**3GPP TSG-RAN WG2 Meeting #112-e R2-201xxxx**

**Online, 2 – 13 November 2020**

**Title: [DRAFT]** LS on per-table MCS range for mode-2

**Response to:**

**Release:** Rel-16

**Work Item:** 5G\_V2X\_NRSL

**Source:** OPPO [To be RAN2]

**To:** RAN1

**Cc:**

**Contact Person:**

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**Attachments:**

**1. Overall Description:**

Following RAN1 request on RRC parameter definition, RAN2 defined

* Per-pool configuration on additional MCS table, for the following parameter (in R1-2003190), and

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| additional-mcs-Table-SL | new | mcs-Table-SL | Indicates MCS table(s) additionally used in a resource pool. FFS in RAN1 on whether multiple MCS tables can be configured in a resource pool. 64QAM table is (pre-)configured as default. Zero, one or two additional can be additionally (pre-)configured using the 256QAM and/or low-SE MCS tables | {qam256}, {qam64LowSE}, {qam256, qam64LowSE} |

* Per-table configuration on MCS range for each additional MCS table for mode-1 operation (in R1-2005050)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| minMcs-Mode1 | new | minMcs-Mode1 | Indicates the minimum MCS value for Mode 1 configured and dynamic grants when using the associated MCS table. If no MCS is configured, UE autonomously selects MCS from the full range of values.  | 0..27 |
| maxMcs-Mode1 | new | maxMcs-Mode1 | Indicates the maximum MCS value used for Mode 1 configured and dynamic grants when using the associated MCS table. If no MCS is configured, UE autonomously selects MCS from the full range of values. | 0..31 |

For mode-2 operation, MCS-ranges specified in RRC specification are de-coupled with MCS-tables, i.e.,

* *sl-MinMCS-PSSCH* and *sl-MaxMCS-PSSCH* included in *sl-PSSCH-TxConfigList*, which is the PSSCH transmission parameter table based on UE speed and synchronization source; and
* *sl-MinMCS-PSSCH* and *sl-MaxMCS-PSSCH* indicated in *sl-CBR-PSSCH-TxConfigList*, which is the PSSCH transmission parameter table based on CBR and priority

RAN2 would like to request feedback from RAN1 on the following question:

**Q1**: Similar to mode-1 operation, considering the MCS table(s) additionally used in a resource pool (i.e., MCS table for 256QAM and/or low-SE), is there a need to define per-MCS-table MCS ranges for mode-2 operation (i.e., in the PSSCH transmission parameter table based on UE speed and synchronization source, and the PSSCH transmission parameter table based on CBR and priority) or not?

**2. Actions:**

**To RAN1 group**

RAN2 respectfully requests RAN1 to feedback on Q1 as above.

**3. Date of Next TSG-RAN2 Meetings:**

3GPPRAN2#113 25 January – 5 February 2021 E-meeting

3GPPRAN2#113-bis 12-21 April 2021 E-meeting