**3GPP TSG-RAN WG4 Meeting # 99-e Rev. 2 of R4-2110699**

**Electronic Meeting, May. 19-27, 2021**

**Title: TP to TR 38.717-04-02: Addition of UL CA for CA\_n25-n41-n71-n77**

**Source: Nokia, T-Mobile USA**

**Agenda item: 8.14.2**

**Document for: Approval**

# 1 Introduction

This is a TP to TR 38.717-04-01 to add CA\_n25A-n41(A/C/2A)-n71A-n77A with 2UL

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Start of TP\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

## 5.2.x CA\_n25-n41-n71-n77

5.2. x.1 Operating bands for CA

Table 5.2.x-1: Inter-band CA operating bands of CA\_n25-n41-n71-n77

|  |  |
| --- | --- |
| NR CA Band | NR Band(Table 5.2-1 in TS38.101-1[2]) |
| CA\_n25-n41-n71-n77 | n25, n41, n71, n77 |

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|  |  |  |  |  |  |  |  |

CA\_n25A-n41A 2UL defined in 38.101-1 Table 5.5A.3.1-1

CA\_n25A-n71A 2UL defined in 38.101-1 Table 5.5A.3.1-1

CA\_n25A-n77A 2UL defined in 38.101-1 Table 5.5A.3.1-1

CA\_n41A-n71A 2UL defined in 38.101-1 Table 5.5A.3.1-1

CA\_n41A-n77A 2UL defined in 38.101-1 Table 5.5A.3.1-1

CA\_n71A-n77A 2UL defined in 38.101-1 Table 5.5A.3.1-1

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#### 5.2.x.2 Channel bandwidths per operating band for CA

Table 5.2.x.2-1: Supported bandwidths per CA\_n25-n41-n71-n77

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **NR CA Configuration** | **UL Config** | **NR Band** | **5** | **10** | **15** | **20** | **25** | **30** | **40** | **50** | **60** | **70** | **80** | **90** | **100** | **Bandwidth combination set** |
| CA\_n25A-n41A-n71A-n77A | CA\_n25A-n41ACA\_n25A-n71ACA\_n25A-n77ACA\_n41A-n71ACA\_n41A-n77ACA\_n71A-n77A | n25 | 5 | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  | 0 |
| n41 |  | 10 | 15 | 20 |  | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| n71 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n77 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| CA\_n25A-n41C-n71A-n77A | CA\_n25A-n41ACA\_n25A-n71ACA\_n25A-n77ACA\_n41A-n71ACA\_n41A-n77ACA\_n71A-n77A | n25 | 5 | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  | 0 |
| n41 | See CA\_n41C bandwidth combination set 1 in Table 5.5A.1-1 |
| n71 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n77 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| CA\_n25A-n41(2A)-n71A-n77A | CA\_n25A-n41ACA\_n25A-n71ACA\_n25A-n77ACA\_n41A-n71ACA\_n41A-n77ACA\_n71A-n77A | n25 | 5 | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  | 0 |
| n41 | See CA\_n41(2A) bandwidth combination set 1 in Table 5.5A.2-1 |
| n71 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n77 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

### This table is a continuation of the Table 5.8.2-1 in 3GPP TR 38.717-04-01 V0.4.0 (2021-04), but an error was spotted in the table as highlighted below

Table 5.8.2-1: Supported channel bandwidths per CA configuration for 4DL inter-band CA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **NR CA Configuration** | **UL Config** | **NR Band** | **5** | **10** | **15** | **20** | **25** | **30** | **40** | **50** | **60** | **70** | **80** | **90** | **100** | **Bandwidth combination set** |
| CA\_n25A-n41A-n71A-n77A | - | n25 | 5 | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  | 0 |
| n41 |  | 10 | 15 | 20 |  | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| n71 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n77 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| CA\_n25A-n41C-n71A-n77A | - | n25 | 5 | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  | 0 |
| n41 | See CA\_n41C bandwidth combination set 1 in Table 5.5A.1-1 |
| n71 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n77 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| CA\_n25A-n41(2A)-n71A-n77A | - | n25 | 5 | 10 | 15 | 20 | 25 | 30 | 40 |  |  |  |  |  |  | 0 |
| n41 | See CA\_n41(2A) bandwidth combination set 1 in Table 5.5A.1-2 |
| n71 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |  |
| n77 |  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

#### 5.2.x.3 UE co-existence study

The coexistence studies have been captured into the constituent fallback modes in TR 38.717-03-02 and in TS 38.101-1, there is no additional harmonic and intermodulation impact for the additional band receiver.

#### 5.2.x.5 REFSENS requirements

MSD requirements are captured in lower order combinations.

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