**3GPP TSG-RAN WG4 Meeting #94-e R4-2002611**

**Online, 24th February – 6th March 2020** (revision of RP-191812)

**Source: Ericsson**

**Title: Revised WID on Rel-16 NR intra band Carrier Aggregation for xCC DL/yCC UL including contiguous and non-contiguous spectrum (x>=y)**

**Document for: Approval**

**Agenda Item: 9.5.1**

3GPP™ Work Item Description

For guidance, see [3GPP Working Procedures](http://www.3gpp.org/specifications-groups/working-procedures), article 39; and [3GPP TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm).
Information about Work Items can be found at <http://www.3gpp.org/Work-Items>

# Title: Revised WID on Rel-16 NR intra band Carrier Aggregation for xCC DL/yCC UL including contiguous and non-contiguous spectrum (x>=y)

## Acronym: NR\_CA\_R16\_Intra

## Unique identifier: 800073

 NOTE: For new WIs/SIs leave the Unique identifier empty or you can make a proposal for an Acronym.

 If this is a RAN WID including Core and Perf. part, then Title, Acronym and Unique identifier refer to the feature WI.

 Please tick (X) the applicable box(es) in the table below:

 Either:

|  |  |
| --- | --- |
| **This WID includes a Core part** | **X** |
| **This WID includes a Performance part** | **X** |

## 1 Impacts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Affects:** | UICC apps | ME | AN | CN | Others (specify) |
| **Yes** |  | X |  |  |  |
| **No** | X |  | X | X | X |
| **Don't know** |  |  |  |  |  |

## 2 Classification of the Work Item and linked work items

### 2.1 Primary classification

This work item is a … *{Tick one box. "***Feature** */* **Building Block** */ Work Task" form a hierarchical structure. E.g. no Building Block can be proposed without a corresponding parent Feature. The full structure of all existing Work Items is shown in the 3GPP Work Plan in* *ftp://ftp.3gpp.org/Information/WORK\_PLAN* *}*

|  |  |
| --- | --- |
|  | Feature |
| X | Building Block |
|  | *Work Task* |
|  | Study Item |

NOTE: Normally, Core/Perf./Testing parts in RAN WIDs are Building Blocks. Only if they are under an SA or CT umbrella, we define them as work tasks. If you are in doubt, please contact MCC.

### 2.2 Parent and child Work Items

*{For a* **Feature***: list here the children* **Building Blocks** *(optional) and* Work Tasks *(optional)}*

*{For a* **Building Block***: list here the parent* **Feature** *(mandatory) and children* Work Tasks *(optional)}*

*{For a* Work Task*: list here the parent* **Building Block** *(mandatory)}*

|  |
| --- |
| Parent and child Work Items  |
| Unique ID | Title | Nature of relationship |
| 800073 | NR intra band CA for xCC DL/yCC UL including contiguous and non-contiguous spectrum, (x>=y) | Parent WID |

NOTE: RAN agreed some time ago, that it describes the feature WI + Core/Perf. part WI or Testing part WI in one WID. Therefore the table above should just include the feature WI Unique ID and title and Nature of relationship is "parent WID".

### 2.3 Other related Work Items and dependencies

*{List here other Work Items which relate to the proposed one but are not part of the hierarchical structure, such as preceding SI or a preceding WI (e.g. if you further enhance a topic).}*

|  |
| --- |
| Other related Work Items (if any) |
| Unique ID | Title | Nature of relationship |
| 800173 | Core part: NR intra band CA for xCC DL/yCC UL including contiguous and non-contiguous spectrum, (x>=y) | Child WID |
| 800273 | Perf. part: NR intra band CA for xCC DL/yCC UL including contiguous and non-contiguous spectrum, (x>=y) | Child WID |

NOTE: Also related or dependent WIs in other TSGs should be indicated.

## 3 Justification

NR CA intra-band configurations are fundamental part of all higher order combinations and all new intra-band configurations will be defined under this WI. New configurations still emerge from exiting bands and whenever new band is specified, it will create a potential for several new intra-band configurations.

The preconditions

To propose DL CA for NR Intra-band CA for x CC DL/1 CC UL including contiguous and non-contiguous spectrum in rel-16, the constituent NR band requirements shall be completed and specified in advance.

To propose UL CA UL CA of x CC DL/y CC UL in rel-16 are as follows.

* Constituent x CC DL/ (y-1) CC UL shall be completed and specified in advance.

Example 1: If the following configuration is proposed,

|  |  |
| --- | --- |
| CA configuration | Uplink CA configuration |
| CA\_1C | None |

* NR Band 1 requirements shall be completed and specified in advance.

Example 2: If the following configuration is proposed,

|  |  |
| --- | --- |
| EN-DC configuration | Uplink EN-DC configuration |
| CA\_1E | CA\_1D |

* NR CA of DL\_CA\_1E\_UL\_1C shall be completed and specified in advance.

## 4 Objective

### 4.1 Objective of SI or Core part WI or Testing part WI

* Specify the configuration specific RF requirements for all listed NR intra-band CA combinations for x CC DL/y CC UL including contiguous and non-contiguous spectrum
	+ Applicable frequencies
	+ Applicable bandwidths and bandwidth sets
* Analyse combinations that have self-desensitization due to following reasons:
	+ TX frequency being in close proximity of their own receive bands for FDD bands
	+ Any other identified reasons
* For the combination where self-desensitization exists, specify at least needed
	+ Reference sensitivity excerptions
	+ UL RB restrictions for REFSENS test
* Add conformance testing in RAN5 specifications (to follow at a later stage)

of all REL-16 CA configurations that fall into the category defined by the WI title. An overview table of these CA configurations is provided here:

CA configurations for Intra-band for FR1
\*Unless otherwise stated, the number of UL CC is one for all band in the configuration.

Table 1-1: Individual combination names, proponents and supporting companies for Intra band contiguous CA configurations FR1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Num****CC** | **CA configuration** | **REL-indep.****from** | **contact****name, company** | **contact****email** | **other supporting companies****(min. 3)** | **status****(new, ongoing, completed, stopped)** | **supported next level fallback modes(in DL and UL)** |
| 2 | DL\_n78C\_UL\_n78C | Rel-16 | Bo Liu, China Telecom | liubo1.bri@chinatelecom.cn  | OPPO, ZTE, Xiaomi | Ongoing | 1B\_DL\_n78C\_UL\_n78A-completed |
| 2 | DL\_n79C\_UL\_n79C | Rel-16 | Bo Liu, China Telecom | liubo1.bri@chinatelecom.cn  | OPPO, ZTE, Xiaomi | Ongoing | 1B\_DL\_n79C\_UL\_n79A-completed |
| 2 | DL\_n66B\_UL\_n66A | Rel-15 | Antti Immonen, Dish network | antti.immonen@dish.com | Nokia, Ericsson, Huawei, Hisilicon | Completed | NONE |
| 2 | DL\_n41C\_UL\_n41A | Rel-15 | Liu Ye, Huawei | Leo.liuye@huawei.com | Hisilicon, CATT, CMCC | Completed | NONE |
| 2 | DL\_n41C\_UL\_n41C | Rel-16 | Liu Ye, Huawei | Leo.liuye@huawei.com | Hisilicon, CATT, CMCC | Ongoing | 1B\_DL\_n41C\_UL\_n41A |
| 2 | DL\_n71B | Rel-15 | Nelson Ueng, T-Mobile USA | nelson.ueng@T-Mobile.com | Ericsson, Nokia, Deutsche Telekom, Skyworks, Samsung | Completed | none |
| 2 | DL\_n77C\_UL\_n77C | Rel-16 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Ongoing | CA\_n77C\_UL\_n77A (Completed) |
| 2 | 2CC\_DL\_n5B\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
| 2 | 2CC\_DL\_n5B\_1CC\_UL\_n5A\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
| 2 | 2CC\_DL\_n5B\_2CC \_UL\_n5B\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | 2CC\_DL\_n5B\_1CC\_UL\_5A\_BCS0-new |
| 2 | 2CC\_DL\_n48B\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
| 2 | 2CC\_DL\_n48B\_1CC\_UL\_n48A\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
|  |  |  |  |  |  |  |  |
| 2 | 2CC\_DL\_n48C\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
| 2 | 2CC\_DL\_n48C\_1CC \_UL\_n48A\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
|  |  |  |  |  |  |  |  |
| 2 | 2CC\_DL\_n66B\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
| 2 | 2CC\_DL\_n66B\_1CC\_UL\_n66A\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
| 2 | 2CC\_DL\_n66B\_2CC\_UL\_n66B\_BCS0 | Rel-16 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | 2CC\_DL\_n66B\_1CC\_UL\_n66A\_BCS0 |
| 2 | DL\_n3B\_UL\_n3B\_BCS0 | Rel. 16 | Stephen Truelove, BT plc | stephen.truelove@bt.com | Telstra, Nokia, Ericsson, Huawei | Ongoing | None |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **CA configuration** | **UL configuration** | **BCS** | **contact****name, company** | **contact****email** | **other supporting companies****(min. 3)** | **status****(new, ongoing, completed, stopped)** | **supported next level fallback modes(in DL and UL)** |
| CA\_n1B | - | 0 | Zhang Peng, Huawei | zhangpeng169@huawei.com  | HiSilicon, Samsung, Qualcomm | Completed | None |
| CA\_n41C\_BCS1 | - | 1 | Bill Shvodian, Sprint | bill.shvodian@sprint.com | Skyworks Solutions, Inc., Qorvo, Broadcom, Nokia | Completed | None |
| CA\_n7B | CA\_n7B | 0 | S. Truelove, BT plc. | stephen.truelove@bt.com | Ericsson, Huawei, Rogers Comms. Canada, Telstra | Ongoing | DL\_n7B\_UL\_n7A |
| CA\_n7B | - | 0 | S. Truelove, BT plc. | stephen.truelove@bt.com | Ericsson, Huawei, Rogers Comms. Canada, Telstra | Ongoing | NA |
| CA\_n71B | - | 1 | Ahmed Alsohaily, CITC | asohaily@citc.gov.sa | Huawei, HiSilicon, Nokia, Ericsson, T-Mobile US, Etisalat, Qorvo | new | none |
| CA\_n41B | CA\_n41B | 0 | Li Yankun Samsung | Yankun.li@samsung.com | KDDI, Ericsson, Nokia | New | DL\_n41B\_UL\_n41B |
| CA\_n46M | - | 0 | Imadur Rahman, Ericsson | imadur.rahman@ericsson.com | Charter Communications, (Other supporters will be added later) | new | (new) DL\_n46B\_UL\_n46A(new) DL\_n46A\_UL\_n46A |
| CA\_n46N | - | 0 | Imadur Rahman, Ericsson | imadur.rahman@ericsson.com | Charter Communications, (Other supporters will be added later) | new | (new) DL\_n46B\_UL\_n46A(new) DL\_n46A\_UL\_n46A |
| CA\_n46O | - | 0 | Imadur Rahman, Ericsson | imadur.rahman@ericsson.com | Charter Communications, (Other supporters will be added later) | new | (new) DL\_n46B\_UL\_n46A(new) DL\_n46A\_UL\_n46A |

