**3GPP TSG-RAN4 Meeting #99-e *R4-2108509***

**Online, , 19th May 2021 – 27th May 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.141-2** | **CR** | **0330** | **rev** | **1** | **Current version:** | **15.9.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network | **x** | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Keysight Technologies UK Ltd | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_newRAT-Perf | | | | |  | ***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 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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | There is critical error in TS38.141-2 document PUCCH format 1 demodulation test AWGN level table.   * FR2 120 kHz SCS setting is missing. Rel -16 aslo has the same error. * For ACK missed detection test (8.3.2.2), for FR2, AWGN level descriptino has error   This set of error exist in Rel-15 only. In Rel-16 document, different set of error exist. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | In Table 8.3.2.1.4.2-1 AWGN level table (for NACK to ACK detection)   * BS type 1-O, Format correction on Delta-OTAREFSENSE * BS type 2-O, 120 kHz SCS setting is missing.   In Table 8.3.2.2.4.2-2 AWGN level table (for ACK missed detection)   * BS type 2-O, 120 kHz SCS setting is missing. * BS type 2-O, AWGN level description are incorrect | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Without this correction, BS type 2-O PUCCH format 1 demodulation text can not be performed because of incorrect AWGN level description as well as 120 kHz SCS setting is missing | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 8.3.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Solved overlap with other CR, typo and format correction added | | | | | | | | |

Table 8.3.2.1.4.2-2: AWGN power level at the BS input

|  |  |  |  |
| --- | --- | --- | --- |
| BS type | Subcarrier spacing (kHz) | Channel bandwidth (MHz) | AWGN power level |
| *BS type 1-O* | 15 kHz | 5 | -83.5 - ΔOTAREFSENSdBm / 4.5MHz |
|  |  | 10 | -80.3 – ΔOTAREFSENS dBm / 9.36MHz |
|  |  | 20 | -77.2 - ΔOTAREFSENS dBm / 19.08MHz |
|  | 30 kHz | 10 | -80.6 - ΔOTAREFSENS dBm / 8.64MHz |
|  |  | 20 | -77.4 - ΔOTAREFSENS dBm / 18.36MHz |
|  |  | 40 | -74.2 - ΔOTAREFSENS dBm / 38.16MHz |
|  |  | 100 | -70.1 - ΔOTAREFSENS dBm / 98.28MHz |
| *BS type 2-O* | 60 kHz | 50 | EISREFSENS\_50M + ΔFR2\_REFSENS + 15 dBm / 47.52 MHz |
|  |  | 100 | EISREFSENS\_50M + ΔFR2\_REFSENS + 18 dBm / 95.04 MHz |
|  | 120 kHz | 50 | EISREFSENS\_50M + ΔFR2\_REFSENS + 15 dBm / 46.08 MHz |
|  |  | 100 | EISREFSENS\_50M + ΔFR2\_REFSENS + 18 dBm / 95.04 MHz |
|  |  | 200 | EISREFSENS\_50M + ΔFR2\_REFSENS + 21 dBm / 190.08 MHz |
| NOTE 1: ΔOTAREFSENS as declared in D.53 in table 4.6-1 and clause 7.1.  NOTE 2: ΔFR2\_REFSENS = -3 dB as described in clause 7.1, since the OTA REFSENS reference direction (as declared in D.54 in table 4.6-1) is used for testing.  NOTE 3: EISREFSENS\_50M as declared in D.28 in table 4.6-1. | | | |

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