3GPP TSG-RAN WG4 Meeting #99-eR4-210xxxx

**Electronic Meeting, 19th - 27th May, 2021**

**Title:** Further Reply LS on the maximum/minimum channel bandwidths and channelization for NR operation in 52.6 to 71GHz

**Response to:** R1-2102128

**Release:** Rel-17

**Work Item:** NR\_ext\_to\_71GHz

**Source:** RAN WG4

**To:** RAN WG1

**Contact Person:**

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**1. Overall Description:**

Continuing further discussion in RAN4, RAN4 agreed on the following maximum channel bandwidths for NR operation in 52.6 GHz to 71 GHz as follow:

* For 960 kHz SCS, TBD MHz

The channel bandwidths agreements aim to apply to both licensed and unlicensed bands.

For other RAN1 questions on channelization and number of RBs for each channel bandwidths, RAN4 continues the discussion and would like to update the current discussion status:

* For channelization, the following options are currently discussed:
  + Option 1: Harmonize channelization between licensed and unlicensed bands:
    - Option 1A: Align with IEEE 802.11ad/ay with fixed channelization
    - Option 1B: Do not align with IEEE with fixed channelization
    - Option 1C: Do not align with IEEE and floating channelization
    - Option 1D:
      * Option 1D-1 for licensed and no LBT unlicensed bands.
      * Option 1D-2 for LBT unlicensed bands. Try to harmonize option 1A with option 1B as much as possible.
  + Option 2: Separate channelization
    - For licensed:
      * Option 2A: NR based floating raster (No 802.11ad/ay alignment)
    - For unlicensed:
      * Option 2B: Align with 802.11ad/ay and no NR channel overlaps with two IEEE channels
* For number of RBs for maximum channel bandwidths:
  + For 120 kHz SCS: Keep the same SU from FR2, i.e., 95 %;
  + For 480 and 960 kHz SCS: Currently [85 – 95] % are being discussed.

RAN4 will further inform once there is any update.

**2. Actions:**

**To RAN1:**

RAN4 would like RAN1 to consider the information above for their further design of the NR physical layer.

**3. Date of Next RAN4 Meetings:**

TSG-RAN WG4 Meeting #100-e 23 - 27 Aug 2021 Online

TSG-RAN WG4 Meeting #101-e 1 - 12 Nov 2021 Online