**3GPP TSG-RAN4 Meeting #109  *rev* R4-2318505**

Chicago, US, November 13 – 17, 2023

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.101-3** | **CR** |  | **rev** | **-** | **Current version:** | **18.3.0** |  |
|  | | | | | | | | |
| *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 | **X** | Radio Access Network |  | Core Network |  |

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| ***Title:*** | Draft CR for TS 38101-3 to add x LTE (x=1,2, 3, 4) and 2 NR inter-band EN-DC | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, Hisilicon, Rogers | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | DC\_R18\_xBLTE\_2BNR\_yDL2UL | | | | |  | ***Date:*** | | | 2023-11-03 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| Reason for change: | | The current specification TS 38.101-3 has not included the following DC\_R18\_xBLTE\_2BNR\_yDL2UL combinations in the WID RP-231723 based on requests from operators:  DC\_2A-5A\_n2A-n41A  DC\_2A-5A\_n41A-n66A  DC\_2A-7A\_n12A-n77A  DC\_5A-66A\_n2A-n41A  All fallbacks have been completed. | | | | | | | | |
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| ***Summary of change:*** | | Add the above mentioned DC\_R18\_xBLTE\_2BNR\_yDL2UL combinations in the spec. | | | | | | | | |
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| ***Consequences if not approved:*** | | The above mentioned combinations are not supported in the spec. | | | | | | | | |
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| ***Clauses affected:*** | | 5.5B.4.3, 6.2B.4.2.3.3 and 7.3B.3.3.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

#### 5.5B.4.3 Inter-band EN-DC configurations within FR1 (four bands)

Table 5.5B.4.3-1: Inter-band EN-DC configurations within FR1 (four bands)

| **EN-DC**  **configuration** | **Uplink EN-DC**  **configuration**  **(NOTE 1)** |
| --- | --- |
| DC\_1A-3A\_n3A-n41A | DC\_1A\_n3A  DC\_1A\_n41A  DC\_3A\_n3A4  DC\_3A\_n41A |

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| --- | --- |
| DC\_2A-4A-7A\_n78A  DC\_2A-4A-7C\_n78A | DC\_2A\_n78A  DC\_4A\_n78A |
| DC\_2A-5A\_n2A-n41A | DC\_2A\_n2A  DC\_2A\_n41A  DC\_5A\_n2A  DC\_5A\_n41A |
| DC\_2A-5A\_n2A-n66A | DC\_2A\_n2A4  DC\_2A\_n66A  DC\_5A\_n2A  DC\_5A\_n66A |

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| --- | --- |
| DC\_2A-5A-7A\_n78(2A) | DC\_2A\_n78A  DC\_5A\_n78A  DC\_7A\_n78A |
| DC\_2A-5A-(n)12AA | DC\_5A\_n12A  DC\_2A\_n12A  DC\_(n)12AA4 |
| DC\_2A-5A\_n41A-n66A | DC\_2A\_n41A  DC\_2A\_n66A  DC\_5A\_n41A  DC\_5A\_n66A |
| DC\_2A-12A-(n)5AA | DC\_2A\_n5A  DC\_12A\_n5A  DC\_(n)5AA4 |

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| --- | --- |
| DC\_2A-7A-12A\_n77A | DC\_2A\_n77A  DC\_7A\_n77A  DC\_12A\_n77A |
| DC\_2A-7A\_n12A-n77A | DC\_2A\_n12A  DC\_2A\_n77A  DC\_7A\_n12A  DC\_7A\_n77A |
| DC\_2A-7A-12A\_n78A | DC\_2A\_n78A  DC\_7A\_n78A  DC\_12A\_n78A |

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| --- | --- |
| DC\_5A-48A-66A\_n71A | DC\_5A\_n71A  DC\_48A\_n71A  DC\_66A\_n71A |
| DC\_5A-66A\_n2A-n41A | DC\_5A\_n2A  DC\_5A\_n41A  DC\_66A\_n2A  DC\_66A\_n41A |
| DC\_5A-66A\_n2A-n77A  DC\_5A-66A\_n2A-n77C | DC\_5A\_n2A  DC\_5A\_n77A  DC\_66A\_n2A  DC\_66A\_n77A |

**< Non-changed part is omitted >**

## **<<Next Change>>**

###### 6.2B.4.2.3.3 ΔTIB,c for EN-DC four bands

Table 6.2B.4.2.3.3-1: ΔTIB,c due to EN-DC(four bands)

| Inter-band EN-DC configuration | ΔTIB,c for E-UTRA band / NR band (dB)12 | | | |
| --- | --- | --- | --- | --- |
| Component band in order of bands in configuration13 | | | |
| DC\_1-3\_n3-n41 | 0.5 | 0.5 | 0.5 | 0.34/0.85 |