Table 1-2: Individual combination names, proponents and supporting companies for Intra band non-contiguous CA configurations FR1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Num****CC** | **CA configuration** | **REL-indep.****from** | **contact****name, company** | **contact****email** | **other supporting companies****(min. 3)** | **status****(new, ongoing, completed, stopped)** | **supported next level fallback modes(in DL and UL)** |
| 2 | DL\_n66(2A)\_UL\_66A | Rel-15 | Antti Immonen, Dish network | antti.immonen@dish.com | Nokia, Ericsson, Huawei, Hisilicon | Completed | NONE |
| 2 | DL\_n41(2A)\_UL\_n41A | Rel-15 | Liu Ye, Huawei | Leo.liuye@huawei.com | Hisilicon, CATT, CMCC | Completed | NONE |
|  |  |  |  |  |  |  |  |
| 2 | 2CC\_DL\_n2(2A)\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
| 2 | 2CC\_DL\_n2(2A)\_1CC\_UL\_n2A\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
| 2 | 2CC\_DL\_n5(2A)\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
| 2 | 2CC\_DL\_n5(2A)\_1CC\_UL\_n5A\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
| 2 | 2CC\_DL\_n48(2A)\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
| 2 | 2CC\_DL\_n48(2A)\_1CC \_n48A\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
| 2 | 2CC\_DL\_n66(2A)\_1CC\_UL\_n66A\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
| 3 | 3CC\_DL\_ n66(A-B)\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
| 3 | 3CC\_DL\_ n66(A-B)\_1CC \_UL\_n66A\_BCS0 | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | None |
| 3 | 3CC\_DL\_ n66(A-B)\_2CC \_UL\_n66B\_BCS0 | Rel-16 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | Ongoing | 3CC\_DL\_ n66(A-B) \_1CC \_UL\_n66A |
| 2 | CA\_n41(2A) | Rel-15 | Nelson Ueng, T-Mobile USA | nelson.ueng@T-Mobile.com | Ericsson, Nokia, Deutsche Telekom,  | Ongoing | None |
| 2 | DL\_n77(2A)\_UL\_n77A | Rel-16 | Zhang Peng, Huawei | zhangpeng169@huawei.com | HiSilicon, CKH IOD UK, Qorvo, NTT DOCOMO | Completed | None |
| 2 | DL\_n78(2A)\_UL\_n78A | Rel-16 | Zhang Peng, Huawei | zhangpeng169@huawei.com | HiSilicon, CKH IOD UK, Qorvo, NTT DOCOMO | Completed | None |
|  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **CA configuration** | **UL configuration** | **BCS** | **contact****name, company** | **contact****email** | **other supporting companies****(min. 3)** | **status****(new, ongoing, completed, stopped)** | **supported next level fallback modes(in DL and UL)** |
| CA\_n25(2A) | - | 0 | Bill Shvodian, Sprint | bill.shvodian@sprint.com | Ericsson, Nokia, Broadcom, Skyworks | Completed | None |
| CA\_n7(2A) | CA\_n7A | 0 | Liu Liehai, Huawei | liuliehai@huawei.com | Bell Mobility, TELUS, Hisilicon | Ongoing | None |
| CA\_n78(2A) | CA\_n78A | 0 | Liu Liehai, Huawei | liuliehai@huawei.com | Bell Mobility, TELUS, Hisilicon | Completed | None |
| CA\_n3(2A) | - | 0 | Zhang Peng, Huawei | zhangpeng169@huawei.com  | HiSilicon, Samsung, Qualcomm | Ongoing | None |
| CA\_n41(2A)\_BCS1 | - | 2 | Bill Shvodian, Sprint | bill.shvodian@sprint.com  | Skyworks Solutions, Inc., Qorvo, Broadcom, Nokia | Ongoing | None |
| CA\_n78(2A) | - | 1 | Zhang Peng, Huawei | zhangpeng169@huawei.com  | HiSilicon, CKH IOD UK, Telcel, Claro, Bell Mobility | new | none |
| CA\_n77(3A) | - | 0 | Masashi Fushiki, SoftBank | masashi.fushiki@g.softbank.co.jp | Ericsson, Huawei, HiSilicon, Nokia, ZTE | new | (completed) DL\_n77(2A)\_BCS0 |
| CA\_n48(A-C) | - | 0 | Zheng Zhao | zheng.zhao@verizonwireless.com | Nokia, Samsung, Ericsson, Qualcomm | New | (complete) DL\_n48C\_BCS0(complete) DL\_n482A |
| CA\_n48(3A) | - | 0 | Frank AzcuyCharters Communication | Frank.Azcuy@charter.com | Cable Labs, Ericsson, Qorvo | New | None |
| CA\_n48(4A) | - | 0 | Frank AzcuyCharters Communication | Frank.Azcuy@charter.com | Cable Labs, Ericsson, Qorvo | New | None |
| CA\_n77(2A) | CA\_n77(2A) | 0 | Li Yankun, Samsung | yankun.li@samsung.com | KDDI, Ericsson, Nokia | New | DL\_n77(2A)\_UL\_n77A |
| CA\_n78(2A) | CA\_n78(2A) | 0,1 | Li Yankun, Samsung | yankun.li@samsung.com | KDDI, Ericsson, Nokia | New | DL\_n78(2A)\_UL\_n78A |

Bandwidth combination set for Intra band FR1

Table 2-1 Bandwidth combination sets for Intra band contiguous CA configurations FR1

|  |  |  |
| --- | --- | --- |
|  |  | E-UTRA CA configuration / Bandwidth combination set |
| NR CA configuration | Uplink CA configurations | Component carriers in order of increasing carrier frequency | Maximum aggregated bandwidth [MHz] | Bandwidth combination set |
| Channel bandwidths for carrier [MHz] | Channel bandwidths for carrier [MHz] | Channel bandwidths for carrier [MHz] | Channel bandwidths for carrier [MHz] | Channel bandwidths for carrier [MHz] |
| CA\_n66B | - | 51 | 20 |  |  |  | 25 | 0 |
| 10 | 15 |  |  |  |
| 15 | 10 |  |  |  |
| 20 | 51 |  |  |  |
| 10 | 20 |  |  |  | 30 |
| 15 | 15 |  |  |  |
| 20 | 10 |  |  |  |
| 15 | 20 |  |  |  | 35 |
| 20 | 15 |  |  |  |
| 51 | 40 |  |  |  | 45 |
| 40 | 51 |  |  |  |
| 10 | 40 |  |  |  | 50 |
| 40 | 10 |  |  |  |
| CA\_n41C | - | 10, 15, 20, 40, 50, 60, 80, 90, 100 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |  |  | 190 | 0 |
| CA\_n71B | - | 5 | 20 |  |  |  | 25 | 0 |
| 10 | 15 |  |  |  |
| 15 | 10 |  |  |  |
| 20 | 5 |  |  |  |
| CA\_n71B | - | 10 | 20 |  |  |  | 35 | 1 |
| 15 | 15,20 |  |  |  |
| 20 | 10,15 |  |  |  |
| CA\_n77C | CA\_n77C | This part can be omitted unless there is some particular reason |
| CA\_n78C | CA\_n78C |
| CA\_n79C | CA\_n79C |
| CA\_n2B | - | 51 | 15 |  |  |  | 20 | 0 |
| 10 | 10 |  |  |  |
| 15 | 51 |  |  |  |
| 51 | 20 |  |  |  | 25 |
| 10 | 15 |  |  |  |
| 15 | 10 |  |  |  |
| 20 | 51 |  |  |  |
| 10 | 20 |  |  |  | 30 |
| 15 | 15 |  |  |  |
| 20 | 10 |  |  |  |
| 15 | 20 |  |  |  | 35 |
| 20 | 15 |  |  |  |
| 20 | 20 |  |  |  | 40 |
| CA\_n5B | n5ACA\_n5B | 51 | 152 |  |  |  | 20 | 0 |
| 102 | 102 |  |  |  |
| 152 | 51 |  |  |  |
| 51 | 202 |  |  |  | 25 |
| 102 | 152 |  |  |  |
| 152 | 102 |  |  |  |
| 202 | 51 |  |  |  |
| 102 | 202 |  |  |  | 30 |
| 152 | 152 |  |  |  |
| 202 | 102 |  |  |  |
| 152 | 202 |  |  |  | 35 |
| 202 | 152 |  |  |  |
| 202 | 202 |  |  |  | 40 |
| CA\_n48B | - | 5 | 15, 20, 40 |  |  |  | 50 | 0 |
| 10 | 10, 15, 20, 40 |  |  |  |
| 15, 20 | 5, 10, 15, 20 |  |  |  |
| 40 | 5, 10 |  |  |  |
| CA\_n48C | n48ACA\_n48C | 501 | 501 |  |  |  | 100 | 0 |
| CA\_n48C | n48ACA\_n48C | 10 | 90 |  |  |  | 100 | 0 |
| 20 | 80 |  |  |  |
| 40 | 60 |  |  |  |
| 50 | 50 |  |  |  |
| 60 | 40 |  |  |  |
| 80 | 20 |  |  |  |
| 90 | 10 |  |  |  |
| 15 | 90 |  |  |  | 105 |
| 90 | 15 |  |  |  |
| 10 | 100 |  |  |  | 110 |
| 20 | 90 |  |  |  |
| 50 | 60 |  |  |  |
| 60 | 50 |  |  |  |
| 90 | 20 |  |  |  |
| 100 | 10 |  |  |  |
| 15 | 100 |  |  |  | 115 |
| 100 | 15 |  |  |  |
| 20 | 100 |  |  |  | 120 |
| 40 | 80 |  |  |  |
| 60 | 60 |  |  |  |
| 80 | 40 |  |  |  |
| 100 | 20 |  |  |  |
| 40 | 90 |  |  |  | 130 |
| 50 | 80 |  |  |  |
| 80 | 50 |  |  |  |
| 90 | 40 |  |  |  |
| 40 | 100 |  |  |  | 140 |
| 50 | 90 |  |  |  |
| 60 | 80 |  |  |  |
| 80 | 60 |  |  |  |
| 90 | 50 |  |  |  |
| 100 | 40 |  |  |  |
| 50 | 100 |  |  |  | 150 |
| 60 | 90 |  |  |  |
| 90 | 60 |  |  |  |
| 100 | 50 |  |  |  |
| CA\_n3B | CA\_n3B | 20 | 20 |  |  |  | 40 | 0 |
| CA\_n1B | - | 10 | 10 |  |  |  | 20 | 0 |
| 10 | 15 |  |  |  | 25 |
| 15 | 15 |  |  |  | 30 |
| 15 | 20 |  |  |  | 35 |
| 20 | 20 |  |  |  | 40 |
| CA\_n7B | CA\_n7B | 10, 15, 20 | 10, 15, 20, 30, 35, 40 |  |  |  | 50 | 0 |
| CA\_n7B | - | 10, 15, 20 | 10, 15, 20, 30, 35, 40 |  |  |  | 50 | 0 |
| CA\_n41B | CA\_n41B | 10, 20, 30, 40, 50 | 10, 20, 30, 40, 50 |  |  |  | 100 | 0 |
| CA\_n46M | - | 10, 20 | 20 | 20 |  |  | 60 | 0 |
| CA\_n46N | - | 20 | 20 | 20 | 20 |  | 80 | 0 |
| CA\_n46O | - | 20 | 20 | 20 | 20 | 20 | 100 | 0 |
| NOTE 1: 51, 101, 151, 201, 401 and 501 MHz are not applicable for 30/60kHz SCS NOTE 2: 10, 15, 20MHz are not applicable for 60KHz SCSNOTE 3: The maximum bandwidth of band n48 is 150MHz |

