**3GPP TSG-RAN WG3 Meeting #109-e *R3-20***

**17- 28 Aug 2020**

**Online**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.473** | **CR** | 0632 | **rev** | **1** | **Current version:** | **16.2.0** |  |
|  | | | | | | | | |
| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)*** *on using this form: comprehensive instructions can be found at  <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:*** | Correction on Overlapping Band Handling over F1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | ZTE | | | | | | | | | |
| ***Source to TSG:*** | R3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_newRAT-Core | | | | |  | ***Date:*** | | | 2020-08-24 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **A** |  | | | | | ***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:*** | | In single connectivity(PCell supports multiple overlapping bands), carrier aggregation and dual connectivity scenarios, the UE may support different band combinations with overlapping bands, and the network shall select the band combination with highest throughput to provide the best performance for the UE. In this case, the gNB-DU shall transmit the newly selected band in form of band combination to the gNB-CU. However, in current F1AP specification, there is no related description of this issue, especially for the CA scenario. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Extend the scope of the *Selected BandCombinationIndex* IE to include single connectivity and CA scenarios.  Impact Analysis:  Impact assessment towards the previous version of the specification (same release):  This CR has isolate impact on the band selection over F1.  No ANS.1 impact. | | | | | | | | |
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| ***Consequences if not approved:*** | | The network cannot select the optimal band combination for UE. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 8.3.1; 9.3.1.26 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | |  | | |
| ***affected:*** | |  | **X** | Test specifications | | | |  | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | Rev1:  Update the semantic description of the *Selected BandCombinationIndex* IE. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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### 8.3.1 UE Context Setup

<Unchanged Part Skipped>

If the *RAN UE ID* IE is contained in the UE CONTEXT SETUP REQUEST message, the gNB-DU shall store and replace any previous information received.

If the *Selected BandCombinationIndex* IE is included in the *DU to CU RRC Information* IE contained in the UE CONTEXT SETUP RESPONSE message, the gNB-CU shall consider the bands of the band combination corresponds to the received BandCombinationIndex, as described in TS 38.331 [8], as the ones in use for the UE.

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#### 9.3.1.26 DU to CU RRC Information

This IE contains the RRC Information that are sent from the gNB-DU to the gNB-CU.

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| **IE/Group Name** | **Presence** | **Range** | **IE type and reference** | **Semantics description** | **Criticality** | **Assigned Criticality** |
| CellGroupConfig | M |  | OCTET STRING | CellGroupConfig, as defined in TS 38.331 [8]. |  |  |
| MeasGapConfig | O |  | OCTET STRING | MeasGapConfig as defined in TS 38.331 [8].  For EN-DC/NGEN-DC operation, includes the gap for FR2, as requested by the gNB-CU via MeasConfig IE.  For NG-RAN,NE-DC and MN for NR-NR DC, includes the gap(s) for FR1 and/or FR2, as requested by the gNB-CU via MeasConfig IE and according to the requested gap type (per-UE or per-FR). |  |  |
| Requested P-MaxFR1 | O |  | OCTET STRING | requestedP-MaxFR1, as defined in TS 38.331 [8].  For EN-DC, NGEN-DC and NR-DC operation, this IE should be included. |  |  |
| DRX Long Cycle Start Offset | O |  | INTEGER (0..10239) | Identical to the value of the drx-LongCycleStartOffset IE within the DRX-Config as defined in TS 38.331 [8].  This field is not used in NR-DC. |  |  |
| Selected BandCombinationIndex | O |  | OCTET STRING | BandCombinationIndex, as defined in TS 38.331 [8].  This IE should be included so that gNB-CU is informed of the selected Band Combination. | YES | ignore |
| Selected FeatureSetEntryIndex | O |  | OCTET STRING | FeatureSetEntryIndex, as defined in TS 38.331 [8].  For (NG)EN-DC and NR DC operation, this IE should be included so that gNB-CU is informed of the selected FeatureSet. | YES | ignore |
| Ph-InfoSCG | O |  | OCTET STRING | PH-TypeListSCG, as defined in TS 38.331 [8].For MR-DC, this IE should be included so that gNB-CU is informed of the Power Headroom type for each serving cell in SN. | Yes | ignore |
| Requested BandCombinationIndex | O |  | OCTET STRING | BandCombinationIndex, as defined in TS 38.331 [8].  This IE is used for the gNB-DU to request a new Band Combination. | YES | ignore |
| Requested FeatureSetEntryIndex | O |  | OCTET STRING | FeatureSetEntryIndex, as defined in TS 38.331 [8].  This IE is used for the gNB-DU to request a new Feature Set. | YES | ignore |
| DRX Config | O |  | OCTET STRING | DRX-Config, as defined in TS 38.331 [8].  This field is only used in NR-DC. | YES | ignore |
| PDCCH BlindDetectionSCG | O |  | OCTET STRING | pdcch-BlindDetectionSCG, as defined in TS 38.331 [8]. This IE is used between the MgNB-DU and the MgNB-CU. | YES | ignore |
| Requested PDCCH BlindDetectionSCG | O |  | OCTET STRING | requestedPDCCH-BlindDetectionSCG, as defined in TS 38.331 [8]. This IE is used between the SgNB-DU and the SgNB-CU. | YES | ignore |
| Ph-InfoMCG | O |  | OCTET STRING | PH-TypeListMCG, as defined in TS 38.331 [8]. For MR-DC, this IE should be included so that gNB-CU is informed of the Power Headroom type for each serving cell in MCG. | YES | ignore |
| MeasGapSharingConfig | O |  | OCTET STRING | MeasGapSharingConfig as defined in TS 38.331 [8]. | YES | ignore |
| SL-PHY-MAC-RLC-Config | O |  | OCTET STRING | SL-PHY-MAC-RLC-Config as defined in TS 38.331 [8]. | YES | ignore |
| SL-ConfigDedicatedEUTRA | O |  | OCTET STRING | SL-ConfigDedicatedEUTRA as defined in TS 38.331 [8]. | YES | ignore |
| Requested P-MaxFR2 | O |  | OCTET STRING | RequestedP-MaxFR2, as defined in TS 38.331 [8].  For NR-DC operation, this IE should be included. | YES | ignore |

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