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| --- | --- | --- | --- | --- |
| DC\_2-4-7\_n78 | 0.6 | 0.6 | 0.5 | 0.8 |
| DC\_2-5\_n2-n41 | 0.5 | 0.6 | 0.5 | 0.41 / 0.92 |
| DC\_2-5\_n2-n66 | 0.5 | 0.3 | 0.5 | 0.5 |
| DC\_2-5\_n2-n77 | 0.6 | 0.6 | 0.6 | 0.8 |
| DC\_2-5\_n2-n78 | 0.6 | 0.6 | 0.6 | 0.8 |
| DC\_2-5\_n5-n77 | 0.6 | 0.6 | 0.6 | 0.8 |
| DC\_2-5-7\_n2 | 0.5 | 0.3 | 0.5 | 0.3 |
| DC\_2-5-7\_n7 | 0.5 | 0.3 | 0.5 | 0.5 |
| DC\_2-5-7\_n66  DC\_2-2-5-7\_n66  DC\_2-5-7-7\_n66 | 0.5 | 0.3 | 0.5 | 0.5 |
| DC\_2-5-7\_n77 | 0.6 | 0.6 | 0.6 | 0.8 |
| DC\_2-5-7\_n78 | 0.6 | 0.6 | 0.6 | 0.8 |
| DC\_2-5\_(n)12 | 0.3 | 0.8 | 0.4 | 0.4 |
| DC\_2-12\_(n)5 | - | 0.5 | 0.3 | 0.5 |
| DC\_2-5-30\_n2 | 0.5 | 0.3 | 0.3 | 0.5 |
| DC\_2-5-30\_n66 | 0.5 | 0.3 | 0.3 | 0.5 |
| DC\_2-5-30\_n77  DC\_2-2-5-30\_n77 | 0.6 | 0.6 | 0.3 | 0.8 |
| DC\_2-5\_n41-n66 | 0.5 | 0.6 | 0.51 / 12 | 0.5 |
| DC\_2-5-48\_n12 | 0.6 | 0.8 | 0.8 | 0.4 |

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| DC\_2-7-12\_n2 | 0.5 | 0.5 | 0.3 | 0.5 |
| DC\_2-7-12\_n66 DC\_2-2-7-12\_n66 | 0.5 | 0.5 | 0.8 | 0.5 |
| DC\_2-7-12\_n77 | 0.6 | 0.6 | 0.6 | 0.8 |
| DC\_2-7\_n12-n77 | 0.6 | 0.5 | 0.3 | 0.8 |
| DC\_2-7-12\_n78 DC\_2-2-7-12\_n78 | 0.6 | 0.6 | 0.6 | 0.8 |

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| --- | --- | --- | --- | --- |
| DC\_5-48-66\_n77 | 0.6 | 0.8 | 0.6 | 0.8 |
| DC\_5-66\_n2-n41 | 0.6 | 0.5 | 0.5 | 0.81 / 1.32 |
| DC\_5-66\_n2-n77  DC\_5-66-66\_n2-n77 | 0.6 | 0.6 | 0.6 | 0.8 |

**< Non-changed part is omitted >**

## **<<Next Change>>**

##### 7.3B.3.3.3 ΔRIB,c for EN-DC four bands

Table 7.3B.3.3.3-1: ΔRIB,c due to EN-DC (four bands)

| Inter-band EN-DC configuration | ΔRIB,c for E-UTRA band / NR band (dB)11 | | | |
| --- | --- | --- | --- | --- |
| Component band in order of bands in configuration12 | | | |
| DC\_1-3\_n3-n41 | - | - | - | 03 / 0.54 |

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| --- | --- | --- | --- | --- |
| DC\_2-4-7\_n78 | 0.3 | 0.3 | - | 0.8 |
| DC\_2-5\_n2-n41 | - | 0.2 | - | - |
| DC\_2-5\_n2-n66 | 0.3 | - | 0.3 | 0.3 |
| DC\_2-5\_n2-n77 | 0.2 | 0.2 | 0.2 | 0.5 |
| DC\_2-5\_n2-n78 | 0.2 | 0.2 | 0.2 | 0.5 |
| DC\_2-5\_n5-n77 | 0.2 | 0.2 | 0.2 | 0.5 |
| DC\_2-5-7\_n66  DC\_2-2-5-7\_n66  DC\_2-5-7-7\_n66 | 0.3 | - | 0.5 | 0.5 |
| DC\_2-5-7\_n77 | 0.2 | 0.2 | 0.2 | 0.5 |
| DC\_2-5-7\_n78 | 0.2 | 0.2 | 0.2 | 0.5 |
| DC\_2-5\_(n)12 | - | 0.5 | 0.3 | 0.3 |
| DC\_2-12\_(n)5 | - | 0.5 | 0.5 | - |
| DC\_2-5-30\_n2 | 0.4 | - | 0.5 | 0.4 |
| DC\_2-5-30\_n66 | 0.4 | - | 0.5 | 0.4 |
| DC\_2-5-30\_n77  DC\_2-2-5-30\_n77 | 0.2 | 0.2 | - | 0.5 |
| DC\_2-5\_n41-n66 | 0.3 | - | 0.5 | - |
| DC\_2-5-48\_n12 | 0.2 | 0.5 | 0.5 | 0.3 |

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