

MediaTek Views on RAN4 Rel-19: Demod

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Demod

References: [RP-233951](#)

Potential objectives:

1

- To start from Q3'2024
- UE performance requirements with inter cell and with intra-cell inter-use interference for 8Rx CPE/FWA/vehicle/industrial devices
 - Further check if such objectives can be done in R18 performance
- MMSE-IRC receiver for uplink taking LTE interference profile as starting point. **FFS on other interference profile.**
- **Further check if 1024QAM + 4layers for indoor scenario for 4Rx UE and 8Rx CPE/FWA/vehicle/industrial devices shall be included in the scope**
- **UE CRI reporting requirements with multiple CSI-RS configured with priority on FR1**
 - Further check if any other RRM requirements beyond Demod for FR2 CRI reporting
- **Enhanced UE CSI reporting requirements with R-ML receiver for SU-MIMO with study on whether the UE with R-ML report incorrect CSI**

2

- **Channel model with spatial component for performance requirements with following alternatives for study the test feasibility**
 - Alternative 1: Extending TDL channel model
 - Alternative 2: CDL channel model
 - For this bullet, can the contents be clearly defined during March/RAN#103?

MediaTek views

1. Reasonable SINR target to be considered (avoid corner case optimization).
 - E.g. at SINR < [-6]dB, it is better to handover the UE to the strongest neighboring cell rather than keeping it on the same cell and relying on UE Rx to handle interference
2. MIMO channel model with spatial component study:
 - More clarifications are expected, e.g., FR1 only? Limited to 2-codeword scenarios? Whether conducted testing is still used?
 - Strongly prefer minimum change to current TDL channel model, e.g., a new antenna correlation model
 - Level of device antenna correlation is an important component of MIMO performance

Thank you!