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Technical Report

3rd Generation Partnership Project;

Technical Specification Group Radio Access Networks;

NR intra band Carrier Aggregation (CA) Rel-16 for xCC Down Link (DL) / yCC Up Link (UL) including contiguous and non-contiguous spectrum (x >= y)

(Release 16)

** 

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# Foreword

This Technical Report has been produced by the 3rd Generation Partnership Project (3GPP).

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# 1 Scope

The present document is a technical report for NR Intra-band Carrier Aggregation Rel-16 for xDL/yUL including contiguous and non-contiguous spectrum under Rel-16 time frame. The purpose is to gather the relevant background information and studies in order to address NR Intra-band Carrier Aggregation requirements for the Rel-16 band combinations in Table 1-1, Table 1-2, Table 1-3 and Table 1-4.

Table 1-1: Release 16 NR Intra-band carrier contiguous aggregation combinations FR1

|  |
| --- |
| CA combination |
| DL\_n78C\_UL\_n78C |
| DL\_n79C\_UL\_n79C |
| DL\_n66B\_UL\_n66A |
| DL\_n41C\_UL\_n41A |
| DL\_n41C\_UL\_n41C |
| DL\_n71B |
| DL\_n77C\_UL\_n77C |
| 2CC\_DL\_n5B\_BCS0 |
| 2CC\_DL\_n5B\_1CC\_UL\_n5A\_BCS0 |
| 2CC\_DL\_n5B\_2CC \_UL\_n5B\_BCS0 |
| 2CC\_DL\_n48B\_BCS0 |
| 2CC\_DL\_n48B\_1CC\_UL\_n48A\_BCS0 |
| 2CC\_DL\_n48B\_2CC\_UL\_n48B\_BCS0 |
| 2CC\_DL\_n48C\_BCS0 |
| 2CC\_DL\_n48C\_1CC \_UL\_n48A\_BCS0 |
| 2CC\_DL\_n48C\_2CC \_UL\_n48C\_BCS0 |
| 2CC\_DL\_n66B\_BCS0 |
| 2CC\_DL\_n66B\_1CC\_UL\_n66A\_BCS0 |
| 2CC\_DL\_n66B\_2CC\_UL\_n66B\_BCS0 |
| DL\_n3B\_UL\_n3B\_BCS0 |
| CA\_n1B\_UL\_n1B\_BCS0 |
| CA\_n41C\_UL\_n41A\_BCS1 |
| CA\_n7B\_UL\_n7A\_BCS0 |
| CA\_n7B\_UL\_n7B\_BCS0 |
| CA\_n71B |
| CA\_n41B\_UL\_n41B\_BCS0 |

Table 1-2: Release 16 NR Intra-band carrier non-contiguous aggregation combinations FR1

|  |
| --- |
| CA combination |
| DL\_n66(2A)\_UL\_66A |
| DL\_n41(2A)\_UL\_n41A |
| DC\_n25(2A)\_UL\_n25A |
| 2CC\_DL\_n2(2A)\_BCS0 |
| 2CC\_DL\_n2(2A)\_1CC\_UL\_n2A\_BCS0 |
| 2CC\_DL\_n5(2A)\_BCS0 |
| 2CC\_DL\_n5(2A)\_1CC\_UL\_n5A\_BCS0 |
| 2CC\_DL\_n48(2A)\_BCS0 |
| 2CC\_DL\_n48(2A)\_1CC \_n48A\_BCS0 |
| 2CC\_DL\_n66(2A)\_1CC\_UL\_n66A\_BCS0 |
| 3CC\_DL\_ n66(A-B)\_BCS0 |
| 3CC\_DL\_ n66(A-B)\_1CC \_UL\_n66A\_BCS0 |
| 3CC\_DL\_ n66(A-B)\_2CC \_UL\_n66B\_BCS0 |
| CA\_n41(2A) |
| DL\_n77(2A)\_UL\_n77A |
| DL\_n78(2A)\_UL\_n78A |
| CA\_n25(2A) UL\_n25A\_BCS0 |
| CA\_n7(2A)\_UL\_n7A\_BCS0 |
| CA\_n78(2A)\_UL\_n78A\_BCS0 |
| CA\_n3(2A)\_UL\_n3A\_BCS0 |
| CA\_n41(2A)\_UL\_n41A\_BCS1 |
| CA\_n78(2A) |
| CA\_n77(3A) |
| CA\_n48(A-C) |
| CA\_n48(3A) |
| CA\_n48(4A) |
| CA\_n77(2A)\_UL\_n77(2A)\_BCS0 |
| CA\_n78(2A)\_UL\_n78(2A)\_BCS0 |
| CA\_n78(2A)\_UL\_n78(2A)\_BCS1 |

Table 1-3: Release 16 NR Intra-band carrier contiguous aggregation combinations FR2

|  |  |
| --- | --- |
| CA combination | REL-indep.  from |
| CA\_n258B | Rel-15 |
| CA\_n258C | Rel-15 |
| CA\_n258D | Rel-15 |
| CA\_n258E | Rel-15 |
| CA\_n258F | Rel-15 |
| CA\_n258G | Rel-15 |
| CA\_n258H | Rel-15 |
| CA\_n258I | Rel-15 |
| CA\_n258J | Rel-15 |
| CA\_n258K | Rel-15 |
| CA\_n258L | Rel-15 |
| CA\_n258M | Rel-15 |
| CA\_n257G\_UL\_n257G | Rel-15 |
| CA\_n257H\_UL\_n257G | Rel-15 |
| CA\_n257H\_UL\_n257H | Rel-15 |
| CA\_n257I\_UL\_n257G | Rel-15 |
| CA\_n257I\_UL\_n257H | Rel-15 |
| CA\_n257I\_UL\_n257I | Rel-15 |
| CA\_n257J\_UL\_n257G | Rel-15 |
| CA\_n257J\_UL\_n257H | Rel-15 |
| CA\_n257J\_UL\_n257I | Rel-15 |
| CA\_n257J\_UL\_n257J | Rel-15 |
| CA\_n257K\_UL\_n257G | Rel-15 |
| CA\_n257K\_UL\_n257H | Rel-15 |
| CA\_n257K\_UL\_n257I | Rel-15 |
| CA\_n257K\_UL\_n257J | Rel-15 |
| CA\_n257K\_UL\_n257K | Rel-15 |
| CA\_n257L\_UL\_n257G | Rel-15 |
| CA\_n257L\_UL\_n257H | Rel-15 |
| CA\_n257L\_UL\_n257I | Rel-15 |
| CA\_n257L\_UL\_n257J | Rel-15 |
| CA\_n257L\_UL\_n257K | Rel-15 |
| CA\_n257L\_UL\_n257L | Rel-15 |
| CA\_n257M\_UL\_n257G | Rel-15 |
| CA\_n257M\_UL\_n257H | Rel-15 |
| CA\_n257M\_UL\_n257I | Rel-15 |
| CA\_n257M\_UL\_n257J | Rel-15 |
| CA\_n257M\_UL\_n257K | Rel-15 |
| CA\_n257M\_UL\_n257L | Rel-15 |
| CA\_n257M\_UL\_n257M | Rel-15 |
| CA\_n261G\_UL\_n261G | Rel-15 |
| CA\_n261H\_UL\_n261H | Rel-15 |
| CA\_n261I\_UL\_n261H | Rel-15 |
| CA\_n261J\_UL\_n261H | Rel-15 |
| CA\_n261K\_UL\_n261H | Rel-15 |
| CA\_n261L\_UL\_n261H | Rel-15 |
| CA\_n261M\_UL\_n261H | Rel-15 |
| CA\_n258D\_UL\_n258D | Rel-15 |
| CA\_n257C | Rel-15 |

Table 1-4: Release 16 NR Intra-band carrier non-contiguous aggregation combinations FR2

|  |  |
| --- | --- |
| CA combination |  |
| CA\_n260(5A) |  |
| CA\_n260(6A) |  |
| CA\_n260(7A) |  |
| CA\_n260(8A) |  |
| CA\_n260(9A) |  |
| CA\_n260(10A) |  |
| CA\_n260(2G) |  |
| CA\_n260(4G) |  |
| CA\_n260(2H) |  |
| CA\_n260(2O) |  |
| CA\_n260(3O) |  |
| CA\_n260(4O) |  |
| CA\_n260(2P) |  |
| CA\_n260(4P) |  |
| CA\_n261(2D) |  |
| CA\_n261(2G) |  |
| CA\_n261(3G) |  |
| CA\_n261(4G) |  |
| CA\_n261(2H) |  |
| CA\_n261(2I) |  |
| CA\_n261(2O) |  |
| CA\_n261(4O) |  |
| CA\_n261(7O) |  |
| CA\_n261(2P) |  |
| CA\_n261(4Q) |  |
| CA\_n261(7O) |  |
| CA\_n261(2P) |  |
| CA\_n261(4Q) |  |
| CA\_n260(2P) |  |
| CA\_n260(3G) |  |
| CA\_n260(4G) |  |
| CA\_n260(A-G-O) |  |
| CA\_n260(2A-G-O) |  |
| CA\_n260(2A-2G-O) |  |
| CA\_n260(A-G) |  |
| CA\_n260(G-O) |  |
| CA\_n260(G-O) |  |
| CA\_n260(A-D) |  |
| CA\_n260(2A-D) \_UL\_n260(2A) |  |
| CA\_n260(A-D-O) |  |
| CA\_n260(2A-D-O) |  |
| CA\_n260(D-2O) |  |
| CA\_n260(A-D-2O) |  |
| CA\_n260(2A-D-2O) |  |
| CA\_n260(A-2D) |  |
| CA\_n260(2A-2D) |  |
| DC\_n260(A-P) |  |
| DC\_n260(2A-P)\_UL\_n260(2A) |  |
| DC\_n260(2A-O)\_UL\_n260(2A) |  |
| DC\_n260(2A-G)\_UL\_n260(2A) |  |
| DC\_n260(2A-H)\_UL\_n260(2A) |  |
| DC\_n260(A-2P) |  |
| DC\_n260(2A-2P) |  |
| CA\_n260(3A-3O) |  |
| CA\_n260(D-2G) |  |
| CA\_n260(2D-O) |  |
| CA\_n260(G-2O) |  |
| CA\_n260(2G-2O) |  |
| CA\_n260(G-3O) |  |
| CA\_n260(2G-3O) |  |
| CA\_n260(G-4O) |  |
| CA\_n260(2G-4O) |  |
| CA\_n260(3G-O) |  |
| CA\_n260(4G-O) |  |
| CA\_n260(H-O) |  |
| CA\_n260(2H-O) |  |
| CA\_n261(A-D) |  |
| CA\_n261(A-D-H) |  |
| CA\_n261(A-G) |  |
| CA\_n261(A-G-H) |  |
| CA\_n261(G-I) |  |
| CA\_n261(A-G-I) |  |
| CA\_n261(A-H-I) |  |
| CA\_n261(G-H) |  |
| CA\_n261(H-I) |  |
| CA\_n260(2A-G-2O) |  |
| CA\_n260(A-2G-2O) |  |
| CA\_n260(2A-2O-P) |  |
| CA\_n260(2A-O-2P) |  |
| CA\_n260(A-2O-2P) |  |
| CA\_n260(2A-2O-Q) |  |
| CA\_n260(2A-O-2Q) |  |
| CA\_n260(A-2O-2Q) |  |
| CA\_n260(4A-3O) |  |
| CA\_n260(3A-4O) |  |
| CA\_n260(4A-Q) |  |
| CA\_n260(3A-2Q) |  |
| CA\_n260(3A-P) |  |
| CA\_n260(A-O-P) |  |
| CA\_n260(A-Q) |  |
| CA\_n260(P-Q) |  |
| CA\_n260(2A-3P) |  |
| CA\_n260(A-4P) |  |
| CA\_n260(6A-O) |  |
| CA\_n260(5A-2O) |  |
| CA\_n260(5A-3O) |  |
| CA\_n260(6A-P) |  |
| CA\_n260(5A-2P) |  |
| CA\_n260(8A-O) |  |
| CA\_n260(7A-2O) |  |
| CA\_n260(2O-P) |  |
| CA\_n260(O-2P) |  |
| CA\_n261(A-D-O) |  |
| CA\_n261(A-2O) |  |
| CA\_n261(D-2O) |  |
| CA\_n261(A-2G-O) |  |
| CA\_n261(A-G-2O) |  |
| CA\_n261(2G-2O) |  |
| CA\_n261(A-3G) |  |
| CA\_n261(A-2G-O) |  |
| CA\_n261(3G-O) |  |
| CA\_n261(A-3G) |  |
| CA\_n261(A-3O) |  |
| CA\_n261(A-6O) |  |
| CA\_n261(A-P) |  |
| CA\_n261(A-Q) |  |
| CA\_n260(A-G-2O) |  |
| CA\_n260(2A-O-P) |  |
| CA\_n260(A-2O-P) |  |
| CA\_n260(A-O-2P) |  |
| CA\_n260(A-2O-P) |  |
| CA\_n260(2A-O-Q) |  |
| CA\_n260(A-2O-Q) |  |
| CA\_n260(2A-2Q) |  |
| CA\_n260(A-O-2Q) |  |
| CA\_n260(2O-2Q) |  |
| CA\_n260(3A-Q) |  |
| CA\_n260(O-P) |  |
| CA\_n260(A-3P) |  |
| CA\_n260(5A-O) |  |
| CA\_n260(5A-P) |  |
| CA\_n260(4A-2P) |  |
| CA\_n260(7A-O) |  |
| CA\_n261(A-O) |  |
| CA\_n261(A-2G) |  |
| CA\_n261(A-G-O) |  |
| CA\_n261(2G-O) |  |
| CA\_n261(G-2O) |  |
| CA\_n261(3O) |  |
| CA\_n261(A-5O) |  |
| CA\_n261(6O) |  |
| CA\_n260(2A-Q) |  |
| CA\_n260(A-O-Q) |  |
| CA\_n260(2O-Q) |  |
| CA\_n260(A-2Q) |  |
| CA\_n260(O-2Q) |  |
| CA\_n260(4A-P) |  |
| CA\_n260(3A-2P) |  |
| CA\_n261(G-O) |  |
| CA\_n261(5O) |  |
| CA\_n260(O-Q) |  |
| CA\_n258(2A) |  |
| CA\_n258(3A) |  |
| CA\_n258(4A) |  |
| CA\_n258(5A) |  |
| CA\_n260(G-H) |  |
| CA\_n261(A-J) |  |
| CA\_n261(A-K) |  |
| CA\_n261(2A-G) |  |
| CA\_n261(2A-H) |  |
| CA\_n261(2A-I) |  |
| CA\_n261(3A-G) |  |

This TR contains a band specific combination part. The actual requirements are added to the corresponding technical specifications.

