**3GPP TSG- Meeting #**

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

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| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** | **0060** | **rev** | **1** | **Current version:** |  |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **x** | Core Network |  |

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|  |
| ***Title:***  |  |
|  |  |
| ***Source to WG:*** | , Ericsson |
| ***Source to TSG:*** |  |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** | 9 |
|  |  |  |  |  |
| ***Category:*** | F |  | ***Release:*** |  |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
|  |  |
| ***Reason for change:*** | Note in ACLR absolute limit table that tells scaling factor and test tolerant applied in test requirements is not required. Similar note is not seen in other requirement tables.Notation of IAB-MT test requirements is derived from (basic limit + 9) -9 +10log10(NTXU,OTApercell). Simpler notation is required.MR IAB-DU limit is not applicable to IAB-MT. |
|  |  |
| ***Summary of change:*** | Modify the scaling factor and the test limit notation.Change the MR IAB-DU ACLR absolute limit for IAB-MT to “NA”. |
|  |  |
| ***Consequences if not approved:*** | Notation of IAB-MT test requirements is confusing. |
|  |  |
| ***Clauses affected:*** | 6.7.3.5.1, 6.7.4.5.1.1, 6.7.4.5.1.2, 6.7.4.5.3 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **x** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **x** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **x** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

**--------------Start of change-------------**

##### 6.7.3.5.1 *IAB-DU type 1-O* and *IAB-MT type 1-O*

For the OTA ACLR requirement either the OTA ACLR limits in tables 6.7.3.5.1-1/3 or the OTA ACLR absolute limits in table 6.7.3.5.1-2 shall apply, whichever is less stringent. The OTA CACLR limits in table 6.7.3.5.1-4 or the OTA CACLR absolute limits in table 6.7.3.5.1-5 shall apply, whichever is less stringent.

The CACLR in a sub-block gap and Inter RF Bandwidth gap is the ratio of:

a) the sum of the filtered mean power centred on the assigned channel frequencies for the two carriers adjacent to each side of the sub-block gap or the Inter RF Bandwidth gap, and

b) the filtered mean power centred on a frequency channel adjacent to one of the respective sub-block edges or Base Station RF Bandwidth edges.

The assumed filter for the adjacent channel frequency is defined in table 6.7.3.5.1-4 and the filters on the assigned channels are defined in table 6.7.3.5.1-6.

For operation in paired and unpaired spectrum, the OTA ACLR measurement result shall not be less than the OTA ACLR limit specified in table 6.7.3.5.1-1.

Table 6.7.3.5.1-1: *IAB-DU* and *IAB-MT type 1-O* ACLR limit

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *IAB channel bandwidth* of lowest/highest NR carrier transmitted BWChannel (MHz)  | IAB adjacent channel centre frequency offset below the lowest or above the highest carrier centre frequency transmitted | Assumed adjacent channel carrier (informative) | Filter on the adjacent channel frequency and corresponding filter bandwidth | OTA ACLR limit(0 – 3 GHz) | OTA ACLR limit (3 – 6 GHz) |
| 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90,100  | BWChannel | NR of same BW (Note 2) | Square (BWConfig) | 44 dB | 43.8 dB |
|  | 2 x BWChannel | NR of same BW (Note 2) | Square (BWConfig) | 44 dB | 43.8 dB |
|  | BWChannel /2 + 2.5 MHz | 5 MHz E-UTRA | Square (4.5 MHz) | 44 dB (Note 3) | 43.8 dB (Note 3) |
|  | BWChannel /2 + 7.5 MHz | 5 MHz E-UTRA | Square (4.5 MHz) | 44 dB (Note 3) | 43.8 dB (Note 3) |
| NOTE 1: BWChannel and BWConfig are the *IAB channel bandwidth* and transmission bandwidth configuration of the lowest/highest NR carrier transmitted on the assigned channel frequency.NOTE 2: With SCS that provides largest transmission bandwidth configuration (BWConfig).NOTE 3: The requirements are applicable when the band is also defined for E-UTRA or UTRA. |

The absolute total power measurement shall not exceed the OTA ACLR absolute limit specified in table 6.7.3.5.1-2.

