**3GPP TSG-RAN4 Meeting #100-e *R4-2113738***

**Online, , 16th August 2021 - 27th August 2021**

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| --- |
| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **38.104** | **CR** | **0343** | **rev** | **-** | **Current version:** | **17.2.0** |  |
|  |
| *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)*.* |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network |  |

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| --- |
|  |
| ***Title:***  | Big CR to TS 38.104: Adding channel BW support in existing NR bands |
|  |  |
| ***Source to WG:*** | Ericsson |
| ***Source to TSG:*** | R4 |
|  |  |
| ***Work item code:*** | NR\_bands\_R17\_BWs |  | ***Date:*** | 2021-08-30 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
|  |  |
| ***Reason for change:*** | Add following channel BWs support:* 25, 30 and 40 MHz in band n2.
* 25 MHz in band n5.
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|  |  |
| ***Summary of change:*** | Add CBW support in the bands table. |
|  |  |
| ***Consequences if not approved:*** | The new CBWs won’t be supported in those bands |
|  |  |
| ***Clauses affected:*** | 5.3.5 |
|  |  |
|  | **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 version is consolidating all endorsed draft CRs in RAN4#100-e meeting:R4-2111747 and R4-2111748. |
|  |  |
| ***This CR's revision history:*** |  |

*<Start of the change>*

### 5.3.5 *BS channel bandwidth* per *operating band*

The requirements in this specification apply to the combination of *BS channel bandwidths*, SCS and *operating bands* shown in table 5.3.5-1 for FR1 and in table 5.3.5-2 for FR2. The *transmission bandwidth configuration* in table 5.3.2-1 and table 5.3.2-2 shall be supported for each of the *BS channel bandwidths* within the BS capability. The *BS channel bandwidths* are specified for both the Tx and Rx path.

