**3GPP TSG-RAN WG2 Meeting #113 electronic R2-210xxxx**

**Online, Jan 25 – Feb 5, 2021**

**Title:** [Draft] Reply LS on simultaneous Rx/Tx capability

**Response to:** R4-2016988/R2-2100056

**Release:** Rel-15

**Work Item:** NR\_newRAT

**Source:** Huawei, HiSilicon [to be RAN2]

**To:** RAN4

**Cc:**

**Contact Person:**

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

**Attachments**: N/A

**1. Overall Description:**

RAN2 would like to thank RAN4 for the LS on simultaneous Rx/Tx capability. RAN2 discussed the legacy signalling design for simultaneous Rx/Tx capability for TDD-TDD and TDD-FDD inter-band CA, SUL and EN-DC band combinations.

RAN2 concluded that

* The *simultaneousRxTxInterBandCA* capability applies to any of the two NR bands (if applicable) in a band combination (except for NR-DC), and UE shall only include this capability if it supports simultaneous Rx/Tx capability on all applicable NR band pairs. The UE shall additionally include fallback band combination with different simultaneous RxTx capability (if supports) compared to the corresponding superset band combination;
* The absence of the field *simultaneousRxTxInterBandCA* implies that simultaneous RX/TX is not supported for the band combination;
* With the legacy RAN2 signalling, it is feasible to indicate simultaneous RxTx UE capability separately for NR CA and NR-DC. However RAN2 is not sure how or whether this capability applies across cell-groups in NR-DC, when reported by the UE, and requests RAN4 to clarify.

In addition, RAN2 concluded that the UE capability signalling does not account for the indication of support of a feature that needs to be derived from multiple band combinations. RAN2 kindly asks RAN4 to inform RAN2 if there is any further cases need to be covered from RAN4 perspective.

**2. Actions:**

**To RAN4:**

**ACTION:** RAN2 respectfully asks RAN4 to take above response into account and provide more info the question asked above

**3. Date of Next TSG WG RAN2 Meetings:**

TSG-RAN2 Meeting#113-bis-e 12 – 20 April 2021 Online

TSG-RAN2 Meeting#114-e 19 – 27 May 2021 Online