Table 6.7.3.5.1-2: *IAB-DU* and *IAB-MT type 1-O* ACLR absolutelimit

|  |  |  |
| --- | --- | --- |
| IAB category / IAB class | IAB-DU type 1-O OTA ACLR absolute limit (Note 1) | IAB-MT type 1-O OTA ACLR absolute limit (Note 2) |
| Category A Wide Area IAB-DU and Category A Wide Area IAB-MT | -4 dBm/MHz | -13 + Y dBm/MHz |
| Category B Wide Area IAB-DU and Category B Wide Area IAB-MT | -6 dBm/MHz | -15 + Y dBm/MHz |
| Medium Range IAB-DU | -16 dBm/MHz | NA |
| Local Area IAB-DU and Local Area IAB-MT | -23 dBm/MHz | -32 + Y dBm/MHz |
| NOTE 1: The test requirement is derived from the basic limit a scaling factor of 9 dB and any applicable TT.NOTE 2: Y = 10log10(NTXU,OTApercell) dB |

**--------------Next change-------------**

The absolute total power measurement shall not exceed the OTA CACLR absolute limit specified in table 6.7.3.5.1-5.

Table 6.7.3.5.1-5: *IAB-DU* and *IAB-MT type 1-O* CACLR absolutelimit

|  |  |  |
| --- | --- | --- |
| IAB category / IAB class | IAB-DU type 1-O OTA CACLR absolutelimit(Note 1) | IAB-MT type 1-O OTA CACLR absolutelimit(Note 2) |
| Category A Wide Area IAB-DU and Category A Wide Area IAB-MT | -4 dBm/MHz | -13 + Y dBm/MHz |
| Category B Wide Area IAB-DU and Category B Wide Area IAB-MT | -6 dBm/MHz | -15 + Y dBm/MHz |
| Medium Range IAB-DU | -16 dBm/MHz | NA |
| Local Area IAB-DU andLocal Area IAB-MT | -23 dBm/MHz | -32 + Y dBm/MHz |
| NOTE 1: The test requirement is derived from the basic limit a scaling factor of 9 dB and any applicable TT.NOTE 2: Y = 10log10(NTXU,OTApercell) dB |

**--------------Next change-------------**

6.7.4.5.1.1 Wide Area IAB-DU and Wide Area IAB-MT (Category A)

For operating in Bands n41, n77, n78, n79, emissions shall not exceed the maximum levels specified in tables 6.7.4.5.1.1-1 to 6.7.4.5.1.1-3:

Table 6.7.4.5.1.1-1: Wide Area IAB-DU and Wide Area IAB-MT *operating band* unwanted emission limits
(1 GHz < NR bands ≤ 3 GHz) for Category A

