**3GPP TSG-RAN WG4 Meeting #99-e *R4-210XXXX***

**Electronic Meeting, May 19th - 27th, 2021**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **38.101-3** | **CR** | **XXX** | **rev** | **-** | **Current version:** | **15.13.0** |  |
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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 |  | Core Network |  |

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| ***Title:***  | Correction of general description of EN-DC related power class based on the TxD capability |
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| ***Source to WG:*** | vivo |
| ***Source to TSG:*** | R4 |
|  |  |
| ***Work item code:*** | NR\_newRAT-Core |  | ***Date:*** | 2021-05-24 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | *Rel-15* |
|  | *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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | There has been long debate on the introduction of R4-1916137 after its introduction into spec, since there are arugments that it is not clear and may cause confusion. After the LS confirmation from RAN2 R2-2104353 that a new capability for TxD was introduced and can be release independent to Rel-15, an anlalysis of this was done and supported as documented in Issue 2-1-1 of R4-2107635 that further clarification and confinement can be done based on this capability. |
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| ***Summary of change:*** | Regarding the description of multiple power class possibilities for NR part of NSA in Rel-15:*Unless otherwise stated, if UE indicates IE maxNumberSRS-Ports-PerResource = n2 in NR standalone operation mode, the said UE shall meet the NR requirements for either power class 2 or power class 3 in EN-DC within FR1 if UE indicates IE maxNumberSRS-Ports-PerResource = n1 for EN-DC on this NR band.*Further differentiation were made to confine this behavior would only be allowed in case TxD is supported and signaled. In case not supported and signaled, the current behaviour of multiple power class possibilities for NR part of NSA can be removed.  |
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| ***Consequences if not approved:*** | The power class ambigulity would exist for many unnecessary cases. |
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| ***Clauses affected:*** |  |
|  |  |
|  | **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 revision should not impact Rel-16 since there are other capability signaling insure the power class clarity.Isoloation Impact analysis:This revision have no impact on previous UE implementation. |
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| ***This CR's revision history:*** |  |

## 6.1 General

Unless otherwise stated the transmitter characteristics are specified at the antenna connector(s) of the UE for the bands operating on frequency range 1 and over the air of the UE for the bands operating on frequency range 2. The requirements for frequency range 1 and frequency range 2 can be verified separately. For the carrier in frequency range 1, requirements can be verified with NR FR2 link disabled. For the carrier in frequency range 2, requirements can be verified in OTA mode with E-UTRA connecting to the network by OTA without calibration.

Unless otherwise stated, requirements for NR transmitter written in TS 38.101-1 [2] and TS 38.101-2 [3] apply and are assumed anchor agnostic. If UE indicates IE [*Txdiversity-r16*] as defined in TS 38.331 [9], and UE indicates IE maxNumberSRS-Ports-PerResource = n2 in NR standalone operation mode, the said UE shall meet the NR requirements for either power class 2 or power class 3 in EN-DC within FR1 if UE indicates IE maxNumberSRS-Ports-PerResource = n1 for EN-DC on this NR band. If UE do not indicate IE [*Txdiversity-r16*] as defined in TS 38.331 [9], the UE shall meet NR requirements according to its power class in NR standalone operation mode.Requirements are verified under conditions where anchor resources do not interfere NR operation.