**3GPP TSG RAN WG2 #118-e R2-220xxxx**

**e-Meeting, 9-20 May, 2022**

**Title: [Draft] Reply LS on the L1 related agreements for SDT**

**Response to: R2-2204445 (R1-2202656)**

**Release: Rel-17**

**Work Item: NR\_SmallData\_INACTIVE-Core**

**Source: [to be] RAN2**

**To: RAN1**

**Cc:**

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

# 1 Overall description

RAN2 thanks RAN1 for the Reply LS on physical layer aspects of small data transmission in R2-2204445 (R1-2202656).

RAN2 had further discussion regarding SDT feature and the following agreements were made.

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| RAN2#116bis-e agreements  => If contention resolution fails during RA procedure (for both legacy RA and RA-SDT), the UE restores the NTA value used before RAR TAC is received |

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| RAN2#117e agreements  => For autonomous re-tx, fix the RV to be 0 for both the initial and retransmission of initial CG-SDT transmission. |

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| RAN2#118e agreements  => Do not support uci-onPUSCH for SDT  => During CG-SDT procedure, the UE does not need to (but is allowed to) select a CG resource corresponding to different SSB as used for the previous CG-SDT transmission if the previously selected SSB is above the cg-SDT-RSRP-ThresholdSSB threshold |

**For CG-SDT search space**

In addition to the above, RAN2 would like to inform RAN1 that the parameter named sdt-CG-SearchSpace-r17 used in 3GPP TS 38.213 does not exist in the RAN2 signalling. Instead, RAN2 signalling uses the existing field names for the search space configuration. RAN2 kindly requests RAN1 to update the RAN1 specs to refer to the search space configured using the BWP-Uplink-Dedicated-SDT-r17 for the above parameter hence, instead of using the new name sdt-CG-SearchSpace-r17.

**For SDT common search space**

For SDT common search space RAN2 discussed whether to allow also signalling of an existing search space ID (using a choice structure between configuration of a SearchSpace and SearchSpaceId). However, RAN2 agreed that no such choice structure is introduced.

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| Repetition  For CG-SDT, RAN1 cannot reach consensus on whether to support repetition or not, it’s up to RAN2 to decide on it. |

With regards to the above issue about repetition for CG-SDT, the signalling in TS 38.331 reuses the existing ConfiguredGrantConfig and hence the signalling allows configuration of parameters related to repetition (i.e. repK, repK-RV, pusch-RepTypeIndicator-r16 and frequencyHoppingPUSCH-RepTypeB-r16) within this IE.

# 2 Actions

**To RAN1**

**ACTION:** RAN2 respectfully asks RAN1 to take the above information into account for their specification work and provide feedback, if any, on the above agreements

# 3 Dates of next TSG RAN2 meeting

The dates of the next RAN2 meetings can be found at the following link:

<https://portal.3gpp.org/Home.aspx?tbid=380&SubTB=380#/>