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Frequency offset of measurement filter ‑3dB point, Δf** | **Frequency offset of measurement filter centre frequency, f\_offset** | **IAB-DU type 1-O** **Test requirement (Note 1, 2, 4)** | **IAB-MT type 1-O Test requirement (Note 1, 2, 5)** | **Measurement bandwidth** |
| 0 MHz ≤ Δf < 5 MHz | 0.05 MHz ≤ f\_offset < 5.05 MHz | 3.8 dBm - 7/5(f\_offset/MHz - 0.05) dB | -5.2 dBm - 7/5(f\_offset/MHz - 0.05) + Y dB | 100 kHz  |
| 5 MHz ≤ Δf <min(10 MHz, Δfmax) | 5.05 MHz ≤ f\_offset <min(10.05 MHz, f\_offsetmax) | -3.2 dBm | -12.2 +Y dBm | 100 kHz  |
| 10 MHz ≤ Δf ≤ Δfmax | 10.05 MHz ≤ f\_offset < f\_offsetmax  | -4 dBm (Note 3) | -13 + Y dBm (Note 3) | 100 kHz  |
| NOTE 1: For a IAB supporting non-contiguous spectrum operation within any *operating band*, the emission limits within sub-block gaps is calculated as a cumulative sum of contributions from adjacent sub blocks on each side of the sub block gap. Exception is Df ≥ 10MHz from both adjacent sub blocks on each side of the sub-block gap, where the emission limits within sub-block gaps shall be -4 dBm/100 kHz.NOTE 2: For a *multi-band RIB* with Inter RF Bandwidth gap < 2\*ΔfOBUE the emission limits within the Inter RF Bandwidth gaps is calculated as a cumulative sum of contributions from adjacent sub-blocks or RF Bandwidth on each side of the Inter RF Bandwidth gap.NOTE 3: The requirement is not applicable when Δfmax < 10 MHz.NOTE 4: The test requirement is derived from the basic limit a scaling factor of 9 dB and any applicable TT.NOTE 5: Y = 10log10(NTXU,OTApercell) dB |

Table 6.7.4.5.1.1-2: Wide Area IAB-DU and Wide Area IAB-MT *operating band* unwanted emission limits
(3 GHz < NR bands ≤ 4.2 GHz) for Category A

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Frequency offset of measurement filter ‑3dB point, Δf** | **Frequency offset of measurement filter centre frequency, f\_offset** | **IAB-DU type 1-O Test requirement (Note 1, 2, 4)** | **IAB-MT type 1-O Test requirement (Note 1, 2, 5)** | **Measurement bandwidth** |
| 0 MHz ≤ Δf < 5 MHz | 0.05 MHz ≤ f\_offset < 5.05 MHz | 4 dBm-7/5(f\_offset/MHz-0.05)dB | -5 dBm-7/5(f\_offset/MHz-0.05) +Y dB | 100 kHz  |
| 5 MHz ≤ Δf <min(10 MHz, Δfmax) | 5.05 MHz ≤ f\_offset <min(10.05 MHz, f\_offsetmax) | -3 dBm | -12 +Y dBm | 100 kHz  |
| 10 MHz ≤ Δf ≤ Δfmax | 10.5 MHz ≤ f\_offset < f\_offsetmax  | -4 dBm (Note 3) | -13 +Y dBm (Note 3) | 1MHz  |
| NOTE 1: For a IAB supporting non-contiguous spectrum operation within any *operating band*, the emission limits within sub-block gaps is calculated as a cumulative sum of contributions from adjacent sub blocks on each side of the sub block gap, where the contribution from the far-end sub-block shall be scaled according to the measurement bandwidth of the near-end sub-block. Exception is Df ≥ 10MHz from both adjacent sub blocks on each side of the sub-block gap, where the emission limits within sub-block gaps shall be ‑4 dBm/1 MHz.NOTE 2: For a *multi-band RIB* with Inter RF Bandwidth gap < 2\*ΔfOBUE the emission limits within the Inter RF Bandwidth gaps is calculated as a cumulative sum of contributions from adjacent sub-blocks or RF Bandwidth on each side of the Inter RF Bandwidth gap, where the contribution from the far-end sub-block or RF Bandwidth shall be scaled according to the measurement bandwidth of the near-end sub-block or RF Bandwidth.NOTE 3: The requirement is not applicable when Δfmax < 10 MHz.NOTE 4: The test requirement is derived from the basic limit a scaling factor of 9 dB and any applicable TT.NOTE 5: Y = 10log10(NTXU,OTApercell) dB |

Table 6.7.4.5.1.1-3: Wide Area IAB-DU and Wide Area IAB-MT *operating band* unwanted emission limits
(4.2 GHz < NR bands ≤ 6 GHz) for Category A

