**3GPP TSG-RAN WG4 Meeting #104-e *R4-2213153***

**Electronic Meeting, 15 - 26 August, 2022**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **38.101-1** | **CR** | **1161** | **rev** | **-** | **Current version:** | **17.6.0** |  |
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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 | **X** | Radio Access Network |  | Core Network |  |

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| ***Title:***  | CR for 38.101-1 to clarify the ambiguity of BCS4 and BCS5 |
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| ***Source to WG:*** | Huawei, HiSilicon |
| ***Source to TSG:*** | R4 |
|  |  |
| ***Work item code:*** | NR\_BCS4-Core |  | ***Date:*** | 2022-07-11 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-17 |
|  | *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 canbe 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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
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| ***Reason for change:*** | In current configuration table, BCS4 and BCS5 were listed in one row. There is an ambiguity whether Bandwidth Combination Sets for the FR1 intra-band CA are BCS4 for inter-band CA combinations including FR1 intra-band CA and with BCS4 and whether Bandwidth Combination Sets for the FR1 intra-band CA are BCS5 for inter-band CA combinations including FR1 intra-band CA and with BCS5. |
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| ***Summary of change:*** | Wordings are improved to clarify this ambiguity. |
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| ***Consequences if not approved:*** | The ambiguity of BCS4 and BCS5 exist in the spec. |
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| ***Clauses affected:*** | 5.5A.0, 5.5C |
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|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** | **X** |  |  Test specifications | TS 38.521-1 |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

## **<<Start of Change>>**

### 5.5A.0 General

The configurations for CA operating band including Band n41 also apply for the corresponding CA operating bands with Band n90 replacing Band n41 but with otherwise identical parameters. For brevity the said configuration for CA operating bands with Band n90 are not listed in the tables below but are covered by this specification. For BCS4 and BCS5 combinations with n41, the n90 equivalents also include 5 MHz.

Non‑contiguous resource allocation and almost contiguous allocation are not applicable for each NR carrier of intra‑band contiguous and non-contiguous CA configurations.

For a CA configuration with one or more operating band supporting asymmetric channel bandwidths as specified in sub-clause 5.3.6, requirements are defined for an asymmetric UL and DL channel bandwidth combination of a supported asymmetric channel bandwidth combination set for an operating band of the CA configuration when the said UL and DL channel bandwidths are also contained in a supported bandwidth combination set of the CA configuration.

For a higher order band combination of which CA\_n20-n28 is a subset, the frequency range in band n28 is restricted for the higher order band combination to 703-733 MHz for the UL and 758-788 MHz for the DL.

The configuration tables for CA describe Bandwidth Combination Sets. Bandwidth Combination Set 4 and 5 contain all possible defined channel bandwidths for each band in the combination. The fact that BCS4 and BCS5 contain all channel bandwidths for each band does not alter if a bandwidth is mandatory or optional for a given band. Bandwidths that are identified as optional in Table 5.3.5-1 for a given release are still optional for UEs that support BCS4 or BCS5, where the bandwidths the UE supports for each band, the maximum bandwidth and/or minimum bandwidth for the band in the band combination are indicated in the UE capabilities. Note that the minimum bandwidth is indicated only in BCS5 and BCS5 shall not be indicated together with BCS4 for a CA configuration. For inter-band CA combinations including FR1 intra-band CA and with BCS4 or BCS5 in the following configuration tables, the Bandwidth Combination Sets for the FR1 intra-band CA are BCS4 or BCS5, respectively.

## **<<End of Change>>**

## **<<Start of Change>>**

## 5.5C Configurations for SUL

The configuration tables for SUL describe Bandwidth Combination Sets. Bandwidth Combination Set 4 and 5 contains all possible defined channel bandwidths for each band in the combination. The fact that BCS4 and BCS5 contains all channel bandwidths for each band does not alter if a bandwidth is mandatory or optional for a given band. Bandwidths that are identified as optional in Table 5.3.5-1 for a given release are still optional for UEs that support BCS4 or BCS5. , where the bandwidths the UE supports for each band, the maximum bandwidth and/or minimum bandwidth for the band in the band combination are indicated in the UE capabilities. Note that the minimum bandwidth is indicated only in BCS5 and BCS5 shall not be indicated together with BCS4 for a SUL configuration. For SUL band combinations including FR1 intra-band CA and with BCS4 or BCS5 in the following configuration tables, the Bandwidth Combination Sets for the FR1 intra-band CA are BCS4 or BCS5, respectively.

## **<<End of Change>>**