**3GPP TSG RAN WG2 #116-e R2-211xxxx**

**e-Meeting, 1-12 Nov, 2021**

**Title: [DRAFT] Reply LS on the physical layer aspects of small data transmission**

**Response to: R2-2111219**

**Release: Rel-17**

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

**Source: to be RAN2**

**To: RAN1**

**Cc:**

**Contact person: Eswar Vutukuri**

**E-mail Address: eswar dot vutukuri at zte dot com dot cn**

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

# Overall description

RAN2 would like to thank RAN1 for the LS on the physical layer aspects of small data transmission in R2-2111219.

RAN2 has made the following agreements for SDT at RAN2#116-e.

**Agreements for RA-SDT and CG-SDT**

|  |
| --- |
| => RAN2 changes the agreements and as a baseline we will focus on initial BWP for RA and CG SDT. FFS if further work on CG SDT for non-initial BWP will be needed, based on RAN1 consensus.  |

For the configuration of CG-SDT resources on non-initial BWP, some companies supported this as this is assumed to reduce the congestion on UL initial BWP by providing larger bandwidth for SDT data and flexibility of CG resource allocation, whilst others expressed concerns on the complexity and SSB/paging/system information monitoring associated with non-initial BWP for SDT in case the non-initial SDT BWP could not contain initial BWP.

**Agreements for CG-SDT**

|  |
| --- |
| * Assumption that we won’t have L1 feedback as a functionality. Discuss subsequent and autonomous CG transmissions with email discussion.
* The “CG-SDT timer” starts at the first “valid” PDCCH occasion from the end of the CG-SDT PUSCH transmission. The first “valid” PDCCH occasion is defined in RAN1
* Highest N SSBs of all SSBs actually transmitted as indicated in SIB1 is used for RSRP based TA validation
* At least for initial transmission we will have a mechanism to allow the UE to transmit the message again. FFS for retransmission for subsequent.
* The UE is allowed to initiate subsequent UL data transmission only after the reception of confirmation of initial transmission from the gNB
 |

# Actions

**To RAN1**

**ACTION:** RAN2 respectfully asks RAN1 to take the above information into account in their specification work and inform RAN2 if there is consensus on separate SDT BWP for CG-SDT.

# Dates of next TSG RAN2 meetings

RAN2#116-bis-e 17 – 25 January 2022 E-meeting

RAN2#117-e 21 February – 3 March 2022 E-meeting