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| 3GPP TR 37.717-41-11 V0.1.0 (2020-08) | |
| Technical Report | |
| 3rd Generation Partnership Project;  Technical Specification Group Radio Access Networks;  Dual Connectivity (DC) of 4 bands LTE inter-band CA (4DL/1UL) and 1 NR band (1DL/1UL)  (Release 17) | |
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# Foreword

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

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

x the first digit:

1 presented to TSG for information;

2 presented to TSG for approval;

3 or greater indicates TSG approved document under change control.

y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.

z the third digit is incremented when editorial only changes have been incorporated in the document.

In the present document, modal verbs have the following meanings:

**shall** indicates a mandatory requirement to do something

**shall not** indicates an interdiction (prohibition) to do something

The constructions "shall" and "shall not" are confined to the context of normative provisions, and do not appear in Technical Reports.

The constructions "must" and "must not" are not used as substitutes for "shall" and "shall not". Their use is avoided insofar as possible, and they are not used in a normative context except in a direct citation from an external, referenced, non-3GPP document, or so as to maintain continuity of style when extending or modifying the provisions of such a referenced document.

**should** indicates a recommendation to do something

**should not** indicates a recommendation not to do something

**may** indicates permission to do something

**need not** indicates permission not to do something

The construction "may not" is ambiguous and is not used in normative elements. The unambiguous constructions "might not" or "shall not" are used instead, depending upon the meaning intended.

**can** indicates that something is possible

**cannot** indicates that something is impossible

The constructions "can" and "cannot" are not substitutes for "may" and "need not".

**will** indicates that something is certain or expected to happen as a result of action taken by an agency the behaviour of which is outside the scope of the present document

**will not** indicates that something is certain or expected not to happen as a result of action taken by an agency the behaviour of which is outside the scope of the present document

**might** indicates a likelihood that something will happen as a result of action taken by some agency the behaviour of which is outside the scope of the present document

**might not** indicates a likelihood that something will not happen as a result of action taken by some agency the behaviour of which is outside the scope of the present document

In addition:

**is** (or any other verb in the indicative mood) indicates a statement of fact

**is not** (or any other negative verb in the indicative mood) indicates a statement of fact

The constructions "is" and "is not" do not indicate requirements.

# 1 Scope

The present document is a technical report for Dual Connectivity (DC) of 4 LTE bands (4DL/1UL) and 1 NR band (1DL/1UL) under Rel-17 time frame. The purpose is to gather the relevant background information and studies in order to address Dual Connectivity (DC) of 4 LTE band (4DL/1UL) and 1 NR band (1DL/1UL) for the Rel-17 band combinations. The co-existence analysis and RF front end requirements such as ΔRIB,c and ΔTIB,c are described based on the band combination basis since such information have no difference between the DC configurations consisting with the same E-UTRA band and the same NR band. The actual requirements are added to the corresponding technical specification.

# 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".

…

[x] <doctype> <#>[ ([up to and including]{yyyy[-mm]|V<a[.b[.c]]>}[onwards])]: "<Title>".

It is preferred that the reference to 21.905 be the first in the list.

# 3 Definitions of terms, symbols and abbreviations

This clause and its three subclauses are mandatory. The contents shall be shown as "void" if the TS/TR does not define any terms, symbols, or abbreviations.

## 3.1 Terms

For the purposes of the present document, the terms given in 3GPP 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 3GPP TR 21.905 [1].

Definition format (Normal)

**<defined term>:** <definition>.

**example:** text used to clarify abstract rules by applying them literally.

## 3.2 Symbols

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

Symbol format (EW)

<symbol> <Explanation>

## 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP 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 3GPP TR 21.905 [1].

Abbreviation format (EW)

<ABBREVIATION> <Expansion>

# 4 Background

The present document is a technical report for Dual Connectivity (DC) of 4 bands LTE inter-band CA and 1 NR band under Rel-17 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 DC of 4 LTE band (4DL/1UL) + 1 NR band: Specific Band Combination Part

<Editor’s note: The requirements for specific band combinations shall be described according to the same manner as specified in TS38.101-3.>

