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| **3GPP TSG RAN WG1 Meeting #102-e R1-200xxxx**  **e-Meeting, 17th – 28th August, 2020**   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | *CR-Form-v12.0* | | | | | | | | | | **CHANGE REQUEST** | | | | | | | | | |  | | | | | | | | | |  | **38.213** | **CR** | **DRAFT** | **rev** | **-** | **Current version:** | **16.2.0** |  | |  | | | | | | | | | | *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)*.* | | | | | | | | | |  | | | | | | | | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network | **X** | Core Network |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | | | | | | | | | | | | ***Title:*** | Draft CR (Rel-16, F) on Tyep-3 CSS monitoring with PS-RNTI on primary cell | | | | | | | | | | |  |  | | | | | | | | | | | ***Source to WG:*** | CATT, Samsung, Huawei, HiSilicon | | | | | | | | | | | ***Source to TSG:*** | RAN WG1 | | | | | | | | | | |  |  | | | | | | | | | | | ***Work item code:*** | **NR\_UE\_pow\_sav\_CORE** | | | | |  | | ***Date:*** | | 2020-08-26 | |  |  | | | |  | | |  | |  | | ***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)* | | |  |  | | | | | | | | | | | ***Reason for change:*** | | DCI format 2\_6 scrambled by PS-RNTI can be monitored at primary cell only (PCell for CA and SpCell for DC). However, in the paragraph related to Type3-CSS in 38.213 Section 10.1, it is ambiguous whether the PS-RNTI can be monitored in primary cell only or not since PS-RNTI is located wrongly | | | | | | | | | | ***-*** | |  | | | | | | | | | | ***Summary of change:*** | | Locate PS-RNTI to the primary cell only for Type3-CSS. | | | | | | | | | |  | |  | | | | | | | | | | ***Consequences if not approved:*** | | The UE behavior is not clear in Type3-CSS when CRC is scrambled by PS-RNTI | | | | | | | | | |  | |  | | | | | | | | | | ***Clauses affected:*** | | 10.1 | | | | | | | | | |  | |  | | | | | | | | | |  | | **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:*** | | Isolated impact analysis:  The CR clarifies the UE behavior of Type3-CSS PDCCH monitoring with CRC scrambled by PS-RNTI only at primary cell (PCell for CA and SpCell for DC). The current specification incorrect specifies the PS-RNTI could have Type3-CSS PDCCH monitoring at any cell. | | | | | | | | | |  | |  | | | | | | | | | | ***This CR's revision history:*** | | This is the first version for this CR. | | | | | | | | | |

10.1 UE procedure for determining physical downlink control channel assignment

A set of PDCCH candidates for a UE to monitor is defined in terms of PDCCH search space sets. A search space set can be a CSS set or a USS set. A UE monitors PDCCH candidates in one or more of the following search spaces sets

- a Type0-PDCCH CSS set configured by *pdcch-ConfigSIB1* in *MIB* or by *searchSpaceSIB1* in *PDCCH-ConfigCommon* or by *searchSpaceZero* in *PDCCH-ConfigCommon* for a DCI format with CRC scrambled by a SI-RNTI on the primary cell of the MCG

- a Type0A-PDCCH CSS set configured by *searchSpaceOtherSystemInformation* in *PDCCH-ConfigCommon* for a DCI format with CRC scrambled by a SI-RNTI on the primary cell of the MCG

- a Type1-PDCCH CSS set configured by *ra-SearchSpace* in *PDCCH-ConfigCommon* for a DCI format with CRC scrambled by a RA-RNTI, a MsgB-RNTI, or a TC-RNTI on the primary cell

- a Type2-PDCCH CSS set configured by *pagingSearchSpace* in *PDCCH-ConfigCommon* for a DCI format with CRC scrambled by a P-RNTI on the primary cell of the MCG

- a Type3-PDCCH CSS set configured by *SearchSpace* in *PDCCH-Config* with *searchSpaceType* = *common* for DCI formats with CRC scrambled by INT-RNTI, SFI-RNTI, TPC-PUSCH-RNTI, TPC-PUCCH-RNTI, TPC-SRS-RNTI, or CI-RNTIand, only for the primary cell, C-RNTI, MCS-C-RNTI, CS-RNTI(s), or PS-RNTI and

- a USS set configured by *SearchSpace* in *PDCCH-Config* with *searchSpaceType* = *ue-Specific* for DCI formats with CRC scrambled by C-RNTI, MCS-C-RNTI, SP-CSI-RNTI, CS-RNTI(s), SL-RNTI, SL-CS-RNTI, or SL-L-CS-RNTI.