**3GPP TSG RAN WG1#104-e R1-21xxxxx**

**e-Meeting, January 25th – February 5th, 2021**

**Title:** DRAFT Reply LS on measuring CSI-RS during SCell activation

**Response to:** LS R1-2100008 (R4-2017381) from TSG RAN WG4

**Release:** 16

**Work Item:** NR\_unlic-Core

**Source:** TSG RAN WG1

**To:** TSG RAN WG4

**Contact person:** Alexander Golitschek

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# 1 Overall description

RAN1 would like to thank RAN4 for their LS in R1-2100008 (R4-2017381) on measuring CSI-RS during SCell activation.

RAN1 discussed the questions about the UE behavior with respect to CSI reports during the SCell activation procedure in case none or some of RRC parameters CO-DurationPerCell-r16, SlotFormatIndicator, and CSI-RS-ValidationWith-DCI-r16 are configured with or without corresponding DCIs for the SCell being activated:

**Question by RAN4** (1)   When none of the RRC parameters CO-DurationPerCell-r16, SlotFormatIndicator, and CSI-RS-ValidationWith-DCI-r16 is configured for a UE on the being-activated SCell,

a.      What is the expected UE behavior for this P/SP CSI-RS measurement and report on the being-activated SCell?

**Reply by RAN1:** As in Rel-15, the UE is expected to receive the P/SP CSI-RS.

**Question by RAN4** (2)   When RRC parameters CSI-RS-ValidationWith-DCI-r16 is configured, but SlotFormatIndicator and CO-DurationPerCell-r16 are not configured for the being-activated SCell,

a.      What is the expected UE behavior for this P/SP CSI-RS measurement and report on the being-activated SCell? Does UE need to decode a DCI format from other active serving cell (indicating an aperiodic CSI-RS reception or scheduling a PDSCH reception in the set of symbols of the slot) for this being-activated SCell to validate this P/SP CSI-RS?

**Question by RAN4** (3)   When RRC parameters CO-DurationPerCell-r16 is configured but SlotFormatIndicator is not configured for the being-activated SCell,

a.      What is the expected UE behavior for this P/SP CSI-RS measurement and report on the being-activated SCell? Does UE need to decode a DCI format 2\_0 (indicating remaining channel occupancy duration) from other active serving cell for this being-activated SCell to validate the CSI-RS?

**Question by RAN4** (4)   When RRC parameters CO-DurationPerCell-r16 is not configured but SlotFormatIndicator is configured for the being-activated SCell,

a.      What is the expected UE behavior for this P/SP CSI-RS measurement and report on the being-activated SCell? Does UE need to detect a DCI format 2\_0 (indicating the starting point of CO duration and the slot format) from other active serving cell for this being-activated SCell to validate the CSI-RS?

**Reply by RAN1:** RAN1 has discussed these cases, but has not achieved consensus on the expected UE behaviour. RAN1 will inform RAN4 if consensus is achieved in the future.

# 2 Actions

**To TSG RAN WG4**

**ACTION:** RAN1 respectfully asks RAN4 to consider the above reply.

# 3 Dates of next TSG RAN WG1 meetings

TSG RAN WG1 Meeting #104bis-e 12 - 20 April 2021 Online

TSG RAN WG1 Meeting #105-e 19 - 27 May 2021 Online