## 5.1 Inter-band EN-DC

### 5.1.1 DC\_a-b-c-d\_ne

<Editor’s note: This example section will be voided in final TR>

#### 5.1.1.1 Configuration for EN-DC

<Editor’s note: If you need a note use same note numbering as in TS 38-101-3>

Table 5.2B.4.4-1: Band combinations EN-DC (five bands)

| EN-DC band configuration | UL configuration(s) |
| --- | --- |
| DC\_aA-bA-cA-dA\_neA | DC\_aA\_neA  DC\_bA\_neA  DC\_cA\_neA  DC\_dA\_neA |

#### 5.1.1.2 ∆TIB and ∆RIB values

<Editor’s note: rows in ΔTIB,c andΔRIB tables shall be deleted if ΔTIB,c andΔRIB values are zero. *>*

Table 6.2B.4.2.3.4-1: ΔTIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| DC\_a-b-c-d\_ne | a |  |
| b |  |
| c |  |
| d |  |
| ne |  |

Table 7.3B.3.3.4-1: ΔRIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔRIB,c (dB) |
| --- | --- | --- |
| DC\_a-b-c-d\_ne | a |  |
| b |  |
| c |  |
| d |  |
| ne |  |

#### 5.1.1.3 Reference sensitivity exceptions

<Editor’s note: Unless specific sensitivity exceptions for intermodulation interference is needed due to dual uplink operation for DC in NR FR1 this section shall be omitted. *>*

### 5.1.2 DC\_1-7-20-32\_n28

#### 5.1.2.1 Configuration for EN-DC

Table 5.1.2.1-1: Band combinations EN-DC (five bands)

| EN-DC band configuration | UL configuration(s) |
| --- | --- |
| DC\_1A-7A-20A-32A\_n28A | DC\_1A\_n28A  DC\_7A\_n28A  DC\_20A\_n28A |

#### 5.1.2.2 ∆TIB and ∆RIB values

Table 5.1.2.2.-1: ΔTIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| DC\_1A-7A-20A-32A\_n28A | 1 | 0.5 |
| 7 | 0.6 |
| 20 | 0.6 |
| n28 | 0.7 |

Table 5.1.2.2.-2: ΔRIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔRIB,c (dB) |
| --- | --- | --- |
| DC\_1A-7A-20A-32A\_n28A | 1 | 0 |
| 7 | 0 |
| 20 | 0.2 |
| 32 | 0 |
| n28 | 0.2 |

#### 5.1.2.3 Reference sensitivity exceptions

Compared to its fallback modes, there are no additional MSD requirements for this band combination.

### 5.1.3 DC\_1-7-20-32\_n78

#### 5.1.3.1 Configuration for EN-DC

Table 5.1.3.1-1: Band combinations EN-DC (five bands)

| EN-DC band configuration | UL configuration(s) |
| --- | --- |
| DC\_1A-7A-20A-32A\_n78A | DC\_1A\_n78A  DC\_7A\_n78A  DC\_20A\_n78A |

#### 5.1.3.2 ∆TIB and ∆RIB values

Table 5.1.3.2.-1: ΔTIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| DC\_1A-7A-20A-32A\_n78A | 1 | 0.6 |
| 7 | 0.7 |
| 20 | 0.4 |
| n78 | 0.8 |

Table 5.1.3.2.-2: ΔRIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔRIB,c (dB) |
| --- | --- | --- |
| DC\_1A-7A-20A-32A\_n78A | 1 | 0.2 |
| 7 | 0.2 |
| 20 | 0.2 |
| 32 | 0 |
| n78 | 0.5 |

#### 5.1.3.3 Reference sensitivity exceptions

Compared to its fallback modes, there are no additional MSD requirements for this band combination.

### 5.1.4 DC\_3-7-20-32\_n78

#### 5.1.4.1 Configuration for EN-DC

Table 5.1.4.1-1: Band combinations EN-DC (five bands)

| EN-DC band configuration | UL configuration(s) |
| --- | --- |
| DC\_3A-7A-20A-32A\_n78A | DC\_3A\_n78A  DC\_7A\_n78A  DC\_20A\_n78A |

#### 5.1.4.2 ∆TIB and ∆RIB values

Table 5.1.4.2.-1: ΔTIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| DC\_3-7-20-32 \_n78 | 3 | 0.6 |
| 7 | 0.6 |
| 20 | 0.3 |
| n78 | 0.8 |

Table 5.1.4.2.-2: ΔRIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔRIB,c (dB) |
| --- | --- | --- |
| DC\_3-7-20-32 \_n78 | 3 | 0 |
| 7 | 0 |
| 20 | 0 |
| 32 | 0 |
| n78 | 0 |

#### 5.1.4.3 Reference sensitivity exceptions

Compared to its fallback modes, there are no additional MSD requirements for this band combination.

