**3GPP TSG-RAN WG5 Meeting # *draft R5-21XXXX***

**Electronic Meeting, August 16 – August 27, 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** | **1150** | **rev** |  | **Current version:** |  |  |
|  | | | | | | | | |
| *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 |  | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** | Addition of cl 6.2B.1.3A for RF | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | CMCC, Qualcomm, Ericsson | | | | | | | | | |
| ***Source to TSG:*** | R5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GS\_NR\_LTE-UEConTest | | | | |  | ***Date:*** | | | 2021-08-17 |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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:*** | | cl 6.2B.1.3 for RF need to be updated to address Option 4. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | cl 6.2B.1.3 for RF has been updated. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The WP can not be completed. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.2B.1.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

<<< START OF CHANGES >>>

#### **6.2B.1.3A UE Maximum Output Power for Inter-Band NE-DC within FR1**

6.2B.1.3A.1 Test purpose

Same test purpose as in clause 6.2B.1.3.1

6.2B.1.3A.2 Test applicability

This test applies to all types of E-UTRA UE release 15 and forward, supporting inter-band NE-DC operating on FR1.

6.2B.1.3A.3 Minimum conformance requirements

For inter-band NE-DC of E-UTRA and NR in FR1, the following UE power classes define the maximum output power for any transmission bandwidth within the aggregated channel bandwidth. The maximum output power is measured as the sum of the maximum output power at each UE antenna connector. The period of measurement shall be at least one sub frame (1 ms). UE maximum output power shall be measured over all component carriers from different bands. If each band has separate antenna connectors, maximum output power is measured as the sum of maximum output power at each UE antenna connector.

Table 6.2B.1.3A.3-1: Maximum output power for inter-band NE-DC (two bands)

| NE-DC configuration | Power class 3  (dBm) | Tolerance  (dB) |
| --- | --- | --- |
| DC\_n1A\_28A | 23 | +2/-3 |
| DC\_n78A\_1A | 23 | +2/-3 |
| DC\_n78A\_3A | 23 | +2/-3 |
| DC\_n78A\_5A | 23 | +2/-3 |
| DC\_n78A\_7A | 23 | +2/-3 |
| DC\_n78A\_8A | 23 | +2/-3 |
| DC\_n78A\_26A | 23 | +2/-3 |

The normative reference for this requirement is TS 38.101-3 [4] clause 6.2B.1.3a.

6.2B.1.3A.4 Test description

6.2B.1.3A.4.1 Initial condition

Same initial condition as in clause 6.2B.1.3.4.1 with the following exception:

Step 6 of Initial conditions will be updated as below:

As per guidance in clause 4.5.1

If UE supports EN-DC then

6. Ensure the UE is in state RRC\_CONNECTED with generic procedure parameters Connectivity EN-DC, DC bearer *MCG* and *SCG*, Connected without release *On* according to TS 38.508-1 [6] clause 4.5. Message contents are defined in clause 6.2B.1.3.4.3.

Else if UE does not support EN-DC then

6. Ensure the UE is in state RRC\_CONNECTED with generic procedure parameters Connectivity NE-DC, DC bearer *MCG* and *SCG*, Connected without release *On* according to TS 38.508-1 [6] clause 4.5. Message contents are defined in clause 6.2B.1.3A.4.3.

6.2B.1.3A.4.2 Test procedure

Same test procedure as in clause 6.2B.1.3.4.2

6.2B.1.3A.4.3 Message contents

FFS

6.2B.1.3A.5 Test requirements

For test ID 1~6 the maximum output power for the DC configuration, derived in step 3 shall be within the range prescribed by the UE Power Class and tolerance in Table 6.2B.1.3A.5-1 for NE-DC.

Table 6.2B.1.3A.5-1: Maximum output power for inter-band NE-DC (two bands), for overlapping UL transmission

| NE-DC configuration | Power class 3  (dBm) | Tolerance  (dB) |
| --- | --- | --- |
| DC\_n1A\_28A | 23 | +2+TT/-3-TT |
| DC\_n78A\_1A | 23 | +2+TT/-3-TT |
| DC\_n78A\_3A | 23 | +2+TT/-3-TT |
| DC\_n78A\_5A | 23 | +2+TT/-3-TT |
| DC\_n78A\_7A | 23 | +2+TT/-3-TT |
| DC\_n78A\_8A | 23 | +2+TT/-3-TT |
| DC\_n78A\_26A | 23 | +2+TT/-3-TT |

Same Test Tolerance as in Table 6.2B.1.3.5-3.

<< END OF CHANGES >>