**3GPP TSG-RAN WG4 Meeting #112 R4-2411460**

**Maastricht, Netherlands, 19th August – 23th August 2024**

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| *CR-Form-v12.3* | | | | | | | | |
| **DRAFT CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **-1** | **CR** |  | **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 | **X** | Radio Access Network |  | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** | draft CR 38.101-1 for adding 2 bands NR CA BCS 4 and 5 configurations | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | , Verizon | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_CADC\_SUL\_R19 | | | | |  | ***Date:*** | | | 2024-08-09 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | B |  | | | | | ***Release:*** | | | Rel-19 |
|  | *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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Adding new configurations | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adding new BCS 4 and 5 for configurations for below combinations:  CA\_n2-n5  CA\_n2-n48  CA\_n2-n66  CA\_n2-n77  CA\_n5-n48  CA\_n5-n66  CA\_n5-n77  CA\_n48-n66  CA\_n48-n77  CA\_n66-n77  Removing dotted line for CA\_n2(2A)-n77C  This draft CR has a dependency to R4-2411255, TP for TR 38.719-02-01: PC3 NR BCS4/5 inter-band CA from Verizon.  This draft CR also has a dependency on R4-2411459 intra.band draft CR adding below configurations:  CA\_n2(3A), BCS4 and 5  CA\_n5B, BCS4 and 5  CA\_n48(A-B), BCS4 and 5  CA\_n66(3A), BCS4 and 5  **Technical analysis for adding CA\_n2(3A) to inter-band**  With CA\_n2(3A) the max aggregated BW is increased from 40 to 60 MHz. CA\_n2(3A) will be used in the DL of inter-band combinations CA\_n2(3A)-n48A and CA\_n2(3A)-n77A. With the band distances, cross band isolation is not expected to be an issue even with the increased max aggregated BW.  **Technical analysis for adding CA\_n66(3A) to inter-band**  With CA\_n66(3A) the max aggregated BW is 80 MHz and not increased compared to CA\_n66(2A) or to CA\_n66(3A) BCS0. Therefor no additional technical analys compared to previously already approved combinations.  **Technical analysis for CA\_n2-n5 BCS4 and 5**  For band n2 channel BW 25, 30, 35 and 40 are added compared to previous BCS’s, and for band n5 25 MHz is added. In current specification, there is no MSD defined for cross band isolation, harmonic or harmonic mixing for this band combination. Given the large gap cross band isolation is not needed to be investigated, which is also confirmed in TP R4-2411255.  **Technical analysis for CA\_n2-n48 BCS4 and 5**  For band n2 channel BW 25, 30, 35 and 40 are added compared to previous BCS’s, but for band n48 no new channel BW’s are added.  In current specification, there is harmonic MSD defined but no cross band or harmonic mixing MSD. Harmonic MSD does not need to be updated for the new channel BW’s added for band n2.  **Technical analysis for CA\_n2-n66 BCS4 and 5**  For band n2 channel BW 25, 30, 35 and 40 are added compared to previous BCS’s, and for band n66 45 MHz is added. In current specification, there is no MSD defined for cross band isolation, harmonic or harmonic mixing for this band combination. But since larger bandwidths are added MSD for cross band isolation are included based on suggestion in “TP for TR 38.719-02-01: Cross-band isolation for two uplink CA” from Verizon and R4-2408845: “Adding missing MSD for CA\_n2A-n66A and for CA\_n25A-n66A PC3”, Qualcomm France, Skyworks Inc  **Technical analysis for CA\_n2-n77 BCS4 and 5**  CA\_n2A-n77A is already specified in 38.101-1 and no further analysis is needed.  **Technical analysis for CA\_n5-n48 BCS4 and 5**  For band n5 channel BW 25 are added compared to previous BCS’s, but for band n48 no new channel BW’s are added. In current specification, there is no MSD defined for cross band isolation, harmonic or harmonic mixing for this band combination.  **Technical analysis for CA\_n5-n66 BCS4 and 5**  CA\_n5A-n66A is already specified in 38.101-1 and no further analysis is needed.  **Technical analysis for CA\_n5-n77 BCS4 and 5**  CA\_n5A-n77A is already specified in 38.101-1 and no further analysis is needed.  **Technical analysis for CA\_n48-n66 BCS4 and 5**  For band n48 no new channel BW’s are added compared to previous BCS’s, but for band n66 45 MHz is added. In current specification, there are MSD defined for harmonic, but there are no MSD defined for cross band isolation or for harmonic mixing.  **Technical analysis for CA\_n48-n77 BCS4 and 5**  CA\_n48A-n77A is already specified in 38.101-1 and no further analysis is needed.  **Technical analysis for CA\_n66-n77 BCS4 and 5**  CA\_n66A-n77A is already specified in 38.101-1 and no further analysis is needed. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Configurations are not added | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | | **X** |  | Test specifications | | | | TS 38.521-1 | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