Table 2-2 Bandwidth combination sets for Intra band non-contiguous CA configurations FR1

|  |  |  |
| --- | --- | --- |
|  |  | E-UTRA CA configuration / Bandwidth combination set |
| NR CA configuration | Uplink CA configurations | Component carriers in order of increasing carrier frequency | Maximum aggregated bandwidth [MHz] | Bandwidth combination set |
| Channel bandwidths for carrier [MHz] | Channel bandwidths for carrier [MHz] | Channel bandwidths for carrier [MHz] | Channel bandwidths for carrier [MHz] | Channel bandwidths for carrier [MHz] |
| CA\_n66(2A)1 | - | 51 | 20 |  |  |  | 25 | 0 |
| 10 | 15 |  |  |  |
| 15 | 10 |  |  |  |
| 20 | 51 |  |  |  |
| 10 | 20 |  |  |  | 30 |
| 15 | 15 |  |  |  |
| 20 | 10 |  |  |  |
| 15 | 20 |  |  |  | 35 |
| 20 | 15 |  |  |  |
| 20 | 20 |  |  |  | 40 |
| 51 | 40 |  |  |  | 45 |
| 40 | 51 |  |  |  |
| 10 | 40 |  |  |  | 50 |
| 40 | 10 |  |  |  |
| 15 | 40 |  |  |  | 55 |
| 40 | 15 |  |  |  |
| 20 | 40 |  |  |  | 60 |
| 40 | 20 |  |  |  |
| CA\_n41(2A) | CA\_n41(2A) | 40 | 40 |  |  |  | 80 | 0 |
| 40 | 50 |  |  |  | 90 |
| 40 | 60 |  |  |  | 100 |
| 50 | 50 |  |  |  |
| 50 | 60 |  |  |  | 110 |
| 40 | 80 |  |  |  | 120 |
| 60 | 60 |  |  |  |
| 50 | 80 |  |  |  | 130 |
| 40 | 100 |  |  |  | 140 |
| 60 | 80 |  |  |  |
| 50 | 100 |  |  |  | 150 |
| 60 | 100 |  |  |  | 160 |
| 80 | 80 |  |  |  |
| 50 | 40 |  |  |  | 90 |
| 60 | 40 |  |  |  | 100 |
| 60 | 50 |  |  |  | 110 |
| 80 | 40 |  |  |  | 120 |
| 80 | 50 |  |  |  | 130 |
| 100 | 40 |  |  |  | 140 |
| 80 | 60 |  |  |  |
| 100 | 50 |  |  |  | 150 |
| 100 | 60 |  |  |  | 160 |
| 100 | 80 |  |  |  | 180 |
| CA\_n41(2A) | - | 10, 15, 20, 40, 50, 60, 80, 90, 100 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |  |  | 190 | 1 |
| CA\_n2(2A) | - | 51 | 51 |  |  |  | 10 | 0 |
| 51 | 102 |  |  |  | 15 |
| 102 | 51 |  |  |  |
| 51 | 152 |  |  |  | 20 |
| 102 | 102 |  |  |  |
| 152 | 51 |  |  |  |
| 51 | 202 |  |  |  | 25 |
| 102 | 15 |  |  |  |
| 152 | 102 |  |  |  |
| 202 | 51 |  |  |  |
| 102 | 202 |  |  |  | 30 |
| 152 | 152 |  |  |  |
| 202 | 102 |  |  |  |
| 152 | 202 |  |  |  | 35 |
| 202 | 152 |  |  |  |
| 202 | 202 |  |  |  | 40 |
| CA\_n5(2A) | - | 51 | 51 |  |  |  | 10 | 0 |
| 51 | 102 |  |  |  | 15 |
| 102 | 51 |  |  |  |
| 51 | 152 |  |  |  | 20 |
| 102 | 102 |  |  |  |
| 152 | 51 |  |  |  |
| 51 | 202 |  |  |  | 25 |
| 102 | 15 |  |  |  |
| 152 | 102 |  |  |  |
| 202 | 51 |  |  |  |
| 102 | 202 |  |  |  | 30 |
| 152 | 152 |  |  |  |
| 202 | 102 |  |  |  |
| 152 | 202 |  |  |  | 35 |
| 202 | 152 |  |  |  |
| 202 | 202 |  |  |  | 40 |
| CA\_n7(2A) | - | 5, 10, 15, 20 | 5, 10, 15, 20 |  |  |  | 40 | 0 |
| CA\_n25(2A) | - | 5, 10, 15, 20 | 5, 10, 15, 20 |  |  |  | 40 | 0 |
| CA\_n48(2A)4 | - | 51 | 51 |  |  |  | 10 | 0 |
| 51 | 101 |  |  |  | 15 |
| 101 | 51 |  |  |  |
| 51 | 151 |  |  |  | 20 |
| 101 | 101 |  |  |  |
| 151 | 51 |  |  |  |
| 51 | 51 |  |  |  | 25 |
| 101 | 101 |  |  |  |
| 151 | 151 |  |  |  |
| 201 | 201 |  |  |  |
| 101 | 201 |  |  |  | 30 |
| 151 | 151 |  |  |  |
| 201 | 101 |  |  |  |
| 151 | 201 |  |  |  | 35 |
| 201 | 151 |  |  |  |
| 201 | 201 |  |  |  | 40 |
| 51 | 401 |  |  |  | 45 |
| 401 | 51 |  |  |  |
| 101 | 401 |  |  |  | 50 |
| 401 | 101 |  |  |  |
| 51 | 501 |  |  |  | 55 |
| 151 | 401 |  |  |  |
| 401 | 151 |  |  |  |
| 501 | 51 |  |  |  |
| 101 | 501 |  |  |  | 60 |
| 201 | 401 |  |  |  |
| 401 | 201 |  |  |  |
| 501 | 101 |  |  |  |
| 151 | 501 |  |  |  | 65 |
| 501 | 151 |  |  |  |
| 201 | 501 |  |  |  | 70 |
| 501 | 201 |  |  |  |
| 401 | 401 |  |  |  | 80 |
| 401 | 501 |  |  |  | 90 |
| 501 | 401 |  |  |  |
| 501 | 501 |  |  |  | 100 |
| CA\_n48(2A)5 |  | 10 | 10 |  |  |  | 20 | 0 |
| 10 | 15 |  |  |  | 25 |
| 15 | 10 |  |  |  |
| 10 | 20 |  |  |  | 30 |
| 15 | 15 |  |  |  |
| 20 | 10 |  |  |  |
| 15 | 20 |  |  |  | 35 |
| 20 | 15 |  |  |  |
| 20 | 20 |  |  |  | 40 |
| 10 | 40 |  |  |  | 50 |
| 40 | 10 |  |  |  |
| 15 | 40 |  |  |  | 55 |
| 40 | 15 |  |  |  |
| 10 | 50 |  |  |  | 60 |
| 20 | 40 |  |  |  |
| 40 | 20 |  |  |  |
| 50 | 10 |  |  |  |
| 15 | 50 |  |  |  | 65 |
| 50 | 15 |  |  |  |
| 10 | 60 |  |  |  | 70 |
| 20 | 50 |  |  |  |
| 50 | 20 |  |  |  |
| 60 | 10 |  |  |  |
| 15 | 60 |  |  |  | 75 |
| 60 | 15 |  |  |  |
| 20 | 60 |  |  |  | 80 |
| 40 | 40 |  |  |  |
| 60 | 20 |  |  |  |
| 10 | 80 |  |  |  | 90 |
| 40 | 50 |  |  |  |
| 50 | 40 |  |  |  |
| 80 | 10 |  |  |  |
| 15 | 80 |  |  |  | 95 |
| 80 | 15 |  |  |  |
| 10 | 90 |  |  |  | 100 |
| 20 | 80 |  |  |  |
| 40 | 60 |  |  |  |
| 50 | 50 |  |  |  |
| 60 | 40 |  |  |  |
| 80 | 20 |  |  |  |
| 90 | 10 |  |  |  |
| 15 | 90 |  |  |  | 105 |
| 90 | 15 |  |  |  |
| 10 | 100 |  |  |  | 110 |
| 20 | 90 |  |  |  |
| 50 | 60 |  |  |  |
| 60 | 50 |  |  |  |
| 90 | 20 |  |  |  |
| 100 | 10 |  |  |  |
| 15 | 100 |  |  |  | 115 |
| 100 | 15 |  |  |  |
| 20 | 100 |  |  |  | 120 |
| 40 | 80 |  |  |  |
| 60 | 60 |  |  |  |
| 80 | 40 |  |  |  |
| 100 | 20 |  |  |  |
| 40 | 90 |  |  |  | 130 |
| 50 | 80 |  |  |  |
| 80 | 50 |  |  |  |
| 90 | 40 |  |  |  |
| 40 | 100 |  |  |  | 140 |
| 50 | 90 |  |  |  |
| 60 | 80 |  |  |  |
| 80 | 60 |  |  |  |
| 90 | 50 |  |  |  |
| 100 | 40 |  |  |  |
| 50 | 100 |  |  |  | 1403 |
| 60 | 90 |  |  |  |
| 90 | 60 |  |  |  |
| 100 | 50 |  |  |  |
| 60 | 100 |  |  |  | 1403 |
| 80 | 80 |  |  |  |
| 100 | 60 |  |  |  |
| 80 | 90 |  |  |  | 1403 |
| 90 | 80 |  |  |  |
| 80 | 100 |  |  |  | 1403 |
| 90 | 90 |  |  |  |
| 100 | 80 |  |  |  |
| 90 | 100 |  |  |  | 1403 |
| 100 | 90 |  |  |  |
| 100 | 100 |  |  |  | 1403 |
| CA\_n66(A-B) | n66ACA\_n66B | See 66A Bandwidth Combination in Table 5.3.5-1 of 38.101-1 | See CA\_n66B Bandwidth Combination in Table 5.1.1-1 of 38.101-1 |  |  | 90 | 0 |
| See CA\_n66B Bandwidth Combination in Table 5.1.1-1 of 38.101-1 | See 66A Bandwidth Combination in Table 5.3.5-1 of 38.101-1 |  |  |
| CA\_n77(2A) | - | 20 | 100 |  |  |  | 120 | 0 |
| 100 | 20 |  |  |  |
| 40 | 100 |  |  |  | 140 |
| 100 | 40 |  |  |  |
| 80 | 100 |  |  |  | 180 |
| 100 | 80 |  |  |  |
| 100 | 100 |  |  |  | 200 |
| CA\_n78(2A) | - | 20 | 60 |  |  |  | 80 | 0 |
| 40 | 40 |  |  |  |
| 60 | 20 |  |  |  |
| 20 | 80 |  |  |  | 100 |
| 40 | 60 |  |  |  |
| 60 | 40 |  |  |  |
| 50 | 50 |  |  |  |
| 80 | 20 |  |  |  |
| 10 | 90 |  |  |  |
| 90 | 10 |  |  |  |
| 40 | 80 |  |  |  | 120 |
| 100 | 20 |  |  |  |
| 20 | 100 |  |  |  |
| 80 | 40 |  |  |  |
| 60 | 60 |  |  |  |
| 50 | 90 |  |  |  | 140 |
| 100 | 40 |  |  |  |
| 40 | 100 |  |  |  |
| 90 | 50 |  |  |  |
| 60 | 80 |  |  |  |
| 80 | 60 |  |  |  |
| 60 | 90 |  |  |  | 150 |
| 50 | 100 |  |  |  |
| 100 | 50 |  |  |  |
| 90 | 60 |  |  |  |
| 60 | 100 |  |  |  | 160 |
| 100 | 60 |  |  |  |
| 80 | 80 |  |  |  |
| 80 | 100 |  |  |  | 180 |
| 90 | 90 |  |  |  |
| 100 | 80 |  |  |  |
| 100 | 100 |  |  |  | 200 |
| CA\_n3(2A) | - | 10 | 10 |  |  |  | 20 | 0 |
| 10 | 15 |  |  |  | 25 |
| 15 | 15 |  |  |  | 30 |
| 15 | 20 |  |  |  | 35 |
| 20 | 20 |  |  |  | 40 |
| CA\_n7(2A) | CA\_n7A | 5, 10, 15, 20 | 5, 10, 15, 20 |  |  |  | 40 | 0 |
| CA\_n78(2A) | - | 10, 20, 25, 30, 40, 50, 60, 80, 90, 100 | 10, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |  |  | 200 | 1 |
| CA\_n77(3A) | - | 20, 40, 80, 100 | 20, 40, 80, 100 | 20, 40, 80, 100 |  |  | 300 | 0 |
| CA\_n48(3A) | - | 10 | 10, 15, 20, 40,50, 60, 80, 90, 100 | 10, 15, 20, 40,50, 60, 80, 90, 100 |  |  | 1406 | 0 |
| CA\_n48(4A) | - | 10 | 10 | 10, 15, 20, 40,50, 60, 80, 90, 100 | 10, 15, 20, 40,50, 60, 80, 90, 100 |  | 1356 | 0 |
| CA\_n48(A-C) | - | See n48A Bandwidth Combination in Table 5.3.5-1 of 38.101-1 | See CA\_n48C Bandwidth Combination in Table 5.5A.1-1 of 38.101-1 |  |  | 140 | 0 |
| See CA\_n48C Bandwidth Combination in Table 5.5A.1-1 of 38.101-1 | See n48A Bandwidth Combination in Table 5.3.5-1 of 38.101-1 |  |  |
| CA\_n77(2A) | CA\_n77(2A) | 20, 40, 80, 100 | 20, 40, 80, 100 |  |  |  | 200 | 0 |
| CA\_n78(2A) | CA\_n78(2A) | 10, 20, 40, 50, 60, 80, 90, 100 | 10, 20, 40, 50, 60, 80, 90, 100 |  |  |  | 200 | 0 |
| 10, 20, 25, 30, 40, 50, 60, 80, 90, 100 | 10, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |  |  | 200 | 1 |
| NOTE 1: 51, 101, 151, 201, 401 and 501 are not applicable for 30/60 kHz sub carrier spacing NOTE 2: 10, 15, 20MHz are not applicable for 60KHz SCSNOTE 3: The maximum bandwidth of band n48 is 150MHz and a non-contiguous gap is in between NR component carriersNOTE 4: SCS=15KHzNOTE 5: SCS=30/60KHz NOTE 6:   Parameter value accounts for both, the maximum frequency range of band n48 (150 MHz), and the minimum frequency gaps in between NR non-contiguous component carriers. |

