**3GPP TSG-RAN WG4 Meeting #** **110 R4-2401288**

**Athens, Greece, Feb. 26th – Mar. 1st , 2024**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **38.101-1** | **CR** | **2090** | **rev** |  | **Current version:** | **18.4.0** |  |
|  |
| *For* ***[HELP](http://www.3gpp.org/3G_Specs/CRs.htm)*** *on using this form: comprehensive instructions can be found at <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:***  | CR to reflect the completed 4Rx support for NR FR1 bands (<2.6GHz) into TS 38.101-1 |
|  |  |
| ***Source to WG:*** | ZTE Corporation |
| ***Source to TSG:*** | R4  |
|  |  |
| ***Work item code:*** | 4Rx\_NR\_bands\_R18-Core |  | ***Date:*** | 2024-03-04 |
|  |  |  |  |  |
| ***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 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-16 (Release 16)Rel-17 (Release 17)**Rel-18 (Release 18)**Rel-19 (Release 19)* |
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| ***Reason for change:*** | This big CR is to reflect the completed 4Rx support for NR FR1 bands (2.6GHz) into TS 38.101-1 from RAN4 #110 meeting. |
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| ***Summary of change:*** | The 4Rx support for NR FR1 bands (2.6GHz) into TS 38.101-1 completed in the following contributions are added from RAN4 #110 meeting.The endorsed draft CRs in RAN4 #110 meeting are listed:1. R4-2401265 draft CR to TS38.101-1: 4Rx for n26 |
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| ***Consequences if not approved:*** | n26 does not support 4Rx operation for FWA form factor |
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| ***Clauses affected:*** | 7.3.2 |
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|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** | **X** |  |  Test specifications | TS38.521-1 |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |

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| ***This CR's revision history:*** |  |

## << Start of change >>

### 7.3.2 Reference sensitivity power level

*<Unchanged texts are omitted>*

For UE(s) equipped with 4 Rx antenna ports, reference sensitivity for 2Rx antenna ports in Table 7.3.2-1a and in Table 7.3.2-1b shall be modified by the amount given in ΔRIB,4R in Table 7.3.2-2 for the applicable operating bands. For operating band frequency range ≤ 1 GHz, the 4Rx operation is primarily for FWA form factor, and when 4Rx operation is supported by handheld UE, ∆RIB,4R as indicated in Table 7.3.2-2 NOTE 2 is applied.

Table 7.3.2-2: Four antenna port reference sensitivity allowance ΔRIB,4R

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| --- | --- |
| Operating band | ΔRIB,4R (dB) |
| n5, n8, n13, n26, n28, n71, n85, n105 | -2.71 |
| n5, n8, n28, n71, n20, n26 | -2.42 |
| n1, n2, n3, n25, n30, n40, n7, n34, n38, n39, n41, n66, n70 | -2.7 |
| n48, n77, n78, n79, n104 | -2.2 |
| NOTE 1: When 4 Rx operation is supported by FWA form factorNOTE 2: When 4Rx operation is supported by handheld UE. |

## << End change >>