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Frequency offset of measurement filter ‑3dB point, Δf** | **Frequency offset of measurement filter centre frequency, f\_offset** | **IAB-DU type 1-O** **Test requirement (Note 1, 2, 4)** | **IAB-MT type 1-O Test requirement (Note 1, 2, 6)** | **Measurement bandwidth** |
| 0 MHz ≤ Δf < 5 MHz | 0.05 MHz ≤ f\_offset < 5.05 MHz | 4 dBm-7/5(f\_offset/MHz-0.05)dB | -5 dBm-7/5(f\_offset/MHz-0.05) + Y dB | 100 kHz  |
| 5 MHz ≤ Δf <min(10 MHz, Δfmax) | 5.05 MHz ≤ f\_offset <min(10.05 MHz, f\_offsetmax) | -3 dBm | -12 + Y dBm | 100 kHz  |
| 10 MHz ≤ Δf ≤ Δfmax | 10.5 MHz ≤ f\_offset < f\_offsetmax  | -4 dBm (Note 3) | -13 + Y dBm (Note 3) | 1MHz  |
| NOTE 1: For a IAB supporting non-contiguous spectrum operation within any *operating band*, the emission limits within sub-block gaps is calculated as a cumulative sum of contributions from adjacent sub blocks on each side of the sub block gap, where the contribution from the far-end sub-block shall be scaled according to the measurement bandwidth of the near-end sub-block. Exception is Df ≥ 10MHz from both adjacent sub blocks on each side of the sub-block gap, where the emission limits within sub-block gaps shall be ‑4 dBm/1 MHz.NOTE 2: For a *multi-band RIB* with Inter RF Bandwidth gap < 2\*ΔfOBUE the emission limits within the Inter RF Bandwidth gaps is calculated as a cumulative sum of contributions from adjacent sub-blocks or RF Bandwidth on each side of the Inter RF Bandwidth gap, where the contribution from the far-end sub-block or RF Bandwidth shall be scaled according to the measurement bandwidth of the near-end sub-block or RF Bandwidth.NOTE 3: The requirement is not applicable when Δfmax < 10 MHz.NOTE 4: The test requirement is derived from the basic limit a scaling factor of 9 dB and any applicable TT.NOTE 5: VoidNOTE 6: Y = 10log10(NTXU,OTApercell) dB |

6.7.4.5.1.2 Wide Area IAB-DU and Wide Area IAB-MT (Category B)

For IAB-DU and IAB-MT operating in Bands n41, n77, n78, n79 for Category B emissions shall not exceed the maximum levels specified in tables 6.7.4.5.1.2-1 to 6.7.4.5.1.2-3:

Table 6.7.4.5.1.2-1: Wide Area IAB-DU and IAB-MT operating band unwanted emission limits
(1 GHz < NR bands ≤ 3 GHz) for Category B

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Frequency offset of measurement filter ‑3dB point, Δf | Frequency offset of measurement filter centre frequency, f\_offset | IAB-DU type 1-O Test requirement (Note 1, 2, 4) | IAB-MT type 1-O Test requirement (Note 1, 2, 5) | Measurement bandwidth |
| 0 MHz ≤ Δf < 5 MHz | 0.05 MHz ≤ f\_offset < 5.05 MHz | 3.8 dBm-7/5(f\_offset/MHz-0.05)dB | -5.2 dBm-7/5(f\_offset/MHz-0.05) + Y dB | 100 kHz  |
| 5 MHz ≤ Δf <min(10 MHz, Δfmax) | 5.05 MHz ≤ f\_offset <min(10.05 MHz, f\_offsetmax) | -3.2 dBm | -12.2 + Y dBm | 100 kHz  |
| 10 MHz ≤ Δf ≤ Δfmax | 10.5 MHz ≤ f\_offset < f\_offsetmax  | -6 dBm (3) | -15 + Y dBm (3) | 1MHz  |
| NOTE 1: For a IAB supporting non-contiguous spectrum operation within any *operating band*, the emission limits within sub-block gaps is calculated as a cumulative sum of contributions from adjacent sub blocks on each side of the sub block gap, where the contribution from the far-end sub-block shall be scaled according to the measurement bandwidth of the near-end sub-block. Exception is Df ≥ 10MHz from both adjacent sub blocks on each side of the sub-block gap, where the emission limits within sub-block gaps shall be ‑6 dBm/1 MHz.NOTE 2: For a *multi-band RIB* with Inter RF Bandwidth gap < 2\*ΔfOBUE the emission limits within the Inter RF Bandwidth gaps is calculated as a cumulative sum of contributions from adjacent sub-blocks or RF Bandwidth on each side of the Inter RF Bandwidth gap, where the contribution from the far-end sub-block or RF Bandwidth shall be scaled according to the measurement bandwidth of the near-end sub-block or RF Bandwidth.NOTE 3: The requirement is not applicable when Δfmax < 10 MHz.NOTE 4: The test requirement is derived from the basic limit a scaling factor of 9 dB and any applicable TT.NOTE 5: Y = 10log10(NTXU,OTApercell) dB |