CA configurations for Intra-band for FR2
\*Unless otherwise stated, the number of UL CC is one for all band in the configuration.

Table 3-1: Individual combination names, proponents and supporting companies for Intra band contiguous CA configurations FR2

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Num****CC** | **CA configuration** | **REL-indep.****from** | **contact****name, company** | **contact****email** | **other supporting companies****(min. 3)** | **status****(new, ongoing, completed, stopped)** | **supported next level fallback modes(in DL and UL)** |
| 2 | CA\_n258B | Rel-15 | Meng Wang, Telstra | meng.wang@team.telstra.com | Ericsson, Nokia, Cohere Technologies | Completed | None |
| 3 | CA\_n258C | Rel-15 | Meng Wang, Telstra | meng.wang@team.telstra.com | Ericsson, Nokia, Cohere Technologies | Completed | None |
| 2 | CA\_n258D | Rel-15 | Meng Wang, Telstra | meng.wang@team.telstra.com | Ericsson, Nokia, Cohere Technologies | Completed | None |
| 3 | CA\_n258E | Rel-15 | Meng Wang, Telstra | meng.wang@team.telstra.com | Ericsson, Nokia, Cohere Technologies | Completed | None |
| 4 | CA\_n258F | Rel-15 | Meng Wang, Telstra | meng.wang@team.telstra.com | Ericsson, Nokia, Cohere Technologies | Completed | None |
| 2 | CA\_n258G | Rel-15 | Meng Wang, Telstra | meng.wang@team.telstra.com | Ericsson, Nokia, Cohere Technologies | Completed | None |
| 3 | CA\_n258H | Rel-15 | Meng Wang, Telstra | meng.wang@team.telstra.com | Ericsson, Nokia, Cohere Technologies | Completed | None |
| 4 | CA\_n258I | Rel-15 | Meng Wang, Telstra | meng.wang@team.telstra.com | Ericsson, Nokia, Cohere Technologies | Completed | None |
| 5 | CA\_n258J | Rel-15 | Meng Wang, Telstra | meng.wang@team.telstra.com | Ericsson, Nokia, Cohere Technologies | Completed | None |
| 6 | CA\_n258K | Rel-15 | Meng Wang, Telstra | meng.wang@team.telstra.com | Ericsson, Nokia, Cohere Technologies | Completed | None |
| 7 | CA\_n258L | Rel-15 | Meng Wang, Telstra | meng.wang@team.telstra.com | Ericsson, Nokia, Cohere Technologies | Completed | None |
| 8 | CA\_n258M | Rel-15 | Meng Wang, Telstra | meng.wang@team.telstra.com | Ericsson, Nokia, Cohere Technologies | Completed | None |
| 2 | CA\_n257G\_UL\_n257G | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257G\_UL\_n257A (Completed) |
| 3 | CA\_n257H\_UL\_n257G | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257H\_UL\_n257A (Completed) |
| 3 | CA\_n257H\_UL\_n257H | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257H\_UL\_n257G |
| 4 | CA\_n257I\_UL\_n257G | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257I\_UL\_n257A (Completed) |
| 4 | CA\_n257I\_UL\_n257H | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257I\_UL\_n257G |
| 4 | CA\_n257I\_UL\_n257I | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257I\_UL\_n257H |
| 5 | CA\_n257J\_UL\_n257G | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257J\_UL\_n257A (Completed) |
| 5 | CA\_n257J\_UL\_n257H | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257J\_UL\_n257G |
| 5 | CA\_n257J\_UL\_n257I | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257J\_UL\_n257H |
| 5 | CA\_n257J\_UL\_n257J | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257J\_UL\_n257I |
| 6 | CA\_n257K\_UL\_n257G | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257K\_UL\_n257A (Completed) |
| 6 | CA\_n257K\_UL\_n257H | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257K\_UL\_n257G |
| 6 | CA\_n257K\_UL\_n257I | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257K\_UL\_n257H |
| 6 | CA\_n257K\_UL\_n257J | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257K\_UL\_n257I |
| 6 | CA\_n257K\_UL\_n257K | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257K\_UL\_n257J |
| 7 | CA\_n257L\_UL\_n257G | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257L\_UL\_n257A (Completed) |
| 7 | CA\_n257L\_UL\_n257H | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257L\_UL\_n257G |
| 7 | CA\_n257L\_UL\_n257I | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257L\_UL\_n257H |
| 7 | CA\_n257L\_UL\_n257J | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257L\_UL\_n257I |
| 7 | CA\_n257L\_UL\_n257K | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257L\_UL\_n257J |
| 7 | CA\_n257L\_UL\_n257L | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257L\_UL\_n257K |
| 8 | CA\_n257M\_UL\_n257G | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257M\_UL\_n257A (Completed) |
| 8 | CA\_n257M\_UL\_n257H | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257M\_UL\_n257G |
| 8 | CA\_n257M\_UL\_n257I | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257M\_UL\_n257H |
| 8 | CA\_n257M\_UL\_n257J | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257M\_UL\_n257I |
| 8 | CA\_n257M\_UL\_n257K | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257M\_UL\_n257J |
| 8 | CA\_n257M\_UL\_n257L | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257M\_UL\_n257K |
| 8 | CA\_n257M\_UL\_n257M | Rel-15 | Yuta Oguma, NTT DOCOMO | yuuta.oguma.yt@nttdocomo.com | Fujitsu, NEC, Nokia | Completed | CA\_n257M\_UL\_n257L |
| 2 | CA\_n261G\_UL\_n261G | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261A |
| 3 | CA\_n261H\_UL\_n261H | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261G\_UL\_n261G |
| 4 | CA\_n261I\_UL\_n261H | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261H\_UL\_n261H |
| 5 | CA\_n261J\_UL\_n261H | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261I\_UL\_n261H |
| 6 | CA\_n261K\_UL\_n261H | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261J\_UL\_n261H |
| 7 | CA\_n261L\_UL\_n261H | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261K\_UL\_n261H |
| 8 | CA\_n261M\_UL\_n261H | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261L\_UL\_n261H |
| 3 | CA\_n258D\_UL\_n258D | Rel-15 | Nokia | hisashi.onozawa@nokia.com | Huawei, Ericsson, Qualcomm | Ongoing | None |
| 2 | CA\_n257C  | Rel-15 | Alessandro Trogolo, Telecom Italia S.p.A. | alessandro.trogolo@telecomitalia.it  | Nokia, Huawei, HiSilicon | Ongoing | CA\_n257B (completed) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **NR CA configuration** | **Uplink Configuration** | **contact****name, company** | **contact****email** | **other supporting companies****(min. 3)** | **status****(new, ongoing, completed, stopped)** | **supported next level fallback modes(in DL and UL)** |
| CA\_n258B | CA\_n258B | Jeremy Chu, Telstra | Jeremy.chu@team.telstra.com | Ericsson, ZTE, Nokia | Ongoing | (complete) DL\_n258B\_UL\_n258A |
| CA\_n258C | CA\_n258BCA\_n258C | Jeremy Chu, Telstra | Jeremy.chu@team.telstra.com | Ericsson, ZTE, Nokia | Ongoing | (complete) DL\_n258B\_UL\_n258A(new) DL\_n258B\_UL\_n258B |
| CA\_n258E | CA\_n258DCA\_n258E | Jeremy Chu, Telstra | Jeremy.chu@team.telstra.com | Ericsson, ZTE, Nokia | Ongoing | (complete) DL\_n258E\_UL\_n258A(new) DL\_n258D\_UL\_n258D |
| CA\_n258F | CA\_n258DCA\_n258ECA\_n258F | Jeremy Chu, Telstra | Jeremy.chu@team.telstra.com | Ericsson, ZTE, Nokia | Ongoing | (complete) DL\_n258F\_UL\_n258A(new) DL\_n258E\_UL\_n258E |
| CA\_n258G | CA\_n258G | Jeremy Chu, Telstra | Jeremy.chu@team.telstra.com | Ericsson, ZTE, Nokia | Ongoing | (complete) DL\_n258G\_UL\_n258A |
| CA\_n258H | CA\_n258GCA\_n258H | Jeremy Chu, Telstra | Jeremy.chu@team.telstra.com | Ericsson, ZTE, Nokia | Ongoing | (complete) DL\_n258H\_UL\_n258A(new) DL\_n258G\_UL\_n258G |
| CA\_n258I | CA\_n258GCA\_n258HCA\_n258I | Jeremy Chu, Telstra | Jeremy.chu@team.telstra.com | Ericsson, ZTE, Nokia | Ongoing | (complete) DL\_n258I\_UL\_n258A(new) DL\_n258H\_UL\_n258H |
| CA\_n258J | CA\_n258GCA\_n258HCA\_n258ICA\_n258J | Jeremy Chu, Telstra | Jeremy.chu@team.telstra.com | Ericsson, ZTE, Nokia | Ongoing | (complete) DL\_n258J\_UL\_n258A(new) DL\_n258I\_UL\_n258I |
| CA\_n258K | CA\_n258GCA\_n258HCA\_n258ICA\_n258JCA\_n258K | Jeremy Chu, Telstra | Jeremy.chu@team.telstra.com | Ericsson, ZTE, Nokia | Ongoing | (complete) DL\_n258K\_UL\_n258A(new) DL\_n258J\_UL\_n258J |
| CA\_n258L | CA\_n258GCA\_n258HCA\_n258ICA\_n258JCA\_n258KCA\_n258L | Jeremy Chu, Telstra | Jeremy.chu@team.telstra.com | Ericsson, ZTE, Nokia | Ongoing | (complete) DL\_n258L\_UL\_n258A(new) DL\_n258K\_UL\_n258K |
| CA\_n258M | CA\_n258GCA\_n258HCA\_n258ICA\_n258JCA\_n258KCA\_n258LCA\_n258M | Jeremy Chu, Telstra | Jeremy.chu@team.telstra.com | Ericsson, ZTE, Nokia | Ongoing | (complete) DL\_n258M\_UL\_n258A(new) DL\_n258L\_UL\_n258L |