### 5.1.4 DC\_2-7-28-66\_n66

#### 5.1.4.1 Configuration for EN-DC

Table 5.2B.4.4-1: Band combinations EN-DC (five bands)

| EN-DC band configuration | UL configuration(s) |
| --- | --- |
| DC\_2A-7A-28A-66A\_n66A  DC\_2A-7C-28A-66A\_n66A | DC\_2A\_n66A  DC\_7A\_n66A  DC\_28A\_n66A  DC\_66A\_n66A4 |
| NOTE 4: Only single switched UL is supported | |

#### 5.1.4.2 ∆TIB and ∆RIB values

Table 6.2B.4.2.3.4-1: ΔTIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| DC\_2-7-28-66\_n66 | 2 | 0.5 |
| 7 | 0.5 |
| 28 | 0.6 |
| 66 | 0.5 |
| n66 | 0.5 |

Table 7.3B.3.3.4-1: ΔRIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔRIB [dB] |
| --- | --- | --- |
| DC\_2-7-28-66\_n66 | 2 | 0.3 |
| 7 | 0.5 |
| 28 | 0.2 |
| 66 | 0.5 |
| n66 | 0.5 |

### 5.1.5 DC\_2-5-7-66\_n66

#### 5.1.5.1 Configurations for EN-DC

Table 5.2B.4.4-1: Band combinations EN-DC (five bands)

| DC  configuration | Uplink  configuration |
| --- | --- |
| DC\_2A-5A-7A-66A\_n66A  DC\_2A-5A-7C-66A\_n66A | DC\_2A\_n66A  DC\_5A\_n66A  DC\_7A\_n66A  DC\_66A\_n66A4 |
| NOTE 4: Only single switched UL is supported | |

#### 5.1.5.2 ∆TIB and ∆RIB values

For DC\_2-5-7-66\_n66, the ΔTIB,c and ΔRIB,c values are given in the tables below.

Table 6.2B.4.2.3.4-1: ΔTIB,c due to EN-DC (five bands)

| Inter-band DC Configuration | E-UTRA and NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| DC\_2-5-7-66\_n66 | 2 | 0.5 |
| 5 | 0.3 |
| 7 | 0.5 |
| 66 | 0.5 |
| n66 | 0.5 |

**Table 7.3B.3.3.4-1: ΔRIB due to EN-DC (five bands)**

| Inter-band DC Configuration | E-UTRA and NR Band | ΔRIB [dB] |
| --- | --- | --- |
| DC\_2-5-7-66\_n66 | 2 | 0.3 |
| 5 | 0 |
| 7 | 0.5 |
| 66 | 0.5 |
| n66 | 0.5 |

#### 5.1.5.3 REFSENS requirements

Compared to its fallback modes, there are no additional MSD requirements for this band combination.

### 5.1.6 DC\_1-3-7-40\_n78

#### 5.1.6.1 Configuration for EN-DC

Table 5.2B.4.4-1: Band combinations EN-DC (five bands)

| EN-DC band configuration | UL configuration(s) |
| --- | --- |
| DC\_1A-3A-7A-40A\_n78A  DC\_1A-3A-7A-40C\_n78A | DC\_1A\_n78A  DC\_3A\_n78A  DC\_7A\_n78A  DC\_40A\_n78A |

#### 5.1.6.2 ∆TIB and ∆RIB values

Table 6.2B.4.2.3.4-1: ΔTIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| DC\_1A-3A-7A-40A\_n78A | 1 | 0.6 |
| 3 | 0.6 |
| 7 | 0.5 |
| 40 | 0.35 |
| n78 | 0.85 |
| NOTE 5: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx. | | |

**Table 7.3B.3.3.4-1: ΔRIB due to EN-DC (five bands)**

| EN-DC band | E-UTRA and NR Band | ΔRIB,c (dB) |
| --- | --- | --- |
| DC\_1A-3A-7A-40A\_n78A | 1 | 0.2 |
| 3 | 0.2 |
| 7 | 0 |
| 40 | 0.45 |
| n78 | 0.55 |
| NOTE 5: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx. | | |

#### 5.1.6.3 Reference sensitivity exceptions

In addition to its fallbacks, there is no particular MSD requirement needed for this band combination.

