3GPP TSG-RAN WG4 Meeting #102-e R4-2206479

Electronic Meeting, 21 Feb – 3 Mar 2022

**Source:** Huawei, HiSilicon

**Title:** WF on simultaneous Rx/Tx capability

**Agenda Item:** 9.39

**Document for:** Approval

# MSD threshold

*Background:*

The issue of MSD threshold for deciding mandatory simultaneous Rx/Tx capability for FR1 FDD-TDD band combinations has been discussed for several meetings. There are three main opinions for the issue, i.e.

* Alt 1: Have specific MSD thresholds for determining mandatory simultaneous Tx/Rx capability
* Alt 2: Specify the simultaneous Tx/Rx capability case by case
* Alt 3: Simultaneous Rx/Tx capability can still be optional for FR1 FDD-TDD band combination with MSD, but the identification effort is mainly for those which cannot support simultaneous Rx/Tx operation

*Candidate option based on 1st round draft summary:*

Case by case analysis is considered for FR1 FDD-TDD band combination which may have difficulty to support simultaneous Rx/Tx operation, e.g. with large MSD. If a FR1 FDD-TDD band combination is identified which cannot support simultaneous Rx/Tx operation, a note similar to FR1 TDD-TDD band combination shall be indicated in the specification, and for such operation the minimum requirements are not applicable for this band combination. Otherwise, the FR1 FDD-TDD band combination with MSD can support simultaneous Rx/Tx operation.

*Recommendations for 2nd round:*

Discuss the above candidate option and try to reach agreement.

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| **Company** | **Comments** |
| Qualcomm | It seems the proposal is to go with Alt.2. We are fine to discuss the combinations case by case.  As we commented multiple times, it would be very good to have some analysis from operators or infra vendors on the usefulness of combinations with large MSD and what MSD values still make for a usable combination |
| Apple | We are fine with the candidate option. |
| Samsung | Support the candidate option |
| SoftBank | Considering that it is the last meeting of Rel-17, we can compromise to the candidate option. For avoiding to repeat such a discussion again in Rel-18, it is important to ensure that the case-by-case analysis is carried out in each band. Some modification of the TP structure is needed for capturing the analysis results and it will be discussed in the basket WIs. |
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# References

[1] R4-2206320, Email discussion summary for [102-e][120] LTE\_NR\_Other\_WI