---Start of changes---

Table 5.5A.3.1-1b: NR CA configurations and bandwidth combinations sets defined for inter-band CA (two bands)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configuration or single uplink carrier10 | NR Band | Channel bandwidth (MHz) (NOTE 3) | Bandwidth combination set |
| CA\_n2A-n5A | n28  CA\_n2A-n5A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
| CA\_n2A-n5B | CA\_n2A-n5A  CA\_n5B | n2 | 5, 10, 15, 20 | 0 |
|  |  | n5 | CA\_n5B\_BCS0 |  |
|  | CA\_n2A-n5A | n2 | See n2 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n5 | CA\_n5B\_BCS 4 and 5 |  |
| CA\_n2(2A)-n5A | CA\_n2A-n5A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n2 | CA\_n2(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n5 | See n5 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n2(2A)-n5B | CA\_n2A-n5A | n2 | CA\_n2(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n5 | CA\_n5B\_BCS 4 and 5 |  |
| CA\_n2A-n7A | CA\_n2A-n7A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
| CA\_n2A-n7(2A) | CA\_n2A-n7A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n7 | CA\_n7(2A)\_BCS0 |  |
| CA\_n2(2A)-n7A | CA\_n2A-n7A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
| CA\_n2A-n12A | CA\_n2A-n12A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n12 | 5, 10, 15 |  |
| CA\_n2(2A)-n12A | CA\_n2A-n12A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n12 | 5, 10, 15 |  |
| CA\_n2A-n14A | CA\_n2A-n14A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n14 | 5, 10 |  |
| CA\_n2(2A)-n14A | CA\_n2A-n14A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n14 | 5, 10 |  |
| CA\_n2A-n29A | - | n2 | 5, 10, 15, 20 | 0 |
|  |  | n29 | 5, 10 |  |
| CA\_n2(2A)-n29A | - | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n29 | 5, 10 |  |
| CA\_n2A-n30A | CA\_n2A-n30A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n30 | 5, 10 |  |
| CA\_n2(2A)-n30A | CA\_n2A-n30A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n30 | 5, 10 |  |
| CA\_n2A-n38A | - | n2 | 5, 10, 15, 20 | 0 |
|  |  | n38 | 5, 10, 15, 20, 40 |  |
| CA\_n2A-n41A | CA\_n2A-n41A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n41 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n2(2A)-n41A | CA\_n2A-n41A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n48A | CA\_n2A-n48A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n48 | 5, 10, 15, 20, 40, 506, 606, 806, 906, 1006 |  |
|  |  | n2 | 5, 10, 15, 20 | 1 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 506, 606,706, 806, 906, 1006 |  |
| CA\_n2A-n48B | CA\_n48B  CA\_n2A-n48A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n2 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48B\_BCS2 |  |
|  |  | n2 | See n2 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n48 | CA\_n48B\_BCS 4 and 5 |  |
| CA\_n2A-n48C | CA\_n2A-n48A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
| CA\_n2A-n48(2A) | CA\_n2A-n48A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n2 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48(2A)\_BCS1 |  |
|  |  | n2 | See n2 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n48 | CA\_n48(2A)\_BCS 4 and 5 |  |
| CA\_n2A-n48(A-B) | CA\_n2A-n48A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48(A-B)\_BCS0 |  |
|  |  | n2 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48(A-B)\_BCS1 |  |
|  |  | n2 | See n2 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n48 | CA\_n48(A-B)\_BCS 4 and 5 |  |
| CA\_n2(2A)-n48A | CA\_n2A-n48A | n2 | CA\_n2(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n48 | See n48 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n2(2A)-n48B | CA\_n48B  CA\_n2A-n48A | n2 | CA\_n2(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n48 | CA\_n48B\_BCS 4 and 5 |  |
| CA\_n2(2A)-n48(2A) | CA\_n2A-n48A | n2 | CA\_n2(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n48 | CA\_n48(2A)\_BCS 4 and 5 |  |
| CA\_n2(3A)-n48A | CA\_n2A-n48A | n2 | CA\_n2(3A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n48 | See n48 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n2A-n66A | n28  n668 | n2 | 5, 10, 15, 20 | 0 |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  | n28  n668  CA\_n2A-n66A | n2 | 5, 10, 15, 20 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2(2A)-n66A | CA\_n2A-n66A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n2 | CA\_n2(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n66 | See n66 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n2A-n66(2A) | CA\_n2A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n2 | See n2 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n66 | CA\_n66(2A)\_BCS 4 and 5 |  |
