**3GPP TSG-RAN WG4 Meeting #95-e *Revised R4-2006907***

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** | **1** | **Current version:** |  |  |
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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:*** |  | | | | | | | | | |
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| ***Source to WG:*** | ZTE Corporation | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_newRAT-Core | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In RAN4#92 meeting, R4-1910293 and R4-1910294 have been approved to the notations of NR intra-band contiguous and non-contiguous CA. For intra-band contiguous CA, the NR CA Band is represented as “CA\_nX” by removing the CA BW class letter as the suffix. For intra-band non-contiguous CA, the agreement in RAN4#94-e meeting is to use the notation CA\_nX(\*) as shown in R4-2002911. However, the change request with the above agreements is missing in R15 by mistake. The purpose of this CR is to align the specs between R15 and R16 to reflect the agreements in the past RAN4 meetings.To align with the definition of NR CA band for FR1 in TS 38.101-1 and for FR2 in Rel-16, the NR CA band in table 5.2A.1-1 should not be specified as NR CA configuration.  Furthermore, in section 5.5A for the configurations of intra-band CA, some typos should be corrected and empty tables should be removed. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. Correct the NR CA band in table 5.2A.1-1. 2. Typo corrections on intra-band CA configuration table. 3. Remove the empty tables in section 5.5A.1 and 5.5A.2. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | 1. The intra-band contiguous CA operating bands in FR2 will be incorrect. 2. The configurations for intra-band CA will be inaccurate. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.2A.1, 5.5A.1, 5.5A.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | | **X** |  | Test specifications | | | | TS/TR ... CR ... 38.521-2 | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

### *<< start of changes >>*

### *<< Unchanged sections omitted >>*

## 5.2A Operating bands for CA

### 5.2A.1 Intra-band CA

NR intra-band contiguous carrier aggregation is designed to operate in the operating bands defined in Table 5.2A.1-1, where all operating bands are within FR2.

Table 5.2A.1-1: Intra-band contiguous CA operating bands in FR2

|  |  |
| --- | --- |
| NR CA Band | NR Band  (Table 5.2-1) |
| CA\_n257 | n257 |
| CA\_n260 | n260 |
| CA\_n261 | n261 |

### *<< Unchanged sections omitted >>*

## **5.5 Configurations**

## **5.5A Configurations for CA**

### **5.5A.1 Configurations for intra-band contiguous CA**

Table 5.5A.1-1: NR CA configurations, bandwidth combination sets, and fallback group defined for intra-band contiguous CA

