**3GPP TSG RAN WG1 #118 R1-240xxxx**

**Maastricht, NL, August 19th – 23rd, 2024**

**Source: Moderator (CATT)**

**Title:** **Summary of rate matching pattern for multicast reception in RRC\_INACTIVE state**

**Agenda Item:** **8.1**

**Document for:** **Discussion and Decision**

# Introduction

This contribution aims to collect company’s opinions on the draft CR [1] on rate matching pattern for multicast reception in RRC\_INACTIVE state.

# Discussion

**Reason for change:**

When UE is configured to receive broadcast, REs indicated by *RateMatchPatternLTE-CRS* are not available for broadcast reception. For multicast reception in RRC\_INACTIVE\_state, the same scheme should be reused. But in current specification, it is not clear whehter REs indicated by *RateMatchPatternLTE-CRS* are available or not for multicast reception in RRC\_INACTIVE\_state.

**Proposed TP on TS 38.214:**

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| 5.1.4.2 PDSCH resource mapping with RE level granularity The procedures for PDSCH scheduled by PDCCH with DCI format 1\_1 described in this clause equally apply to PDSCH scheduled by PDCCH with DCI format 1\_2, by applying the parameters of *aperiodicZP-CSI-RS-ResourceSetsToAddModListDCI-1-2* instead of *aperiodic-ZP-CSI-RS-ResourceSetsToAddModList*. The procedures for PDSCH scheduled by PDCCH with DCI format 1\_1 described in this clause equally apply to PDSCH scheduled by PDCCH with DCI format 1\_3.  The procedures for PDSCH scheduled by PDCCH with DCI format 1\_0 described in this clause equally apply to PDSCH scheduled by PDCCH with DCI format 4\_1 and the procedures for PDSCH scheduled by PDCCH with DCI format 1\_1 described in this clause equally apply to PDSCH scheduled by PDCCH with DCI format 4\_2, by applying the parameters of *aperiodicZP-CSI-RS-ResourceSetsToAddModList in pdsch-ConfigMulticast* instead of *aperiodic-ZP-CSI-RS-ResourceSetsToAddModList in PDSCH-Config*.  A UE may be configured with any of the following higher layer parameters:  *-* REs indicated by the '*RateMatchPatternLTE-CRS*'in *lte-CRS-ToMatchAround* in *ServingCellConfig* or *ServingCellConfigCommon* configuring cell-specific RS, in 15 kHz subcarrier spacing applicable only to 15 kHz subcarrier spacing PDSCH, of one LTE carrier in a serving cell are declared as not available for PDSCH.  *-* REs indicated by *'RateMatchPatternLTE-CRS'* in *lte-CRS-PatternList1-r16* or *lte-CRS-PatternList3-r18* in *ServingCellConfig* configuring cell-specific RS, in 15 kHz subcarrier spacing applicable only to 15 kHz subcarrier spacing PDSCH, of one LTE carrier in a serving cell are declared as not available for PDSCH.  - For the UE for broadcast reception or multicast reception in RRC\_INACTIVE\_state, REs indicated by *'RateMatchPatternLTE-CRS'* in *pdsch-ConfigMCCH* or *pdsch-ConfigMTCH* configuring cell-specific RS, in 15 kHz subcarrier spacing applicable only to 15 kHz subcarrier spacing PDSCH, of one LTE carrier in a serving cell are declared as not available for broadcast PDSCH or multicast PDSCH reception in RRC\_INACTIVE\_state. The total number of *RateMatchPatternLTE-CRS* for broadcast reception or multicast reception in RRC\_INACTIVE\_state that a UE can be configured with is the same as for unicast in Rel-15.  < Unchanged parts are omitted > |

**Discussion**

Companies provide your views in the following table:

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| **Company** | **Comments** |
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# Conclusion [TBD]

# References

1. R1-2406338 Draft CR on rate matching pattern for multicast reception in RRC\_INACTIVE state, CATT, CBN, China broadnet