**3GPP TSG-RAN WG4 Meeting #110R4-2403906**

**Athens, Greece, February 26 – March 1, 2024**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.101-1** | **CR** | **2190** | **rev** | **-** | **Current version:** | **18.4.0** |  |
|  | | | | | | | | |
| *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:*** | Big CR to 38.101-1 for two SUL cells | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | CMCC | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_2SUL\_cell\_combos\_R18 | | | | |  | ***Date:*** | | | 2024-3-6 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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:*** | | In RAN4#108bis meeting, a guideline on delta T/R special values has been approved in R4-2316689 for band combinations if uplink / downlink is not supported on a constituted band of the DC/CA band combination, “N/A” is used when deriving the delta T/R requirements for that constituted band of the band combination.  In RAN4#109 meeting, the rule has been applied to SUL band combinations in the agreed CR R4-2319854. However, the rule hasn't been applied to two SUL cells band combinations. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | This big CR contains the following endorced document:   * R4-2403603: draftCR to 38.101-1 Correction on delta\_Rib for two SUL cells | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The form of delta R for two SUL cells is not aligned with that for SUL band combinations. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.3C.3.2.2, 7.3C.3.2.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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>>**

7.3C.3.2.2 ΔRIB,c for three bands

**Table 7.3C.3.2.2-1: ΔRIB,c due to SUL (three bands)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Band combination for SUL** | **ΔRIB,c for NR bands (dB)2** | | |
| **Component band in order of bands in configuration3** | | |
| CA\_n1\_n78-n80 | 0.2 | 0.5 | N/A |
| CA\_n1\_n78-n81 | - | 0.5 | N/A |
| CA\_n1\_n78-n84 | 0.2 | 0.5 | N/A |
| CA\_n3\_n41-n80 | - | 0.51 | N/A |
| CA\_n3\_n78-n80 | 0.2 | 0.5 | N/A |
| CA\_n3\_n79-n80 | - | 0.5 | N/A |
| CA\_n28\_n41-n83 | 0.2 | - | N/A |
| CA\_n8\_n78-n81 | 0.2 | 0.5 | N/A |
| CA\_n28\_n79-n83 | 0.2 | 0.5 | N/A |
| CA\_n41\_n79-n80 | 0.5 | 0.5 | N/A |
| CA\_n41\_n79-n83 | 0.5 | 0.5 | N/A |
| CA\_n41\_n79-n95 | - | 0.5 | N/A |
| CA\_n41\_n79-n97 | - | 0.8 | N/A |
| CA\_n41\_n79-n98 | - | 0.5 | N/A |
| CA\_n78\_n1-n80 | 0.5 | 0.2 | N/A |
| CA\_n78\_n1-n81 | 0.5 | - | N/A |
| CA\_n78\_n1-n89 | 0.5 | 0.2 | N/A |
| CA\_n78\_n3-n84 | 0.5 | 0.2 | N/A |
| CA\_n79\_n41-n80 | 0.5 | 0.5 | N/A |
| CA\_n78\_n80-n84 | 0.5 | N/A | N/A |
| CA\_n78\_n81-n84 | 0.5 | N/A | N/A |
| CA\_n78\_n84-n89 | 0.5 | N/A | N/A |
| CA\_n79\_n41-n83 | 0.5 | 0.5 | N/A |
| CA\_n79\_n41-n95 | - | 0.5 | N/A |
| CA\_n79\_n41-n97 | - | 0.8 | N/A |
| CA\_n79\_n41-n98 | - | 0.5 | N/A |
| NOTE 1: The requirement is applied for UE transmitting on the frequency range of 2496 – 2515 MHz.  NOTE 2: “-” denotes ΔRIB,c = 0 and ΔRIB,c is not applicable to SUL band(s).  NOTE 3: The component band order in the configuration should be listed by the order of NR bands, such as for CA\_n1\_n78-n80 the order of band is n1, n78 and n80. | | | |

7.3C.3.2.3 ΔRIB,c for four bands

**Table 7.3C.3.2.3-1: ΔRIB,c due to SUL (four bands)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Band combination for SUL** | **ΔRIB,c for NR bands (dB)1** | | | |
| **Component band in order of bands in configuration2** | | | |
| CA\_n28-n79\_n41-n83 | 0.2 | - | 0.8 | N/A |
| CA\_n28-n41\_n79-n83 | 0.2 | - | 0.8 | N/A |
| CA\_n41A-n95A\_n79A-n98A | 0.5 | 0.5 | N/A | N/A |
| CA\_n41A-n98A\_n79A-n95A | 0.5 | 0.5 | N/A | N/A |
| CA\_n41A-n83A\_n79A-n98A | 0.5 | 0.5 | N/A | N/A |
| CA\_n41A-n83A\_n79A-n95A | 0.5 | 0.5 | N/A | N/A |
| NOTE 1: “-” denotes ΔRIB,c = 0 and ΔRIB,c is not applicable to SUL band(s).  NOTE 2: The component band order in the configuration should be listed by the order of NR bands, such as for CA\_n28-n79\_n41-n83 the order of band is n28, n41, n79 and n83. | | | | |

**<<End of Change>>**