured in the RAN5 NR FR1 TRP/TRS test specification, but also in TR 38.834 as part of the maintenance phase.

With regards to the definition of TT, concerns were raised regarding the deep relation between radiated performance requirement definition in RAN4, based on test campaign results, and TT. Depending on the process followed to derive requirements based on test results, these might include some part of the TT already. Also, to be considered is the TT factor which defines the percentage of risk to be shared between operators and vendors because this value has a direct impact on the final requirement itself.

Therefore, RAN5 recommendation is to consider:

1. Couple the performance requirements discussions in RAN4 with test tolerance discussion, so both are defined together.
2. RAN4 to provide RAN5 with a thorough description of the requirement definition process so implications from MU and in TT can be clarified and considered during the definition of TT in RAN5. Any RAN4 recommendations regarding TT will be highly appreciated.

Given that the first option may have some impact in the RAN4 workplan and WID, we understand that further RAN Plenary guidance could be required in this case.

# 2 Actions

**To RAN4**

**ACTION:**  RAN5 respectfully asks RAN4 to take the above information into account and provide RAN5 with the following:

* Test tolerance recommendations as applicable to NR FR1 TRP TRS requirements.
* Full description of the process of requirement definition, including any recommendations on the TT factor.

# 3 Dates of next TSG RAN WG 5 meetings

TSG-RAN5 Meeting #96-e 15th – 26th August 2022 Online

TSG-RAN5 Meeting #97 14th – 18th November 2022 Canada, CA

# 4 References

1. R5-223317, “New WID on UE Conformance - Introduction of UE TRP (Total Radiated Power) and TRS (Total Radiated Sensitivity) requirements and test methodologies for FR1 (NR SA and EN-DC)”, Apple, Rohde & Schwarz, Vivo, 3GPP TSG RAN5 Meeting #95-e, May 2022