Table 3-2: Individual combination names, proponents and supporting companies for Intra band non-contiguous CA configurations FR2

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Num****CC** | **CA configuration** | **REL-indep.****from** | **contact****name, company** | **contact****email** | **other supporting companies****(min. 3)** | **status****(new, ongoing, completed, stopped)** | **supported next level fallback modes(in DL and UL)** |
| 2 | CA\_n260(2A)\_UL\_n260(2A) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Ongoing | CA\_n260A\_UL\_n260A-Completed |
| 3 | CA\_n260(3A)\_UL\_n260(3A) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Ongoing | CA\_n260(3A)\_UL\_n260(2A)-New |
| 4 | CA\_n260(4A)\_UL\_n260(4A) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Ongoing | CA\_n260(3A)\_UL\_n260(3A)-New |
| 5 | CA\_n260(5A) | Rel-15 | Marc Grant, AT&T | Marc.grant@att.com | Ericsson, Nokia, Qualcomm | Completed | CA\_n260(4A) |
| 6 | CA\_n260(6A) | Rel-15 | Marc Grant, AT&T | Marc.grant@att.com | Ericsson, Nokia, Qualcomm | Completed | CA\_n260(5A) |
| 7 | CA\_n260(7A) | Rel-15 | Marc Grant, AT&T | Marc.grant@att.com | Ericsson, Nokia, Qualcomm | Completed | CA\_n260(6A) |
| 8 | CA\_n260(8A) | Rel-15 | Marc Grant, AT&T | Marc.grant@att.com | Ericsson, Nokia, Qualcomm | Completed | CA\_n260(7A) |
| 9 | CA\_n260(9A) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n260(8A) |
| 10 | CA\_n260(10A) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n260(9A) |
| 2 | CA\_n260(2G) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n260G |
| 4 | CA\_n260(4G) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n260(3G) |
| 2 | CA\_n260(2H) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n260H |
| 2 | CA\_n260(2O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n260O |
| 3 | CA\_n260(3O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n260(2O) |
| 4 | CA\_n260(4O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n260(3O) |
| 2 | CA\_n260(2P) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n260P |
| 4 | CA\_n260(4P) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n260(3P) |
| 2 | CA\_n261(2D) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261D |
| 2 | CA\_n261(2G) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261G |
| 3 | CA\_n261(3G) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261(2G) |
| 4 | CA\_n261(4G) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261(3G) |
| 2 | CA\_n261(2H) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261H |
| 2 | CA\_n261(2I) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261I |
| 2 | CA\_n261(2O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261O |
| 4 | CA\_n261(4O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261(3O) |
| 7 | CA\_n261(7O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261(6O) |
| 2 | CA\_n261(2P) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261P |
| 4 | CA\_n261(4Q) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericsson, Qualcomm, Samsung | Completed | CA\_n261(3Q) |
|  | CA\_n260(2P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260P |
|  | CA\_n260(3G) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(2G) |
|  | CA\_n260(4G) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(3G) |
|  | CA\_n260(A-G-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(A-G)CA\_n260(A-O)CA\_n260(G-O) |
|  | CA\_n260(2A-G-O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(A-G-O)CA\_n260(2A-G)CA\_n260(2A-O) |
|  | CA\_n260(2A-2G-O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(2A-G-O)CA\_n260(2A-2G)CA\_n260(2G-O) |
|  | CA\_n260(A-G) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260ACA\_n260G |
|  | CA\_n260(G-O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260GCA\_n260O |
|  | CA\_n260(G-O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260GCA\_n260O |
|  | CA\_n260(A-D) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260ACA\_n260D |
|  | CA\_n260(2A-D) \_UL\_n260(2A) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(2A)CA\_n260D |
|  | CA\_n260(A-D-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(A-D)CA\_n260(A-O)CA\_n260(D-O) |
|  | CA\_n260(2A-D-O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(A-D-O)CA\_n260(2A-D)CA\_n260(2A-O) |
|  | CA\_n260(D-2O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(D-O)CA\_n260(2O) |
|  | CA\_n260(A-D-2O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(A-D-O)CA\_n260(A-2O)CA\_n260(D-2O) |
|  | CA\_n260(2A-D-2O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(A-D-2O)CA\_n260(2A-D-O)CA\_n260(2A-2O) |
|  | CA\_n260(A-2D) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(A-D)CA\_n260(2D) |
|  | CA\_n260(2A-2D) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(A-2D)CA\_n260(2A-D) |
|  | DC\_n260(A-P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260ACA\_n260P |
|  | DC\_n260(2A-P)\_UL\_n260(2A) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-P)CA\_n260(2A) |
|  | DC\_n260(2A-O)\_UL\_n260(2A) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-O)CA\_n260(2A) |
|  | DC\_n260(2A-G)\_UL\_n260(2A) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-G)CA\_n260(2A) |
|  | DC\_n260(2A-H)\_UL\_n260(2A) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-H)CA\_n260(2A) |
|  | DC\_n260(A-2P) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(A-P)CA\_n260(2P) |
|  | DC\_n260(2A-2P) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(A-2P)CA\_n260(2A-P) |
|  | CA\_n260(3A-3O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(3A-2O)CA\_n260(2A-3O) |
|  | CA\_n260(D-2G) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(D-G)CA\_n260(2G) |
|  | CA\_n260(2D-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(2D)CA\_n260(D-O) |
|  | CA\_n260(G-2O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(G-O)CA\_n260(2O) |
|  | CA\_n260(2G-2O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(2G-O)CA\_n260(G-2O) |
|  | CA\_n260(G-3O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(G-2O)CA\_n260(3O) |
|  | CA\_n260(2G-3O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(2G-2O)CA\_n260(G-3O) |
|  | CA\_n260(G-4O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(G-3O)CA\_n260(4O) |
|  | CA\_n260(2G-4O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(2G-3O)CA\_n260(G-4O) |
|  | CA\_n260(3G-O) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(3G)CA\_n260(2G-O) |
|  | CA\_n260(4G-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(4G)CA\_n260(3G-O) |
|  | CA\_n260(H-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260HCA\_n260O |
|  | CA\_n260(2H-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n260(2H)CA\_n260(H-O) |
|  | CA\_n261(A-D) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n261(A)CA\_n261(D) |
|  | CA\_n261(A-D-H) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n261(A-D)CA\_n261(A-H)CA\_n261(D-H) |
|  | CA\_n261(A-G) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n261(A)CA\_n261(G) |
|  | CA\_n261(A-G-H) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n261(A-G)CA\_n261(A-H)CA\_n261(G-H) |
|  | CA\_n261(G-I) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n261(G)CA\_n261(I) |
|  | CA\_n261(A-G-I) | Rel-15 | Zheng Zhao | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n261(A-G)CA\_n261(A-I)CA\_n261(G-I) |
|  | CA\_n261(A-H-I) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n261(A-H)CA\_n261(A-I)CA\_n261(H-I) |
|  | CA\_n261(G-H) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n261(G)CA\_n261(H) |
|  | CA\_n261(H-I) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Completed | CA\_n261(H)CA\_n261(H-I) |
|  | CA\_n260(2A-G-2O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(2A-G-O)-CompletedCA\_n260(2A-2O)-CompletedCA\_n260(A-G-2O)-New |
|  | CA\_n260(A-2G-2O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-2G-O)-CompletedCA\_n260(A-G-2O)-NewCA\_n260(2G-2O)-Completed |
|  | CA\_n260(2A-2O-P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(2A-2O)-CompletedCA\_n260(2A-O-P)-NewCA\_n260(A-2O-P)-New |
|  | CA\_n260(2A-O-2P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(2A-O-P)-NewCA\_n260(2A-2P)-CompletedCA\_n260(A-O-2P)-New |
|  | CA\_n260(A-2O-2P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-2O-P)-NewCA\_n260(A-O-2P)-NewCA\_n260(2O-2P)-Completed |
|  | CA\_n260(2A-2O-Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(2A-2O)-CompletedCA\_n260(2A-O-Q)-CompletedCA\_n260(A-2O-Q)-New |
|  | CA\_n260(2A-O-2Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(2A-O-Q)-NewCA\_n260(2A-2Q)-NewCA\_n260(A-O-2Q)-New |
|  | CA\_n260(A-2O-2Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-2O-Q)-NewCA\_n260(A-O-2Q)-NewCA\_n260(2O-2Q)-New |
|  | CA\_n260(4A-3O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(4A-2O)-CompletedCA\_n260(3A-3O)-Completed |