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration / Bandwidth combination set / Fallback group | | | | | | | | | | | | |
| NR CA configuration | Uplink CA configurations | BWChannel (MHz) | BWChannel (MHz) | BWChannel (MHz) | BWChannel (MHz) | BWChannel (MHz) | BWChannel (MHz) | BWChannel (MHz) | BWChannel (MHz) | Maximum aggregated  BW (MHz) | BCS | Fallback group |
| CA\_n257B | CA\_n257B | 50, 100, 200, 400 | 400 |  |  |  |  |  |  | 800 | 0 | 1 |
| CA\_n257D | CA\_n257D | 50, 100, 200 | 200 |  |  |  |  |  |  | 400 | 0 | 2 |
| CA\_n257E | CA\_n257E | 50, 100, 200 | 200 | 200 |  |  |  |  |  | 600 | 0 |
| CA\_n257F | CA\_n257F | 50, 100, 200 | 200 | 200 | 200 |  |  |  |  | 800 | 0 |
| CA\_n257G | CA\_n257G | 50, 100 | 100 |  |  |  |  |  |  | 200 | 0 | 3 |
| CA\_n257H | CA\_n257H | 50, 100 | 100 | 100 |  |  |  |  |  | 300 | 0 |
| CA\_n257I | CA\_n257I | 50, 100 | 100 | 100 | 100 |  |  |  |  | 400 | 0 |
| CA\_n257J | CA\_n257J | 50, 100 | 100 | 100 | 100 | 100 |  |  |  | 500 | 0 |
| CA\_n257K | CA\_n257K | 50, 100 | 100 | 100 | 100 | 100 | 100 |  |  | 600 | 0 |
| CA\_n257L | CA\_n257L | 50, 100 | 100 | 100 | 100 | 100 | 100 | 100 |  | 700 | 0 |
| CA\_n257M | CA\_n257M | 50, 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 800 | 0 |
| CA\_n260B | CA\_n260B | 50, 100, 200, 400 | 400 |  |  |  |  |  |  | 800 | 0 | 1 |
| CA\_n260C | CA\_n260B | 50, 100, 200, 400 | 400 | 400 |  |  |  |  |  | 1200 | 0 |
| CA\_n260D | CA\_n260D | 50, 100, 200 | 200 |  |  |  |  |  |  | 400 | 0 | 2 |
| CA\_n260E | CA\_n260E | 50, 100, 200 | 200 | 200 |  |  |  |  |  | 600 | 0 |
| CA\_n260F | CA\_n260F | 50, 100, 200 | 200 | 200 | 200 |  |  |  |  | 800 | 0 |
| CA\_n260G | CA\_n260G | 50, 100 | 100 |  |  |  |  |  |  | 200 | 0 | 3 |
| CA\_n260H | CA\_n260H | 50, 100 | 100 | 100 |  |  |  |  |  | 300 | 0 |
| CA\_n260I | CA\_n260I | 50, 100 | 100 | 100 | 100 |  |  |  |  | 400 | 0 |
| CA\_n260J | CA\_n260J | 50, 100 | 100 | 100 | 100 | 100 |  |  |  | 500 | 0 |
| CA\_n260K | CA\_n260K | 50, 100 | 100 | 100 | 100 | 100 | 100 |  |  | 600 | 0 |
| CA\_n260L | CA\_n260L | 50, 100 | 100 | 100 | 100 | 100 | 100 | 100 |  | 700 | 0 |
| CA\_n260M | CA\_n260M | 50, 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 800 | 0 |
| CA\_n260O | CA\_n260O | 50, 100 | 50, 100 |  |  |  |  |  |  | 200 | 0 | 4 |
| CA\_n260P | CA\_n260P | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  | 300 | 0 |
| CA\_n260Q | CA\_n260Q | 50, 100 | 50, 100, | 50, 100 | 50, 100 |  |  |  |  | 400 | 0 |
| CA\_n261B | CA\_n261B | 50, 100, 200, 400 | 400 |  |  |  |  |  |  | 800 | 0 | 1 |
| CA\_n261C | CA\_n261B | 50 | 400 | 400 |  |  |  |  |  | 8501 | 0 |
| CA\_n261D | CA\_n261D | 50, 100, 200 | 200 |  |  |  |  |  |  | 400 | 0 | 2 |
| CA\_n261E | CA\_n261E | 50, 100, 200 | 200 | 200 |  |  |  |  |  | 600 | 0 |
| CA\_n261F | CA\_n261F | 50, 100, 200 | 200 | 200 | 200 |  |  |  |  | 800 | 0 |
| CA\_n261G | CA\_n261G | 50, 100 | 100 |  |  |  |  |  |  | 200 | 0 | 3 |
| CA\_n261H | CA\_n261H | 50, 100 | 100 | 100 |  |  |  |  |  | 300 | 0 |
| CA\_n261I | CA\_n261I | 50, 100 | 100 | 100 | 100 |  |  |  |  | 400 | 0 |
| CA\_n261J | CA\_n261J | 50, 100 | 100 | 100 | 100 | 100 |  |  |  | 500 | 0 |
| CA\_n261K | CA\_n261K | 50, 100 | 100 | 100 | 100 | 100 | 100 |  |  | 600 | 0 |
| CA\_n261L | CA\_n261L | 50, 100 | 100 | 100 | 100 | 100 | 100 | 100 |  | 700 | 0 |
| CA\_n261M | CA\_n261M | 50, 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 800 | 0 |
| CA\_n261O | CA\_n261O | 50, 100 | 50, 100 |  |  |  |  |  |  | 200 | 0 | 4 |
| CA\_n261P | CA\_n261P | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  | 300 | 0 |
| CA\_n261Q | CA\_n261Q | 50, 100 | 50, 100, | 50, 100 | 50, 100 |  |  |  |  | 400 | 0 |
| NOTE 1: The maximum bandwidth of band n261 is 850MHz  NOTE 2: For the NR CA configuration with more than two component carries, the bandwidths in a BCS which may introduce combinations more than requested unintentionally should be listed in a row separately. | | | | | | | | | | | | |

### **5.5A.2 Configurations for intra-band non-contiguous CA**

Configurations listed in this clause apply to downlink carrier aggregation only.

