**3GPP TSG RAN WG1#105-e R1-21xxxxx**

**e-Meeting, May 10th – 27th, 2021**

**Title:** DRAFT LS on how to introduce the 52.6-71GHz frequency range

**Release:** 17

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

**Source:** Lenovo

**To:** TSG RAN

**Cc:** TSG RAN WG2, TSG RAN WG4

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# 1 Overall description

Following up on the conclusion from RAN#91E ("RAN1, RAN2 and RAN4 are asked to provide its analysis or recommendation to RAN#92E (June) on how to introduce the 52.6-71GHz frequency range."), the discussion in RAN1#105-e has identified the following options:

* Extend FR2 to cover the whole frequency range 24.25 - 71 GHz (no new notations)
* Introduce a new notation for the new frequency range 52.6 - 71 GHz, and keep FR2 to denote 24.25 – 52.6 GHz.
* Introduce a new notation for the new frequency range 52.6 - 71 GHz, and extend FR2 to denote 24.25 – 71 GHz.
* Introduce new notations for each of 24.25 - 52.6 GHz and 52.6 - 71 GHz, and extend FR2 to denote 24.25 – 71 GHz.

RAN1 would like to inform RAN about the following RAN1 conclusions:

1. Regarding the impact on specifications maintained by RAN1, there are only relatively small differences between potential options.
2. RAN1 can adapt to other groups' preferences on the notation for 52.6-71 GHz.
3. Regardless of if the frequency range 52.6 to 71 GHz is an extension of FR2 or a new FR, the related UE capabilities and their applicability to the frequency range 52.6 to 71 GHz will have to be analyzed on a case by case basis.

[NOTE: The inclusion of the following point depends on further progress in the ongoing discussion.]

1. [From RAN1's perspective, an easy distinction between features, capabilities and other characteristics in the specifications that apply specifically to the following ranges may be useful:
   * 24.25-52.6 GHz
   * 52.6-71 GHz
   * 24.25-71 GHz]

# 2 Actions

**To TSG RAN**

**ACTION:** RAN1 respectfully asks RAN to consider the above conclusions when deciding how to introduce the 52.6-71 GHz frequency range.

# 3 Dates of next TSG RAN WG1 meetings

TSG RAN WG1 Meeting #106-e 16 - 27 August 2021 Online

TSG RAN WG1 Meeting #106bis-e 11 - 19 October 2021 Online

# 4 Discussion

|  |  |
| --- | --- |
| **Company** | **Comment** |
| Intel | Ok, with the understanding (4) will be updated based on agreement. |
| Huawei, HiSilicon | RAN1 has not identified (agreed) this list of options shown in the draft LS:   * Extend FR2 to cover the whole frequency range 24.25 - 71 GHz (no new notations) * Introduce a new notation for the new frequency range 52.6 - 71 GHz, and keep FR2 to denote 24.25 – 52.6 GHz. * Introduce a new notation for the new frequency range 52.6 - 71 GHz, and extend FR2 to denote 24.25 – 71 GHz. * Introduce new notations for each of 24.25 - 52.6 GHz and 52.6 - 71 GHz, and extend FR2 to denote 24.25 – 71 GHz.   There are even other alternatives in the submitted Tdocs. But we don’t think it is needed to provide RAN plenary with such a list of options. The conclusions made on the first GTW are self-contained and didn’t require to first agree on the list of options. If there is a strong preference to keep the list, then these options should only be referred as a non-exhaustive list of options provided in contributions submitted to RAN1#105.  Regarding the action, we would like to suggest the following revision:  **ACTION:** RAN1 respectfully asks RAN to consider the above conclusions when deciding on a denomination for frequencies in the 52.6-71 GHz range. |
| InterDigital | We are fine with the proposed draft LS with Intel’s updates. |