|  | CA\_n260(3A-4O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(3A-3O)-CompletedCA\_n260(2A-4O)-Completed |
|  | CA\_n260(4A-Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(4A)-CompletedCA\_n260(3A-Q)-New |
|  | CA\_n260(3A-2Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(3A-Q)-NewCA\_n260(2A-2Q)-New |
|  | CA\_n260(3A-P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(3A)-CompletedCA\_n260(2A-P)-Completed |
|  | CA\_n260(A-O-P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-O)-CompletedCA\_n260(A-P)-CompletedCA\_n260(O-P)-New |
|  | CA\_n260(A-Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | None |
|  | CA\_n260(P-Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | None |
|  | CA\_n260(2A-3P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(2A-2P)-CompletedCA\_n260(A-3P)-New |
|  | CA\_n260(A-4P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-3P)-NewCA\_n260(4P)-Completed |
|  | CA\_n260(6A-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(6A)-CompletedCA\_n260(5A-O)-New |
|  | CA\_n260(5A-2O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(5A-O)-NewCA\_n260(4A-2O)-Completed |
|  | CA\_n260(5A-3O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(5A-2O)-NewCA\_n260(4A-3O)-New |
|  | CA\_n260(6A-P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(6A)-CompletedCA\_n260(5A-P)-New |
|  | CA\_n260(5A-2P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(5A-P)-NewCA\_n260(4A-2P)-New |
|  | CA\_n260(8A-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(8A)-CompletedCA\_n260(7A-O)-New |
|  | CA\_n260(7A-2O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(7A-O)-NewCA\_n260(6A-2O)-Completed |
|  | CA\_n260(2O-P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(2O)-CompletedCA\_n260(O-P)-New |
|  | CA\_n260(O-2P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(O-P)-NewCA\_n260(2P)-Completed |
|  | CA\_n261(A-D-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(A-D)-CompletedCA\_n261(A-O)-NewCA\_n261(D-O)-Completed |
|  | CA\_n261(A-2O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(A-O)-NewCA\_n261(2O)-Completed |
|  | CA\_n261(D-2O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(D-O)-CompletedCA\_n261(2O)-Completed |
|  | CA\_n261(A-2G-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(A-2G)-NewCA\_n261(A-G-O)-NewCA\_n261(2G-O)-New |
|  | CA\_n261(A-G-2O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(A-G-O)-NewCA\_n261(A-2O)-NewCA\_n261(G-2O)-New |
|  | CA\_n261(2G-2O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(2G-O)-NewCA\_n261(G-2O)-New |
|  | CA\_n261(A-3G) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(A-2G)-NewCA\_n261(3G)-Completed |
|  | CA\_n261(A-2G-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(A-2G)-NewCA\_n261(A-G-O)-NewCA\_n261(2G-O)-New |
|  | CA\_n261(3G-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(3G)-CompletedCA\_n261(2G-O)-New |
|  | CA\_n261(A-3G) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(A-2G)-NewCA\_n261(3G)-Completed |
|  | CA\_n261(A-3O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(A-2O)-NewCA\_n261(3O)-New |
|  | CA\_n261(A-6O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(A-5O)-NewCA\_n261(6O)-New |
|  | CA\_n261(A-P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | None |
|  | CA\_n261(A-Q)  | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | None |
|  | CA\_n260(A-G-2O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-G-O)-CompletedCA\_n260(A-2O)-CompletedCA\_n260(G-2O)-Completed |
|  | CA\_n260(2A-O-P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(2A-O)-CompletedCA\_n260(2A-P)-CompletedCA\_n260(A-O-P)-New |
|  | CA\_n260(A-2O-P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-2O)-CompletedCA\_n260(A-O-P)-NewCA\_n260(2O-P)-New |
|  | CA\_n260(A-O-2P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-O-P)-NewCA\_n260(A-2P)-CompletedCA\_n260(O-2P)-New |
|  | CA\_n260(A-2O-P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-2O)-CompletedCA\_n260(A-O-P)-NewCA\_n260(2O-P)-New |
|  | CA\_n260(2A-O-Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(2A-O)-CompletedCA\_n260(2A-Q)-NewCA\_n260(A-O-Q)-New |
|  | CA\_n260(A-2O-Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-2O)-CompletedCA\_n260(A-O-Q)-NewCA\_n260(2O-Q)-New |
|  | CA\_n260(2A-2Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(2A-Q)-NewCA\_n260(A-2Q)-New |
|  | CA\_n260(A-O-2Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-O-Q)-NewCA\_n260(A-2Q)-NewCA\_n260(O-2Q)-New |
|  | CA\_n260(2O-2Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(2O-Q)-NewCA\_n260(O-2Q)-New |
|  | CA\_n260(3A-Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(3A)-CompletedCA\_n260(2A-Q)-New |
|  | CA\_n260(O-P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | None |
|  | CA\_n260(A-3P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-2P)-CompletedCA\_n260(3P)-Completed |
|  | CA\_n260(5A-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(5A)-CompletedCA\_n260(4A-O)-Completed |
|  | CA\_n260(5A-P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(5A)-CompletedCA\_n260(4A-P)-Completed |
|  | CA\_n260(4A-2P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(4A-P)-NewCA\_n260(3A-2P)-New |
|  | CA\_n260(7A-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(7A)-CompletedCA\_n260(6A-O)-New |
|  | CA\_n261(A-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | None |
|  | CA\_n261(A-2G) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(A-G)-CompletedCA\_n261(2G)-Completed |
|  | CA\_n261(A-G-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(A-G)-CompletedCA\_n261(A-O)-NewCA\_n261(G-O)-New |
|  | CA\_n261(2G-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(2G)-CompletedCA\_n261(G-O)-New |
|  | CA\_n261(G-2O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(G-O)-NewCA\_n261(2O)-Completed |
|  | CA\_n261(3O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(2O)-Completed |
|  | CA\_n261(A-5O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(A-4O)-CompletedCA\_n261(5O)-New |
|  | CA\_n261(6O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(5O)-New |
|  | CA\_n260(2A-Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(2A)-CompletedCA\_n260(A-Q)-New |
|  | CA\_n260(A-O-Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-O)-CompletedCA\_n260(A-Q)-NewCA\_n260(O-Q)-New |
|  | CA\_n260(2O-Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(2O)-CompletedCA\_n260(O-Q)-New |
|  | CA\_n260(A-2Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(A-Q)-NewCA\_n260(2Q)-Completed |
|  | CA\_n260(O-2Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(O-Q)-NewCA\_n260(2Q)-Completed |
|  | CA\_n260(4A-P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(4A)-CompletedCA\_n260(3A-P)-New |
|  | CA\_n260(3A-2P) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n260(3A-P)-NewCA\_n260(2A-2P)-Completed |
|  | CA\_n261(G-O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | None |
|  | CA\_n261(5O) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | CA\_n261(4O)-Completed |
|  | CA\_n260(O-Q) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | Ongoing | None |
|  | CA\_n260(G-H) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | New | None |
|  | CA\_n261(A-J) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | New | None |
|  | CA\_n261(A-K) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | New | None |
|  | CA\_n261(2A-G) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | New | None |
|  | CA\_n261(2A-H) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | New | None |
|  | CA\_n261(2A-I) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | New | None |
|  | CA\_n261(3A-G) | Rel-15 | Zheng ZhaoVerizon | Zheng.zhao@verizonwireless.com | Nokia, Ericson, Qualcomm, Samsung | New | None |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **NR CA configuration** | **Uplink Configuration** | **contact****name, company** | **contact****email** | **other supporting companies****(min. 3)** | **status****(new, ongoing, completed, stopped)** | **supported next level fallback modes(in DL and UL)** |
| CA\_n258(2A) | CA\_n258A | Nelson Ueng, T-Mobile USA | nelson.ueng@T-Mobile.com | Ericsson, Qualcomm, Nokia, Deutsche Telekom | Ongoing | None |
| CA\_n258(3A) | CA\_n258A | Nelson Ueng, T-Mobile USA | nelson.ueng@T-Mobile.com | Ericsson, Qualcomm, Nokia, Deutsche Telekom | Ongoing | (new) DL\_n258(2A)\_UL\_n258A |
| CA\_n258(4A) | CA\_n258A | Nelson Ueng, T-Mobile USA | nelson.ueng@T-Mobile.com | Ericsson, Qualcomm, Nokia, Deutsche Telekom | Ongoing | (new) DL\_n258(3A)\_UL\_n258A |
| CA\_n258(5A) | CA\_n258A | Nelson Ueng, T-Mobile USA | nelson.ueng@T-Mobile.com | Ericsson, Qualcomm, Nokia, Deutsche Telekom | Ongoing | (new) DL\_n258(4A)\_UL\_n258A |

