**3GPP TSG-RAN WG4 Meeting #97-e *R4-2015911***

Electronic meeting, November 2nd – 13th, 2020

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.104** | **CR** | **0258** | **rev** | 1 | **Current version:** | **16.5.0** |  |
|  | | | | | | | | |
| *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 38.104 - Additional Channel BW | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_bands\_R17\_BWs | | | | |  | ***Date:*** | | | 2020-11-16 |
|  |  | | | |  | |  | | |  |
| ***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 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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Add following channel BWs support: 70MHz in n48, 30MHz in n83 and 25/30/40/50 MHz in n84.  And also, after RAN4#97-4: 40MHz in band n80 and 40MHz in band n83. | | | | | | | | |
|  | |  | | | | | | | | |
| ***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 | | |
| ***affected:*** | |  | **x** | Test specifications | | | | TS | | |
| ***(show related CRs)*** | |  | **x** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | This version is consolidating all endorsed draft CRs in RAN4#96-e meeting:  R4-2010525, R4-2010542 and R4-2010544.  A revision would be done if additional draft CRs are endorsed during this RAN4#97-e meeting. | | | | | | | | |

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| --- | --- |
| ***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 / *BS channel bandwidth* | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR Band | SCS  kHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz | 25 MHz | 30 MHz | 40 MHz | 50 MHz | 60 MHz | 70 MHz | 80 MHz | 90 MHz | 100 MHz |
|  | 15 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |
| n1 | 30 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |
|  | 60 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
| n2 | 30 |  | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
|  | 60 |  | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
| n3 | 30 |  | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
|  | 60 |  | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
| n5 | 30 |  | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |
| n7 | 30 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |
|  | 60 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
| n8 | 30 |  | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |  |
| n12 | 30 |  | Yes | Yes |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes |  |  |  |  |  |  |  |  |  |  |  |
| n14 | 30 |  | Yes |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |  |
| n18 | 30 |  | Yes | Yes |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
| n20 | 30 |  | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
| n25 | 30 |  | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
|  | 60 |  | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
| n26 | 15 | Yes | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
|  | 30 |  | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes |  | Yes | Yes |  |  |  |  |  |  |
| n28 | 30 |  | Yes | Yes | Yes |  | Yes | Yes |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes |  |  |  |  |  |  |  |  |  |  |  |
| n29 | 30 |  | Yes |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes |  |  |  |  |  |  |  |  |  |  |  |
| n30 | 30 |  | Yes |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |  |
| n34 | 30 |  | Yes | Yes |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  | Yes | Yes |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
| n38 | 30 |  | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
|  | 60 |  | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
| n39 | 30 |  | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
|  | 60 |  | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
|  | 15 | Yes4 | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |
| n40 | 30 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  | Yes |  | Yes |
|  | 60 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  | Yes |  | Yes |
|  | 15 |  | Yes | Yes | Yes |  | Yes | Yes | Yes |  |  |  |  |  |
| n41 | 30 |  | Yes | Yes | Yes |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
|  | 60 |  | Yes | Yes | Yes |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
|  | 15 |  | Yes6 |  | Yes |  |  | Yes |  |  |  |  |  |  |
| n46 | 30 |  | Yes6 |  | Yes |  |  | Yes |  | Yes |  | Yes |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes2 | Yes | Yes | Yes |  |  | Yes | Yes1 |  |  |  |  |  |
| n48 | 30 |  | Yes | Yes | Yes |  |  | Yes | Yes1 | Yes1 | Yes1 | Yes1 | Yes1 | Yes1 |
|  | 60 |  | Yes | Yes | Yes |  |  | Yes | Yes1 | Yes1 | Yes1 | Yes1 | Yes1 | Yes1 |
|  | 15 | Yes2 | Yes | Yes | Yes |  | Yes | Yes | Yes |  |  |  |  |  |
| n50 | 30 |  | Yes | Yes | Yes |  | Yes | Yes | Yes | Yes |  | Yes |  |  |
|  | 60 |  | Yes | Yes | Yes |  | Yes | Yes | Yes | Yes |  | Yes |  |  |
|  | 15 | Yes |  |  |  |  |  |  |  |  |  |  |  |  |
| n51 | 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes |  |  |  |  |  |  |  |  |  |  |  |
| n53 | 30 |  | Yes |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  | Yes |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes |  |  |  | Yes |  |  |  |  |  |
| n65 | 30 |  | Yes | Yes | Yes |  |  |  | Yes |  |  |  |  |  |
|  | 60 |  | Yes | Yes | Yes |  |  |  | Yes |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
| n66 | 30 |  | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
|  | 60 |  | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |  |  |
| n70 | 30 |  | Yes | Yes | Yes | Yes |  |  |  |  |  |  |  |  |
|  | 60 |  | Yes | Yes | Yes | Yes |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
| n71 | 30 |  | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
| n74 | 30 |  | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
|  | 60 |  | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |
| n75 | 30 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |
|  | 60 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |
|  | 15 | Yes |  |  |  |  |  |  |  |  |  |  |  |  |
| n76 | 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |
| n77 | 30 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
|  | 60 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
|  | 15 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |
| n78 | 30 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
|  | 60 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
|  | 15 |  |  |  |  |  |  | Yes | Yes |  |  |  |  |  |
| n79 | 30 |  |  |  |  |  |  | Yes | Yes | Yes |  | Yes |  | Yes |
|  | 60 |  |  |  |  |  |  | Yes | Yes | Yes |  | Yes |  | Yes |
|  | 15 | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
| n80 | 30 |  | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
|  | 60 |  | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
| n81 | 30 |  | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
| n82 | 30 |  | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes |  | Yes | Yes |  |  |  |  |  |  |
| n83 | 30 |  | Yes | Yes | Yes |  | Yes | Yes |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |
| n84 | 30 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |
|  | 60 |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes |  |  | Yes |  |  |  |  |  |  |
| n86 | 30 |  | Yes | Yes | Yes |  |  | Yes |  |  |  |  |  |  |
|  | 60 |  | Yes | Yes | Yes |  |  | Yes |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
| n89 | 30 |  | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 |  | Yes | Yes | Yes |  | Yes | Yes | Yes |  |  |  |  |  |
| n90 | 30 |  | Yes | Yes | Yes |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
|  | 60 |  | Yes | Yes | Yes |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
|  | 15 | Yes | Yes3 |  |  |  |  |  |  |  |  |  |  |  |
| n91 | 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
| n92 | 30 |  | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes3 |  |  |  |  |  |  |  |  |  |  |  |
| n93 | 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
| n94 | 30 |  | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | Yes | Yes | Yes |  |  |  |  |  |  |  |  |  |  |
| n95 | 30 |  | Yes | Yes |  |  |  |  |  |  |  |  |  |  |
|  | 60 |  | Yes | Yes |  |  |  |  |  |  |  |  |  |  |
|  | 15 |  |  |  | Yes |  |  | Yes |  |  |  |  |  |  |
| n96 | 30 |  |  |  | Yes |  |  | Yes |  | Yes |  | Yes |  |  |
|  | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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. | | | | | | | | | | | | | | |

*<End of the change>*