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

**e-Meeting, April 17th – 26th, 2023**

**Title: [DRAFT] LS on PSFCH and S-SSB transmissions over non-contiguous RB sets**

**Response to: -**

**Release: Rel-18**

**Work Item: NR\_SL\_enh2-Core**

**Source: OPPO [RAN1]**

**To: RAN4**

**Cc: -**

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

**Attachments:** -

**1. Overall Description:**

RAN1 has discussed the scenario where a RX UE needs to transmit PSFCHs (using existing R16/17 PSFCH format 0) across multiple unlicensed channels within a SL BWP in a same slot. Similarly, RAN1 is also discussing UE transmitting S-SSBs across multiple unlicensed channels within a SL BWP in a same slot. RAN1 would like to seek RAN4’s opinion on the following questions.

Question 1: whether multiple PSFCHs (using existing R16/17 PSFCH format 0) can be transmitted over non-contiguous RB sets?

Question 2: If multiple PSFCHs (using existing R16/17 PSFCH format 0) can be transmitted over non-contiguous RB sets, is there a limitation(s) on e.g., number of RB sets, max. frequency separation between the RB sets, etc?

The above same two questions also apply to UE transmitting S-SSBs over non-contiguous RB sets. Note that, according to existing RAN1 agreements, it is not possible to transmit PSFCH and S-SSB within a SL BWP in a same slot.

**2. Actions:**

**To RAN4**: RAN1 respectfully requests RAN4 to provide feedback to the questions above for both multiple PSFCHs and multiple S-SSBs cases.

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

RAN1#113 May 22-26, 2023 Incheon, KR

RAN1#114 August 21-25, 2023 Toulouse, FR