Table 5.3.5-1: *BS channel bandwidths* and SCS per *operating band* in FR1

| NR Band | SCS (kHz) | *BS channel bandwidth* (MHz) |
| --- | --- | --- |
| 5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|  | 15 | 5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
| n1 | 30 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
|  | 60 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
| n2 | 30 |  | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
|  | 60 |  | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
| n3 | 30 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
|  | 60 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 | 257 |  |  |  |  |  |  |  |  |
| n5 | 30 |  | 10 | 15 | 20 | 257 |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
| n7 | 30 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
|  | 60 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n8 | 30 |  | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 |  |  |  |  |  |  |  |  |  |  |
| n12 | 30 |  | 10 | 15 |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| n13 | 15 | 5 | 10 |  |  |  |  |  |  |  |  |  |  |  |
| 30 |  | 10 |  |  |  |  |  |  |  |  |  |  |  |
| 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 |  |  |  |  |  |  |  |  |  |  |  |
| n14 | 30 |  | 10 |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 |  |  |  |  |  |  |  |  |  |  |
| n18 | 30 |  | 10 | 15 |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n20 | 30 |  | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
| n24 | 15 | 5 | 10 |  |  |  |  |  |  |  |  |  |  |  |
|  | 30 |  | 10 |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  | 10 |  |  |  |  |  |  |  |  |  |  |  |
| n25 | 30 |  | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
|  | 60 |  | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
| n26 | 15 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
|  | 30 |  | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 |  | 30 | 40 |  |  |  |  |  |  |
| n28 | 30 |  | 10 | 15 | 20 |  | 30 | 40 |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 |  |  |  |  |  |  |  |  |  |  |  |
| n29 | 30 |  | 10 |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 |  |  |  |  |  |  |  |  |  |  |  |
| n30 | 30 |  | 10 |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 |  |  |  |  |  |  |  |  |  |  |
| n34 | 30 |  | 10 | 15 |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  | 10 | 15 |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
| n38 | 30 |  | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
|  | 60 |  | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
| n39 | 30 |  | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
|  | 60 |  | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
|  | 15 | 54 | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
| n40 | 30 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 |  | 80 | 90 | 100 |
|  | 60 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 |  | 80 | 90 | 100 |
|  | 15 |  | 10 | 15 | 20 |  | 30 | 40 | 50 |  |  |  |  |  |
| n41 | 30 |  | 10 | 15 | 20 |  | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|  | 60 |  | 10 | 15 | 20 |  | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|  | 15 |  | 106 |  | 20 |  |  | 40 |  |  |  |  |  |  |
| n46 | 30 |  | 106 |  | 20 |  |  | 40 |  | 60 |  | 80 |  |  |
|  | 60 |  | 106 |  | 20 |  |  | 40 |  | 60 |  | 80 |  |  |
|  | 15 | 52 | 10 | 15 | 20 |  | 30 | 40 | 501 |  |  |  |  |  |
| n48 | 30 |  | 10 | 15 | 20 |  | 30 | 40 | 501 | 601 | 701 | 801 | 901 | 1001 |
|  | 60 |  | 10 | 15 | 20 |  | 30 | 40 | 501 | 601 | 701 | 801 | 901 | 1001 |
|  | 15 | 52 | 10 | 15 | 20 |  | 30 | 40 | 50 |  |  |  |  |  |
| n50 | 30 |  | 10 | 15 | 20 |  | 30 | 40 | 50 | 60 |  | 80 |  |  |
|  | 60 |  | 10 | 15 | 20 |  | 30 | 40 | 50 | 60 |  | 80 |  |  |
|  | 15 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |
| n51 | 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 |  |  |  |  |  |  |  |  |  |  |  |
| n53 | 30 |  | 10 |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  | 10 |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 |  |  |  | 50 |  |  |  |  |  |
| n65 | 30 |  | 10 | 15 | 20 |  |  |  | 50 |  |  |  |  |  |
|  | 60 |  | 10 | 15 | 20 |  |  |  | 50 |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
| n66 | 30 |  | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
|  | 60 |  | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n67 | 30 |  | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 | 25 |  |  |  |  |  |  |  |  |
| n70 | 30 |  | 10 | 15 | 20 | 25 |  |  |  |  |  |  |  |  |
|  | 60 |  | 10 | 15 | 20 | 25 |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n71 | 30 |  | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n74 | 30 |  | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
|  | 60 |  | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
| n75 | 30 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
|  | 60 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
|  | 15 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |
| n76 | 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 |  | 10 | 15  | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
| n77 | 30 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|  | 60 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|  | 15 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
| n78 | 30 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|  | 60 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|  | 15 |  |  |  |  |  |  | 40 | 50 |  |  |  |  |  |
| n79 | 30 |  |  |  |  |  |  | 40 | 50 | 60 |  | 80 |  | 100 |
|  | 60 |  |  |  |  |  |  | 40 | 50 | 60 |  | 80 |  | 100 |
|  | 15 | 5 | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
| n80 | 30 |  | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
|  | 60 |  | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n81 | 30 |  | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n82 | 30 |  | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 |  | 30 | 40 |  |  |  |  |  |  |
| n83 | 30 |  | 10 | 15 | 20 |  | 30 | 40 |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
| n84 | 30 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
|  | 60 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 |  |  |  |  |  |  |  |  |  |  |
| n85 | 30 |  | 10 | 15 |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 |  |  | 40 |  |  |  |  |  |  |
| n86 | 30 |  | 10 | 15 | 20 |  |  | 40 |  |  |  |  |  |  |
|  | 60 |  | 10 | 15 | 20 |  |  | 40 |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n89 | 30 |  | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 |  | 10 | 15 | 20 |  | 30 | 40 | 50 |  |  |  |  |  |
| n90 | 30 |  | 10 | 15 | 20 |  | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|  | 60 |  | 10 | 15 | 20 |  | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|  | 15 | 5 | 103 |  |  |  |  |  |  |  |  |  |  |  |
| n91 | 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n92 | 30 |  | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 103 |  |  |  |  |  |  |  |  |  |  |  |
| n93 | 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n94 | 30 |  | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 5 | 10 | 15 |  |  |  |  |  |  |  |  |  |  |
| n95 | 30 |  | 10 | 15 |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  | 10 | 15 |  |  |  |  |  |  |  |  |  |  |
|  | 15 |  |  |  | 20 |  |  | 40 |  |  |  |  |  |  |
| n96 | 30 |  |  |  | 20 |  |  | 40 |  | 60 |  | 80 |  |  |
|  | 60 |  |  |  | 20 |  |  | 40 |  | 60 |  | 80 |  |  |
| n97 | 15 | 5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 |  |  |  |  |  |
| 30 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 |  | 80 |  | 100 |
| 60 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 |  | 80 |  | 100 |
| n98 | 15 | 5 | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
| 30 |  | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
| 60 |  | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  |
| n99 | 15 | 5 | 10 |  |  |  |  |  |  |  |  |  |  |  |
| 30 |  | 10 |  |  |  |  |  |  |  |  |  |  |  |
| 60 |  | 10 |  |  |  |  |  |  |  |  |  |  |  |
| NOTE 1: For this bandwidth, the minimum requirements are restricted to operation when carrier is configured as an downlink SCell part of CA configuration.NOTE 2: For this bandwidth, the minimum requirements are restricted to operation when carrier is configured as an SCell part of DC or CA configuration.NOTE 3: For this bandwidth, it only applies for UL transmission.NOTE 4: For this bandwidth, the minimum requirements are restricted to operation when carrier is configured as an SCell part of DC or CA configuration.NOTE 5: Void.NOTE 6: This bandwidth can only be applied in certain regions where the absence of non 3GPP technologies can be guaranteed on a long term basis in this version of specification.NOTE 7: For this bandwidth, it only applies for DL transmission. |

*<End of the change>*