### 5.1.7 DC\_1-3-8-40\_n78

#### 5.1.7.1 Configuration for EN-DC

Table 5.2B.4.4-1: Band combinations EN-DC (five bands)

| EN-DC band configuration | UL configuration(s) |
| --- | --- |
| DC\_1A-3A-8A-40A\_n78A  DC\_1A-3A-8A-40C\_n78A | DC\_1A\_n78A  DC\_3A\_n78A  DC\_8A\_n78A  DC\_40A\_n78A |

#### 5.1.7.2 ∆TIB and ∆RIB values

Table 6.2B.4.2.3.4-1: ΔTIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| DC\_1-3-8-40\_n78 | 1 | 0.6 |
| 3 | 0.6 |
| 8 | 0.6 |
| 40 | 0.35 |
| n78 | 0.85 |
| NOTE 5: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx. | | |

**Table 7.3B.3.3.4-1: ΔRIB due to EN-DC (five bands)**

| EN-DC band | E-UTRA and NR Band | ΔRIB,c (dB) |
| --- | --- | --- |
| DC\_1-3-8-40\_n78 | 1 | 0.2 |
| 3 | 0.2 |
| 8 | 0.2 |
| 40 | 0.45 |
| n78 | 0.55 |
| NOTE 5: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx. | | |

#### 5.1.7.3 Reference sensitivity exceptions

In addition to its fallbacks, there is no particular MSD requirement needed for this band combination.

### 5.1.8 DC\_1-7-8-40\_n78

#### 5.1.8.1 Configuration for EN-DC

Table 5.1.x.1-1: Band combinations EN-DC (five bands)

| EN-DC band configuration | UL configuration(s) |
| --- | --- |
| DC\_1A-7A-8A-40A\_n78A  DC\_1A-7A-8A-40C\_n78A | DC\_1A\_n78A  DC\_7A\_n78A  DC\_8A\_n78A  DC\_40A\_n78A |

#### 5.1.8.2 ∆TIB and ∆RIB values

Table 5.1.x.2.-1: ΔTIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| DC\_1-7-8-40\_n78 | 1 | 0.6 |
| 7 | 0.5 |
| 8 | 0.6 |
| 40 | 0.35 |
| n78 | 0.85 |
| NOTE 5: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx. | | |

Table 5.1.x.2.-2: ΔRIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔRIB,c (dB) |
| --- | --- | --- |
| DC\_1-7-8-40\_n78 | 1 | 0.2 |
| 7 | 0 |
| 8 | 0.2 |
| 40 | 0.45 |
| n78 | 0.55 |
| NOTE 5: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx. | | |

#### 5.1.8.3 Reference sensitivity exceptions

In addition to its fallbacks, there is no particular MSD requirement needed for this band combination.

### 5.1.9 DC\_3-7-8-40\_n78

#### 5.1.9.1 Configuration for EN-DC

Table 5.1.x.1-1: Band combinations EN-DC (five bands)

| EN-DC band configuration | UL configuration(s) |
| --- | --- |
| DC\_3A-7A-8A-40A\_n78A  DC\_3A-7A-8A-40C\_n78A | DC\_3A\_n78A  DC\_7A\_n78A  DC\_8A\_n78A  DC\_40A\_n78A |

#### 5.1.9.2 ∆TIB and ∆RIB values

Table 5.1.x.2.-1: ΔTIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| DC\_3-7-8-40\_n78 | 3 | 0.6 |
| 7 | 0.5 |
| 8 | 0.6 |
| 40 | 0.35 |
| n78 | 0.85 |
| NOTE 5: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx. | | |

Table 5.1.x.2.-2: ΔRIB,c due to EN-DC (five bands)

| EN-DC band | E-UTRA and NR Band | ΔRIB,c (dB) |
| --- | --- | --- |
| DC\_3-7-8-40\_n78 | 3 | 0.2 |
| 7 | 0 |
| 8 | 0.2 |
| 40 | 0.45 |
| n78 | 0.55 |
| NOTE 5: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx. | | |

#### 5.1.9.3 Reference sensitivity exceptions

In addition to its fallbacks, there is no particular MSD requirement needed for this band combination.