| CA\_n2(2A)-n66(2A) | CA\_n2A-n66A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n2 | CA\_n2(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n66 | CA\_n66(2A)\_BCS 4 and 5 |  |
| CA\_n2(2A)-n66(3A) | CA\_n2A-n66A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n66 | CA\_n66(3A)\_BCS0 |  |
| CA\_n2A-n66(3A) | CA\_n2A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66(3A)\_BCS0 |  |
| CA\_n2A-n66B | CA\_n2A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66B\_BCS0 |  |
| CA\_n2A-n71A | CA\_n2A-n71A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  | - | n2 | See n2 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n71 | See n71 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n2(2A)-n71A | CA\_n2A-n71A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  | - | n2 | CA\_n2(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n71 | See n71 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n2A-n77A | n778,9  CA\_n2A-n77A8, 13,14 | n2 | 5, 10, 15, 20 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n2 | n2 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n2A-n77(2A) | n778,9  CA\_n2A-n77A8  CA\_n77(2A)7 | n2 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
|  |  | n2 | 5, 10, 15, 20 | 1 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n2A-n77B | CA\_n2A-n77A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77B\_BCS0 |  |
|  | - | n2 | n2 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77B\_BCS 4 and 5 |  |
| CA\_n2A-n77C | n778, 9  CA\_n77C  CA\_n2A-n77A8 | n2 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n2 | n2 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77C\_BCS 4 and 5 |  |
| CA\_n2(2A)-n77A | n778, 9  CA\_n2A-n77A8 | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n2 | CA\_n2(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n2(2A)-n77B | CA\_n2A-n77A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n77 | CA\_n77B\_BCS0 |  |
|  | - | n2 | CA\_n2(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | CA\_n77B\_BCS 4 and 5 |  |
| CA\_n2(2A)-n77(2A) | n778,9  CA\_n2A-n77A8  CA\_n77(2A)7 | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n2A-n77(3A) | CA\_n2A-n77A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77(3A)\_BCS0 |  |
|  |  | n2 | 5, 10, 15, 20 | 1 |
|  |  | n77 | CA\_n77(3A)\_BCS1 |  |
| CA\_n2(2A)-n77C | n778, 9  CA\_n77C  CA\_n2A-n77A8 | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
|  | CA\_n2A-n77A | n2 | CA\_n2(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | CA\_n77C\_BCS 4 and 5 |  |
| CA\_n2(3A)-n77A | CA\_n2A-n77A | n2 | CA\_n2(3A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | See n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n2A-n78A | CA\_n2A-n78A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n2 | 5, 10, 15, 20 | 1 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n2 | See n2 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | See n78 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n2A-n78(2A) | CA\_n2A-n78A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS1 |  |
|  |  | n2 | 5, 10, 15, 20 | 1 |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
|  |  | n2 | See n2 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | CA\_n78(2A)\_BCS4 and 5 |  |

---Text omitted---

Table 5.5A.3.1-1d: NR CA configurations and bandwidth combinations sets defined for inter-band CA (two bands)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configuration or single uplink carrier10 | NR Band | Channel bandwidth (MHz) (NOTE 3) | Bandwidth combination set |
| CA\_n5A-n7A | CA\_n5A-n7A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n7 | n7 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n7B | CA\_n5A-n7A  CA\_n7B | n5 | 5, 10, 15, 20 | 0 |
|  |  | n7 | CA\_n7B\_BCS0 |  |
| CA\_n5A-n8A15 | - | n5 | 5, 10 | 0 |
|  |  | n8 | 5, 10 |  |
| CA\_n5A-n12A | CA\_n5A-n12A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n12 | 5, 10, 15 |  |
| CA\_n5B-n12A | CA\_n5A-n12A  CA\_n5B | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n12 | 5, 10, 15 |  |
| CA\_n5A-n13A | CA\_n5A-n13A | n5 | 5, 10, 15, 20 | 4 and 5 |
|  |  | n13 | 5, 10 |  |
| CA\_n5B-n13A | CA\_n5A-n13A | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n13 | 5, 10 |  |
| CA\_n5A-n14A | CA\_n5A-n14A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n14 | 5, 10 |  |
| CA\_n5B-n14A | CA\_n5A-n14A  CA\_n5B | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n14 | 5, 10 |  |
| CA\_n5A-n25A | CA\_n5A-n25A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n25 | n25 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n25(2A) | CA\_n5A-n25A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
| CA\_n5A-n28A | CA\_n5A-n28A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n28 | 5, 10, 15, 20, 30 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n28 | 5, 10, 15, 20, 25, 30 |  |
| CA\_n5A-n29A | - | n5 | 5, 10, 15, 20 | 0 |
|  |  | n29 | 5, 10 |  |