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

# 3 Definitions, symbols and abbreviations

## 3.1 Definitions

For the purposes of the present document, the terms and definitions given in TR 21.905 [1] and the following apply.   
A term defined in the present document takes precedence over the definition of the same term, if any, in TR 21.905 [1].

## 3.2 Symbols

For the purposes of the present document, the following symbols apply:

ΔRIB,c Allowed reference sensitivity relaxation due to support for inter-band CA operation, for serving cell *c*.

ΔTIB,c Allowed maximum configured output power relaxation due to support for inter-band CA

FDL\_low The lowest frequency of the downlink operating band

FDL\_high The highest frequency of the downlink operating band

FUL\_low The lowest frequency of the uplink operating band

FUL\_high The highest frequency of the uplink operating band

## 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in TR 21.905 [1] and the following apply.   
An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in TR 21.905 [1].

BS Base Station

CA Carrier Aggregation

CA\_nX-nY Inter-band CA of component carrier(s) in one sub-block within Band X and component carrier(s) in one sub-block within Band Y where X and Y are the applicable NR operating band

CC Component Carriers

DL DownLink

FDD Frequency Division Duplex

IMD Inter-modulation

MSD Maximum Sensitivity Deduction

NR New RAT

SCS Subcarrier spacing

TDD Time Division Duplex

UE User Equipment

UL UpLink

# 4 Background

The present document is a technical report for NR Intra-band Carrier Aggregation under Rel-16 timeframe. The document covers each band combination specific issues (i.e. one sub-clause defined per band combination)

## 4.1 TR Maintenance

A single company is responsible for introducing all approved TPs in the current TR, i.e. TR editor. However, it is the responsibility of the contact person of each band combination to ensure that the TPs related to the band combination have been implemented.

# 5 Intra-Band Contiguous Carrier Aggregation FR1: Specific Band Combination Part

## 5.1 CA\_2DL\_n66B\_1UL\_n66A

### 5.1.1 Channel bandwidths per operating band for CA

Table 5.1.1-1: Supported bandwidth combinations for CA\_n66B

| E-UTRA CA configuration / Bandwidth combination set | | | | | |
| --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configurations | Component carriers in order of increasing carrier frequency | | Aggregated  bandwidth (MHz) | Bandwidth combination set |
| 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 |
| Note 1: 5MHz is not applicable for 30/60kHz SCS | | | | | |

### 5.1.2 UE co-existence studies

There are no co-existence issues for this combination.

## 5.2 CA\_2DL\_n71B

### 5.2.1 Channel bandwidths per operating band for CA

Table 5.2.1-1: Supported bandwidth combinations for CA\_n71B

| E-UTRA CA configuration / Bandwidth combination set | | | | | |
| --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configurations | Component carriers in order of increasing carrier frequency | | Aggregated  bandwidth (MHz) | Bandwidth combination set |
| Channel bandwidths for carrier (MHz) | Channel bandwidths for carrier (MHz) |
| CA\_n71B | - | 5 | 20 | 25 | 0 |
| 10 | 15 |
| 15 | 10 |
| 20 | 5 |
| 10 | 20 | 35 | 1 |
| 15 | 15,20 |
| 20 | 10,15 |

Table 5.2.1-1: Supported bandwidth combinations for CA\_n71B

| E-UTRA CA configuration / Bandwidth combination set | | | | | |
| --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configurations | Component carriers in order of increasing carrier frequency | | Aggregated  bandwidth (MHz) | Bandwidth combination set |
| Channel bandwidths for carrier (MHz) | Channel bandwidths for carrier (MHz) |
| CA\_n71B | - | 5 | 20 | 25 | 0 |
| 10 | 15 |
| 15 | 10 |
| 20 | 5 |
| 35 | 1 | 35 | 1 |
| 15 | 15, 20 |
| 20 | 10, 15 |

Clarification: UE with split band dual duplexer implement may not support BCS1.

### 5.2.2 UE co-existence studies

There are no co-existence issues for this combination.

### 5.2.3 REFSENS

General REFSENS for intra-band CA has been specified in the spec.

## 5.3 CA\_2DL\_n41C\_1UL\_n41A

### 5.3.1 Channel bandwidths per operating band for CA

Table 5.3.1-1: Bandwidth combination sets for Intra band contiguous CA configurations FR1

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E-UTRA CA configuration / Bandwidth combination set | | | | | | | | |
| NR CA configuration | Uplink CA configurations | 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] | Maximum aggregated  bandwidth [MHz] | Bandwidth combination set |
| CA\_n41C | - | 50 | 60 |  |  |  | 110 | 0 |
| 40 | 80 |  |  |  | 120 |
| 60 | 60 |  |  |  |
| 50 | 80 |  |  |  | 130 |
| 40 | 100 |  |  |  | 140 |
| 60 | 80 |  |  |  |
| 50 | 100 |  |  |  | 150 |
| 60 | 100 |  |  |  | 160 |
| 80 | 80 |  |  |  |
| 80 | 100 |  |  |  | 180 |
| 60 | 50 |  |  |  | 110 |
| 80 | 40 |  |  |  | 120 |
| 80 | 50 |  |  |  | 130 |
| 100 | 40 |  |  |  | 140 |
| 80 | 60 |  |  |  |
| 100 | 50 |  |  |  | 150 |
| 100 | 60 |  |  |  | 160 |
| 100 | 80 |  |  |  | 180 |
| 10, 15, 20, 40, 50, 60, 80, 90 | 15, 20, 40, 50, 60, 80, 90, 100 |  |  |  | 190 | 1 |

### 5.3.2 Co-existence studies

There are no co-existence issues for this combination.

## 5.4 CA\_2DL\_n48B, CA\_2DL\_n48C

### 5.4.1 Channel bandwidths per operating band for CA

Table 5.4.1-1: Supported bandwidth combinations for CA\_2DL\_n48B and CA\_2DL\_n48C

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **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\_n48B | - | 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 |
| 51 | 40 |  |  |  | 45 |
| 40 | 51 |  |  |  |
| 10 | 40 |  |  |  | 50 |
| 40 | 10 |  |  |  |
| CA\_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 |  |  |  |
| NOTE 1: 51 MHz is not applicable for 30/60kHz SCS | | | | | | | | |

### 5.4.2 Co-existence studies

There are no co-existence issues for these combinations.

### 5.4.3 REFSENS

There are no REFSENS exceptions for these combinations.

## 5.5 CA\_2DL\_n1B\_ 1UL\_n1A

### 5.5.1 Operating band for CA

Table 5.5.1-1: intra-band contiguous CA operating bands in FR1

|  |  |
| --- | --- |
| NR CA Band | NR Band  (Table 5.2-1) |
| CA\_n1 | n1 |

### 5.5.2 Channel bandwidths per operating band for CA

Table 5.5.2-1: Supported bandwidth combinations for CA\_2DL\_n1B\_1UL \_n1A

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NR CA Configuration | Uplink Configurations | Channel bandwidths for carrier  [MHz] | Channel bandwidths for carrier  [MHz] | Aggregated bandwidth  [MHz] | Bandwidth combination set |
| CA\_n1B | - | 10 | 10,15 | 40 | 0 |
| 15 | 15,20 |
| 20 | 20 |

### 5.5.3 Co-existence studies

There are no co-existence issues for this combination.

## 5.6 CA\_2DL\_n7B\_ 2UL\_n7B

### 5.6.1 Operating band for CA

Table 5.6.1-1: intra-band contiguous CA operating bands in FR1

|  |  |
| --- | --- |
| NR CA Band | NR Band  (Table 5.2-1) |
| CA\_n7 | n7 |

### 5.6.2 Channel bandwidths per operating band for CA

Table 5.6.2-1: Supported bandwidth combinations for CA\_2DL\_n1B\_1UL \_n1A

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NR CA Configuration | Uplink Configurations | Channel bandwidths for carrier  [MHz] | Channel bandwidths for carrier  [MHz] | Aggregated bandwidth  [MHz] | Bandwidth combination set |
| CA\_n7B | CA\_n7B | 10, 15, 20 | 10, 15, 20, 30, 40 | 50 | 0 |

### 5.6.3 Co-existence studies

There are no co-existence issues for this combination.

## 5.7 CA\_2DL\_n41B\_2UL\_n41B

### 5.7.1 Channel bandwidths per operating band for CA

Table 5.7.1-1: Supported bandwidth combinations for CA\_n41B

| E-UTRA CA configuration / Bandwidth combination set | | | | | |
| --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configurations | Component carriers in order of increasing carrier frequency | | Aggregated  bandwidth (MHz) | Bandwidth combination set |
| Channel bandwidths for carrier (MHz) | Channel bandwidths for carrier (MHz) |
| CA\_n41B | CA\_n41B | 10, 20, 30, 40, 50 | 10, 20, 30, 40, 50 | 100 | 0 |

### 5.7.2 UE maximum output power for CA

Table 5.7.2-1 UE Power Class for intra-band contiguous CA

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA Configuration | Class 1 (dBm) | Tolerance (dB) | Class 2 (dBm) | Tolerance  (dB) | Class 3 (dBm) | Tolerance (dB) | Class 4 (dBm) | Tolerance (dB) |
| CA\_n41B |  |  |  |  | 23 | ±2 |  |  |

### 5.7.3 Spurious emission for Co-existence band

Table 5.7.3 lists the protected bands required for the 2UL intra-band non-contiguous CA configuration

Table 5.7.3-1: Spurious emission band UE co-existence for CA\_n41B

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| E-UTRA CA Configuration | Spurious emission | | | | | | |
| Protected band | Frequency range (MHz) | | | Maximum Level (dBm) | MBW (MHz) | NOTE |
| CA\_n41B | E-UTRA Band 1, 2, 3, 4, 5, 8, 10, 12, 13, 14, 17, 24, 25, 26, 27, 28, 29, 30, 34, 39, 42, 44, 45, 48, 50, 51, 52, 65, 66, 70, 71, 73, 74, 85,  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | NR Band n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 9, 11, 18, 19, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 30 |
|  | Frequency range | 1884.5 |  | 1915.7 | -41 | 0.3 | 8, 30 |
| NOTE 2: As exceptions, measurements with a level up to the applicable requirements defined in Table 6.5.3.1-2 are permitted for each assigned NR carrier used in the measurement due to 2nd, 3rd, 4th or 5th harmonic spurious emissions. Due to spreading of the harmonic emission the exception is also allowed for the first 1 MHz frequency range immediately outside the harmonic emission on both sides of the harmonic emission. This results in an overall exception interval centred at the harmonic emission of (2 MHz + N x LCRB x RBsize kHz), where N is 2, 3, 4, 5 for the 2nd, 3rd, 4th or 5th harmonic respectively. The exception is allowed if the measurement bandwidth (MBW) totally or partially overlaps the overall exception interval.  NOTE 8: Applicable when co-existence with PHS system operating in 1884.5 - 1915.7 MHz.  NOTE 30: This requirement applies when the NR carrier is confined within 2545 – 2575 MHz or 2595 – 2645 MHz and the channel bandwidth is 10 or 20 MHz | | | | | | | |

### 

### 5.7.3 REFSENS

There are no REFSENS exceptions for this combination.

## 5.8 CA\_n46

### 5.8.1 Operating band for CA

Table 5.8.1-1: intra-band contiguous CA operating bands in FR1

|  |  |
| --- | --- |
| NR CA Band | NR Band  (Table 5.2-1) |
| CA\_n46 | n46 |

### 5.8.2 Channel bandwidths per operating band for CA

Table 5.8.2-1: Supported bandwidth combinations for CA\_n46

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration / Bandwidth combination set | | | | | | | | |
| NR CA configuration | Uplink CA configurations | 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] | Maximum aggregated  bandwidth [MHz] | Bandwidth combination set |
| CA\_n46B | CA\_n46A | 20, 40, 60 | 20, 40 |  |  |  | 100 |  |
| CA\_n46C | CA\_n46A | 60, 80 | 60, 80 |  |  |  | 160 |  |
| CA\_n46D | CA\_n46A | 60, 80 | 80 | 80 |  |  | 240 |  |
| CA\_n46E | CA\_n46A | 80 | 80 | 80 | 80 |  | 320 |  |
| CA\_n46G | CA\_n46A | 40, 60 | 40 | 40 |  |  | 140 |  |
| CA\_n46H | CA\_n46A | 40, 80 | 40 | 40 | 40 |  | 200 |  |
| CA\_n46I | CA\_n46A | 60 | 40 | 40 | 40 | 40 | 220 |  |

### 5.8.3 Co-existence studies

There are no co-existence issues for this combination.

