**3GPP TSG-SA5 Meeting #132e *S5-204205***

**e-meeting 17th 28th August 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | 28.552 | **CR** | 0254 | **rev** | 1 | **Current version:** | 16.6.0 |  |
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| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network |  |

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| ***Title:*** | Modify MCS related Measurements | | | | | | | | | |
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| ***Source to WG:*** | ZTE | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5G\_SLICE\_ePA | | | | |  | ***Date:*** | | | 2020/8/3 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) Rel-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
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| ***Reason for change:*** | | MCS related Measurements “spatial multiplexing” is ambiguous and needs to be defined SU-MIMO ( single user multiple input multiple output) in c) | | | | | | | | |
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| ***Summary of change:*** | | Modify Spatial multiplexing as single user Spatial multiplexing. | | | | | | | | |
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| ***Consequences if not approved:*** | | The existing measurement definitions are inaccurate and easy to be misunderstood. | | | | | | | | |
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| ***Clauses affected:*** | | 5.1.1.12.1, 5.1.1.12.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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| **1st modified section** |

##### 5.1.1.12 MCS related Measurements

##### 5.1.1.12.1 MCS Distribution in PDSCH

a) This measurement provides the distribution of the MCS scheduled for PDSCH RB by NG-RAN.

b) CC

c) This measurement is obtained by incrementing the appropriate measurement bin with the number of the PDSCH RBs according to the MCS scheduled by NG-RAN. When single user spatial multiplexing(ie SU-MIMO) is used, MCS for both rank indicator should be considered. Different *MCS index tables for PDSCH* should be considered when the configuration is different as defined in clause 5.1.3.1, TS 38.214 [19]. The RBs used for broadcast should be excluded.

d) Each measurement is a single integer value.

e) CARR.PDSCHMCSDist.BinX.BinY.BinZ, where X represents the index of rank value (1 to 8), Y represents the index of table value (1 to 3), and Z represents the index of the MCS value (0 to 31).

f) NRCellDU.

g) Valid for packet switching.

h) 5GS.

##### 5.1.1.12.2 MCS Distribution in PUSCH

a) This measurement provides the distribution of the MCS scheduled for PUSCH RB by NG-RAN.

b) CC.

c) This measurement is obtained by incrementing the appropriate measurement bin with the number of the PUSCH RBs according to the MCS scheduled by NG-RAN. When single user spatial multiplexing (ie SU-MIMO)is used, MCS for both rank indicator should be considered. Different *MCS index tables for PUSCH with transform precoding and 64QAM* should be considered when the configuration is different as defined in clause 6.1.4.1, TS 38.214 [19].

d) Each measurement is a single integer value.

e) CARR.PUSCHMCSDist.BinX.BinY.BinZ, , where X represents the index of rank value (1 to 8), Y represents the index of table value (1 to 2), and Z represents the index of the MCS value (0 to 31).

f) NRCellDU.

g) Valid for packet switching.

h) 5GS.

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| **End of modifications** |