**3GPP TSG-RAN WG4 Meeting # 111** **R4-2410143**

**Fukuoka City, Japan, 20th – 24th May, 2024**

**Agenda item:** 6.15.3

**Source:** Moderator (vivo)

**Title:** WF on NR Dual TxRx Multi-SIM

**Document for:** Approval

# Topic #1: RRM core requirements maintenance for Rel-17 MUSIM gaps

### Sub-topic 1-1 RRM core requirements maintenance for Rel-17 MUSIM gaps

**Issue 1-1-1: Mandatory MUSIM gap patterns or constraints on MUSIM gap request from UE side**

Agreement:

No consensus to introduce mandatory MUSIM gap patterns in Rel-18.

This issue is closed.

**Issue 1-1-2: Scenarios for the case where the MO to be measured without MG have to be measured in the associated MG**

Agreement:

* + - Case 1: For the scenario when measurement gap and MUSIM gaps are configured, where intra/inter- frequency measurement is measured with no measurement gap however part of the SMTC occasions of this intra/inter- frequency measurement object are overlapped with the measurement gap and all its SMTC are overlapping with the union of measurement gap and MUSIM gaps. Clarify the measurement will be performed within measurement gap.
			* Further discuss the CR wording
		- Case 2: For the scenario when concurrent gaps and MUSIM gaps are configured, where intra intra/inter- frequency measurement is measured with no measurement gap however part of the SMTC occasions of this intra/inter- frequency measurement object are overlapped with the associated measurement gap of concurrent gap and all its SMTC are overlapping with the union of concurrent gaps and MUSIM gaps. Clarify the measurement will be performed within the associated measurement gaps.
			* Further discuss the CR wording
		- Case 3: For the scenario when concurrent gaps and MUSIM gaps are configured, where intra/inter-frequency measurement is measured with no measurement gap and this measurement object is not associated with any concurrent gap, No requirement applies when all its SMTC are overlapping with the union of concurrent gaps and MUSIM gaps.
			* The proposal for case 3 is RAN4’s common understanding in principle, and further discuss whether/how to capture it in the spec.

**Issue 1-1-3: How to capture agreements on MUSIM and Type-1 collision handling when their MGRP is identical**

Agreement:

Capture in the MUSIM requirements in an existing section that no requirements apply if collisions occur between a MUSIM gap and any measurement gap without assigned priority if the two gaps in a collision have the same MGRP.

**Issue 1-1-4: Clarification on network schedule on dropped gaps**

Agreement:

The network can schedule the UE in gaps (MUSIM and measurement gaps) which are dropped due to gap collision handling.

* Capture the above understanding in RAN4 spec if it it not fully covered in the current spec. Further discuss the details in the CR.

**Issue 1-1-5: Clarification on MUSIM related operations within allocated MUSIM gaps**

*Recommendations: Discuss in the CR*

**Issue 1-1-6: Clarification on MUSIM requirements**

*Recommendations:*

*Discuss in the CR*

**Issue 1-1-7: UE Rel-18 MUSIM operation using separate receiver**

* Proposals
	+ P1: RAN4 need to discuss potential impact from UE autonomous MUSIM operation using a separate (MUSIM) receiver. RAN4 to provide a clarification within Rel-18 regarding Rel-18 MUSIM operation using separate receiver (Nokia)

**Issue 1-1-8: Clarify UE requirements when only part of the requested MUSIM gaps are allocated by the network.**

* Proposals:
	+ Clarify that the MUSIM requirements applies when UE is allocated one or more of the requested MUSIM gaps.