### 5.1.10 DC\_2-7-28-66\_n7

#### 5.1.10.1 Configurations for EN-DC

Table 5.1.x.1-1: Band combinations EN-DC (five bands)

| EN-DC  Configuration | Uplink EN-DC  configuration |
| --- | --- |
| DC\_2A-7A-28A-66A\_n7A | DC\_2A\_n7A  DC\_7A\_n7A4  DC\_28A\_n7A  DC\_66A\_n7A |
| NOTE 4: Only single switched UL is supported | |

#### 5.1.10.2 ∆TIB and ∆RIB values

Table 5.1.x.2-1: ΔTIB,c due to EN-DC(five bands)

| Inter-band DC Configuration | E-UTRA and NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| DC\_2-7-28-66\_n7 | 2 | 0.5 |
| 7 | 0.5 |
| 28 | 0.6 |
| 66 | 0.5 |
| n7 | 0.5 |

**Table 5.1.x.2-2: ΔRIB,c due to EN-DC (five bands)**

| Inter-band DC Configuration | E-UTRA and NR Band | ΔRIB [dB] |
| --- | --- | --- |
| DC\_2-7-28-66\_n7 | 2 | 0.3 |
| 7 | 0.5 |
| 28 | 0.2 |
| 66 | 0.5 |
| n7 | 0.5 |

#### 5.1.10.3 Reference sensitivity exceptions

REFSENS exceptions are not needed.

### 5.1.11 DC\_2-5-7-66\_n7/ DC\_2-5-7-66-66\_n7

#### 5.1.11.1 Configurations for EN-DC

Table 5.1.x.1-1: Band combinations EN-DC (five bands)

| EN-DC  Configuration | Uplink EN-DC  configuration |
| --- | --- |
| DC\_2A-5A-7A-66A\_n7A  DC\_2A-5A-7A-66A-66A\_n7A | DC\_2A\_n7A  DC\_5A\_n7A  DC\_7A\_n7A4  DC\_66A\_n7A |
| NOTE 4: Only single switched UL is supported | |

#### 5.1.11.2 ∆TIB and ∆RIB values

Table 5.1.x.2-1: ΔTIB,c due to EN-DC(five bands)

| Inter-band DC Configuration | E-UTRA and NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| DC\_2-5-7-66\_n7  DC\_2-5-7-66-66\_n7 | 2 | 0.5 |
| 5 | 0.3 |
| 7 | 0.5 |
| 66 | 0.5 |
| n7 | 0.5 |

**Table 5.1.x.2-2: ΔRIB,c due to EN-DC (five bands)**

| Inter-band DC Configuration | E-UTRA and NR Band | ΔRIB [dB] |
| --- | --- | --- |
| DC\_2-5-7-66\_n7  DC\_2-5-7-66-66\_n7 | 2 | 0.3 |
| 5 | 0.2 |
| 7 | 0.5 |
| 66 | 0.5 |
| n7 | 0.5 |

#### 5.1.11.3 Reference sensitivity exceptions

REFSENS exceptions are not needed.

### 5.1.12 DC\_1-3-7-8\_n28

#### 5.1.12.1 Configurations for EN-DC

Table 5.1.x.1-1: Band combinations EN-DC (five bands)

| EN-DC  Configuration | Uplink EN-DC  configuration |
| --- | --- |
| DC\_1A-3A-7A-8A\_n28A | DC\_1A\_n28A  DC\_3A\_n28A  DC\_7A\_n28A  DC\_8A\_n28A |
|  | |

#### 5.1.12.2 ∆TIB and ∆RIB values

Table 5.1.x.2-1: ΔTIB,c due to EN-DC(five bands)

| Inter-band DC Configuration | E-UTRA and NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| DC\_1-3-7-8\_n28 | 1 | 0.5 |
| 3 | 0.5 |
| 7 | 0.6 |
| 8 | 0.6 |
| n28 | 0.6 |

**Table 5.1.x.2-2: ΔRIB,c due to EN-DC (five bands)**

| Inter-band DC Configuration | E-UTRA and NR Band | ΔRIB [dB] |
| --- | --- | --- |
| DC\_1-3-7-8\_n28 | 1 | 0 |
| 3 | 0 |
| 7 | 0 |
| 8 | 0.2 |
| n28 | 0.2 |

#### 5.1.12.3 Reference sensitivity exceptions

REFSENS exceptions are not needed.

