**3GPP TSG-RAN4 Meeting #97-e *R4-2014782***

**Electronic Meeting, 2nd Nov. 2020 – 13th Nov. 2020**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.101-3** | **CR** | **0374** | **rev** | **-** | **Current version:** | **16.5.0** |  |
|  | | | | | | | | |
| *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:*** | CR introduction completed band combinations for Dual Connectivity (DC) of 5 bands LTE inter-band CA (5DL/1UL) and 1 NR band (1DL/1UL) | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Samsung | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | DC\_R17\_5BLTE\_1BNR\_6DL2UL-Core | | | | |  | ***Date:*** | | | 2020-11-08 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | |  |
|  | *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:*** | | Completed new DC inter-band combinations for Dual Connectivity (DC) of 5 bands LTE inter-band CA (5DL/1UL) and 1 NR band (1DL/1UL) are introduced into TS 38.101-3 in RAN4 #97e meeting. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The EN-DC band combinations DC\_1A-3A-7A-8A-40C\_n78A completed in the following contritbuions are added from RAN4 #97-e meeting  R4-2015282 TP to TR 37.717-51-11 DC\_1A-3A-7A-8A-40C\_n78A | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The requirements for above band combinations are incomplete. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.5B.4.5, 6.2B.4.2.3.5, 7.3B.3.3.5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | |  | | |
| ***affected:*** | | **X** |  | Test specifications | | | | TS 38.521-3 | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

## <Unchanged sections omitted>

#### 5.5B.4.5 Inter-band EN-DC configurations within FR1 (six bands)

**Table 5.5B.4.5-1: Inter-band EN-DC configurations within FR1 (six bands)**

|  |  |
| --- | --- |
| **EN-DC**  **configuration** | **Uplink EN-DC**  **configuration**  **(NOTE 1)** |
| DC\_1A-3A-7A-8A-40A\_n78A  DC\_1A-3A-7A-8A-40C\_n78A | DC\_1A\_n78A  DC\_3A\_n78A  DC\_7A\_n78A  DC\_8A\_n78A  DC\_40A\_n78A |
| DC\_1A-3A-7A-20A\_n28A-n78A2,3 | DC\_1A\_n28A  DC\_1A\_n78A  DC\_3A\_n28A  DC\_3A\_n78A  DC\_7A\_n28A  DC\_7A\_n78A  DC\_20A\_n28A  DC\_20A\_n78A |
| DC\_1A-3A-7A-28A\_n5A-n78A  DC\_1A-3A-7C-28A\_n5A-n78A  DC\_1A-3C-7A-28A\_n5A-n78A  DC\_1A-3C-7C-28A\_n5A-n78A | DC\_1A\_n5A  DC\_1A\_n78A  DC\_3A\_n5A  DC\_3C\_n5A  DC\_3A\_n78A  DC\_3C\_n78A  DC\_7A\_n5A  DC\_7C\_n5A  DC\_7A\_n78A  DC\_7C\_n78A  DC\_28A\_n5A  DC\_28A\_n78A |
| DC\_1A-3A-7A-28A\_n7A-n78A | DC\_1A-n7A  DC\_3A-n7A  DC\_7A-n7A4  DC\_28A\_n7A  DC\_1A\_n78A  DC\_3A\_n78A  DC\_7A\_n78A  DC\_28A\_n78A |
| DC\_1A-3C-7A-28A\_n7A-n78A | DC\_1A-n7A  DC\_3A-n7A  DC\_3C-n7A  DC\_7A-n7A4  DC\_28A\_n7A  DC\_1A\_n78A  DC\_3A\_n78A  DC\_3C\_n78A  DC\_7A\_n78A  DC\_28A\_n78A |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.  NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability.  NOTE 3: The frequency range in band n28 is restricted for this band combination to 703-733 MHz for the UL and 758-788 MHz for the DL.  NOTE 4: Only single switched UL is supported. | |

## <Unchanged sections omitted>

###### 6.2B.4.2.3.5 ΔTIB,c for EN-DC six bands

Table 6.2B.4.2.3.5-1: ΔTIB,c due to EN-DC (six bands)

|  |  |  |
| --- | --- | --- |
| Inter-band EN-DC configuration | E-UTRA or NR Band | ΔTIB,c (dB) |
| DC\_1-3-7-8-40\_n78 | 1 | 0.6 |
| 3 | 0.6 |
| 7 | 0.5 |
| 8 | 0.6 |
| 40 | 0.31 |
| n78 | 0.81 |
| DC\_1-3-7-20\_n28-n78 | 1 | 0.7 |
| 3 | 0.7 |
| 7 | 0.7 |
| 20 | 0.6 |
| n28 | 0.6 |
| n78 | 0.8 |
| DC\_1-3-7-28\_n7-n78 | 1 | 0.7 |
| 3 | 0.7 |
| 7 | 0.7 |
| 28 | 0.6 |
| n7 | 0.7 |
| n78 | 0.8 |
| NOTE 1: Only applicable for UE supporting inter-band carrier aggregation with uplink in one NR band and without simultaneous Rx/Tx. | | |

## <Unchanged sections omitted>

##### 7.3B.3.3.5 ΔRIB,c for EN-DC six bands

Table 7.3B.3.3.5-1: ΔRIB,c due to EN-DC (six bands)

|  |  |  |
| --- | --- | --- |
| Inter-band EN-DC configuration | E-UTRA or NR Band | ΔRIB,c (dB) |
| DC\_1-3-7-8-40\_n78 | 1 | 0.2 |
| 3 | 0.2 |
| 7 | 0 |
| 8 | 0.2 |
| 40 | 0.41 |
| n78 | 0.51 |
| DC\_1-3-7-20\_n28-n78 | 1 | 0.2 |
| 3 | 0.2 |
| 7 | 0.2 |
| 20 | 0.2 |
| n28 | 0.2 |
| n78 | 0.5 |
| DC\_1-3-7-28\_n7-n78 | 1 | 0.2 |
| 3 | 0.2 |
| 7 | 0.2 |
| 28 | 0.2 |
| n7 | 0.2 |
| n78 | 0.5 |
| NOTE 1: Only applicable for UE supporting inter-band carrier aggregation with uplink in one NR band and without simultaneous Rx/Tx. | | |

## <Unchanged sections omitted>