### 5.8.4 REFSENS

In Rel-13 LAA, only CA was allowed involving band 46, thus we did not have any REFSENS values introduced in the REFSENS table in Section 7 of the spec.

In Rel-16, we will also have standalone NR-U operations. Following LAA specification, REFSENS for 15kHz SCS with 20MHz CBW can be reused as -90dBm. However, the other REFENS numbers need to be investigated.

|  | Operating band / SCS / Channel bandwidth / Duplex-mode | | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Operating Band | | SCS kHz | 5  MHz (dBm) | 10  MHz (dBm) | 15  MHz (dBm) | 20  MHz (dBm) | 25  MHz (dBm) | 30 MHz (dBm) | 40  MHz (dBm) | 50  MHz (dBm) | 60  MHz (dBm) | 70  MHz (dBm) | 80  MHz (dBm) | 90  MHz (dBm) | 100 MHz (dBm) | Duplex Mode |
| n46 | | 15 |  |  |  | -89.7 |  |  | -86.6 |  |  |  |  |  |  | TDD |
| 30 |  |  |  | -89.9 |  |  | -86.7 |  | -84.8 |  | -83.6 |  |  |
| 60 |  |  |  | -90.1 |  |  | -86.9 |  | -85.0 |  | -83.6 |  |  |

### 5.8.5 A-MPR studies

Since there will be wideband UL operation (UL CBW larger than 20MHz), A-MPR studies are required too.

# 6 Intra-Band Non-Contiguous Carrier Aggregation FR1: Specific Band Combination Part

## 6.1 CA\_2DL\_n66(2A)\_1UL\_n66A

### 6.1.1 Channel bandwidths per operating band for CA

Table 6.1.1-1: Supported bandwidth combinations for CA\_n66(2A)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **NR CA Configuration** | **Uplink Configurations** | **Channel bandwidths for carrier**  **[MHz]** | **Channel bandwidths for carrier**  **[MHz]** | **Aggregated bandwidth**  **[MHz]** | **Bandwidth combination set** |
| CA\_n66(2A) | - | 51 | 20 | 25 | 0 |
| 10 | 15 |
| 20 | 51 |
| 15 | 10 |
| 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 |
| Note 1: 5MHz is not applicable for 30/60kHz SCS | | | | | |

### 6.1.2 UE co-existence studies

There are no co-existence issues for this combination.

### 6.1.3 REFSENS

There are no REFSENS exceptions for this combination. However, UL configuration for REFSENS needs to be captured after general principles for RX requirements have been agreed.

## 6.2 CA\_2DL\_n41(2A)\_1UL\_n41A

6.2.1 Operating band for CA

|  |  |
| --- | --- |
| NR CA Band | NR Band  (Table 5.2-1) |
| CA\_n41(2A) | n41 |

### 6.2.2 Channel bandwidths per operating band for CA

Table 6.2.2-1: Supported bandwidth combinations for CA\_2DL\_n41(2A)\_1UL \_n41A

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E-UTRA CA configuration / Bandwidth combination set | | | | | | | | |
| NR CA configuration | Uplink CA configurations | 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] | Maximum aggregated  bandwidth [MHz] | Bandwidth combination set |
| 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 |
| 80 | 100 |  |  |  | 180 |
| 10, 15, 20, 40, 50, 60, 80, 90, 100 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |  |  | 190 | 1 |

### 6.2.3 Co-existence studies

There are no co-existence issues for this combination.

### 6.2.4 REFSENS

There are no REFSENS exceptions for this combination. UL configuration for REFSENS is listed below.

Table 6.2.4-1: Intra-band non-contiguous CA with one uplink configuration for reference sensitivity

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CA configuration | Aggregated channel bandwidth (PCC+SCC) | Wgap / [MHz] | UL PCC allocation | ΔRIBNC (dB) | Duplex mode |
| CA\_n41(2A) | NOTE 1 | NOTE 2 | NOTE 3 | 0.0 | TDD |
| NOTE 1: All combinations of channel bandwidths defined in Table 5.5A.2-1.  NOTE 2: All applicable sub-block gap sizes.  NOTE 3: The PCC allocation is same as Transmission bandwidth configuration NRB as defined in Table 5.3.2-1.  NOTE 4: The carrier center frequency of PCC in the DL operating band is configured closer to the UL operating band. | | | | | |

## 6.3 CA\_2DL\_n25(2A)\_1UL\_n25A

### 6.3.1 Channel bandwidths per operating band for CA

Table 6.3.1-1: Supported bandwidth combinations for CA\_2DL\_n25(2A)\_1UL \_n25A

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 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\_n25(2A) | - | 5, 10, 15, 20 | 5, 10, 15, 20 |  |  |  | 40 | 0 |

### 6.3.2 Co-existence studies

There are no co-existence issues for this combination.

### 6.3.3 REFSENS

REFSENS can be impacted by the PCC UL being closer to do the SCC DL than the nominal spacing.

NOTE to rapporteur: The paragraph below has highlighted necessary changes to 38.101-1 section 7.3A.2.2 that will need to be included in the big CR.

For intra-band non-contiguous carrier aggregation with FDL\_low < 2700 MHz and FUL\_low < 2700 MHz with one uplink carrier and two or more downlink sub-blocks, throughput of each downlink component carrier shall be ≥ 95% of the maximum throughput of the reference measurement channels as specified in Annexes A.2.2, A.2.3 and A.3.2 (with one sided dynamic OCNG Pattern OP.1 FDD/TDD for the DL-signal as described in Annex A.5.1.1/A.5.2.1) and parameters specified in Table 7.3.2-1, Table 7.3.2-2, and Table 7.3A.2.2-1 with the reference sensitivity power level increased by D RIBNC given in Table 7.3A.2.2-1 for the SCC(s). For aggregation of two or more downlink FDD carriers with one uplink carrier the reference sensitivity is defined only for the specific uplink and downlink test points which are specified in Table 7.3A.2.2-1. The requirements apply with all downlink carriers active. Unless given by Table 7.3.2-4, the reference sensitivity requirements shall be verified with the network signalling value NS\_01 (Table 6.2.3-1) configured.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CA configuration** | **SCS**  **kHz** | **Aggregated channel bandwidth (PCC+SCC)** | **Wgap / [MHz]** | **UL PCC allocation** | **ΔRIBNC (dB)** | **Duplex mode** |
| CA\_n25(2A) | 15 | 25RB+25RB | Wgap = 55.0 | 101 | 5.0 | FDD |
| Wgap = 30.0 | 25 | 0.0 |
| NOTE 1: 1 refers to the UL resource blocks shall be located as close as possible to the downlink operating band but confined within the transmission.  NOTE 2: Wgap is the sub-block gap between the two sub-blocks.  NOTE 3: The carrier centre frequency of SCC in the DL operating band is configured closer to the UL operating band. | | | | | | |

## 6.4 CA\_2DL\_n48(2A)\_1UL\_n48A

### 6.4.1 Channel bandwidths per operating band for CA

Table 6.4.1-1: Supported bandwidth combinations for CA\_2DL\_n48(2A)\_1UL \_n48A

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 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\_n48(2A) | - | 51, 10, 15, 20, 40, 50 | 51, 10, 15, 20, 40, 50 |  |  |  | 100 | 0 |
| 10, 15, 20, 40,50, 60, 80, 90, 100 | 10, 15, 20, 40,50, 60, 80, 90, 100 |  |  |  | 1402 |
| NOTE 1: 5MHz is not applicable for 30/60kHz SCS  NOTE 2: Parameter value accounts for both, the maximum frequency range of band n48 (150MHz), and the minimum frequency gaps in between NR non-contiguous component carriers | | | | | | | | |

### 6.4.2 Co-existence studies

There are no co-existence issues for this combination.

### 6.4.3 REFSENS

There are no REFSENS exceptions for this combination. However, UL configuration for REFSENS needs to be captured after general principles for RX requirements have been agreed

## 6.5 CA\_2DL\_n3(2A)\_ 1UL\_n3A

### 6.5.1 Operating band for CA

Table 6.5.1-1: intra-band non-contiguous CA operating bands in FR1

|  |  |
| --- | --- |
| NR CA Band | NR Band  (Table 5.2-1) |
| CA\_n3 | n3 |

### 6.5.2 Channel bandwidths per operating band for CA

Table 6.5.2-1: Supported bandwidth combinations for CA\_2DL\_n3(2A)\_1UL \_n3A

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NR CA Configuration | Uplink Configurations | Channel bandwidths for carrier  [MHz] | Channel bandwidths for carrier  [MHz] | Aggregated bandwidth  [MHz] | Bandwidth combination set |
| CA\_n3(2A) | - | 5,10,15,20 | 5,10,15,20 | 40 | 0 |

### 6.5.3 Co-existence studies

There are no co-existence issues for this combination.

### 6.5.4 REFSENS

There are no REFSENS exceptions for this combination. UL configuration for REFSENS is listed below.

Table 6.5.4-1: Intra-band non-contiguous CA with one uplink configuration for reference sensitivity

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CA configuration | Aggregated channel bandwidth (PCC+SCC) | Wgap / [MHz] | UL PCC allocation | ΔRIBNC (dB) | Duplex mode |
| CA\_n3(2A) | 25RB+25RB | Wgap = 65.0 | 125 | 4.7 | FDD |
| Wgap = 45.0 | 255 | 0 |
| NOTE 1: All combinations of channel bandwidths defined in Table 5.5A.2-1.  NOTE 2: All applicable sub-block gap sizes.  NOTE 3: The PCC allocation is same as Transmission bandwidth configuration NRB as defined in Table 5.3.2-1.  NOTE 4: The carrier center frequency of PCC in the DL operating band is configured closer to the UL operating band.  NOTE 5: refers to the UL resource blocks shall be located as close as possible to the downlink operating band but confined within the transmission. | | | | | |

## 6.6 CA\_2DL\_n7(2A)\_ 1UL\_n7A

### 6.6.1 Operating band for CA

Table 6.6.1-1: intra-band non-contiguous CA operating bands in FR1

|  |  |
| --- | --- |
| NR CA Band | NR Band  (Table 5.2-1) |
| CA\_n7 | n7 |

### 6.6.2 Channel bandwidths per operating band for CA

Table 6.6.2-1: Supported bandwidth combinations for CA\_2DL\_n7(2A)\_1UL \_n7A

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NR CA Configuration | Uplink Configurations | Channel bandwidths for carrier  [MHz] | Channel bandwidths for carrier  [MHz] | Aggregated bandwidth  [MHz] | Bandwidth combination set |
| CA\_n7(2A) | - | 5,10,15,20 | 5,10,15,20 | 40 | 0 |

### 6.6.3 Co-existence studies

There are no co-existence issues for this combination.

### 6.6.4 REFSENS

There are no REFSENS exceptions for this combination. UL configuration for REFSENS is listed below.

Table 6.6.4-1: Intra-band non-contiguous CA with one uplink configuration for reference sensitivity

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CA configuration | Aggregated channel bandwidth (PCC+SCC) | Wgap / [MHz] | UL PCC allocation | ΔRIBNC (dB) | Duplex mode |
| CA\_n7(2A) | 52RB+25RB (SCS=15kHz) | Wgap = 55 | 325 | 0.0 | FDD |
| Wgap = 30 | 505 | 0.0 | FDD |
| NOTE 1: All combinations of channel bandwidths defined in Table 5.5A.2-1.  NOTE 2: All applicable sub-block gap sizes.  NOTE 3: The PCC allocation is same as Transmission bandwidth configuration NRB as defined in Table 5.3.2-1.  NOTE 4: The carrier center frequency of PCC in the DL operating band is configured closer to the UL operating band.  NOTE 5: Refers to the UL resource blocks shall be located as close as possible to the downlink operating band but confined within the transmission.  NOTE 6: Wgap is the sub-block gap between the two sub-blocks.  NOTE 7: The carrier centre frequency of SCC in the DL operating band is configured closer to the UL operating band. | | | | | |

## 6.7 CA\_2DL\_n48(3A)\_1UL\_n48A, CA\_2DL\_n48(4A)\_1UL\_n48A

### 6.7.1 Channel bandwidths per operating band for CA

Table 6.7.1-1: Supported bandwidth combinations for CA\_2DL\_n48(3A)\_1UL \_n48A

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink Configurations | Channel bandwidths for carrier [MHz] | Channel bandwidths for carrier [MHz] | Channel bandwidths for carrier [MHz] | Maximum  Aggregated bandwidth  (MHz) | Bandwidth combination set |
| CA\_n48(3A) | - | 10, 15, 20, 40,50, 60, 80, 90, 100 | 10, 15, 20, 40,50, 60, 80, 90, 100 | 10, 15, 20, 40,50, 60, 80, 90, 100 | 1402 | 0 |

Table 6.7.1-2: Supported bandwidth combinations for CA\_2DL\_n48(4A)\_1UL \_n48A

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink Configurations | Channel bandwidths for carrier [MHz] | Channel bandwidths for carrier [MHz] | Channel bandwidths for carrier [MHz] | Channel bandwidths for carrier [MHz] | Maximum  Aggregated bandwidth  (MHz) | Bandwidth combination set |
| CA\_n48(4A) | - | 10, 15, 20, 40,50, 60, 80, 90, 100 | 10, 15, 20, 40,50, 60, 80, 90, 100 | 10, 15, 20, 40,50, 60, 80, 90, 100 | 10, 15, 20, 40,50, 60, 80, 90, 100 | 1352 | 0 |

### 6.7.2 Co-existence studies

There are no co-existence issues for this combination.

