**3GPP TSG RAN WG1 #112bis-e R1-230xxxx**

**e-Meeting, April 17th –26th, 2023**

Title: LS on PRACH coverage enhancement

Response to:

Release: Rel-18

Work Item: NR\_cov\_enh2

**Source:** TSG RAN WG1

**To:** TSG RAN WG2

**Cc:**

**Contact Person:**

Name: Nanxi Li

E-mail Address: linanxi@chinatelecom.cn

**1. Overall Description:**

RAN1 has achieved the following agreements for PRACH coverage enhancement and details on how to realize PRACH resource partitioning is up to RAN2.

Agreement

Confirm the following working assumptions.

|  |
| --- |
| Working Assumption  For multiple PRACH transmissions with same Tx beam, to differentiate the multiple PRACH transmissions with single PRACH transmission, at least support that multiple PRACH are transmitted on separate ROs.   * Note: Separate RO means that the RO is separated with single PRACH transmission. * FFS: whether Rel-17 framework of feature combination (*FeatureCombination-r17*) and additional RACH configuration (*AdditionalRACH-Config-r17*) can be reused for Rel-18 multiple PRACH transmissions to realize the corresponding PRACH resource partitioning.   Working Assumption  For multiple PRACH transmissions with same Tx beam, to differentiate the multiple PRACH transmissions with single PRACH transmission, support that multiple PRACH are transmitted with separate preamble on shared ROs.   * Note: Shared or separate RO/preamble means that the RO/preamble is shared or separated with single PRACH transmission. * FFS: whether Rel-17 framework of feature combination (*FeatureCombination-r17*) and additional RACH configuration (*AdditionalRACH-Config-r17*) can be reused for Rel-18 multiple PRACH transmissions to realize the corresponding PRACH resource partitioning. |

Agreement

Send LS to inform RAN2 about the 2 confirmed Working Assumptions, and details on how to realize PRACH resource partitioning is up to RAN2.

**2. Actions:**

**To RAN WG2:**

**ACTION:**

RAN1 respectfully requests RAN2 to take the above information into consideration for their future work.

**3. Dates of Next RAN WG1 Meetings:**

TSG RAN WG1 Meeting #113 May 22 – May 26 2023 Incheon, South Korea

TSG RAN WG1 Meeting #114 August 21 – August 25 2023 Toulouse, France