| CA\_n5B-n29A | CA\_n5B | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n29 | 5, 10 |  |
| CA\_n5A-n30A | CA\_n5A-n30A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n30 | 5, 10 |  |
| CA\_n5A-n40A | CA\_n5A-n40A | n5 | 5, 10, 15, 20, 251 | 0 |
|  |  | n40 | 55, 10, 15, 20, 25, 30, 40, 50, 60, 70, 80,90,100 |  |
| CA\_n5A-n41A | CA\_n5A-n41A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n48A | CA\_n5A-n48A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | 5, 10, 15, 20, 40, 506, 606, 806, 906, 1006 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 506, 606,706, 806, 906, 1006 |  |
| CA\_n5A-n48(2A) | CA\_n5A-n48A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48(2A)\_BCS1 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n48 | CA\_n48(2A)\_BCS 4 and 5 |  |
| CA\_n5A-n48B | CA\_n48B  CA\_n5A-n48A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48B\_BCS2 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n48 | CA\_n48B\_BCS 4 and 5 |  |
| CA\_n5A-n48C | CA\_n5A-n48A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
| CA\_n5A-n48(A-B) | CA\_n5A-n48A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48(A-B)\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48(A-B)\_BCS1 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n48 | CA\_n48(A-B)\_BCS 4 and 5 |  |
| CA\_n5B-n48A | CA\_n5A-n48A | n5 | CA\_n5B\_BCS 4 and 5 | 4 and 5 |
|  |  | n48 | n48 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5B-n48B | CA\_n48B CA\_n5A-n48A | n5 | CA\_n5B\_BCS 4 and 5 | 4 and 5 |
|  |  | n48 | CA\_n48B\_BCS 4 and 5 |  |
| CA\_n5B-n48(2A) | CA\_n5A-n48A | n5 | CA\_n5B\_BCS 4 and 5 | 4 and 5 |
|  |  | n48 | CA\_n48(2A)\_BCS 4 and 5 |  |
| CA\_n5A-n66A | n668  CA\_n5A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n66 | n66 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n66B | CA\_n5A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66B\_BCS0 |  |
| CA\_n5B-n66A | CA\_n5A-n66A  CA\_n5B | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n5 | CA\_n5B\_BCS 4 and 5 | 4 and 5 |
|  |  | n66 | n66 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5B-n66B | CA\_n5A-n66A | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n66 | CA\_n66B\_BCS0` |  |
| CA\_n5A-n66(2A) | CA\_n5A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n66 | CA\_n66(2A)\_BCS 4 and 5 |  |
| CA\_n5A-n66(3A) | CA\_n5A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66(3A)\_BCS0 |  |
| CA\_n5B-n66(2A) | CA\_n5A-n66A  CA\_n5B | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n5 | CA\_n5B\_BCS 4 and 5 | 4 and 5 |
|  |  | n66 | CA\_n66(2A)\_BCS 4 and 5 |  |
| CA\_n5A-n71A | - | n5 | 5, 10, 15, 20 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n71 | n71 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n77A | n778,9  CA\_n5A-n77A8,13,14 | n5 | 5, 10, 15, 20 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n77B | CA\_n5A-n77A  n778,9 | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77B\_BCS 4 and 5 |  |
| CA\_n5A-n77(2A) | n778,9  CA\_n5A-n77A8  CA\_n77(2A)8 | n5 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77(2A)\_BCS4 and 5 |  |
| CA\_n5A-n77(3A) | n778,9  CA\_n77(2A)8  CA\_n5A-n77A8 | n5 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77(3A)\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n77 | CA\_n77(3A)\_BCS1 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77(3A)\_BCS4 and 5 |  |
| CA\_n5(2A)-n77A | n778,9  CA\_n5A-n77A8 | n5 | CA\_n5(2A)\_BCS0 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n77C | 778,9  CA\_n5A-n77A8  CA\_n77C | n5 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
|  | CA\_n5A-n77A  CA\_n77C | n5 | See n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77C\_BCS 4 and 5 |  |
| CA\_n5(2A)-n77C | n778,9  CA\_n77C  CA\_n5A-n77A8 | n5 | CA\_n5(2A)\_BCS0 | 0 |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n5 | CA\_n5(2A)\_BCS0 | 1 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
| CA\_n5B-n77A | n778,9  CA\_n5A-n77A8  CA\_n5B | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  | n5A-n77A  CA\_n5B | n5 | CA\_n5B\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5B-n77C | n778,9  CA\_n5A-n77A8  CA\_n5B  CA\_n77C | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n5 | CA\_n5B\_BCS0 | 1 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
|  | CA\_n5A-n77A  CA\_n5B  CA\_n77C | n5 | CA\_n5B\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | CA\_n77C\_BCS 4 and 5 |  |
| CA\_n5A-n78A | n788,9  CA\_n5A-n78A8 | n5 | 5, 10, 15, 20 | 0 |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n5 | See n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | See n78 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n78(2A) | n788,9  CA\_n5A-n78A8  CA\_n78(2A)8 | n5 | 5, 10, 15, 20 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