### 6.7.3 REFSENS

There are no REFSENS exceptions for this combination. However, UL configuration for REFSENS needs to be captured after general principles for RX requirements have been agreed

## 7.1 CA\_xDL\_n257a\_xUL\_n257a (x=2, 3, 4, 5, 6, 7, 8, a=G, H, I, J, K, L, M)

### 7.1.1 Channel bandwidths per operating band for CA

Table 7.1.1-1: NR CA configurations, bandwidth combination sets and fallback group defined for intra-band contiguous CA

|  |  | NR CA configuration / Bandwidth combination set / Fallback group | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configurations | 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\_n257G | CA\_n257G | 100 | 100 |  |  |  |  |  |  | 200 | 0 | 3 |
| CA\_n257H | CA\_n257G  CA\_n257H | 100 | 100 | 100 |  |  |  |  |  | 300 | 0 |
| CA\_n257I | CA\_n257G  CA\_n257H  CA\_n257I | 100 | 100 | 100 | 100 |  |  |  |  | 400 | 0 |
| CA\_n257J | CA\_n257G  CA\_n257H  CA\_n257I  CA\_n257J | 100 | 100 | 100 | 100 | 100 |  |  |  | 500 | 0 |
| CA\_n257K | CA\_n257G  CA\_n257H  CA\_n257I  CA\_n257J  CA\_n257K | 100 | 100 | 100 | 100 | 100 | 100 |  |  | 600 | 0 |
| CA\_n257L | CA\_n257G  CA\_n257H  CA\_n257I  CA\_n257J  CA\_n257K  CA\_n257L | 100 | 100 | 100 | 100 | 100 | 100 | 100 |  | 700 | 0 |
| CA\_n257M | CA\_n257G  CA\_n257H  CA\_n257I  CA\_n257J  CA\_n257K  CA\_n257L  CA\_n257M | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 800 | 0 |

### 7.1.2 UE co-existence studies

There are no co-existence issues for this combination.

## 7.2 CA\_n258

### 7.2.1 Operating bands for CA

Table 7.2.1-1: Intra-band CA

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **NR CA Band** | **NR Band** | **Uplink (UL) band** | | | **Downlink (DL) band** | | | **Duplex**  **mode** |
| **BS receive / UE transmit** | | | **BS transmit / UE receive** | | |
| **FUL\_low – FUL\_high** | | | **FDL\_low – FDL\_high** | | |
| CA\_n258 | n258 | 24250 MHz | – | 27500 MHz | 24250 MHz | – | 27500 MHz | TDD |

### 7.2.2 Channel bandwidths per operating band for CA

Table 7.2.2-1: NR CA configurations, bandwidth combination sets and fallback group defined for intra-band contiguous CA

|  |  | NR CA configuration / Bandwidth combination set / Fallback group | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configurations | 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\_n258A  CA\_n258B | 50, 100, 200, 400 | 50, 100, 200, 400 |  |  |  |  |  |  | 800 | 0 | 1 |
| CA\_n258C | CA\_n258A  CA\_n258B  CA\_n258C | 50, 100, 200, 400 | 50, 100, 200, 400 | 50, 100, 200, 400 |  |  |  |  |  | 1200 | 0 |
| CA\_n258D | CA\_n258A  CA\_n258D | 50, 100, 200 | 50, 100, 200 |  |  |  |  |  |  | 400 | 0 | 2 |
| CA\_n258E | CA\_n258A  CA\_n258D  CA\_n258E | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 |  |  |  |  |  | 600 | 0 |
| CA\_n258F | CA\_n258A  CA\_n258D  CA\_n258E  CA\_n258F | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 | 50, 100, 200 |  |  |  |  | 800 | 0 |
| CA\_n258G | CA\_n258A  CA\_n258G | 50, 100 | 50, 100 |  |  |  |  |  |  | 200 | 0 | 3 |
| CA\_n258H | CA\_n258A  CA\_n258G CA\_n258H | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  | 300 | 0 |
| CA\_n258I | CA\_n258A  CA\_n258G CA\_n258H  CA\_n258I | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  | 400 | 0 |
| CA\_n258J | CA\_n258A  CA\_n258G CA\_n258H  CA\_n258I  CA\_n258J | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  | 500 | 0 |
| CA\_n258K | CA\_n258A  CA\_n258G CA\_n258H  CA\_n258I  CA\_n258J  CA\_n258K | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  | 600 | 0 |
| CA\_n258L | CA\_n258A  CA\_n258G CA\_n258H  CA\_n258I  CA\_n258J  CA\_n258K  CA\_n258L | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  | 700 | 0 |
| CA\_n258M | CA\_n258A  CA\_n258G CA\_n258H  CA\_n258I  CA\_n258J  CA\_n258K  CA\_n258L  CA\_n258M | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 800 | 0 |

### 7.2.3 Co-existence studies

Table 7.2.3-1: Impact of UL and DL Harmonic Interference

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | **2nd Harmonic** | | **3rd Harmonic** | | **4th Harmonic** | | **5th Harmonic** | | **6th Harmonic** | | **7th Harmonic** | |
| **Band** | **UL DL Low Band Edge** | **UL DL High Band Edge** | **UL DL Low Band Edge** | **UL DL High Band Edge** | **UL DL Low Band Edge** | **UL DL High Band Edge** | **UL DL Low Band Edge** | **UL DL High Band Edge** | **UL DL Low Band Edge** | **UL DL High Band Edge** | **UL DL Low Band Edge** | **UL DL High Band Edge** | **UL DL Low Band Edge** | **UL DL High Band Edge** |
| n258 | 24250 | 27500 | 48500 | 55000 | 72750 | 82500 | 97000 | 110000 | 121250 | 137500 | 145500 | 165000 | 169750 | 192500 |

# 8 Intra-Band Non-Contiguous Carrier Aggregation FR2: Specific Band Combination Part

## 8.1 Intra band non-contiguous CA configurations n260

Table 8.1-1: Supported bandwidth combinations for n260(A)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **NR CA configuration / Bandwidth combination set** | | | | | | | | | |
|  |  |  | **Component carriers in order of increasing carrier frequency** | | | | | | | |  |  |
| NR configuration | Uplink CA configurations | SCS | 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) | Maximum aggregated  bandwidth (MHz) | Fall-back group |
| 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 |  | 26001 |
| 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 |
| Note 1: The maximum bandwidth of band n260 is 3000MHz and a non-contiguous gap is in between NR component carriers | | | | | | | | | | | | |

Table 8.1-2: Supported bandwidth combinations for n260(D)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **NR CA configuration / Bandwidth combination set** | | | | | | | | | |
|  |  |  | **Component carriers in order of increasing carrier frequency** | | | | | | | |  |  |
| NR configuration | Uplink CA configurations | SCS | 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) | Maximum aggregated  bandwidth (MHz) | Fall-back group |
| CA\_n260(2D) | - | 60 | 50, 100, 200 | 200 | 50, 100, 200 | 200 |  |  |  |  | 800 | 2 |
| 120 | 50, 100, 200 | 200 | 50, 100, 200 | 200 |  |  |  |  | 800 |

Table 8.1-3: Supported bandwidth combinations for n260(G)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **NR CA configuration / Bandwidth combination set** | | | | | | | | | |
|  |  |  | **Component carriers in order of increasing carrier frequency** | | | | | | | |  |  |
| NR configuration | Uplink CA configurations | SCS | 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) | Maximum aggregated  bandwidth (MHz) | Fall-back group |
| 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(3G) | - | 60 | 100 | 50, 100 | 100 | 50, 100 | 100 | 50, 100 |  |  | 600 | 3 |
| 120 | 100 | 50, 100 | 100 | 50, 100 | 100 | 50, 100 |  |  | 600 |
| CA\_n260(4G) | - | 60 | 100 | 50, 100 | 100 | 50, 100 | 100 | 50, 100 | 100 | 50, 100 | 800 | 3 |
| 120 | 100 | 50, 100 | 100 | 50, 100 | 100 | 50, 100 | 100 | 50, 100 | 800 |

Table 8.1-4: Supported bandwidth combinations for n260(H)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **NR CA configuration / Bandwidth combination set** | | | | | | | | | |
|  |  |  | **Component carriers in order of increasing carrier frequency** | | | | | | | |  |  |
| NR configuration | Uplink CA configurations | SCS | 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) | Maximum aggregated  bandwidth (MHz) | Fall-back group |
| 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 |

Table 8.1-5: Supported bandwidth combinations for n260(O)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **NR CA configuration / Bandwidth combination set** | | | | | | | | | |
|  |  |  | **Component carriers in order of increasing carrier frequency** | | | | | | | |  |  |
| NR configuration | Uplink CA configurations | SCS | 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) | Maximum aggregated  bandwidth (MHz) | Fall-back group |
| 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 |

Table 8.1-6: Supported bandwidth combinations for n260(P)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **NR CA configuration / Bandwidth combination set** | | | | | | | | | |
|  |  |  | **Component carriers in order of increasing carrier frequency** | | | | | | | |  |  |
| NR configuration | Uplink CA configurations | SCS | 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) | Maximum aggregated  bandwidth (MHz) | Fall-back group |
| CA\_n260(2P) | - | 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 |

Table 8.1-7: Supported bandwidth combinations for n260(P)

|  |  |  | NR CA configuration / Bandwidth combination set | | | | | | | | | | | | | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configurations | SCS | Component carriers in order of increasing carrier frequency | | | | | | | | | | | | | | Aggregated  BW (MHz) | Fallback group |
| CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) |
| CA\_n260(4P) | n260A | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  | 1200 | 4 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  | 1200 |

Table 8.1-8: Supported bandwidth combinations for n260(Q)

|  |  |  | NR CA configuration / Bandwidth combination set | | | | | | | | | | | | | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configurations | SCS | Component carriers in order of increasing carrier frequency | | | | | | | | | | | | | | Aggregated  BW (MHz) | Fallback group |
| CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) |
| CA\_n260(2Q) | n260A | 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 |

## 8.2 Intra band non-contiguous CA fallback groups n260

Table 8.2-1: Supported bandwidth combinations for n260(A-G)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | NR CA configuration / Bandwidth combination set | | | | | | | | | | | | | |
| **NR configuration** | **Uplink CA configurations** | Component carriers in order of increasing carrier frequency | | | | | | | | | | | | **Maximum aggregated  bandwidth (MHz)** | **Fall-back group** |
|  |  | **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(2A-G) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | | | |  |  |  |  | 1000 |  |
| See CA\_n260G Bandwidth Combination Fallback group 3 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-2G) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n260(2G) Bandwidth Combination Fallback group 3 in table above | | | | | | | |  |  |  | 800 |  |
| See CA\_n260(2G) Bandwidth Combination Fallback group 3 in table above | | | | | | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | | |  |  |  |
| CA\_n260(2A-2G) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | See CA\_n260(2G) Bandwidth Combination Fallback group 3 in table above | | | | | |  |  | 1200 |  |
| See CA\_n260(2G) Bandwidth Combination Fallback group 3 in table above | | | | | | | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | |  |  |
| CA\_n260(2A-2G-O) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | See CA\_n260(2G) Bandwidth Combination Fallback group 3 in table above | | | | | | 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\_n260(2G) Bandwidth Combination Fallback group 3 in table above | | | |
| CA\_n260(3A-2G) | - | See CA\_n260(3A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | | See CA\_n260(2G) Bandwidth Combination Fallback group 3 in table above | | | | | |  | 1600 |  |
| See CA\_n260(2G) Bandwidth Combination Fallback group 3 in table above | | | | | | | | See CA\_n260(3A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | |  |
| CA\_n260(4A-G) | - | See CA\_n260(4A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | | | | | See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | |  |  | 1800 |  |
| See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | | | See CA\_n260(4A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | | | |  |  |
| CA\_n260(4A-2G) | - | See CA\_n260(4A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | | | | | See CA\_n260(2G) Bandwidth Combination Fallback group 3 in table above | | | | 2000 |  |
| See CA\_n260(2G) Bandwidth Combination Fallback group 3 in table above | | | | | | | | See CA\_n260(4A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | |
| CA\_n260(A-G) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | | | |  | | |  |  |  |  | 600 |  |
| See CA\_n260G Bandwidth Combination Fallback group 3 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(3A-G) | - | See CA\_n260(3A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | | See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | | | |  |  |  | 1400 |  |
| See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | | | See CA\_n260(3A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | | |  |  |  |

