3GPP TSG RAN WG1 #103-e R1-20xxxxx

**e-Meeting, October 26th – November 13th, 2020**

**Title: LS on PUCCH and PUSCH repetition**

**Release: Rel-17**

**Study Item: FS\_NR\_CovEnh**

**Source:** RAN1

**To:** RAN4

**Cc:**

**Attachments:**

**Contact Person:**

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**1. Overall Description:**

In the study of coverage enhancement in Rel-17, DMRS bundling cross PUCCH or PUSCH are identified as a potential scheme to enhance PUCCH or PUSCH coverage. For RAN1 to further study the DMRS bundling scheme, RAN1 made the following agreement to ask feedback from RAN 4 on the conditions for UE to keep phase continuity and same power level (with certain tolerance level) cross PUCCH or PUSCH repetitions.

**Agreements: For DMRS bundling cross PUCCH or PUSCH repetitions, send an LS to RAN4 to ask the following**

* **Under what conditions UE can keep phase continuity cross PUCCH or PUSCH repetitions** 
  + **Whether back-to-back PUCCH or PUSCH repetitions is one of the conditions required to keep phase continuity cross the repetitions**
* **Power control tolerance level cross PUCCH or PUSCH repetitions**

**2. Actions:**

RAN1 respectfully asks RAN4 to provide answers to the following questions

* **Question 1: Under what conditions UE can keep phase continuity cross PUCCH or PUSCH repetitions**
* **Question 2: Whether back-to-back PUCCH or PUSCH repetitions is one of the conditions required to keep phase continuity cross the repetitions**
* **Question: Under what conditions UE can meet the power control tolerance level cross PUCCH or PUSCH repetitions**

**3. Date of Next RAN1 Meetings:**

TSG-RAN WG1 Meeting #104-e 25th January – 5th February 2021 E-meeting.

TSG-RAN WG1 Meeting #104bis-e 12th April – 20th April 2021 E-meeting.