**3GPP TSG-RAN WG2 Meeting #129 R2-2500xxxx**

**Athens, Greece, 17th – 21st Feb. 2025**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.306** | **CR** | **1204** | **rev** | **2** | **Current version:** | **18.4.0** |  |
|  | | | | | | | | |
| *For* [***HELP***](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 | **X** | Radio Access Network | **X** | Core Network |  |

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| ***Title:*** | Correction on UE capability on ncd-SSB-BWP-Wor-r18 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | vivo, Qualcomm Incorporated, Guangdong Genius | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_BWP\_wor-Core | | | | |  | ***Date:*** | | | 2025-02-07 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In TS 38.306, the current field description for *ncd-SSB-BWP-Wor-r18* only mentions the Bandwidth of UE-specific RRC configured BWP may not include bandwidth of the CORESET#0 (if CORESET#0 is present) and CD-SSB for PCell/PSCell (if configured). For PSCell case, the current wording may not be clear enough on whether it includes the case for CD-SSB-less PSCell, e.g. when the UE is configured only with the initial BWP which contains NCD-SSB, and there is no UE-specific BWP or other NCD-SSB; or when NCD-SSB is associated with both initial BWP and UE specific BWP, and UE’s active BWP is the initial BWP. In this way, the current specification may be mis-interpreted as *ncd-SSB-BWP-Wor-r18* is not applicable for the case that PSCell’s initial BWP or the active BWP is associated with NCD-SSB.  According to RAN4 specifcation, UE will not measure NCD-SSB unless UE supports *ncd-SSB-BWP-Wor-r18* in this case. Thus, it is clear that *ncd-SSB-BWP-Wor-r18* is also applicable for the case that PSCell’s initial BWP or the active BWP is associated with NCD-SSB.  In order to avoid any mis-interpretation on the current field decription for *ncd-SSB-BWP-Wor-r18*, it is better to change the corresponding clarifcation for PSCell in the field description for *ncd-SSB-BWP-Wor-r18* as: For PSCell (if configured), bandwidth of UE-specific RRC configured BWP needs not include bandwidth of the CORESET#0 (if CORESET#0 is present) and SSB indicated by *absoluteFrequencySSB* (either CD-SSB or NCD-SSB). | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Change the clarifcation in the field description for *ncd-SSB-BWP-Wor-r18* as: For PSCell (if configured), bandwidth of UE-specific RRC configured BWP needs not include bandwidth of the CORESET#0 (if CORESET#0 is present) and SSB indicated by *absoluteFrequencySSB* (either CD-SSB or NCD-SSB).  **Impact analysis**  Impacted 5G architecture options:  MR-DC  Impacted functionality  *ncd-SSB-BWP-Wor*  Inter-operability:   1. If the network is implemented according to the CR and the UE is not, there is no inter-operability issue. 2. If the UE is implemented according to the CR and the network is not, there is no inter-operability issue. | | | | | | | | |
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| ***Consequences if not approved:*** | | It is not clear whether *ncd-SSB-BWP-Wor-r18* is applicable for the case that PSCell’s initial BWP or the active BWP is associated with NCD-SSB. | | | | | | | | |
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| ***Clauses affected:*** | | 4.2.7.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

Start of change

#### 4.2.7.2 *BandNR parameters*

| **Definitions for parameters** | **Per** | **M** | **FDD-TDD**  **DIFF** | **FR1-FR2**  **DIFF** |
| --- | --- | --- | --- | --- |
| ***------------------------------Omit the unrelated part-------------------------------------*** |  |  |  |  |
| ***ncd-SSB-BWP-Wor-r18***  Indicates whether the UE supports RLM/BM/BFD and gapless L3 intra-frequency measurements based on NCD-SSB within active BWP. For Pcell, bandwidth of UE-specific RRC configured BWP needs not include bandwidth of the CORESET#0 (if CORESET#0 is present) and CD-SSB. For PSCell (if configured), bandwidth of UE-specific RRC configured BWP needs not include bandwidth of the CORESET#0 (if CORESET#0 is present) and SSB indicated by *absoluteFrequencySSB* (either CD-SSB or NCD-SSB). NCD-SSB within the active DL BWP can be used as the QCL source for other reference signal. UE performs L3 intra-frequency measurements without gaps based on NCD-SSB, where the NCD-SSB is within the active DL BWP.  NOTE: This feature applies only to PCell and PSCell (if configured). It is not applicable to RedCap or eRedCap UEs. | Band | No | N/A | N/A |
| ***------------------------------Omit the unrelated part-------------------------------------*** |  |  |  |  |

End of change