**3GPP TSG-RAN2 Meeting #113bis electronic R2-210xxxx**

**Online, April 12th - April 20th, 2021**

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| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **38.306** | **CR** | **0568** | **rev** | **1** | **Current version:** | **16.4.0** |  |
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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 | **X** | Core Network |  |

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| ***Title:***  | CR on the 35M45M supporting-R16 |
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| ***Source to WG:*** | ZTE Corporation, Sanechips |
| ***Source to TSG:*** | RAN2 |
|  |  |
| ***Work item code:*** | NR\_newRAT-Core |  | ***Date:*** | 2021-4-15 |
|  |  |  |  |  |
| ***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 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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
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| ***Reason for change:*** | With the current spec, to indicate supporting of 35M/45M, the UE has to report a SupportedBandwidth wider than channelBW\_UL/DL and this SupportedBandwidth may even not be included in the Table 5.3.5-1 of TS 38.101-1 for the corresponding band. However, it has been clearly specified that “the *supportedBandwidthDL/UL* shall be defined in Table 5.3.5-1 in TS 38.101-1 for FR1 and Table 5.3.5-1 in TS 38.101-2 for FR2.” |
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| ***Summary of change:*** | Add a clarification to the current field description of *supportedBandwidthDL/UL as* below:For the band with 35M/45M as the maximum supported bandwith, the UE may report a *supportedBandwidthDL/UL* wider than *channelBW\_DL/UL,* this *supportedBandwidthDL/UL* may not be included in the Table 5.3.5-1 of TS 38.101-1/TS 38.101-2.**Impact analysis**Impacted 5G architecture options:(NG)EN-DC, NE-DC, NR DC, NR SAImpacted functionality:(NG)EN-DC/NE-DC, NR DC, NR SAConfigurationInter-operability:1. If UE implements according to the CR and the network does not, the network may misunderstand the UE supported bandwidth.
2. If the network implements according to the CR and the UE does not, the UE is unable to report the bandwidth that wider than the channelBW\_UL/DL, thus can’t support newly added 35M/45M.
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| ***Consequences if not approved:*** | The UE is unable to report the bandwidth that wider than the channelBW\_UL/DL, thus can’t support newly added 35M/45M feature. |
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| ***Clauses affected:*** | 4.2.7.6/4.2.7.8 |
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|  | **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 ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** | R2-2104251 |

First change

#### 4.2.7.6 *FeatureSetDownlinkPerCC* parameters

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* omitted unchanged parts \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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| ***Definitions for parameters*** | Per | M | FDD-TDDDIFF | FR1-FR2DIFF |
| ***supportedBandwidthDL***Indicates maximum DL channel bandwidth supported for a given SCS that UE supports within a single CC (and in case of intra-frequency DAPS handover for the source and target cells), which is defined in Table 5.3.5-1 in TS 38.101-1 [2] for FR1 and Table 5.3.5-1 in TS 38.101-2 [3] for FR2.For FR1, all the bandwidths listed in TS38.101-1 Table 5.3.5-1 for each band shall be mandatory with a single CC unless indicated optional. For FR2, the set of mandatory CBW is 50, 100, 200 MHz. When this field is included in a band combination with a single band entry and a single CC entry (i.e. non-CA band combination), the UE shall indicate the maximum channel bandwidth for the band according to TS 38.101-1 [2] and TS 38.101-2 [3].For the band with 35M/45M as the maximum supported bandwidth, the UE may report a *supportedBandwidthDL* wider than *channelBW\_D*L, this *supportedBandwidthDL* may not be included in the Table 5.3.5-1 of TS 38.101-1[2]/TS 38.101-2[3].NOTE: To determine whether the UE supports a channel bandwidth of 90 MHz, the network may ignore this capability and validate instead the *channelBW-90mhz* and the *supportedBandwidthCombinationSet*. For serving cell(s) with other channel bandwidths the network validates the *channelBWs-DL*, the *supportedBandwidthCombinationSet*, the *supportedBandwidthCombinationSetIntraENDC*, the *asymmetricBandwidthCombinationSet* (for a band supporting asymmetric channel bandwidth as defined in clause 5.3.6 of TS 38.101-1 [2]) and *supportedBandwidthDL*. | FSPC | CY | N/A | N/A |

 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* omitted unchanged parts \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Second change

#### **4.2.7.8 *FeatureSetUplinkPerCC* parameters**

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* omitted unchanged parts \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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| **Definitions for parameters** | **Per** | **M** | **FDD-TDD****DIFF** | **FR1-FR2****DIFF** |
| ***supportedBandwidthUL***Indicates maximum UL channel bandwidth supported for a given SCS that UE supports within a single CC (and in case of intra-frequency DAPS handover for the source and target cells), which is defined in Table 5.3.5-1 in TS38.101-1 [2] for FR1 and Table 5.3.5-1 in TS 38.101-2 [3] for FR2.For FR1, all the bandwidths listed in TS38.101-1 Table 5.3.5-1 for each band shall be mandatory with a single CC unless indicated optional. For FR2, the set of mandatory CBW is 50, 100, 200 MHz. When this field is included in a band combination with a single band entry and a single CC entry (i.e. non-CA band combination), the UE shall indicate the maximum channel bandwidth for the band according to TS 38.101-1 [2] and TS 38.101-2 [3].For the band with 35M/45M as the maximum supported bandwidth, the UE may report a *supportedBandwidthUL* wider than *channelBW\_U*L, this *supportedBandwidthUL* may not be included in the Table 5.3.5-1 of TS 38.101-1[2]/TS 38.101-2[3].NOTE: To determine whether the UE supports a channel bandwidth of 90 MHz the network may ignore this capability and validate instead the *channelBW-90mhz* and the *supportedBandwidthCombiantionSet*. For serving cell(s) with other channel bandwidths the network validates the *channelBWs-UL*, the *supportedBandwidthCombinationSet*, the *supportedBandwidthCombinationSetIntraENDC*, the *asymmetricBandwidthCombinationSet* (for a band supporting asymmetric channel bandwidth as defined in clause 5.3.6 of TS 38.101-1 [2]) and *supportedBandwidthUL*. | FSPC | CY | N/A | N/A |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* omitted unchanged parts \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

End of change