|  |  | n5 | See n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | CA\_n78(2A)\_BCS4 and 5 |  |
| CA\_n5A-n78C | CA\_n5A-n78A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n78 | CA\_n78C\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n78 | CA\_n78C\_BCS1 |  |
|  | CA\_n78C  CA\_n5A-n78C | n5 | See n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | CA\_n78C\_BCS4 and 5 |  |
| CA\_n5A-n79A | CA\_n5A-n79A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
|  |  | n5 | See n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n79 | See n79 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n79C | CA\_n5A-n79A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n79 | CA\_n79C\_BCS0 |  |
|  |  | n5 | See n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n79 | CA\_n79C\_BCS4 and 5 |  |
| CA\_n5A-n105A | CA\_n5A-n105A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n105 | 5, 10, 15, 20, 25, 30, 35 |  |

---Text omitted---

Table 5.5A.3.1-1l: NR CA configurations and bandwidth combinations sets defined for inter-band CA (two bands)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configuration or single uplink carrier10 | NR Band | Channel bandwidth (MHz) (NOTE 3) | Bandwidth combination set |
| CA\_n48A-n53A | - | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n53 | 5, 10 |  |
| CA\_n48(2A)-n53A | - | n48 | CA\_n48(2A)\_BCS0 | 0 |
|  |  | n53 | 5, 10 |  |
| CA\_n48A-n66A | CA\_n48A-n66A | n48 | 5, 10, 15, 20, 40, 506,606, 806,906,1006 | 0 |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n48 | 5, 10, 15, 20, 40, 506, 606, 806, 906, 1006 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 | 2 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40, |  |
| CA\_n48A-n66B | CA\_n48A-n66A | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 | 0 |
|  |  | n66 | CA\_n66B\_BCS0 |  |
| CA\_n48A-n66(2A) | CA\_n48A-n66A | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS0 |  |
|  |  | n48 | See n48 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n66 | CA\_n66(2A)\_BCS 4 and 5 |  |
| CA\_n48A-n66(3A) | CA\_n48A-n66A | n48 | See n48 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n66 | CA\_n66(3A)\_BCS 4 and 5 |  |
| CA\_n48B-n66A | CA\_n48B  CA\_n48A-n66A | n48 | CA\_n48B\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n48 | CA\_n48B\_BCS1 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n48 | CA\_n48B\_BCS2 | 2 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n48 | CA\_n48B\_BCS 4 and 5 | 4 and 5 |
|  |  | n66 | See n66 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n48B-n66B | CA\_n48A-n66A | n48 | CA\_n48B\_BCS0 | 0 |
|  |  | n66 | CA\_n66B\_BCS0 |  |
|  |  | n48 | CA\_n48B\_BCS2 | 1 |
|  |  | n66 | CA\_n66B\_BCS0 |  |
| CA\_n48B-n66(2A) | CA\_n48B  CA\_n48A-n66A | n48 | CA\_n48B\_BCS2 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS0 |  |
|  |  | n48 | CA\_n48B\_BCS2 | 1 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n48 | CA\_n48B\_BCS2 | 2 |
|  |  | n66 | CA\_n66(2A)\_BCS2 |  |
|  |  | n48 | CA\_n48B\_BCS 4 and 5 | 4 and 5 |
|  |  | n66 | CA\_n66(2A)\_BCS 4 and 5 |  |
| CA\_n48C-n66A | CA\_n48B  CA\_n48A-n66A | n48 | CA\_n48C\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n48 | CA\_n48C\_BCS0 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n48C-n66B | CA\_n48A-n66A | n48 | CA\_n48C\_BCS1 | 0 |
|  |  | n66 | CA\_n66B\_BCS0 |  |
| CA\_n48(2A)-n66A | CA\_n48A-n66A | n48 | CA\_n48(2A)\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n48 | CA\_n48(2A)\_BCS0 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n48 | CA\_n48(2A)\_BCS1 | 2 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n48 | CA\_n48(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n66 | See n66 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n48(2A)-n66B | CA\_n48A-n66A | n48 | CA\_n48(2A)\_BCS1 | 0 |
|  |  | n66 | CA\_n66B\_BCS0 |  |
| CA\_n48(2A)-n66(2A) | CA\_n48A-n66A | n48 | CA\_n48(2A)\_BCS1 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS0 |  |
|  |  | n48 | CA\_n48(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n66 | CA\_n66(2A)\_BCS 4 and 5 |  |
| CA\_n48(A-B)-n66A | CA\_n48A-n66A | n48 | CA\_n48(A-B)\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n48 | CA\_n48(A-B)\_BCS1 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n48 | CA\_n48(A-B)\_BCS 4 and 5 | 4 and 5 |
|  |  | n66 | See n66 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n48A-n70A | CA\_n48A-n70A | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 | 0 |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
| CA\_n48(2A)-n70A | CA\_n48A-n70A | n48 | CA\_n48(2A)\_BCS1 | 0 |
|  |  | n70 | 5, 10, 15, 20, 25 |  |
| CA\_n48B-n70A | CA\_n48A-n70A | n48 | CA\_n48B\_BCS2 | 0 |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
| CA\_n48A-n71A | CA\_n48A-n71A | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n48A-n71(2A) | CA\_n48A-n71A | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 | 0 |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