Table 8.2-2: Supported bandwidth combinations for n260(A-H)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | NR CA configuration / Bandwidth combination set | | | | | | | | | | | | |
| **NR configuration** | **Uplink CA configurations** | Component carriers in order of increasing carrier frequency | | | | | | | | | | | **Maximum aggregated  bandwidth (MHz)** | **Fall-back group** |
|  |  | **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-2H) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n260(2H) Bandwidth Combination Fallback group 3 in table above | | | | | | | | |  | 1000 |  |
| See CA\_n260(2H) Bandwidth Combination Fallback group 3 in table above | | | | | | | | | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 |  |
| CA\_n260(2A-H) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | See CA\_n260H Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | | | |  | |  | |  | 1100 |  |
| See CA\_n260H Bandwidth Combination Fallback group 3 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-2H) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | See CA\_n260(2H) Bandwidth Combination Fallback group 3 in table above | | | | | | | | | 1400 |  |
| See CA\_n260(2H) Bandwidth Combination Fallback group 3 in table above | | | | | | | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | |
| CA\_n260(A-H) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n260H Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | | | |  |  | |  | |  | 700 |  |
| See CA\_n260H Bandwidth Combination Fallback group 3 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 |  |  | |  | |  |

Table 8.2-3: Supported bandwidth combinations for n260(A-O)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | NR CA configuration / Bandwidth combination set | | | | | | | | | | | | | | | | | | |
| **NR configuration** | **Uplink CA configurations** | Component carriers in order of increasing carrier frequency | | | | | | | | | | | | | | | | | **Maximum aggregated  bandwidth (MHz)** | **Fall-back group** |
|  |  | **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(2A-O) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 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\_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 | | | | | |  | |  | | |  |  |
| CA\_n260(A-2O) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n260(2O) Bandwidth Combination Fallback group 4 in table above | | | | | | | | | | |  | | |  |  | 800 |  |
| See CA\_n260(2O) Bandwidth Combination Fallback group 4 in table above | | | | | | | | | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | | |  | | |  |  |
| CA\_n260(2G-O) | - | See CA\_n260(2G) 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 | | | | |  |  | 600 |  |
| See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | | | | See CA\_n260(2G) Bandwidth Combination Fallback group 3 in Table 2 above | | | | | | | | | | |  |  |
| CA\_n260(2A-2O) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | See CA\_n260(2O) Bandwidth Combination Fallback group 4 in table above | | | | | | | | | | |  |  | 1200 |  |
| See CA\_n260(2O) Bandwidth Combination Fallback group 4 in table above | | | | | | | | | | | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | |  |  |
| CA\_n260(2A-3O) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | See CA\_n260(3O) Bandwidth Combination Fallback group 4 in table above | | | | | | | | | | | | | 1400 |  |
| See CA\_n260(3O) Bandwidth Combination Fallback group 4 in table above | | | | | | | | | | | | | | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | |
| CA\_n260(3A-2O) | - | See CA\_n260(3A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | | See CA\_n260(2O) Bandwidth Combination Fallback group 4 in table above | | | | | | | | | | |  | 1600 |  |
| See CA\_n260(2O) Bandwidth Combination Fallback group 4 in table above | | | | | | See CA\_n260(3A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | | | | | | |  |
| CA\_n260(4A-O) | - | See CA\_n260(4A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | | | | | | | See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | | | | |  |  | 1800 |  |
| See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | | See CA\_n260(4A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | | | | | | | | | |  |  |
| CA\_n260(4A-2O) | - | See CA\_n260(4A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | | | | | | | See CA\_n260(2O) Bandwidth Combination Fallback group 4 in table above | | | | | | | 2000 |  |
| See CA\_n260(2O) Bandwidth Combination Fallback group 4 in table above | | | | | | | | | | See CA\_n260(4A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | | | |
| CA\_n260(A-O) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | | | |  | | | | |  | |  | | |  |  | 600 |  |
| 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(G-O) | - | See CA\_n260G 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 | | | | | |  | |  | | |  |  | 400 |  |
| See CA\_n260O Bandwidth Combination Fallback group 4 in Table 5.5A.1-2 of 38.101-2 | | | | See CA\_n260G Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | | | | | |  | |  | | |  |  |
| CA\_n260(A-G-O) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n260G 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 | | | | | | |  | | |  |  | 800 |  |
| See CA\_n260G 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 | | | | | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | | | |  | | |  |  |
| CA\_n260(2A-G-O) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | See CA\_n260G 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 | | | | |  |  | 1200 |  |
| See CA\_n260G 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 | | | | | | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | |  |  |
| CA\_n260(A-2G-O) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n260(2G) 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\_n260(2G) 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 | | | | | | | | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 |  |
| CA\_n260(A-3O) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | 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\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | | |  |
| CA\_n260(3A-O) | - | See CA\_n260(3A) Bandwidth Combination in Table 5.5A.2-1 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(3A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | | | | | | |  | | |  |  |

Table 8.2-4: Supported bandwidth combinations for n260(A-O)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | NR CA configuration / Bandwidth combination set | | | | | | | | | | | | | | | |
| **NR configuration** | **Uplink CA configurations** | Component carriers in order of increasing carrier frequency | | | | | | | | | | | | | | **Maximum aggregated  bandwidth (MHz)** | **Fall-back group** |
|  |  | 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) | | Channel bandwidths for carrier (MHz) | | Channel bandwidths for carrier (MHz) | Channel bandwidths for carrier (MHz) | Channel bandwidths for carrier (MHz) |  |  |
| CA\_n260(A-4O) | - | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n260(4O) Bandwidth Combination Fallback group 4 in table above | | | | | | | | | |  |  |  | 1200 |  |
| See CA\_n260(4O) Bandwidth Combination Fallback group 4 in table above | | | | | | | | | | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 |  |  |  |
| CA\_n260(2A-4O) | - | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | See CA\_n260(4O) Bandwidth Combination Fallback group 4 in table above | | | | | | | | | |  |  | 1600 |  |
| See CA\_n260(4O) Bandwidth Combination Fallback group 4 in table above | | | | | | | | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | |  |  |

Table 8.2-5: Supported bandwidth combinations for n260(A-P)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | NR CA configuration / Bandwidth combination set | | | | | | | | | | | | |
| **NR configuration** | **Uplink CA configurations** | Component carriers in order of increasing carrier frequency | | | | | | | | | | | **Maximum aggregated  bandwidth (MHz)** | **Fall-back group** |
|  |  | **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-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) | - | 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 above | | | | | | | | |  | 1000 |  |
| See CA\_n260(2p) Bandwidth Combination Fallback group 4 in table above | | | | | | | | See CA\_n260A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | |  |
| CA\_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 above | | | | | | | | | 1400 |  |
| See CA\_n260(2p) Bandwidth Combination Fallback group 4 in table above | | | | | | | See CA\_n260(2A) Bandwidth Combination in Table 5.5A.2-1 of 38.101-2 | | | |

Table 8.2-6: Supported bandwidth combinations for n260() CA (Max #CC ≤ 8)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | NR CA configuration / set | | | | | | | | | | | | | | | | | |
| **NR configuration** | **Uplink CA configurations** | Component carriers 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) | - | CA\_n260A | See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | | | | | |  | |  |  | |  | | |  | 800 |
| See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | | CA\_n260A | | | | |  | |  |  | |  | | |  |
| CA\_n260(2A-D) | - | CA\_n260(2A) [2] | | | See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | | | | | |  |  | |  | | |  | 1200 |
| See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | | CA\_n260(2A) [2] | | | | | | |  |  | |  | | |  |
| CA\_n260(A-D-O) | - | CA\_n260A | See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | | | | | | See CA\_n260O BCS 0 in Table 5.5A.1-2 [2] | | |  | |  | | |  | 1000 |
| See CA\_n260O BCS 0 in Table 5.5A.1-2 [2] | | | See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | | | | | | CA\_n260A |  | |  | | |  |
| CA\_n260(2A-D-O) | - | CA\_n260(2A) [2] | | | See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | | | | | | See CA\_n260O BCS 0 in Table 5.5A.1-2 [2] | | |  | | |  | 1400 |
| See CA\_n260O BCS 0 in Table 5.5A.1-2 [2] | | | See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | | | | | | CA\_n260(2A) [2] | | |  | | |  |
| CA\_n260(D-2O) | - | See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | | See CA\_n260(2O) in Table 5.5A.2-1 [2] | | | | | | | | | |  | | |  | 800 |
| See CA\_n260(2O) in Table 5.5A.2-1 [2] | | | | | | | | | | See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | |  | | |  |
| CA\_n260(A-D-2O) | - | CA\_n260A | See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | | | | | | See CA\_n260(2O) in Table 5.5A.2-1 [2] | | | | | | | |  | 1200 |
| See CA\_n260(2O) in Table 5.5A.2-1 [2] | | | | | | | | | | See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | | | | CA\_n260A |  |
| CA\_n260(2A-D-2O) | - | CA\_n260(2A) [2] | | | See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | | | | | | See CA\_n260(2O) in Table 5.5A.2-1 [2] | | | | | | | 1600 |
| See CA\_n260(2O) in Table 5.5A.2-1 [2] | | | | | | | | | | See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | | CA\_n260(2A) [2] | | | |
| CA\_n260(A-2D) | - | CA\_n260A | See CA\_n260(2D) in Table 8.1-x1 above | | | | | | | | | |  | |  | | |  | 1200 |
| See CA\_n260(2D) in Table 8.1-x1 above | | | | | | | | | CA\_n260A | |  | |  | | |  |
| CA\_n260(2A-2D) | - | CA\_n260(2A) [2] | | | See CA\_n260(2D) in Table 8.1-x1 above | | | | | | | | | |  | | |  | 1600 |
| See CA\_n260(2D) in Table 8.1-x1 above | | | | | | | | | CA\_n260(2A) [2] | | | |  | | |  |
| CA\_n260(A-P) | - | CA\_n260A | See CA\_n260P BCS 0 in Table 5.5A.1-2 [2] | | | | | | | |  | | |  |  | | |  | 700 |
| See CA\_n260P BCS 0 in Table 5.5A.1-2 [2] | | | | | | | CA\_n260A | |  | | |  |  | | |  |
| CA\_n260(2A-P) | - | CA\_n260(2A) [2] | | | See CA\_n260P BCS 0 in Table 5.5A.1-2 [2] | | | | | | | | |  |  | | |  | 1100 |
| See CA\_n260P BCS 0 in Table 5.5A.1-2 [2] | | | | | | CA\_n260(2A) [2] | | | | | |  |  | | |  |
| CA\_n260(A-2P) | - | CA\_n260A | | See CA\_n260(2P) in Table 5.5A.2-1 [2] | | | | | | | | | | | | | |  | 1000 |
| See CA\_n260(2P) in Table 5.5A.2-1 [2] | | | | | | | | | | | | | CA\_n260A | | |  |
| DC\_n260(2A-2P) | - | CA\_n260(2A) [2] | | | | See CA\_n260(2P) in Table 5.5A.2-1 [2] | | | | | | | | | | | | | 1400 |
| See CA\_n260(2P) in Table 5.5A.2-1 [2] | | | | | | | | | | | | | | CA\_n260(2A) [2] | | |
| CA\_n260(D-2G) | - | See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | | See CA\_n260(2G) in Table 5.5A.2-1 [2] | | | | | | | | | | |  | |  | 800 |
| See CA\_n260(2G) in Table 5.5A.2-1 [2] | | | | | | | | | | See CA\_n260D BCS 0 in Table 5.5A.1-2 [2] | | | |  | |  |
| CA\_n260(2D-O) | - | See CA\_n260(2D) in Table 8.1-x1 above | | | | | | | | | | See CA\_n260O BCS 0 in Table 5.5A.1-2 [2] | | | |  | |  | 1000 |
| See CA\_n260O BCS 0 in Table 5.5A.1-2 [2] | | | See CA\_n260(2D) in Table 8.1-x1 above | | | | | | | | | | |  | |  |
| CA\_n260(G-2O) | - | CA\_n260G BCS 0 in Table 5.5A.1-2 [2] | | | See CA\_n260(2O in Table 5.5A.2-1 [2] | | | | | | | | | | |  | |  | 600 |
| See CA\_n260(2O) in Table 5.5A.2-1 [2] | | | | | | | | | | See CA\_n260G BCS 0 in Table 5.5A.1-2 [2] | | | |  | |  |
| CA\_n260(2G-2O) | - | See CA\_n260(2G) in Table 5.5A.2-1 [2] | | | | | | | | | | See CA\_n260(2O) in Table 5.5A.2-1 [2] | | | | | | | 800 |
| See CA\_n260(2O in Table 5.5A.2-1 [2] | | | | | | | | | | See CA\_n260(2G) in Table 5.5A.2-1 [2] | | | | | | |
| CA\_n260(G-3O) | - | See CA\_n260G BCS 0 in Table 5.5A.1-2 [2] | | | See CA\_n260(3O) in Table 5.5A.2-1 [2] | | | | | | | | | | | | | | 800 |
| See CA\_n260(3O) in Table 5.5A.2-1 [2] | | | | | | | | | | | | | See CA\_n260G BCS 0 in Table 5.5A.1-2 [2] | | | |
| CA\_n260(3G-O) | - | See CA\_n260(3G) in Table 8.1-x1 above | | | | | | | | | | | | | See CA\_n260O BCS 0 in Table 5.5A.1-2 [2] | | | | 800 |
| See CA\_n260O BCS 0 in Table 5.5A.1-2 [2] | | | See CA\_n260(3G) in Table 8.1-x1 above | | | | | | | | | | | | | |
| CA\_n260(H-O) | - | See CA\_n260H BCS 0 in Table 5.5A.1-2 [2] | | | | | | | | See CA\_n260O BCS 0 in Table 5.5A.1-2 [2] | | |  | |  | | |  | 500 |
| See CA\_n260O BCS 0 in Table 5.5A.1-2 [2] | | | See CA\_n260H BCS 0 in Table 5.5A.1-2 [2] | | | | | | | |  | |  | | |  |
| CA\_n260(2H-O) | - | See CA\_n260(2H) in Table 5.5A.2-1 [2] | | | | | | | | | | | | | See CA\_n260O BCS 0 in Table 5.5A.1-2 [2] | | | | 800 |
| See CA\_n260O BCS 0 in Table 5.5A.1-2 [2] | | | | | See CA\_n260(2H) in Table 5.5A.2-1 [2] | | | | | | | | | | | |

