

3GPP TSG RAN Rel-19 workshop

Taipei, June 15 – 16, 2023

Agenda Item: 5

RWS-230356



# Further enhancement on MUSIM in Rel-19

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# Motivation on MUSIM enhancement in Rel-19

- **Motivation 1:** For the periodic/short time activities in NW B, a finer granularity MUSIM gap in NW A is more suitable.
  - Issue 1: R17 per UE MUSIM gap causes data interruption and throughput loss in NW A
  - Issue 2: R18 MUSIM capability switching causes the related resources release with data throughput loss in NW A
- **Motivation 2:** There is a fair percentage of mobile phones with 2 USIMs from the same operator, and also RAN Sharing is deployed in China.
  - Issue 1: The network need to do some coordination for both USIMs to improve the performance both network side and UE side by same operator information.

- **Motivation 3:** SA1 has proposed dual steering in SA1 R19, which is highly similar with the dual active MUSIM case, i.e., two simultaneous 3GPP accesses for two RAN nodes and no RAN node coordination between two RAN nodes. Thus, dynamic capability change may be needed
  - Issue: SA1 assumes that it will be no RAN impacts by super and independent hardware/RF by the UE. It is not realistic from RAN Point of view, i.e., interference between UL and DL in UE side.

# Scope and Objective

- Enhancements of finer granularity (e.g. per CG, per FR, per CC) MUSIM gap:
  - Specify request/configure a finer granularity MUSIM gap
  - Specify new RRM requirement for the finer granularity MUSIM gap
- Enhancements for same operator:
  - Specify indicating the same operator USIM information to the network. The coordination of RRC configuration and scheduling between two USIMs can be based on the same operator information.
- Identify and specify the RAN impacts based on dual steering scenarios based on existing MUSIM mechanism

Thanks