Table 6.7.4.5.1.2-2: Wide Area IAB-DU and IAB-MT operating band unwanted emission limits
(1 GHz < NR bands ≤ 3 GHz) for Category B

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Frequency offset of measurement filter ‑3dB point, Δf | Frequency offset of measurement filter centre frequency, f\_offset | IAB-DU type 1-O Test requirement (Note 1, 2, 4) | IAB-MT type 1-O Test requirement (Note 1, 2, 5) | Measurement bandwidth |
| 0 MHz ≤ Δf < 5 MHz | 0.05 MHz ≤ f\_offset < 5.05 MHz | 4 dBm-7/5(f\_offset/MHz-0.05)dB | -5 dBm-7/5(f\_offset/MHz-0.05) + Y dB | 100 kHz  |
| 5 MHz ≤ Δf <min(10 MHz, Δfmax) | 5.05 MHz ≤ f\_offset <min(10.05 MHz, f\_offsetmax) | -3 dBm | -12 + Y dBm | 100 kHz  |
| 10 MHz ≤ Δf ≤ Δfmax | 10.5 MHz ≤ f\_offset < f\_offsetmax  | -6 dBm (Note 3) | -15 dBm + Y (Note 3) | 1MHz  |
| NOTE 1: For a IAB supporting non-contiguous spectrum operation within any *operating band*, the emission limits within sub-block gaps is calculated as a cumulative sum of contributions from adjacent sub blocks on each side of the sub block gap, where the contribution from the far-end sub-block shall be scaled according to the measurement bandwidth of the near-end sub-block. Exception is Df ≥ 10MHz from both adjacent sub blocks on each side of the sub-block gap, where the emission limits within sub-block gaps shall be ‑6 dBm/1 MHz.NOTE 2: For a *multi-band RIB* with Inter RF Bandwidth gap < 2\*ΔfOBUE the emission limits within the Inter RF Bandwidth gaps is calculated as a cumulative sum of contributions from adjacent sub-blocks or RF Bandwidth on each side of the Inter RF Bandwidth gap, where the contribution from the far-end sub-block or RF Bandwidth shall be scaled according to the measurement bandwidth of the near-end sub-block or RF Bandwidth.NOTE 3: The requirement is not applicable when Δfmax < 10 MHz.NOTE 4: The test requirement is derived from the basic limit a scaling factor of 9 dB and any applicable TT.NOTE 5: Y = 10log10(NTXU,OTApercell) dB |

Table 6.7.4.5.1.2-3: Wide Area IAB-DU and IAB-MT operating band unwanted emission limits
(4.2 GHz < NR bands ≤ 6 GHz) for Category B