Table 8.2-7: Supported bandwidth combinations for n260() CA (Max #CC ≤ 12)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | NR CA configuration / set | | | | | | | | | | | | | | | | | | |
| **NR configuration** | **Uplink CA configurations** | Component carriers 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) | | Channel bandwidths for carrier (MHz) | Channel bandwidths for carrier (MHz) | Channel bandwidths for carrier (MHz) | Channel bandwidths for carrier (MHz) |  |
| CA\_n260(3A-3O) | - | CA\_n260(3A) [2] | | | | See CA\_n260(3O) in Table 5.5A.2-1 [2] | | | | | | | | | | |  |  |  | 1800 |
| See CA\_n260(3O) in Table 5.5A.2-1 [2] | | | | | | | | | CA\_n260(3A) [2] | | | | | |  |  |  |
| CA\_n260(2G-3O) | - | See CA\_n260(2G) in Table 5.5A.2-1 [2] | | | | | See CA\_n260(3O) in Table 5.5A.2-1 [2] | | | | | | | | | | |  |  | 1000 |
| See CA\_n260(3O) in Table 5.5A.2-1 [2] | | | | | | | | | | See CA\_n260(2G) in Table 5.5A.2-1 [2] | | | | | |  |  |
| CA\_n260(G-4O) | - | See CA\_n260G BCS 0 in Table 5.5A.1-2 [2] | | | See CA\_n260(4O) in Table 5.5A.2-1 [2] | | | | | | | | | | | | |  |  | 1000 |
| See CA\_n260(4O) in Table 5.5A.2-1 [2] | | | | | | | | | | | See CA\_n260G BCS 0 in Table 5.5A.1-2 [2] | | | | |  |  |
| CA\_n260(2G-4O) | - | See CA\_n260(2G) in Table 5.5A.2-1 [2] | | | | | | See CA\_n260(4O) in Table 5.5A.2-1 [2] | | | | | | | | | | | | 1200 |
| See CA\_n260(4O) in Table 5.5A.2-1 [2] | | | | | | | | | | | | | See CA\_n260(2G) in Table 5.5A.2-1 [2] | | | | |
| CA\_n260(4G-O) | - | See CA\_n260(4G) in Table 8.1-x1 above | | | | | | | | | | | | | | See CA\_n260O BCS 0 in Table 5.5A.2-1 [2] | |  |  | 1000 |
| See CA\_n260O BCS 0 in Table 5.5A.2-1 [2] | | See CA\_n260(4G) in Table 8.1-x1 above | | | | | | | | | | | | | |  |  |

Table 8.2-8: Supported bandwidth combinations for n260(A-O) (Max #CC≤8)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **NR CA configuration / Bandwidth combination set** | | | | | | | | |  |
| **NR CA configuration** | Uplink CA configurations | **Component carriers in order of increasing carrier frequency** | | | | | | | | | Maximum aggregated  bandwidth [MHz] |
| **CBW for carrier (MHz)** | **CBW for carrier (MHz)** | | **CBW for carrier (MHz)** | **CBW for carrier (MHz)** | **CBW for carrier (MHz)** | **CBW for carrier (MHz)** | **CBW for carrier (MHz)** | **CBW for carrier (MHz)** |  |
| CA\_n260(3A-O-P) | n260A  CA\_n260O  CA\_n260P | See CA\_n261(3A) BCS0 in Table 5.5A.2-1 in [2] | | | | See CA\_n260O BCS0 in Table 5.5A.1-1 in [2] | | See CA\_n260P BCS0 in Table 5.5A.1-1 in [2] | | | 1700 |
| See CA\_n260P BCS0 in Table 5.5A.1-1 in [2] | | | | See CA\_n261(3A) BCS0 in Table 5.5A.2-1 in [2] | | | See CA\_n260O BCS0 in Table 5.5A.1-1 in [2] | |
| See CA\_n260O BCS0 in Table 5.5A.1-1 in [2] | | See CA\_n260P BCS0 in Table 5.5A.1-1 in [2] | | | | See CA\_n261(3A) BCS0 in Table 5.5A.2-1 in [2] | | |

Table 8.2-9: Supported bandwidth combinations for n260(A-P) (Max #CC≤8)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **NR CA configuration / Bandwidth combination set** | | | | | | | |  |
| **NR CA configuration** | Uplink CA configurations | **Component carriers in order of increasing carrier frequency** | | | | | | | | Maximum aggregated  bandwidth [MHz] |
| **CBW for carrier (MHz)** | **CBW for carrier (MHz)** | **CBW for carrier (MHz)** | **CBW for carrier (MHz)** | **CBW for carrier (MHz)** | **CBW for carrier (MHz)** | **CBW for carrier (MHz)** | **CBW for carrier (MHz)** |  |
| CA\_n260(A-P-Q) | n260A  CA\_n260P  CA\_n260Q | See n260A Channel Bandwidth in Table 5.3.5-1 in [2] | See CA\_n260P BCS0 in Table 5.5A.1-1 in [2] | | | See CA\_n260Q BCS0 in Table 5.5A.1-1 in [2] | | | | 1100 |
| See CA\_n260Q BCS0 in Table 5.5A.1-1 in [2] | | | | See n260A Channel Bandwidth in Table 5.3.5-1 in [2] | See CA\_n260P BCS0 in Table 5.5A.1-1 in [2] | | |
| See CA\_n260P BCS0 in Table 5.5A.1-1 in [2] | | | See CA\_n260Q BCS0 in Table 5.5A.1-1 in [2] | | | | See n260A Channel Bandwidth in Table 5.3.5-1 in [2] |

Table 8.2-10: Supported bandwidth combinations for n260() CA (Max #CC≤15)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | NR CA configuration / set | | | | | | | | | | | | | | | | | |
| **NR configuration** | **Uplink CA configurations** | Component carriers order of increasing carrier frequency | | | | | | | | | | | | | | | | | **Maximum aggregated  bandwidth (MHz)** |
|  |  | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | | | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** |  |
| CA\_n260(2A-2G-2O) | n260A | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | | See CA\_n260(2G) in Table 8.1-3 in [3] | | | | | | CA\_n260(2O) in Table 8.1-5 in [3] | | | |  |  |  |  |  | 1600 |
| See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | | | See CA\_n260(2G) in Table 8.1-3 in [3] | | | |  |  |  |  |  |
| See CA\_n260(2G) in Table 8.1-3 in [3] | | | | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | |  |  |  |  |  |
| CA\_n260(2A-4P) | n260A | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | | See CA\_n260(4P) in Table 8.1-6-1 above | | | | | | | | | | | | | |  | 2000 |
| See CA\_n260(4P) in Table 8.1-6-1 above | | | | | | | | | | | | | | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | |  |
| CA\_n260(2A-2O-2Q) | n260A | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | | See CA\_n260(2Q) in Table 8.1-x-2 above | | | | | | | |  | 2000 |
| See CA\_n260(2Q) in Table 8.1-x-2 above | | | | | | | | | | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | |  |
| See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | See CA\_n260(2Q) in Table 8.1-x-2 above | | | | | | | | | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | |  |
| CA\_n260(4A-2Q) | n260A | See CA\_n260(4A) in Table 5.5A.2-1 in [2] | | | | See CA\_n260(2Q) in Table 8.1-x-2 above | | | | | | | | | |  |  |  | 2400 |
| See CA\_n260(2Q) in Table 8.1-x-2 above | | | | | | | | | | See CA\_n260(4A) in Table 5.5A.2-1 in [2] | | | |  |  |  |
| CA\_n260(2A-2O-2P) | n260A | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | | See CA\_n260(2P) in Table 8.1-6 in [3] | | | | | |  |  |  | 1800 |
| See CA\_n260(2P) in Table 8.1-6 in [3] | | | | | | | | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | |  |  |  |
| See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | See CA\_n260(2P) in Table 8.1-6 in [3] | | | | | | | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | |  |  |  |
| CA\_n260(4A-4O) | n260A | See CA\_n260(4A) in Table 5.5A.2-1 in [2] | | | | See CA\_n260(4O) in Table 8.1-5 in [3] | | | | | | | | | |  |  |  | 2400 |
| See CA\_n260(4O) in Table 8.1-5 in [3] | | | | | | | | | | See CA\_n260(4A) in Table 5.5A.2-1 in [2]) | | | |  |  |  |
| CA\_n260(6A-2O) | n260A | See CA\_n260(6A) in Table 8.1-1 in [3] | | | | | | | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | |  |  |  |  |  | 24501 |
| See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | See CA\_n260(6A) in Table 8.1-1 in [3] | | | | | | |  |  |  |  |  |
| CA\_n260(6A-3O) | n260A | See CA\_n260(6A) in Table 8.1-1 in [3] | | | | | | | | See CA\_n260(3O) in Table 8.1-5 in [3] | | | | | |  |  |  | 26001 |
| See CA\_n260(3O) in Table 8.1-5 in [3] | | | | | | | | See CA\_n260(6A) in Table 8.1-1 in [3] | | | | | |  |  |  |
| CA\_n260(6A-2P) | n260A | See CA\_n260(6A) in Table 8.1-1 in [3] | | | | | | | | See CA\_n260(2P) in Table 8.1-6 in [3] | | | | | |  |  |  | 26501 |
| See CA\_n260(2P) in Table 8.1-6 in [3] | | | | | | | | See CA\_n260(6A) in Table 8.1-1 in [3] | | | | | |  |  |  |
| CA\_n260(8A-2O) | n260A | See CA\_n260(8A) in Table 8.1-1 in [3] | | | | | | | | | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | |  |  |  | 25501 |
| See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | See CA\_n260(8A) in Table 8.1-1 in [3] | | | | | | | | |  |  |  |
| CA\_n260(2O-2P) | n260A | See CA\_n260(2O) in Table 8.1-5 in [3] | | | | See CA\_n260(2P) in Table 8.1-6 in [3] | | | | | | | |  |  |  |  |  | 1000 |
| See CA\_n260(2P) in Table 8.1-6 in [3] | | | | | | | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | |  |  |  |  |  |
| Note 1: The maximum bandwidth of band n260 is 3000MHz and a non-contiguous gap is in between NR component carriers | | | | | | | | | | | | | | | | | | | |

