3GPP TSG-RAN WG4 Meeting # 99-e R4-211xxxx

Electronic Meeting, May 19-27, 2021

Title: LS on RAN4 recommendation for the 52.6 - 71 GHz frequency range designation

Response to: -

Release: Rel-17

Work Item: NR\_ext\_to\_71GHz-Core

Source: 3GPP RAN WG4

To: 3GPP TSG RAN

Cc: 3GPP RAN WG1, 3GPP RAN WG2, 3GPP RAN WG5

**Contact Person:**

Name: Michal Szydelko

Tel. Number:

E-mail Address: [michal.szydelko@huawei.com](mailto:michal.szydelko@huawei.com)

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

Attachments: -

**1. Overall Description:**

3GPP RAN WG4 would like to inform 3GPP TSG RAN on the progress of the discussion on 52.6 - 71 GHz frequency range designation.

During the discussion in NR\_ext\_to\_71GHz-Core work item, RAN WG4 was investigating various options for the 52.6 - 71 GHz frequency range designation, including such options as:

* Option 1: Introduce FR2-1 (24.25 – 52.6 GHz) and FR2-2 (52.6 – 71 GHz)

Within option 1, indicate on the preferred approach:

* + “FR2-1 and FR2-2”, or
  + “FR2.1 and FR2.2”
* Option 2: Introduce FR2-2 (52.6 – 71 GHz) in addition to FR2 (24.25 – 52.6 GHz)
* Option 3: Define FR3
* Option 4:
  + All UE RF/demod requirements defined as function of band, BW, PC or band combo within FR2;
  + BS requirements can be updated to cater for an extension of FR2 to include 52.6 – 71 GHz;
  + All RRM requirements for higher SCS applicable for 52.6 – 71 GHz can be defined as function of SCS within FR2;
* Option 5:
  + Keep FR2 definition as it is
  + Introduce FR2x (52.6 – 71 GHz) and FR2-comb (24.25 – 71 GHz)
* Except option 3, all above proposals intend not to introduce FR3.

During the discussion on 52.6 - 71 GHz frequency range designation, pros and cons of the above options were analysed, including RAN4 specification impact considerations. Additionally, RAN5 decision on the introduction of FR2a / FR2b / FR2c terms for the MU and TT purposes was also recognized.

Based on the RAN WG4 discussion, the following is provided as recommendation to 3GPP TSG RAN:

1. To drop “FR3” terminology from consideration on the 52.6 - 71 GHz frequency range designation.
2. Terminology for BS operating in 52.6 - 71 GHz frequency range to be reused from FR2, i.e. *BS type 2-O*.
3. To consider the following terminology for the frequency sub-ranges above 24.25GHz:
   1. For 24250 MHz – 52600 MHz: TBD
   2. For 52600 MHz – 71000 MHz: TBD

**2. Actions:**

**To 3GPP TSG RAN:**

**ACTION:** 3GPP RAN WG4 kindly asks 3GPP TSG RAN to take the above recommendation into account.

**3. Date of Next RAN WG4 Meetings:**

RAN WG4 Meeting #100-e 16th – 27th August 2021 Online meeting

RAN WG4 Meeting #101-e 1st – 12th November 2021 Online meeting