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Frequency offset of measurement filter ‑3dB point, Δf | Frequency offset of measurement filter centre frequency, f\_offset | IAB-DU type 1-O Test requirement (Note 1, 2, 4) | IAB-MT type 1-O Test requirement (Note 1, 2, 5) | Measurement bandwidth |
| 0 MHz ≤ Δf < 5 MHz | 0.05 MHz ≤ f\_offset < 5.05 MHz | 4 dBm-7/5(f\_offset/MHz-0.05)dB | -5 dBm-7/5(f\_offset/MHz-0.05) + Y dB | 100 kHz  |
| 5 MHz ≤ Δf <min(10 MHz, Δfmax) | 5.05 MHz ≤ f\_offset <min(10.05 MHz, f\_offsetmax) | -3 dBm | -12 + Y dBm | 100 kHz  |
| 10 MHz ≤ Δf ≤ Δfmax | 10.5 MHz ≤ f\_offset < f\_offsetmax  | -6 dBm (Note 3) | -15 + Y dBm (Note 3) | 1MHz  |
| NOTE 1: For a IAB supporting non-contiguous spectrum operation within any *operating band*, the emission limits within sub-block gaps is calculated as a cumulative sum of contributions from adjacent sub blocks on each side of the sub block gap, where the contribution from the far-end sub-block shall be scaled according to the measurement bandwidth of the near-end sub-block. Exception is Df ≥ 10MHz from both adjacent sub blocks on each side of the sub-block gap, where the emission limits within sub-block gaps shall be ‑6 dBm/1 MHz.NOTE 2: For a *multi-band RIB* with Inter RF Bandwidth gap < 2\*ΔfOBUE the emission limits within the Inter RF Bandwidth gaps is calculated as a cumulative sum of contributions from adjacent sub-blocks or RF Bandwidth on each side of the Inter RF Bandwidth gap, where the contribution from the far-end sub-block or RF Bandwidth shall be scaled according to the measurement bandwidth of the near-end sub-block or RF Bandwidth.NOTE 3: The requirement is not applicable when Δfmax < 10 MHz.NOTE 4: The test requirement is derived from the basic limit a scaling factor of 9 dB and any applicable TT.NOTE 5: Y = 10log10(NTXU,OTApercell) dB |

**--------------Next change-------------**

##### 6.7.4.5.3 Local Area IAB-DU and Local Area IAB-MT (Category A and B)

For Local Area IAB-DU and Local Area IAB-MT in NR bands ≤ 3 GHz, emissions shall not exceed the maximum levels specified in table 6.7.4.5.3-1.

For Local Area IAB-DU and Local Area IAB-MT in 3 GHz < NR bands ≤ 4.2 GHz, emissions shall not exceed the maximum levels specified in table 6.7.4.5.3-2.

For Local Area IAB-DU and Local Area IAB-MT in 4.2 GHz < NR bands ≤ 6 GHz, emissions shall not exceed the maximum levels specified in table 6.7.4.5.3-3.

Table 6.7.4.5.3-1: Local Area IAB-DU and Local Area IAB-MT operating band unwanted emission limits (NR bands ≤ 3 GHz)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Frequency offset of measurement filter ‑3dB point, Δf | Frequency offset of measurement filter centre frequency, f\_offset | IAB-DU type 1-O Test requirement (Note 1, 2, 4) | IAB-MT type 1-O Test requirement (Note 1, 2, 6) | Measurement bandwidth  |
| 0 MHz ≤ Δf < 5 MHz | 0.05 MHz ≤ f\_offset < 5.05 MHz |  |  | 100 kHz  |
| 5 MHz ≤ Δf < min(10 MHz, Δfmax) | 5.05 MHz ≤ f\_offset < min(10.05 MHz, f\_offsetmax) | -26.2 dBm | -35.2 +Y dBm | 100 kHz  |
| 10 MHz ≤ Δf ≤ Δfmax | 10.05 MHz ≤ f\_offset < f\_offsetmax  | -28 dBm (Note 3) | -37 +Y dBm (Note 3) | 100 kHz  |
| NOTE 1: For a IAB supporting non-contiguous spectrum operation within any *operating band* the emission limits within sub-block gaps is calculated as a cumulative sum of contributions from adjacent sub blocks on each side of the sub block gap. Exception is Df ≥ 10MHz from both adjacent sub blocks on each side of the sub-block gap, where the emission limits within sub-block gaps shall be -28 dBm/100kHz.NOTE 2: For a *multi-band RIB* with Inter RF Bandwidth gap < 2\*ΔfOBUE the emission limits within the Inter RF Bandwidth gaps is calculated as a cumulative sum of contributions from adjacent sub-blocks or RF Bandwidth on each side of the Inter RF Bandwidth gap.NOTE 3: The requirement is not applicable when Δfmax < 10 MHz.NOTE 4: The test requirement is derived from the basic limit a scaling factor of 9 dB and any applicable TT.NOTE 5: VoidNOTE 6: Y = 10log10(NTXU,OTApercell) dB |