Table 8.2-11: Supported bandwidth combinations for n260() CA (Max #CC≤15)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | NR CA configuration / set | | | | | | | | | | | | | | | | | |
| **NR configuration** | **Uplink CA configurations** | Component carriers order of increasing carrier frequency | | | | | | | | | | | | | | | | | **Maximum aggregated  bandwidth (MHz)** |
|  |  | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | | | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** | **CBW for carrier**  **(MHz)** |  |
| CA\_n260(2A-2G-2O) | n260A | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | | See CA\_n260(2G) in Table 8.1-3 in [3] | | | | | | CA\_n260(2O) in Table 8.1-5 in [3] | | | |  |  |  |  |  | 1600 |
| See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | | | See CA\_n260(2G) in Table 8.1-3 in [3] | | | |  |  |  |  |  |
| See CA\_n260(2G) in Table 8.1-3 in [3] | | | | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | |  |  |  |  |  |
| CA\_n260(2A-4P) | n260A | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | | See CA\_n260(4P) in Table 8.1-6-1 above | | | | | | | | | | | | | |  | 2000 |
| See CA\_n260(4P) in Table 8.1-6-1 above | | | | | | | | | | | | | | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | |  |
| CA\_n260(2A-2O-2Q) | n260A | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | | See CA\_n260(2Q) in Table 8.1-x-2 above | | | | | | | |  | 2000 |
| See CA\_n260(2Q) in Table 8.1-x-2 above | | | | | | | | | | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | |  |
| See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | See CA\_n260(2Q) in Table 8.1-x-2 above | | | | | | | | | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | |  |
| CA\_n260(4A-2Q) | n260A | See CA\_n260(4A) in Table 5.5A.2-1 in [2] | | | | See CA\_n260(2Q) in Table 8.1-x-2 above | | | | | | | | | |  |  |  | 2400 |
| See CA\_n260(2Q) in Table 8.1-x-2 above | | | | | | | | | | See CA\_n260(4A) in Table 5.5A.2-1 in [2] | | | |  |  |  |
| CA\_n260(2A-2O-2P) | n260A | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | | See CA\_n260(2P) in Table 8.1-6 in [3] | | | | | |  |  |  | 1800 |
| See CA\_n260(2P) in Table 8.1-6 in [3] | | | | | | | | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | |  |  |  |
| See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | See CA\_n260(2P) in Table 8.1-6 in [3] | | | | | | | See CA\_n260(2A) BCS0 in Table 5.5A.2-1 in [2] | |  |  |  |
| CA\_n260(4A-4O) | n260A | See CA\_n260(4A) in Table 5.5A.2-1 in [2] | | | | See CA\_n260(4O) in Table 8.1-5 in [3] | | | | | | | | | |  |  |  | 2400 |
| See CA\_n260(4O) in Table 8.1-5 in [3] | | | | | | | | | | See CA\_n260(4A) in Table 5.5A.2-1 in [2]) | | | |  |  |  |
| CA\_n260(6A-2O) | n260A | See CA\_n260(6A) in Table 8.1-1 in [3] | | | | | | | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | |  |  |  |  |  | 24501 |
| See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | See CA\_n260(6A) in Table 8.1-1 in [3] | | | | | | |  |  |  |  |  |
| CA\_n260(6A-3O) | n260A | See CA\_n260(6A) in Table 8.1-1 in [3] | | | | | | | | See CA\_n260(3O) in Table 8.1-5 in [3] | | | | | |  |  |  | 26001 |
| See CA\_n260(3O) in Table 8.1-5 in [3] | | | | | | | | See CA\_n260(6A) in Table 8.1-1 in [3] | | | | | |  |  |  |
| CA\_n260(6A-2P) | n260A | See CA\_n260(6A) in Table 8.1-1 in [3] | | | | | | | | See CA\_n260(2P) in Table 8.1-6 in [3] | | | | | |  |  |  | 26501 |
| See CA\_n260(2P) in Table 8.1-6 in [3] | | | | | | | | See CA\_n260(6A) in Table 8.1-1 in [3] | | | | | |  |  |  |
| CA\_n260(8A-2O) | n260A | See CA\_n260(8A) in Table 8.1-1 in [3] | | | | | | | | | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | |  |  |  | 25501 |
| See CA\_n260(2O) in Table 8.1-5 in [3] | | | | | See CA\_n260(8A) in Table 8.1-1 in [3] | | | | | | | | |  |  |  |
| CA\_n260(2O-2P) | n260A | See CA\_n260(2O) in Table 8.1-5 in [3] | | | | See CA\_n260(2P) in Table 8.1-6 in [3] | | | | | | | |  |  |  |  |  | 1000 |
| See CA\_n260(2P) in Table 8.1-6 in [3] | | | | | | | | See CA\_n260(2O) in Table 8.1-5 in [3] | | | |  |  |  |  |  |
| Note 1: The maximum bandwidth of band n260 is 3000MHz and a non-contiguous gap is in between NR component carriers | | | | | | | | | | | | | | | | | | | |

## 8.3 Intra band non-contiguous CA configurations n261

Table 8.3-1: Supported bandwidth combinations for n261(H) and n261(I)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **NR CA configuration / Bandwidth combination set** | | | | | | | | | |
|  |  |  | **Component carriers in order of increasing carrier frequency** | | | | | | | |  |  |
| NR configuration | Uplink CA configurations | SCS | 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) | Maximum aggregated  bandwidth (MHz) | Fall-back group |
| CA\_n261(2H) | - | 60 | 100 | 100 | 50, 100 | 100 | 100 | 50, 100 |  |  | 600 | 3 |
| 120 | 100 | 100 | 50, 100 | 100 | 100 | 50, 100 |  |  | 600 |
| CA\_n261(2I) | - | 60 | 100 | 100 | 100 | 50, 100 | 100 | 100 | 100 | 50, 100 | 800 | 3 |
| 120 | 100 | 100 | 100 | 50, 100 | 100 | 100 | 100 | 50, 100 | 800 |

Table 8.3-2: Supported bandwidth combinations for n261(D)

|  |  |  | NR CA configuration / Bandwidth combination set | | | | | | | | | | | | | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configurations | SCS | Component carriers in order of increasing carrier frequency | | | | | | | | | | | | | | Aggregated  BW (MHz) | Fallback group |
| CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) |
| CA\_n261(2D) | n261A | 60 | 50, 100, 200 | 200 | 50, 100, 200 | 200 |  |  |  |  |  |  |  |  |  |  | 800 | 2 |
| 120 | 200 | 50, 100, 200 | 200 | 50, 100, 200 |  |  |  |  |  |  |  |  |  |  | 800 |

Table 8.3-3: Supported bandwidth combinations for n261(G)

|  |  |  | NR CA configuration / Bandwidth combination set | | | | | | | | | | | | | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configurations | SCS | Component carriers in order of increasing carrier frequency | | | | | | | | | | | | | | Aggregated  BW (MHz) | Fallback group |
| CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) |
| CA\_n261(2G) | n261A | 60 | 100 | 50, 100 | 100 | 50, 100 |  |  |  |  |  |  |  |  |  |  | 400 | 3 |
| 120 | 50, 100 | 100 | 50, 100 | 100 |  |  |  |  |  |  |  |  |  |  | 400 |
| CA\_n261(3G) | n261A | 60 | 100 | 50, 100 | 100 | 50, 100 | 100 | 50, 100 |  |  |  |  |  |  |  |  | 600 | 3 |
| 120 | 50, 100 | 100 | 50, 100 | 100 | 50, 100 | 100 |  |  |  |  |  |  |  |  | 600 |
| CA\_n261(4G) | n261A | 60 | 100 | 50, 100 | 100 | 50, 100 | 100 | 50, 100 | 100 | 50, 100 |  |  |  |  |  |  | 7001 | 3 |
| 120 | 50, 100 | 100 | 50, 100 | 100 | 50, 100 | 100 | 50, 100 | 100 |  |  |  |  |  |  | 7001 |
| Note 1: The maximum bandwidth of band n261 is 850MHz and a non-contiguous gap is in between NR component carriers | | | | | | | | | | | | | | | | | | |

Table 8.3-x-3: Supported bandwidth combinations for n261(O)

|  |  |  | NR CA configuration / Bandwidth combination set | | | | | | | | | | | | | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configurations | SCS | Component carriers in order of increasing carrier frequency | | | | | | | | | | | | | | Aggregated  BW (MHz) | Fallback group |
| CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) |
| CA\_n261(2O) | n261A | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  |  |  |  |  | 400 | 4 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  |  |  |  |  | 400 |
| CA\_n261(4O) | n261A | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 7001 | 4 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 |  |  |  |  |  |  | 7001 |
| CA\_n261(7O) | n261A | 60 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 5501 | 4 |
| 120 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 50, 100 | 5501 |
| Note 1: The maximum bandwidth of band n261 is 850MHz and a non-contiguous gap is in between NR component carriers | | | | | | | | | | | | | | | | | | |

Table 8.3-x-4: Supported bandwidth combinations for n261(P)

|  |  |  | NR CA configuration / Bandwidth combination set | | | | | | | | | | | | | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configurations | SCS | Component carriers in order of increasing carrier frequency | | | | | | | | | | | | | | Aggregated  BW (MHz) | Fallback group |
| CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) |
| CA\_n261(2P) | n261A | 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 |

Table 8.3-x-5: Supported bandwidth combinations for n261(Q)

|  |  |  | NR CA configuration / Bandwidth combination set | | | | | | | | | | | | | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration | Uplink CA configurations | SCS | Component carriers in order of increasing carrier frequency | | | | | | | | | | | | | | Aggregated  BW (MHz) | Fallback group |
| CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) | CBW (MHz) |
| CA\_n261(2Q) | n261A | 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 |

## 8.4 Intra band non-contiguous CA fallback groups n261

Table 8.4-1: Supported bandwidth combinations for n261(A-H) and n261(A-I)

|  |  | NR CA configuration / Bandwidth combination set | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR configuration | Uplink CA configurations  (NOTE 1) | Component carriers in order of increasing carrier frequency | | | | | | | | | | Maximum aggregated  bandwidth (MHz) | Fall-back group |
|  |  | 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\_n261(A-H) | - | See CA\_n261A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n261H Bandwidth Combination Fallback group 2 in Table 5.5A.1-2 of 38.101-2 | | | | |  |  |  |  | 700 |  |
| See CA\_n261H 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-I) | - | See CA\_n261A Bandwidth Combination in Table 5.3A.4-1 of 38.101-2 | See CA\_n261I Bandwidth Combination Fallback group 3 in Table 5.5A.1-2 of 38.101-2 | | | | | |  |  |  | 800 |  |
| See CA\_n261I 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 | |  |  |  |

Table 8.4-2: Supported bandwidth combinations for n261()

|  |  | NR CA configuration / set | | | | | | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR configuration | Uplink CA configurations  (NOTE 1) | Component carriers 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\_n261(A-D) | - | CA\_n261A | | See CA\_n261D BCS 0 in Table 5.5A.1-2 [2] | | | |  | | |  | | | | |  |  | | |  | 800 |
| See CA\_n261D BCS 0 in Table 5.5A.1-2 [2] | | | CA\_n261A | | |  | | |  | | | | |  |  | | |  |
| CA\_n261(A-G) | - | CA\_n261A | | See CA\_n261G BCS 0 in Table 5.5A.1-2 [2] | | | |  | | |  | | | | |  |  | | |  | 600 |
| See CA\_n261G BCS 0 in Table 5.5A.1-2 [2] | | | | CA\_n261A | |  | | |  | | | | |  |  | | |  |
| CA\_n261(G-I) | - | See CA\_n261G BCS 0 in Table 5.5A.1-2 [2] | | | | See CA\_n261I BCS 0 in Table 5.5A.1-2 [2] | | | | | | | | | | |  | | |  | 600 |
| See CA\_n261I BCS 0 in Table 5.5A.1-2 [2] | | | | | | | | See CA\_n261G BCS 0 in Table 5.5A.1-2 [2] | | | | | | |  | | |  |
| CA\_n261(H-I) | - | See CA\_n261H BCS 0 in Table 5.5A.1-2 [2] | | | | | | See CA\_n261I BCS 0 in Table 5.5A.1-2 [2] | | | | | | | | | | | |  | 700 |
| See CA\_n261I BCS 0 in Table 5.5A.1-2 [2] | | | | | | | See CA\_n261H BCS 0 in Table 5.5A.1-2 [2] | | | | | | | | | | |  |
| CA\_n261(G-H) | - | See CA\_n261G BCS 0 in Table 5.5A.1-2 [2] | | | | See CA\_n261H BCS 0 in Table 5.5A.1-2 [2] | | | | | | | | | |  |  | | |  | 500 |
| See CA\_n261H BCS 0 in Table 5.5A.1-2 [2] | | | | | See CA\_n261G BCS 0 in Table 5.5A.1-2 [2] | | | | | | | | |  |  | | |  |
| CA\_n261(A-D-H) | - | CA\_n261A | | See CA\_n261D BCS 0 in Table 5.5A.1-2 [2] | | | | See CA\_n261H BCS 0 in Table 5.5A.1-2 [2] | | | | | | | | |  | | |  | 7501 |
| See CA\_n261H BCS 0 in Table 5.5A.1-2 [2] | | | | | | See CA\_n261D BCS 0 in Table 5.5A.1-2 [2] | | | | | | CA\_n261A | | |  | | |  |
| CA\_n261(A-G-H) | - | CA\_n261A | | See CA\_n261G BCS 0 in Table 5.5A.1-2 [2] | | | | See CA\_n261H BCS 0 in Table 5.5A.1-2 [2] | | | | | | | | |  | | |  | 7001 |
| See CA\_n261H BCS 0 in Table 5.5A.1-2 [2] | | | | | | See CA\_n261G BCS 0 in Table 5.5A.1-2 [2] | | | | | | | CA\_n261A | |  | | |  |
| CA\_n261(A-G-I) | - | CA\_n261A | | See CA\_n261G BCS 0 in Table 5.5A.1-2 [2] | | | | See CA\_n261I BCS 0 in Table 5.5A.1-2 [2] | | | | | | | | | | | |  | 7001 |
| See CA\_n261I BCS 0 in Table 5.5A.1-2 [2] | | | | | | | | | | See CA\_n261G BCS 0 in Table 5.5A.1-2 [2] | | | | | | CA\_n261A | |  |
| CA\_n261(A-H-I) | - | CA\_n261A | | See CA\_n261H BCS 0 in Table 5.5A.1-2 [2] | | | | | | | | | See CA\_n261I BCS 0 in Table 5.5A.1-2 [2] | | | | | | | | 7501 |
| See CA\_n261I BCS 0 in Table 5.5A.1-2 [2] | | | | | | | | | | | See CA\_n261H BCS 0 in Table 5.5A.1-2 [2] | | | | | | CA\_n261A | |
| CA\_n261(A-2H) |  | CA\_n261A | See CA\_n261(2H) in Table 5.5A.1-2 [2] | | | | | | | | | | | | | | | |  | | 7001 |
| See CA\_n261(2H) in Table 5.5A.1-2 [2] | | | | | | | | | | | | | | | | CA\_n261A |  | |
| Note 1: The maximum bandwidth of band n261 is 850MHz and a non-contiguous gap is between NR component carriers | | | | | | | | | | | | | | | | | |  | | | |

Table 8.4-3: Supported bandwidth combinations for n26() CA (Max #CC ≤ 12)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | NR CA configuration / set | | | | | | | | | | | | | | | | |
| **NR configuration** | **Uplink CA configurations** | Component carriers 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) | Channel bandwidths for carrier (MHz) | | Channel bandwidths for carrier (MHz) | | Channel bandwidths for carrier (MHz) | | Channel bandwidths for carrier (MHz) | |  |
| CA\_n261(A-2I) | - | CA\_n261A | See CA\_n261(2I) in Table 8.3-x1 above | | | | | | | |  | |  | |  | | 7501 | |
| See CA\_n261(2I) in Table 8.3-x1 above | | | | | | | | CA\_n261A |  | |  | |  | |
| Note 1: The maximum bandwidth of band n261 is 850MHz and a non-contiguous gap is between NR component carriers | | | | | | | | | | | | | | | | | | |