### 5.1.13 DC\_3-7-8-40\_n1

#### 5.1.13.1 Configurations for EN-DC

Table 5.1.x.1-1: Band combinations EN-DC (five bands)

| EN-DC  Configuration | Uplink EN-DC  configuration |
| --- | --- |
| DC\_3A-7A-8A-40A\_n1A  DC\_3A-7A-8A-40C\_n1A | DC\_3A\_n1A  DC\_7A\_n1A  DC\_8A\_n1A  DC\_40A\_n1A |
|  | |

#### 5.1.13.2 ∆TIB and ∆RIB values

Table 5.1.x.2-1: ΔTIB,c due to EN-DC(five bands)

| Inter-band DC Configuration | E-UTRA and NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| DC\_3-7-8-40\_n1 | 3 | 0.5 |
| 7 | 0.8 |
| 8 | 0.6 |
| 40 | 0.9 |
| n1 | 0.6 |

**Table 5.1.x.2-2: ΔRIB,c due to EN-DC (five bands)**

| Inter-band DC Configuration | E-UTRA and NR Band | ΔRIB [dB] |
| --- | --- | --- |
| DC\_3-7-8-40\_n1 | 3 | 0 |
| 7 | 0.3 |
| 8 | 0.2 |
| 40 | 0.8 |
| n1 | 0.1 |

#### 5.1.13.3 Reference sensitivity exceptions

REFSENS exceptions are not needed.

## 5.2 Inter-band NE-DC

5.2.1 DC\_na\_b-c-d-e

<Editor’s note: This example section will be voided in final TR>

#### 5.2.1.1 Configuration for NE-DC

<Editor’s note: If you need a note use same note numbering as in TS 38-101-3>

Table 5.5B.4a.4-1: Band combinations NE-DC (five bands)

| EN-DC band configuration | UL configuration(s) |
| --- | --- |
| DC\_naA\_bA-cA-ndA-eA | DC\_naA\_bA  DC\_naA\_cA  DC\_naA\_dA  DC\_naA\_eA |

#### 5.2.1.2 ∆TIB and ∆RIB values

<Editor’s note: Unless ΔTIB,c andΔRIB for specific reason need to be specified different than the correspondingly specified EN-DC configuration this section shall be omitted. *>*

# Annex A - Change history

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Change history** | | | | | | | |
| **Date** | **Meeting** | **TDoc** | **CR** | **Rev** | **Cat** | **Subject/Comment** | **New version** |
| 2020-08 | 3GPP RAN4#96-e | R4-2010399 |  |  |  | TR skeleton | 0.0.1 |
| 2020-08 | 3GPP RAN4#96-e | R4-2010400  R4-2009860  R4-2009861  R4-2009862  R4-2011624 |  |  |  | Addition of TPs from RAN4#96-e:  TP for TR 37.717-41-11: DC\_1-7-20-32\_n28  TP for TR 37.717-41-11: DC\_1-7-20-32\_n78  TP for TR 37.717-41-11: DC\_3-7-20-32\_n78  TP for TR 37.716-41-11 DC\_2A-7A-28A 66A\_n66A / DC\_2A-7C-28A-66A \_n66A | 0.1.0 |
| 2020-11 | 3GPP RAN4#97-e | R4-2015216  R4-2016657  R4-2016672  R4-2016673  R4-2016674  R4-2016675  R4-2015416  R4-2015417  R4-2015418  R4-2016677 |  |  |  | Addition of TPs from RAN4#97-e:  TP for 37.717-41-11 for DC\_2-5-7-66\_n66  TP to TR 37.717-41-11 DC\_1A-3A-7A-40C\_n78A  TP to TR 37.717-41-11 DC\_1A-3A-8A-40C\_n78A  TP to TR 37.717-41-11 DC\_1A-7A-8A-40C\_n78A  TP to TR 37.717-41-11 DC\_3A-7A-8A-40C\_n78A  TP for TR 37.717-41-11: DC\_2A-7A-28A-66A\_n7A  TP for TR 37.717-41-11:DC\_2A-5A-7A-66A\_n7A/DC\_2A-5A-7A-66A-66A\_n7A  TP for TR 37.717-41-11:DC\_1A-3A-7A-8A\_n28A  TP for TR 37.717-41-11:DC\_3A-7A-8A-40A\_n1A/DC\_3A-7A-8A-40C\_n1A | 0.2.0 |