Table 5.5A.2-1: NR CA configurations with single CA bandwidth class defined for intra-band non-contiguous CA

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configurations | Sub-block | Sub-block | Sub-block | Sub-block | Sub-block | Sub-block | Sub-block | Sub-block | (BWChannel,block) (MHz) | BCS |
|
| CA\_n257(2A) | - | n257A | n257A |  |  |  |  |  |  | 800 | 0 |
| CA\_n260(2A) | - | n260A | n260A |  |  |  |  |  |  | 800 | 0 |
| CA\_n260(3A) | - | n260A | n260A | n260A |  |  |  |  |  | 1200 | 0 |
| CA\_n260(4A) | - | n260A | n260A | n260A | n260A |  |  |  |  | 1600 | 0 |
| CA\_n261(2A) | - | n261A | n261A |  |  |  |  |  |  | 800 | 0 |
| CA\_n261(3A) | - | n261A | n261A | n261A |  |  |  |  |  | 750 | 0 |
| CA\_n261(4A) | - | n261A | n261A | n261A | n261A |  |  |  |  | 700 | 0 |
| NOTE 1: Void  NOTE 2: Void  NOTE 3: Void  NOTE 4: Channel bandwidth per operating band defined in Table 5.3.5-1 | | | | | | | | | | | |

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Table 5.5A.2-2: NR CA configurations and bandwidth combination sets for intra-band non-contiguous CA

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configurations | Sub-block | Sub-block | Sub-block | Sub-block | Sub-block | Sub-block | Sub-block | (BWChannel,block) (MHz) | BCS |
|
| CA\_n260(A-I) | CA\_n260I | n260A | CA\_n260I |  |  |  |  |  | 800 | 0 |
| CA\_n260(D-G) | CA\_n260D CA\_n260G | CA\_n260D | CA\_n260G |  |  |  |  |  | 600 | 0 |
|
| CA\_n260(D-H) | CA\_n260D CA\_n260H | CA\_n260D | CA\_n260H |  |  |  |  |  | 700 | 0 |
|
| CA\_n260(D-I) | CA\_n260D CA\_n260I | CA\_n260D | CA\_n260I |  |  |  |  |  | 800 | 0 |
|
| CA\_n260(D-O) | CA\_n260D CA\_n260O | CA\_n260D | CA\_n260O |  |  |  |  |  | 600 | 0 |
|
| CA\_n260(D-P) | CA\_n260D CA\_n260P | CA\_n260D | CA\_n260P |  |  |  |  |  | 700 | 0 |
|
| CA\_n260(D-Q) | CA\_n260D CA\_n260Q | CA\_n260D | CA\_n260Q |  |  |  |  |  | 800 | 0 |
|
| CA\_n260(E-O) | CA\_n260E CA\_n260O | CA\_n260O | CA\_n260E |  |  |  |  |  | 800 | 0 |
|
| CA\_n260(E-P) | CA\_n260E CA\_n260P | CA\_n260E | CA\_n260P |  |  |  |  |  | 8001 | 0 |
|
| CA\_n260(E-Q) | CA\_n260E CA\_n260Q | CA\_n260E | CA\_n260Q |  |  |  |  |  | 1000 | 0 |
|
| CA\_n260(G-I) | CA\_n260G CA\_n260I | CA\_n260G | CA\_n260I |  |  |  |  |  | 600 | 0 |
|
| CA\_n261(D-G) | CA\_n261D CA\_n261G | CA\_n261D | CA\_n261G |  |  |  |  |  | 600 | 0 |
|
| CA\_n261(D-H) | CA\_n261D CA\_n261H | CA\_n261D | CA\_n261H |  |  |  |  |  | 700 | 0 |
|
| CA\_n261(D-I) | CA\_n261D CA\_n261I | CA\_n261D | CA\_n261I |  |  |  |  |  | 800 | 0 |
|
| CA\_n261(D-O) | CA\_n261D CA\_n261O | CA\_n261D | CA\_n261O |  |  |  |  |  | 600 | 0 |
|
| CA\_n261(D-P) | CA\_n261D CA\_n261P | CA\_n261D | CA\_n261P |  |  |  |  |  | 700 | 0 |
|
| CA\_n261(D-Q) | CA\_n261D CA\_n261Q | CA\_n261D | CA\_n261Q |  |  |  |  |  | 800 | 0 |
|
| CA\_n261(E-O) | CA\_n261E CA\_n261O | CA\_n261E | CA\_n261O |  |  |  |  |  | 800 | 0 |
|
| CA\_n261(E-P) | CA\_n261E CA\_n261P | CA\_n261E | CA\_n261P |  |  |  |  |  | 900 | 0 |
|
| CA\_n261(E-Q) | CA\_n261E CA\_n261Q | CA\_n261E | CA\_n261Q |  |  |  |  |  | 8001 | 0 |
|
| NOTE 1: Void  NOTE 2: Void  NOTE 3: Unless otherwise stated, BCS0 is referred in each constituent CA configuration | | | | | | | | | | |

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### *<< End of changes >>*