

3GPP TSG RAN Meeting #102

RP-233065

Edinburg, Scotland, December 11-15, 2023

Views on Rel-19 RRM scope

Source: vivo

Document for: Discussion & Decision

Agenda Item: 9.1.4.3

Rel-19 RRM scope

- **General thoughts for Rel-19 RRM scope**
 - A umbrella/basket WI is used for necessary RRM only enhancement items.
 - At most up to 2-3 items, depending on the scope of each item.
 - The items should be with obvious gains and better commercially interested at present.
 - The scope should be clear enough to avoid unnecessary discussions on understanding / interpretation of the scope in RAN4.

Motivation of RRM enhancement only items

RRM

- Rel-17 leftover
 - In RAN#95-e meeting, TCI state switch delay enhancement and HO with PSCell new scenarios were prioritized for Rel-18 in moderator summary RP-220021.
 - It was not considered in Rel-18 due to RAN4 workload issue
 - TCI state switch delay enhancement
 - Periodic TRS and A-TRS have been used for reduction of SCell activation delay. The enhancement were made in Rel-17 and Rel-18 for known and unknown SCell activation, respectively.
 - Similar solution can be used for reducing TCI state switch delay when one SSB is needed during the switch. The TCI state switch delay can be reduced for
 - Rel-15/16 TCI state framework
 - Unified TCI state framework
- HO with PSCell
 - Following scenarios could happen in practical NW
 - HO with Pcell from NR SA to NR-DC
 - CHO with CPA

Motivation of RRM enhancement only items

RRM

- Gap combination of different features

- RAN2 signaling in general supports joint configuration for all gap features, including concurrent gap, Pre-MG, NCSG, ePOS, MUSIM and NTN.
- However, RAN4 has not define any requirements on joint configuration gaps of different features.
- It is high likely a UE would support MUSIM and NTN. There is benefit to define corresponding requirements for the joint configuration of the two features in terms of gap handling. MSIM and NCSG may be another example.

- RACH-less handover

- In Rel-18, RAN4 agreed to define delay requirements and timing requirements on RACH-less handover for NTN scenario.
- However, there is no requirement for NR RACH-less handover procedure which would make RACH-less handover unstable depending on UE implementations.

Scope of RRM enhancement only items

RRM

- TCI state switch delay enhancement
 - Specify requirements for TCI state switch delay based on periodical TRS / A-TRS.
 - Note: It includes requirements for Rel-15/16 TCI state framework and unified TCI state framework
- HO with PSCell
 - Specify requirements for HO with PSCell for following scenario
 - HO with Pcell from NR SA to NR-DC
 - CHO with CPA
- Gap combination of different features
 - Specify RRM requirements for joint configuration of or MUSIM gaps and NTN gaps.
 - Note: Other feature combinations may also be considered depending on interest from industry, e.g., joint configuration of MUSIM gaps and NCSG, etc.
- RACH-less handover
 - Specify requirements for NR RACH-less handover

THANK YOU.

谢谢。