Bandwidth combination set for Intra band FR2

Table 4-1 Bandwidth combinations for Intra band contiguous CA configurations FR2

|  |  |  |
| --- | --- | --- |
|  |  | NR CA configuration / Bandwidth combination set |
| NR CA configuration | Uplink CA configurations | Component carriers in order of increasing carrier frequency | Maximum aggregated BW (MHz) | BCS | Fallback group |
| CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) |
| CA\_n258B | CA\_n258B | 400 | 50, 100, 200, 400 |  |  |  |  |  |  | 800 | 0 | 1 |
| CA\_n258C | CA\_n258BCA\_n258C | 400 | 400 | 50, 100, 200, 400 |  |  |  |  |  | 1200 | 0 |
| CA\_n258D | CA\_n258D | 200 | 50, 100, 200 |  |  |  |  |  |  | 400 | 0 | 2 |
| CA\_n258E | CA\_n258DCA\_n258E | 200 | 200 | 50, 100, 200 |  |  |  |  |  | 600 | 0 |
| CA\_n258F | CA\_n258DCA\_n258ECA\_n258F | 200 | 200 | 200 | 50, 100, 200 |  |  |  |  | 800 | 0 |
| CA\_n258G | CA\_n258G | 100 | 50, 100 |  |  |  |  |  |  | 200 | 0 | 3 |
| CA\_n258H | CA\_n258GCA\_n258H | 100 | 100 | 50, 100 |  |  |  |  |  | 300 | 0 |
| CA\_n258I | CA\_n258GCA\_n258HCA\_n258I | 100 | 100 | 100 | 50, 100 |  |  |  |  | 400 | 0 |
| CA\_n258J | CA\_n258GCA\_n258HCA\_n258ICA\_n258J | 100 | 100 | 100 | 100 | 50, 100 |  |  |  | 500 | 0 |
| CA\_n258K | CA\_n258GCA\_n258HCA\_n258ICA\_n258JCA\_n258K | 100 | 100 | 100 | 100 | 100 | 50, 100 |  |  | 600 | 0 |
| CA\_n258L | CA\_n258GCA\_n258HCA\_n258ICA\_n258JCA\_n258KCA\_n258L | 100 | 100 | 100 | 100 | 100 | 100 | 50, 100 |  | 700 | 0 |
| CA\_n258M | CA\_n258GCA\_n258HCA\_n258ICA\_n258JCA\_n258KCA\_n258LCA\_n258M | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 50, 100 | 800 | 0 |
| CA\_n257G | CA\_n257G | 100 | 100 |  |  |  |  |  |  | 200 | 0 | 3 |
| CA\_n257H | CA\_n257G CA\_n257H | 100 | 100 | 100 |  |  |  |  |  | 300 | 0 |
| CA\_n257I | CA\_n257GCA\_n257HCA\_n257I | 100 | 100 | 100 | 100 |  |  |  |  | 400 | 0 |
| CA\_n257J | CA\_n257GCA\_n257HCA\_n257ICA\_n257J | 100 | 100 | 100 | 100 | 100 |  |  |  | 500 | 0 |
| CA\_n257K | CA\_n257GCA\_n257HCA\_n257ICA\_n257JCA\_n257K | 100 | 100 | 100 | 100 | 100 | 100 |  |  | 600 | 0 |
| CA\_n257L | CA\_n257G CA\_n257HCA\_n257ICA\_n257JCA\_n257KCA\_n257L | 100 | 100 | 100 | 100 | 100 | 100 | 100 |  | 700 | 0 |
| CA\_n257M | CA\_n257GCA\_n257HCA\_n257ICA\_n257JCA\_n257KCA\_n257LCA\_n257M | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 800 | 0 |
| CA\_n261G | CA\_n261G | 100  | 50, 100 |  |  |  |  |  |  | 200 | 0 | 3 |
| CA\_n261H | CA\_n261H | 100  | 100 | 50, 100 |  |  |  |  |  | 300 | 0 | 3 |
| CA\_n261I | CA\_n261H | 100  | 100 | 100 | 50, 100 |  |  |  |  | 400 | 0 | 3 |
| CA\_n261J | CA\_n261H | 100 | 100 | 100 | 100 | 50, 100 |  |  |  | 500 | 0 | 3 |
| CA\_n261K | CA\_n261H | 100 | 100 | 100 | 100 | 100 | 50, 100 |  |  | 600 | 0 | 3 |
| CA\_n261L | CA\_n261H | 100 | 100 | 100 | 100 | 100 | 100 | 50, 100 |  | 800 | 0 | 3 |
| CA\_n261M | CA\_n261H | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 50, 100 | 800 | 0 | 3 |
| CA\_n257C | CA\_n257B | 50 | 400 | 400 |  |  |  |  |  | 850 | 0 | 1 |
| 100 | 400 | 400 |  |  |  |  |  | 900 |
| 200 | 400 | 400 |  |  |  |  |  | 1000 |
| 400 | 400 | 400 |  |  |  |  |  | 1200 |

Table 4-2 Bandwidth combination sets for Intra band non-contiguous CA configurations FR2

|  |
| --- |
| NR CA configuration / Bandwidth combination set |
| NR CA configuration | Uplink CA configurations |  | Component carriers in order of increasing carrier frequency | Maximum aggregated BW (MHz) | BCS | Fallback group |
| SCS (kHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) |
| CA\_n260(2A) | CA\_n260(2A) | 60 | 50, 100, 200 | 50, 100, 200 |  |  |  |  |  |  |  |  | 400 | - |  |
| 120 | 50, 100, 200, 400 | 50, 100, 200, 400 |  |  |  |  |  |  |  |  | 800 | - |  |
| CA\_n260(3A) | CA\_n260(3A) | 60 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 |  |  |  |  |  |  |  | 600 | - |  |
| 120 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 |  |  |  |  |  |  |  | 1200 | - |  |
| CA\_n260(4A) | CA\_n260(4A) | 60 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 |  |  |  |  |  |  | 800 | - |  |
| 120 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 |  |  |  |  |  |  | 1600 | - |  |
| CA\_n260(5A) | - | 60 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 |  |  |  |  |  | 1000 | - |  |
| - | 120 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 |  |  |  |  |  | 2000 | - |  |
| CA\_n260(6A) | - | 60 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 |  |  |  |  | 1200 | - |  |
| - | 120 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 |  |  |  |  | 2400 | - |  |
| CA\_n260(7A) | - | 60 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 |  |  |  | 1400 | - |  |
| - | 120 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 |  |  |  | 27001 | - |  |
| CA\_n260(8A) | - | 60 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 |  |  | 1600 | - |  |
| - | 120 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 |  |  | 26501 | - |  |
| CA\_n260(9A) | - | 60 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 |  | 1800 | - |  |
| - | 120 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 |  | 26001 | - |  |
| CA\_n260(10A) | - | 60 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 2000 | - |  |
| - | 120 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 25501 | - |  |
| CA\_n260(2G) | - | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 400 | - | 3 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 400 | - |
| CA\_n260(4G) | - | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 400 | - | 3 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 400 | - |
| CA\_n260(2H) | - | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  | 600 | - | 3 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  | 600 | - |
| CA\_n260(2O) | - | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 400 | - | 4 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 400 | - |
| CA\_n260(3O) | - | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  | 600 | - | 4 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  | 600 | - |
| CA\_n260(4O) | - | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  | 800 | - | 4 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  | 800 | - |
| CA\_n260(2P) | - | 60 | 50, 100 | 50, 100 |  |  |  |  |  |  |  |  | 200 | - | 4 |
| 120 | 50, 100 | 50, 100 |  |  |  |  |  |  |  |  | 200 | - |
| CA\_n260(4P) | - | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 400 | - | 4 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 400 | - |
| CA\_n261(2D) | - | 60 | 50, 100, 200 | 50, 100, 200 |  |  |  |  |  |  |  |  | 400 | - | 2 |
| 120 | 50, 100, 200, 400 | 50, 100, 200, 400 |  |  |  |  |  |  |  |  | 800 | - |
| CA\_n261(2G) | - | 60 | 50, 100 | 50, 100 |  |  |  |  |  |  |  |  | 200 | - | 3 |
| 120 | 50, 100 | 50, 100 |  |  |  |  |  |  |  |  | 200 | - |
| CA\_n261(3G) | - | 60 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  |  | 300 | - | 3 |
| 120 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  |  | 300 | - |
| CA\_n261(4G) | - | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 400 | - | 3 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 400 | - |
| CA\_n261(2H) | - | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  | 600 | - | 3 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  | 600 | - |
| CA\_n261(2I) | - | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  | 800 | - | 3 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  | 800 | - |
| CA\_n261(2O) | - | 60 | 50, 100 | 50, 100 |  |  |  |  |  |  |  |  | 200 | - | 4 |
| 120 | 50, 100 | 50, 100 |  |  |  |  |  |  |  |  | 200 | - |
| CA\_n261(4O) | - | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 400 | - | 4 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 400 | - |
| CA\_n261(7O) | - | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  | 700 | - | 4 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  | 700 | - |
| CA\_n261(2P) | - | 60 | 50, 100 | 50, 100 |  |  |  |  |  |  |  |  | 200 | - | 4 |
| 120 | 50, 100 | 50, 100 |  |  |  |  |  |  |  |  | 200 | - |
| CA\_n261(4Q) | - | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 400 | - | 4 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 400 | - |
| CA\_n260(2D) | - | 60 | 200 | 200 | 200 | 50, 100, 200 |  |  |  |  |  |  | 800 | - | 2 |
| 120 | 200 | 200 | 200 | 50, 100, 200 |  |  |  |  |  |  | 800 | - |
| CA\_n260(3G) | - | 60 | 100 | 100 | 100 | 100 | 100 | 50, 100 |  |  |  |  | 600 | - | 3 |
| 120 | 100 | 100 | 100 | 100 | 100 | 50, 100 |  |  |  |  | 600 | - |
| CA\_n260(4G) | - | 60 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 50, 100 |  |  | 800 | - | 3 |
| 120 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 50, 100 |  |  | 800 | - |
| CA\_n260(2P) | - | 60 | 100 | 100 | 100 | 100 | 100 | 50, 100 |  |  |  |  | 600 | - | 4 |
| 120 | 100 | 100 | 100 | 100 | 100 | 50, 100 |  |  |  |  | 600 | - |
| CA\_n258(2A) | - | 60 | 50, 100, 200 | 50, 100, 200 |  |  |  |  |  |  |  |  | 400 |  |  |
| 120 | 50, 100, 200, 400 | 50, 100, 200, 400 |  |  |  |  |  |  |  |  | 800 | 0 |
| CA\_n258(3A) | - | 60 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 |  |  |  |  |  |  |  | 600 | 0 |  |
| 120 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 |  |  |  |  |  |  |  | 1200 |
| CA\_n258(4A) | - | 60 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 |  |  |  |  |  |  | 800 | 0 |  |
| 120 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 |  |  |  |  |  |  | 1600 |
| CA\_n258(5A) | - | 60 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 |  |  |  |  |  | 1000 | 0 |  |
| 120 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 |  |  |  |  |  | 2000 |
| Note 1: The maximum bandwidth of band n260 is 3000MHz, and a 50MHz gap is in between non-contiguous CCs |

