

# Views on Rel-15 NR UE features

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- RAN WGs discussed NR UE features and made progress in Aug. meeting as informed in the following LSs
  - R1-1810005
- RAN is tasked to decide on whether the NR UE features are mandatory or optional
- In this contribution, we discussed the remaining issues on NR UE features

**Proposal: Follow WG recommendations to decide on whether the features are mandatory or optional**

- **1-8 RLM based on a mix of SS block and CSI-RS signals within active BWP**
  - **Proposal:** Optional with capability signaling
- **5-27a: Dynamic rate-matching control resource set for DL**
  - **Proposal:** Mandatory with capability signaling
- **6-16, 6-18**
  - **Proposal:** Decide whether 6-16, 6-18 is mandatory or optional respectively

## ■ 2-2: PDSCH beam switching

- **Proposal:** Mandatory with capability signaling, i.e. UE shall report one value for each component at least for FR2

## ■ 2-4: TCI state for PDSCH

- **Proposal:** Mandatory with capability signaling, i.e. UE shall report one value for each component at least for FR2

## ■ 2-14: Codebook based PUSCH MIMO transmission

- **Proposal:** UE is mandated to report at least 1-layer

## ■ 2-20: Beam correspondence

- **Proposal:** Mandatory with capability signaling which shall be set to '1' for FR2

## ■ 2-20 a: Configured spatial relations

- **Proposal:** Mandatory with capability signaling, i.e. UE shall report one value for each component at least for FR2

## ■ 2-20 b: Active spatial relations

- **Proposal:** Mandatory with capability signaling, i.e. UE shall report one value for each component at least for FR2

## ■ 2-22: Aperiodic beam report

- **Proposal:** Mandatory with UE capability for both FR1 and FR2

## ■ 2-24: SSB/CSI-RS for beam measurement

- **Proposal:** Mandatory with capability signaling, i.e. UE shall report one value for each component for FR1

## ■ 2-25: Beam reporting timing

- **Proposal:** Mandatory with capability signaling, i.e. UE shall reports one value for each  $X_i$  at least for FR2

## ■ 2-28: A-CSI-RS beam switching timing

- **Proposal:** Mandatory with capability signaling, i.e. UE shall report one value for each component at least for FR2

## ■ 2-29: Non-group based beam reporting

- **Proposal:** Mandatory with capability signaling, i.e. UE shall report one value for each component at least for FR2

## ■ 2-33a: Supported PDSCH RE-mapping patterns

- **Proposal:** Delete square bracket from Component 2

{Component-2 candidate values: {from 16: 16: 256 16} for FR1 {16: 16: 256} for FR2}

## ■ 2-35: CSI report framework

- **Proposal:** Mandatory with capability signaling, i.e. UE shall report one value for each component for both FR1 and FR2

## ■ 2-36: Type I single panel codebook

- **Proposal:** Mandatory with capability signaling, i.e. UE shall report one value for each component for both FR1 and FR2

## ■ 2-51: TRS

- **Proposal:** Component-4: mandatory value is 64 for FR2

## ■ 2-53: SRS resources

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## ■ 2-53: SRS resources

- **Proposal:** Mandatory with capability signaling, i.e. UE shall report one value for each component for both FR1 and FR2

- **Proposal:** According to RAN1 agreement below, define additional UE capability signaling

## Agreement

- For SRS for CB PUSCH and antenna switching on FR1, the minimal time interval between the last symbol of the PDCCH triggering the aperiodic SRS transmission and the first symbol of SRS resource is  $N_2$  symbols
  - Support of zero slot offset for aperiodic SRS triggering is UE capability
  - The time interval in units of OFDM symbols is counted based on the minimum subcarrier spacing between PDCCH and SRS

Above agreement does not change the switching time for SUL/UL

Above agreement only affects UE capability signalling from RAN2 perspective

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