

Flexible UL/DL enhancements for Rel-18

RAN Rel-18 Workshop

28th June – 2nd July 2021

RWS-210081

Flexible UL/DL enhancements: Motivation

Rel-16 introduced simple TDD CLI solutions, mainly focusing on UE-2-UE CLI and related UE CLI measurements.

Rel-16 TDD coexistence studies sets the scene for deployments where dynamic TDD (flexible duplexing) is feasible

Cases with uplink heavy configurations and solutions for gNB-2-gNB CLI mitigation was not covered in Rel-16.

Growing demand for more diverse services, where some of them require more uplink heavy configurations than currently considered practical for NR TDD deployments.

Summary of adjacent channel coexistence TDD Rel-16 study conclusions, see details in [TR 38.828](#)

- Performance degradation observed in FR1 Macro-to-Macro scenario if not using the same TDD config.
- For FR2 Macro-to-Macro and Micro-to-Micro, some performance degradation is observed unless carefully planned.
- Dynamic TDD can be used for low power indoor gNB as long as care is taken.

Flexible UL/DL enhancements: Objectives

Scope for Rel-18 Study on Flexible UL/DL Enhancements (RAN1 led):

- Study solutions for improvements of uplink heavy configurations, incl. both uplink coverage, capacity and latency improvements.
- Including potential gNB-2-gNB CLI mitigation solutions.
- Conduct the study in line with Rel-16 TDD adjacent channel coexistence conclusions, where dynamic TDD was primarily found feasible for low power gNBs.

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