| CA\_n48(2A)-n71A | CA\_n48A-n71A | n48 | CA\_n48(2A)\_BCS1 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n48(2A)-n71(2A) | CA\_n48A-n71A | n48 | CA\_n48(2A)\_BCS1 | 0 |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
| CA\_n48(3A)-n71A | CA\_n48A-n71A | n48 | CA\_n48(3A)\_BCS0 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n48(4A)-n71A | CA\_n48A-n71A | n48 | CA\_n48(4A)\_BCS0 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n48B-n71A | CA\_n48A-n71A | n48 | CA\_n48B\_BCS2 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n48B-n71(2A) | CA\_n48A-n71A | n48 | CA\_n48B\_BCS2 | 0 |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
| CA\_n48C-n71A | CA\_n48A-n71A | n48 | CA\_n48C\_BCS0 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n48A-n77A | n778,9 | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n48 | See n48 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | See n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n48A-n77C | n778,9  CA\_n77C | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 | 0 |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 | 1 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
|  | CA\_n77C | n48 | See n48 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77C\_BCS4 and 5 |  |
| CA\_n48A-n77(2A) | - | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
|  |  | n48 | See n48 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77(2A)\_BCS4 and 5 |  |
| CA\_n48(2A)-n77A | n778,9 | n48 | CA\_n48(2A)\_BCS0 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n48 | CA\_n48(2A)\_BCS1 | 1 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n48 | CA\_n48(2A)\_BCS4 and 5 | 4 and 5 |
|  |  | n77 | See n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n48(2A)-n77C | n778,9  CA\_n77C | n48 | CA\_n48(2A)\_BCS0 | 0 |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n48 | CA\_n48(2A)\_BCS0 | 1 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
|  |  | n48 | CA\_n48(2A)\_BCS1 | 2 |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n48 | CA\_n48(2A)\_BCS1 | 3 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
|  | CA\_n77C | n48 | CA\_n48(2A)\_BCS4 and 5 | 4 and 5 |
|  |  | n77 | CA\_n77C\_BCS4 and 5 |  |
| CA\_n48(2A)-n77(2A) | - | n48 | CA\_n48(2A)\_BCS0 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
|  |  | n48 | CA\_n48(2A)\_BCS4 and 5 | 4 and 5 |
|  |  | n77 | CA\_n77(2A)\_BCS4 and 5 |  |
| CA\_n48(3A)-n77A | - | n48 | CA\_n48(3A)\_BCS0 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n48B-n77A | CA\_n48B  n778,9 | n48 | CA\_n48B\_BCS0 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n48 | CA\_n48B\_BCS1 | 1 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n48 | CA\_n48B\_BCS2 | 2 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  | CA\_n48B  CA\_n77C | n48 | CA\_n48B\_BCS4 and 5 | 4 and 5 |
|  |  | n77 | See n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n48B-n77C | CA\_n48B  n778,9  CA\_n77C | n48 | CA\_n48B\_BCS0 | 0 |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n48 | CA\_n48B\_BCS0 | 1 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
|  |  | n48 | CA\_n48B\_BCS2 | 2 |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n48 | CA\_n48B\_BCS2 | 3 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
|  | CA\_n48B | n48 | CA\_n48B\_BCS4 and 5 | 4 and 5 |
|  |  | n77 | CA\_n77C\_BCS4 and 5 |  |
| CA\_n48(A-B)-n77A | n778,9 | n48 | CA\_n48(A-B)\_BCS0 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n48 | CA\_n48(A-B)\_BCS1 | 1 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n48(A-B)-n77C | n778,9  CA\_n48B  CA\_n77C | n48 | CA\_n48(A-B)\_BCS1 | 0 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
| CA\_n48A-n96A | CA\_n48A-n96A | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 | 0 |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n48(2A)-n96A | CA\_n48A-n96A | n48 | CA\_n48(2A)\_BCS0 | 0 |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n48(2A)-n96B | CA\_n48A-n96B | n48 | CA\_n48(2A)\_BCS0 | 0 |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n48(2A)-n96C | CA\_n48A-n96A | n48 | CA\_n48(2A)\_BCS0 | 0 |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n48(2A)-n96D | CA\_n48A-n96A | n48 | CA\_n48(2A)\_BCS0 | 0 |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n48(2A)-n96E | CA\_n48A-n96A | n48 | CA\_n48(2A)\_BCS0 | 0 |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n48(3A)-n96A | CA\_n48A-n96A | n48 | CA\_n48(3A)\_BCS0 | 0 |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n48(3A)-n96B | CA\_n48A-n96B | n48 | CA\_n48(3A)\_BCS0 | 0 |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n48(3A)-n96C | CA\_n48A-n96A | n48 | CA\_n48(3A)\_BCS0 | 0 |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n48(3A)-n96D | CA\_n48A-n96A | n48 | CA\_n48(3A)\_BCS0 | 0 |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n48(3A)-n96E | CA\_n48A-n96A | n48 | CA\_n48(3A)\_BCS0 | 0 |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n48(4A)-n96A | CA\_n48A-n96A | n48 | CA\_n48(4A)\_BCS0 | 0 |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n48(4A)-n96B | CA\_n48A-n96A | n48 | CA\_n48(4A)\_BCS0 | 0 |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n48(4A)-n96C | CA\_n48A-n96A | n48 | CA\_n48(4A)\_BCS0 | 0 |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n48(4A)-n96D | CA\_n48A-n96A | n48 | CA\_n48(4A)\_BCS0 | 0 |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n48(4A)-n96E | CA\_n48A-n96A | n48 | CA\_n48(4A)\_BCS0 | 0 |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n48A-n96B | CA\_n48A-n96A | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 | 0 |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n48A-n96C | CA\_n48A-n96A | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 | 0 |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n48A-n96D | CA\_n48A-n96A | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 | 0 |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n48A-n96E | CA\_n48A-n96A | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 | 0 |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n48B-n96A | CA\_n48A-n96A CA\_n48B-n96A | n48 | CA\_n48B\_BCS0 | 0 |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n48B-n96B | CA\_n48A-n96A CA\_n48B-n96A | n48 | CA\_n48B\_BCS0 | 0 |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n48B-n96C | CA\_n48A-n96A CA\_n48B-n96A | n48 | CA\_n48B\_BCS0 | 0 |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n48B-n96D | CA\_n48A-n96A CA\_n48B-n96A | n48 | CA\_n48B\_BCS0 | 0 |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n48B-n96E | CA\_n48A-n96A CA\_n48B-n96A | n48 | CA\_n48B\_BCS0 | 0 |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n48C-n96A | CA\_n48A-n96A | n48 | CA\_n48C\_BCS0 | 0 |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n48C-n96B | CA\_n48A-n96A | n48 | CA\_n48C\_BCS0 | 0 |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n48C-n96C | CA\_n48A-n96A | n48 | CA\_n48C\_BCS0 | 0 |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n48C-n96D | CA\_n48A-n96A | n48 | CA\_n48C\_BCS0 | 0 |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n48C-n96E | CA\_n48A-n96A | n48 | CA\_n48C\_BCS0 | 0 |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n50A-n78A | CA\_n50A-n78A | n50 | 5, 10, 15, 20, 30, 40, 50, 60, 801 | 0 |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |

Table 5.5A.3.1-1m: NR CA configurations and bandwidth combinations sets defined for inter-band CA (two bands)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configuration or single uplink carrier10 | NR Band | Channel bandwidth (MHz) (NOTE 3) | Bandwidth combination set |
| CA\_n66A-n70A | - | n66 | 5, 10, 15, 20, 40 | 0 |
|  |  | n70 | 5, 10, 15, 201,251 |  |
| CA\_n66B-n70A | - | n66 | CA\_n66B\_BCS0 | 0 |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
| CA\_n66(2A)-n70A | - | n66 | CA\_n66(2A)\_BCS0 | 0 |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
| CA\_n66(3A)-n70A | - | n66 | CA\_n66(3A)\_BCS0 | 0 |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
| CA\_n66A-n71A | n668  n718  CA\_n66A-n71A | n66 | 5, 10, 15, 20, 40 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n66 | n66 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n71 | n71 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n66A-n71B | CA\_n66A-n71A | n66 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n71 | CA\_n71B\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n71 | CA\_n71B\_BCS2 |  |
|  |  | n66 | n66 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n71 | CA\_n71B\_BCS 4 and 5 |  |
| CA\_n66A-n71(2A) | CA\_n66A-n71A | n66 | 5, 10, 15, 20, 40 | 0 |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
|  |  | n66 | n66 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n71 | CA\_n71(2A)\_BCS 4 and 5 |  |
| CA\_n66(2A)-n71A | CA\_n66A-n71A | n66 | CA\_n66(2A)\_BCS0 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 | 1 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n66 | CA\_n66(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n71 | n71 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n66(2A)-n71B | CA\_n66A-n71A | n66 | CA\_n66(2A)\_BCS1 | 0 |
|  |  | n71 | CA\_n71B\_BCS2 |  |
|  |  | n66 | CA\_n66(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n71 | CA\_n71B\_BCS 4 and 5 |  |
| CA\_n66(2A)-n71(2A) | CA\_n66A-n71A | n66 | CA\_n66(2A)\_BCS1 | 0 |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
|  |  | n66 | CA\_n66(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n71 | CA\_n71(2A)\_BCS 4 and 5 |  |