Table 4-3 Bandwidth combination fallback groups for Intra band non-contiguous CA configurations FR2

|  |  |  |  |
| --- | --- | --- | --- |
| **NR configuration** | **Uplink CA configurations** | Component carriers in order of increasing carrier frequency | **Maximum aggregated bandwidth (MHz)** |
|  |  | **Channel bandwidths for carrier (MHz)** | **Channel bandwidths for carrier (MHz)** | **Channel bandwidths for carrier (MHz)** | **Channel bandwidths for carrier (MHz)** | **Channel bandwidths for carrier (MHz)** | **Channel bandwidths for carrier (MHz)** | **Channel bandwidths for carrier (MHz)** | **Channel bandwidths for carrier (MHz)** |  |
| CA\_n260(A-D) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 |  |  |  |  |  | 800 |
| See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 |  |  |  |  |  |
| CA\_n260(2A-D) | CA\_n260(2A) | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 |  |  |  |  | 1200 |
| See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 |  |  |  |  |
| CA\_n260(2A-0) | CA\_n260(2A) | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | See CA\_n260O Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 |  |  |  |  | 1200 |
| See CA\_n260O Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 |  |  |  |  |
| CA\_n260(2A-G) | CA\_n260(2A) | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | See CA\_n260G Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 |  |  |  |  | 1200 |
| See CA\_n260G Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 |  |  |  |  |
| CA\_n260(2A-H) | CA\_n260(2A) | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | See CA\_n260H Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 |  |  |  |  | 1200 |
| See CA\_n260H Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 |  |  |  |  |
| CA\_n260(2A-G-O) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 | See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 | See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 |  |  |  | 1200 |
| See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 | See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 |  |  |  |
| CA\_n260(A-G-O) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 | See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 | See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 |  |  |  | 800 |
| See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 | See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 |  |  |  |
| CA\_n260(2A-2G-O) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 | See CA\_n260(2G) Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 | See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 |  |  |  | 1400 |
| See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 | See CA\_n260(2G) Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 |  |  |  |
| CA\_n260(A-D-O) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 |  |  |  | 1000 |
| See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 |  |  |  |
| CA\_n260(2A-D-O) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 |  |  | 1400 |
| See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 |  |  |
| CA\_n260(D-2O) | - | See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(2O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation |  |  | 800 |
| See CA\_n260(2O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 |  |  |
| CA\_n260(A-D-2O) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(2O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation |  | 1200 |
| See CA\_n260(2O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 |  |
| CA\_n260(2A-D-2O) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(2O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | 1600 |
| See CA\_n260(2O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 |
| CA\_n260(A-2D) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n260(2D) Bandwidth Combination Fallback group 2 in Table 2 above  |  |  |  | 1200 |
| See CA\_n260(2D) Bandwidth Combination Fallback group 2 in Table 2 above  | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 |  |  |  |
| CA\_n260(2A-2D) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | See CA\_n260(2D) Bandwidth Combination Fallback group 2 in Table 2 above |  |  | 1600 |
| See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | See CA\_n260(2D) Bandwidth Combination Fallback group 2 in Table 2 above |  |  |
| CA\_n260(A-P) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n260P Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 |  |  |  |  | 700 |
| See CA\_n260P Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 |  |  |  |  |
| CA\_n260(2A-P) | CA\_n260(2A) | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | See CA\_n260P Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 |  |  |  | 1100 |
| See CA\_n260P Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 |  |  |  |
| CA\_n260(A-2P) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n260(2P) Bandwidth Combination Fallback group 4 in Table 2 above |  | 1000 |
| See CA\_n260(2P) Bandwidth Combination Fallback group 4 in Table 2 above | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 |  |
| DC\_n260(2A-2P) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | See CA\_n260(2P) Bandwidth Combination Fallback group 4 in Table 2 above | 1400 |
| See CA\_n260(2P) Bandwidth Combination Fallback group 4 in Table 2 above | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 |
| CA\_n260(D-2G) | - | See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(2G) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation |  |  | 800 |
| See CA\_n260(2G) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | See CA\_n260D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 |  |  |
| CA\_n260(2D-O) | - | See CA\_n260(2D) Bandwidth Combination Fallback group 2 in Table 2 above | See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 |  |  | 1000 |
| See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(2D) Bandwidth Combination Fallback group 2 in Table 2 above |  |  |
| CA\_n260(G-2O) | - | See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(2O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation |  |  | 600 |
| See CA\_n260(2O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 |  |  |
| CA\_n260(2G-2O) | - | See CA\_n260(2G) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | See CA\_n260(2O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | 800 |
| See CA\_n260(2O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | See CA\_n260(2G) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation |
| CA\_n260(G-3O) | - | See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(3O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | 800 |
| See CA\_n260(3O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 |
| CA\_n260(3G-O) | - | See CA\_n260(3G) Bandwidth Combination Fallback group 3 in Table 2 above | See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | 800 |
| See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(3G) Bandwidth Combination Fallback group 3 in Table 2 above |
| CA\_n260(H-O) | - | See CA\_n260H Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 |  |  |  | 500 |
| See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260H Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 |  |  |  |
| CA\_n260(2H-O) | - | See CA\_n260(2H) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | 800 |
| See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(2H) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation |
| CA\_n260(3A-3O) | - | See CA\_n260(3A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | See CA\_n260(3O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation |  |  | 1800 |
| See CA\_n260(3O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | See CA\_n260(3A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 |  |  |
| CA\_n260(2G-3O) | - | See CA\_n260(2G) Bandwidth Combination Fallback group 3 in Table 2 above | See CA\_n260(3O) Bandwidth Combination Fallback group 4 in Table 2 above |  |  | 1000 |
| See CA\_n260(3O) Bandwidth Combination Fallback group 4 in Table 2 above | See CA\_n260(2G) Bandwidth Combination Fallback group 3 in Table 2 above |  |  |
| CA\_n260(G-4O) | - | See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.2-1 of 38.101-2 | See CA\_n260(4O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation |  |  | 1000 |
| See CA\_n260(4O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.2-1 of 38.101-2 |  |  |
| CA\_n260(2G-4O) | - | See CA\_n260(2G) Bandwidth Combination Fallback group 3 in Table 2 above | See CA\_n260(4O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | 1200 |
| See CA\_n260(4O) Bandwidth Combination Fallback group 3 in Table 6.x.2-1 off TP for TR 37.863 Inter-band DC\_5A-n260 Carrier Aggregation | See CA\_n260(2G) Bandwidth Combination Fallback group 3 in Table 2 above |
| CA\_n260(4G-O) | - | See CA\_n260(4G) Bandwidth Combination Fallback group 3 in Table 2 above | See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 |  |  | 1000 |
| See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | See CA\_n260(4G) Bandwidth Combination Fallback group 3 in Table 2 above |  |  |
| CA\_n261(A-D) | - | See CA\_n261A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n261D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 |  |  |  |  |  | 800 |
| See CA\_n261D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 |  |  |  |  |  |
| CA\_n261(A-G) | - | See CA\_n261A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n261G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 |  |  |  |  |  | 600 |
| See CA\_n261G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 |  |  |  |  |  |
| CA\_n261(G-I) | - | See CA\_n261G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261I Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 |  |  | 600 |
| See CA\_n261I Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 |  |  |
| CA\_n261(H-I) | - | See CA\_n261H Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261I Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 |  | 700 |
| See CA\_n261I Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261H Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 |  |
| CA\_n261(G-H) | - | See CA\_n261G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261H Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 |  |  |  | 500 |
| See CA\_n261H Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 |  |  |  |
| CA\_n261(A-D-H) | - | See CA\_n261A Bandwidth Combination in Table 5.3A.4-1 | See CA\_n261D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261H Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 |  |  | 7502 |
| See CA\_n261H Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261D Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261A Bandwidth Combination in Table 5.3A.4-1 |  |  |
| CA\_n261(A-G-H) | - | See CA\_n261A Bandwidth Combination in Table 5.3A.4-1 | See CA\_n261G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261H Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 |  |  | 7502 |
| See CA\_n261H Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261A Bandwidth Combination in Table 5.3A.4-1 |  |  |
| CA\_n261(A-G-I) | - | See CA\_n261A Bandwidth Combination in Table 5.3A.4-1 | See CA\_n261G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261I Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 |  | 7502 |
| See CA\_n261I Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261A Bandwidth Combination in Table 5.3A.4-1 |  |
| CA\_n261(A-H-I) | - | See CA\_n261A Bandwidth Combination in Table 5.3A.4-1 | See CA\_n261H Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261I Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | 7502 |
| See CA\_n261I Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261H Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | See CA\_n261A Bandwidth Combination in Table 5.3A.4-1 |

Note 2: The maximum aggregated bandwidth of intra-band n261 is 850MHz, and a 50MHz gap is in between non-contiguous CCs

### 4.2 Objective of Performance part WI

NOTE: Leave empty if the WI proposal does not contain a RAN performance part.

This Perf. Part WI has to standardize the Perf. Part requirements:

* Required changes to be added to release independence TS 38.307.

of all REL-16 CA combinations that fall into the category defined by the WI title. See overview table in 4.1 above.

### 4.3 RAN time budget request (not applicable to RAN5 WIs/SIs)

NOTE: For all new RAN related WIs/SIs which are not led by RAN WG5 the WI/SI rapporteur has to fill out the attached Excel table to request time budgets for corresponding RAN WG meetings.
The Excel table has to be filled out for all affected RAN WGs and up to the target date of the WI/SI.
One time unit (TU) corresponds to ~ 2 hours in the meeting.
If no TU is needed leave the field empty otherwise enter a number >0 in the field.

 For revisions of already approved WI/SI descriptions: Please remove the Excel table from the WID/SID's zip file. The time budgets are already recorded. If you want to modify them, then this has to be done via the status report and not via a revised WID/SID.

 If this WID is covering Core and Performance part, then please fill out one line for each part in the attached Excel table.

**additional comments to the time budget request in the attached Excel table:**

## 5 Expected Output and Time scale

|  |
| --- |
| **New specifications** *{One line per specification. Create/delete lines as needed}* |
| Type  | Series | Title | For info at TSG#  | For approval at TSG# | Remarks |
| Internal TR | TR 38.716-01-01 | NR Intra-band Carrier Aggregation |  | TSG#87 | Core part |

*{Note 1: Only TSs may contain normative provisions. Study Items shall create or impact only TRs.
"Internal TR" is intended for 3GPP internal use only whereas "External TR" may be transposed by OPs.}*

NOTE: If this is a RAN WID including Core and Perf. part, then all new Core part specs have to be listed first and then all new Perf. part specs. Indicate "Core part" or "Perf. part" under Remarks for each spec.
By default a new specs can only be new for one of both parts.

|  |
| --- |
| **Impacted existing TS/TR** *{One line per specification. Create/delete lines as needed}* |
| TS/TR No. | Description of change  | Target completion plenary# | Remarks |
| 38.101-1 | User Equipment (UE) radio transmission and reception;Part 1: Range 1 Standalone | TSG#87 | Core part |
| 38.101-2 | User Equipment (UE) radio transmission and reception;Part 2: Range 2 Standalone | TSG#87 | Core part |
| 38.307 | EN-DC configurations | TSG#87 | Perf. Part |

NOTE: If this is a RAN WID including Core and Perf. Part, then all new Core part specs have to be listed first and then all new Perf. Part specs. Indicate “Core part” or “Perf. Part” under Remarks for each spec.
If an existing spec is affected by both (Core part and Perf. Part), then it has to be listed twice with appropriate approval dates.

## 6 Work item Rapporteur(s)

 *Per Lindell, Ericsson,* *per.lindell@ericsson.com*

## 7 Work item leadership

*R4*

## 8 Aspects that involve other WGs

 *None*

NOTE: For RAN WIDs: Section 8 applies only toWGs outside of TSG RAN because RAN WG aspects have to be covered in section 4.

## 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| NTT DOCOMO, INC. |
| Qualcomm |
| Nokia |
| Nokia Shanghai Bell |
| Huawei |
| Ericsson |
| LGE |
| ZTE |
| OPPO |
| ZTE |
| Xiaomi |
| Hisilicon |
| HTC |
| ASUSTek |
| AT&T  |
| Verizon |
| Samsung |
| Telstra |
| CATT |
| CMCC |
| NEC |
| Fujitsu |
| Deutsche Telekom |
| Skyworks |
| CKH IOD UK |
| Telcel |
| Claro |
| Bell Mobility |
| Qorvo |
| CITC |
| Etisalat |