Table 8.4-4: Supported bandwidth combinations for n261() CA (Max #CC≤ 15)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | NR CA configuration / set | | | | | | | | | | | | | | | | |
| **NR configuration** | **Uplink CA configurations** | Component carriers order of increasing carrier frequency | | | | | | | | | | | | | | | | **Maximum aggregated  bandwidth (MHz)** |
|  |  | **CBW** for carrier  (MHz) | **CBW** for carrier  (MHz) | | **CBW** for carrier  (MHz) | **CBW** for carrier  (MHz) | **CBW** for carrier  (MHz) | **CBW** for carrier  (MHz) | **CBW** for carrier  (MHz) | **CBW** for carrier  (MHz) | **CBW** for carrier  (MHz) | **CBW** for carrier  (MHz) | **CBW** for carrier  (MHz) | **CBW** for carrier  (MHz) | **CBW** for carrier  (MHz) | **CBW** for carrier  (MHz) | **CBW** for carrier  (MHz) |  |
| CA\_n261(A-2D) | n261A | See n261A in Table 5.3A.4-1 in [2] | | See CA\_n261(2D) in Table 8.3-x-1 above | | | |  |  |  |  |  |  |  |  |  |  | 7501 |
| See CA\_n261(2D) in Table 8.3-x-1 above | | | | | See n261A in Table 5.3A.4-1 in [2] |  |  |  |  |  |  |  |  |  |  |
| CA\_n261(A-2G-2O) | n261A | See n261A in Table 5.3A.4-1 in [2] | | CA\_n261(2G) in Table 8.3-x-2 above | | | | See CA\_n261(2O) in Table 8.3-x-3 above | | | |  |  |  |  |  |  | 6501 |
| See CA\_n261(2O) in Table 8.3-x-3 above | | | | | See n261A in Table 5.3A.4-1 in [2] | CA\_n261(2G) in Table 8.3-x-2 above | | | |  |  |  |  |  |  |
| CA\_n261(2G) in Table 8.3-x-2 above | | | | | See CA\_n261(2O) in Table 8.3-x-3 above | | | | See n261A in Table 5.3A.4-1 in [2] |  |  |  |  |  |  |
| CA\_n261(A-3G-O) | n261A | See n261A in Table 5.3A.4-1 in [2] | | See CA\_n261(3G) in Table 8.3-x-2 above | | | | | | See CA\_n261O in Table 5.5A.1-1 in [2] | |  |  |  |  |  |  | 6501 |
| See CA\_n261O in Table 5.5A.1-1 in [2] | | | See n261A in Table 5.3A.4-1 in [2] | See CA\_n261(3G) in Table 8.3-x-2 above | | | | | |  |  |  |  |  |  |
| See CA\_n261(3G) in Table 8.3-x-2 above | | | | | | | See CA\_n261O in Table 5.5A.1-1 in [2] | | See n261A in Table 5.3A.4-1 in [2] |  |  |  |  |  |  |
| CA\_n261(A-4G) | n261A | See n261A in Table 5.3A.4-1 in [2] | | See CA\_n261(4G) in Table 8.3-x-2 above | | | | | | | |  |  |  |  |  |  | 6501 |
| See CA\_n261(4G) in Table 8.3-x-2 above | | | | | | | | | See n261A in Table 5.3A.4-1 in [2] |  |  |  |  |  |  |
| CA\_n261(A-4O) | n261A | See n261A in Table 5.3A.4-1 in [2] | | See CA\_n261(4O) in Table 8.3-x-3 above | | | | | | | |  |  |  |  |  |  | 6501 |
| See CA\_n261(4O) in Table 8.3-x-3 above | | | | | | | | | See n261A in Table 5.3A.4-1 in [2] |  |  |  |  |  |  |
| CA\_n261(A-7O) | n261A | See n261A in Table 5.3A.4-1 in [2] | | See CA\_n261(7O) in Table 8.3-x-3 above | | | | | | | | | | | | | | 5001 |
| See CA\_n261(7O) in Table 8.3-x-3 above | | | | | | | | | | | | | | | See n261A in Table 5.3A.4-1 in [2] |
| CA\_n261(A-2P) | n261A | See n261A in Table 5.3A.4-1 in [2] | | See CA\_n261(2P) in Table 8.3-x-4 above | | | | | |  |  |  |  |  |  |  |  | 7501 |
| See CA\_n261(2P) in Table 8.3-x-4 above | | | | | | | See n261A in Table 5.3A.4-1 in [2] |  |  |  |  |  |  |  |  |
| CA\_n261(A-2Q) | n261A | See n261A in Table 5.3A.4-1 in [2] | | See CA\_n261(2Q) in Table 8.3-x-5 above | | | | | | | |  |  |  |  |  |  | 7501 |
| See CA\_n261(2Q) in Table 8.3-x-5 above | | | | | | | | | See n261A in Table 5.3A.4-1 in [2] |  |  |  |  |  |  |
| CA\_n261(A-D-2O) | n261A | See n261A in Table 5.3A.4-1 in [2] | | See CA\_n261D in Table 5.5A.1-2 in [2] | | See CA\_n261(2O) in Table 8.3-x-3 above | | | |  |  |  |  |  |  |  |  | 7001 |
| See CA\_n261(2O) in Table 8.3-x-3 above | | | | | See n261A in Table 5.3A.4-1 in [2] | See CA\_n261D in Table 5.5A.1-2 in [2] | |  |  |  |  |  |  |  |  |
| See CA\_n261D in Table 5.5A.1-2 in [2] | | | See CA\_n261(2O) in Table 8.3-x-3 above | | | | See n261A in Table 5.3A.4-1 in [2] |  |  |  |  |  |  |  |  |
| Note 1: The maximum bandwidth of band n261 is 850MHz and a non-contiguous gap is in between NR component carriers | | | | | | | | | | | | | | | | | | |

# Annex A: Change history

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Change history** | | | | | | | |
| **Date** | **TSG #** | **TSG Doc.** | **CR** | **Rev** | **Subject/Comment** | **Old** | **New** |
| 2018-08 | 3GPP RAN4 #88 | R4-1810381 |  |  | Initial TR skeleton |  | 0.0.1 |
| 2018-10 | 3GPP RAN4 #88bis | R4-1812779 |  |  | Implemented TP´s from RAN4 #88:  R4-1811433, “TP for TR38.716-01-01: Requirements for CA\_n66(2A) and CA\_n66B”, Dish Network  R4-1811441, “TP for TR 38.716-01-01 NR Intra-band n260 CA”, Verizon UK Ltd  R4-1811442, “TP for TR 38.716-01-01 NR Intra-band n261 CA”, Verizon UK Ltd | 0.0.1 | 0.1.0 |
| 2018-11 | 3GPP RAN4 #89 | R4-1815794 |  |  | Implemented TP´s from RAN4 #88bis:  R4-1812078, “draft CR to introduce BCS for CA\_n71B”, T-Mobile USA Inc.  R4-1813789, “TP for TR 38.716-01-01 for CA\_n71B”, Ericsson, T-Mobile US  R4-1812347. “TP for TR 38.716-01-01 NR Intra-band n260 and n261 CA”, Verizon UK Ltd | 0.1.0 | 0.2.0 |
| 2019-02 | 3GPP RAN4 #90 | R4-1901416 |  |  | Implemented TP´s from RAN4 #89:  R4-1814927, “TP for TR 38.716-01-01 for CA\_2DL\_n41C\_1UL\_n41A”, Huawei, HiSilicon  R4-1816172, “TP for TR 38.716-01-01 for CA\_2DL\_n41(2A)\_1UL\_n41A”, Huawei, HiSilicon  R4-1815066, “TP for TR 37.716-01-01 CA\_n257\_UL\_n257”, NTT DOCOMO, INC.  R4-1815821, “TP for 38 716-01-01 for Intra-band CA\_n258B - CA\_n258M”, Ericsson, Telstra | 0.2.0 | 0.3.0 |
| 2019-04 | 3GPP RAN4 #90bis | R4-1904402 |  |  | Implemented TP´s from RAN4 #90:  R4-1901419, “TP for 38.716-01-01 for updated scope from RAN #82”, Ericsson  R4-1901422, “TP for TR 38.716-01-01 for symbols and abbreviations”, Ericsson  R4-1902123, “NR Intra-band non-contiguous CA n260 and n261”, Verizon, Ericsson | 0.3.0 | 0.4.0 |
| 2019-05 | 3GPP RAN4 #91 | R4-1906734 |  |  | Implemented TP´s from RAN4 #90bis:  R4-1904404, “TP for 38.716-01-01 for updated scope from RAN #83”, Ericsson  R4-1903187, “Updated TP for TR 38.716-01-01 for DL\_n41(2A)\_UL\_n41A”, Huawei, HiSilicon  R4-1904540, “TP for TR 38.716-01-01: CA\_n25(2A)”, Sprint Corporation | 0.4.0 | 0.5.0 |
| 2019-08 | 3GPP RAN4 #92 | R4-1909784 |  |  | Implemented TP´s from RAN4 #91:  R4-1907464, “TP for TR 38.716-01-01: CA\_n48B and CA\_n48C”, Samsung  R4-1905414, “TP for TR 38.716-01-01: CA\_n48(2A)”, Samsung | 0.5.0 | 0.6.0 |
| 2019-10 | 3GPP RAN4 #92bis | R4-1912234 |  |  | Implemented TP´s from RAN4 #92:  R4-1910204, “TP for TR 38.716-01-01 for updated scope from RAN #84”, Ericsson  R4-1910298, “TP for 38.716-01-01 CA\_n25(2A) REFSENS”, Sprint Corporation  R4-1908935, “TP for TR 38.716-01-01: DL\_n1B\_UL\_n1A”, Huawei, HiSilicon  R4-1909895, “TP for 38.716-01-01: CA\_n41C and CA\_n41(2A) BCS1”, Sprint Corporation | 0.6.0 | 0.7.0 |
| 2019-11 | 3GPP RAN4 #93 | R4-1914682 |  |  | Implemented TP´s from RAN4 #92bis:  R4-1912236, “TP for TR 38.716-01-01 for updated scope from RAN #85”, Ericsson  R4-1911471, “TP for TR 38.716-01-01: DL\_n3(2A)\_UL\_n3A”, Huawei, HiSilicon  R4-1912612, “TP for TR 38.716-01-01: DL\_n7(2A)\_UL\_n7A”, Huawei, HiSilicon  R4-1912278, “TP for TR 38.716-01-01 to include CA\_n7B”, Ericsson, Telstra  R4-1912564, “TP for TR 38 716-01-01 to include UL n258B - n258M”, Ericsson, Telstra | 0.7.0 | 0.8.0 |
| 2020-02 | 3GPP RAN4 #94 | R4-2001502 |  |  | Implemented TP´s from RAN4 #93:  [R4-1914300](file:///D:\RAN4\TSGRAN4_93\Docs\R4-1914300.zip), “updated TP for TR 38.716-01-01: DL\_n3(2A)\_UL\_n3A”, Huawei, HiSilicon  [R4-1915632](file:///D:\RAN4\TSGRAN4_93\Docs\R4-1915632.zip), “TP for TR 38.716-01-01 to include CA\_n7B UL”, Ericsson, Telstra | 0.8.0 | 0.9.0 |
| 2020-04 | 3GPP RAN4 #94 bis | R4-2004576 |  |  | Implemented TP´s from RAN4 #94:  R4-2001506, “TP for TR 38.716-01-01 for updated scope from RAN #86”, Ericsson | 0.9.0 | 0.10.0 |
| 2020-05 | 3GPP RAN4 #95 | R4-2005867 |  |  | Implemented TP´s from RAN4 #94bis:  R4-2004579, “TP for TR 38.716-01-01 for updated scope from RAN #87”, Ericsson  R4-2003159, “TP for TR 38.716-01-01: CA\_n41B\_UL\_n41B”, Samsung, KDDI  R4-2005137, “TP for TR 38.716-01-01 for CA\_n48(3A) and CA\_n48(4A)”, Charter Communications, Inc  R4-2005144, “Updated TP for TR 38.716-01-01: to add BCS1 for CA\_n71B”, Huawei, HiSilicon, CITC  R4-2005725, “TP on Inclusion of NR-U standalone combinations in TR 38 716-01-01”, Ericsson | 0.10.0 | 0.11.0 |
| 2020-06 | 3GPP RAN4 #95 | R4-2006045 |  |  | No TP’s implemented. Just an update of version number to align with 3GU database. | 0.11.0 | 0.12.0 |
| 2020-06 | 3GPP RAN #88 | RP-200660 |  |  | No TP’s implemented. Presented for approval at RAN plenary. | 0.12.0 | 1.0.0 |

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| **Change history** | | | | | | | |
| **Date** | **Meeting** | **TDoc** | **CR** | **Rev** | **Cat** | **Subject/Comment** | **New version** |
| 2020-06 | RAN#88 |  |  |  |  | Approved by plenary – Rel-16 spec under change control | 16.0.0 |