| CA\_n66(3A)-n71A | CA\_n66A-n71A | n66 | CA\_n66(3A)\_BCS0 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n66B-n71A | CA\_n66A-n71A | n66 | CA\_n66B\_BCS0 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n66A-n77A | n668  n778,9  CA\_n66A-n77A8,13,14 | n66 | 5, 10, 15, 20, 40 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n66 | n66 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n66A-n77B | CA\_n66A-n77A | n66 | n66 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77B\_BCS 4 and 5 |  |
| CA\_n66(2A)-n77A | n778,9  CA\_n66A-n77A8 | n66 | CA\_n66(2A)\_BCS1 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 | 1 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n66 | CA\_n66(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n66(2A)-n77B | CA\_n66A-n77A | n66 | CA\_n66(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | CA\_n77B\_BCS 4 and 5 |  |
| CA\_n66A-n77(2A) | n778,9  CA\_n66A-n77A8  CA\_n77(2A)8 | n66 | 5, 10, 15, 20, 40 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
|  |  | n66 | n66 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77(2A)\_BCS 4 and 5 |  |
| CA\_n66(3A)-n77A | n778,9  CA\_n66A-n77A8 | n66 | CA\_n66(3A)\_BCS0 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  | CA\_n66A-n77A | n66 | CA\_n66(3A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n66(2A)-n77(2A) | n778,9  CA\_n66A-n77A8  CA\_n77(2A) | n66 | CA\_n66(2A)\_BCS0 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 | 1 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
|  |  | n66 | CA\_n66(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | CA\_n77(2A)\_BCS 4 and 5 |  |
| CA\_n66(3A)-n77(2A) | n778,9  CA\_n66A-n77A8 | n66 | CA\_n66(3A)\_BCS0 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n66A-n77C | n778,9  CA\_n77C  CA\_n66A-n77A8 | n66 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
|  | CA\_n77C  CA\_n66A-n77A | n66 | n66 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77C\_BCS 4 and 5 |  |
| CA\_n66A-n77(3A) | n778,9  CA\_n77(2A)8  CA\_n66A-n77A8 | n66 | 5, 10, 15, 20, 40 | 0 |
|  |  | n77 | CA\_n77(3A)\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n77 | CA\_n77(3A)\_BCS1 |  |
|  |  | n66 | n66 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77(3A)\_BCS4 and 5 |  |
| CA\_n66(2A)-n77(3A) | CA\_n77(2A)  CA\_n66A-n77A | n66 | CA\_n66(2A)\_BCS0 | 0 |
|  |  | n77 | CA\_n77(3A)\_BCS1 |  |
| CA\_n66(2A)-n77C | n778,9  CA\_n77C  CA\_n66A-n77A8 | n66 | CA\_n66(2A)\_BCS0 | 0 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 | 1 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
|  | CA\_n77C  CA\_n66A-n77A | n66 | CA\_n66(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | CA\_n77C\_BCS 4 and 5 |  |
| CA\_n66(3A)-n77C | n778,9  CA\_n77C CA\_n66A-n77A8 | n66 | CA\_n66(3A)\_BCS0 | 0 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
| CA\_n66B-n77A | n778,9  CA\_n66A-n77A8 | n66 | CA\_n66B\_BCS0 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n66B-n77C | n778,9  CA\_n77C  CA\_n66A-n77A8 | n66 | CA\_n66B\_BCS0 | 0 |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n66 | CA\_n66B\_BCS0 | 1 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
| CA\_n66A-n78A | n788,9  CA\_n66A-n78A8 | n66 | 5, 10, 15, 20, 40 | 0 |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n66 | See n66 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | See n78 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n66A-n78(2A) | n788,9  CA\_n66A-n78A8 | n66 | 5, 10, 15, 20, 30, 40 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS1 |  |
|  | CA\_n78(2A)8 | n66 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
|  |  | n66 | See n66 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | CA\_n78(2A)\_BCS4 and 5 |  |
| CA\_n66(2A)-n78A | n788,9  CA\_n66A-n78A8 | n66 | CA\_n66(2A)\_BCS0 | 0 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 | 1 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n66 | CA\_n66(2A)\_BCS4 and 5 | 4 and 5 |
|  |  | n78 | See n78 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n66(2A)-n78(2A) | n788,9  CA\_n66A-n78A8 | n66 | CA\_n66(2A)\_BCS0 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS1 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 | 1 |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
|  |  | n66 | CA\_n66(2A)\_BCS4 and 5 | 4 and 5 |
|  |  | n78 | CA\_n78(2A)\_BCS4 and 5 |  |
| CA\_n66A-n85A | n668  CA\_n66A-n85A | n66 | See n66 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n85 | See n85 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n66(2A)-n85A | CA\_n66A-n85A | n66 | CA\_n66(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n85 | See n85 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n67A-n78A | - | n67 | 5, 10, 15, 20 | 0 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n67A-n78(2A) | CA\_n78(2A) | n67 | 5, 10, 15, 20 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |

---End of changes---