Table 6.7.4.5.3-2: Local Area IAB-DU and Local Area IAB-MT operating band unwanted emission limits (3 GHz < NR bands ≤ 4.2 GHz)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Frequency offset of measurement filter ‑3dB point, Δf | Frequency offset of measurement filter centre frequency, f\_offset | IAB-DU type 1-O Test requirement (Note 1, 2, 4) | IAB-MT type 1-O Test requirement (Note 1, 2, 5) | Measurement bandwidth  |
| 0 MHz ≤ Δf < 5 MHz | 0.05 MHz ≤ f\_offset < 5.05 MHz |  |  | 100 kHz  |
| 5 MHz ≤ Δf < min(10 MHz, Δfmax) | 5.05 MHz ≤ f\_offset < min(10.05 MHz, f\_offsetmax) | -26 dBm | -35 +Y dBm | 100 kHz  |
| 10 MHz ≤ Δf ≤ Δfmax | 10.05 MHz ≤ f\_offset < f\_offsetmax  | -28 dBm (Note 3) | -37 +Y dBm (Note 3) | 100 kHz  |
| NOTE 1: For a IAB supporting non-contiguous spectrum operation within any *operating band* the emission limits within sub-block gaps is calculated as a cumulative sum of contributions from adjacent sub blocks on each side of the sub block gap. Exception is Df ≥ 10MHz from both adjacent sub blocks on each side of the sub-block gap, where the emission limits within sub-block gaps shall be -28 dBm/100kHz.NOTE 2: For a *multi-band RIB* with Inter RF Bandwidth gap < 2\*ΔfOBUE the emission limits within the Inter RF Bandwidth gaps is calculated as a cumulative sum of contributions from adjacent sub-blocks or RF Bandwidth on each side of the Inter RF Bandwidth gap.NOTE 3: The requirement is not applicable when Δfmax < 10 MHz.NOTE 4: The test requirement is derived from the basic limit a scaling factor of 9 dB and any applicable TT.NOTE 5: Y = 10log10(NTXU,OTApercell) dB |

Table 6.7.4.5.3-3: Local Area IAB-DU and Local Area IAB-MT operating band unwanted emission limits (4.2 GHz < NR bands ≤ 6 GHz)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Frequency offset of measurement filter ‑3dB point, Δf | Frequency offset of measurement filter centre frequency, f\_offset | IAB-DU type 1-O Test requirement (Note 1, 2, 4) | IAB-MT type 1-O Test requirement (Note 1, 25) | Measurement bandwidth  |
| 0 MHz ≤ Δf < 5 MHz | 0.05 MHz ≤ f\_offset < 5.05 MHz |  |  | 100 kHz  |
| 5 MHz ≤ Δf < min(10 MHz, Δfmax) | 5.05 MHz ≤ f\_offset < min(10.05 MHz, f\_offsetmax) | -26 dBm | -35 +Y dBm | 100 kHz  |
| 10 MHz ≤ Δf ≤ Δfmax | 10.05 MHz ≤ f\_offset < f\_offsetmax  | -28 dBm (Note 3) | -37 +Y dBm (Note 3) | 100 kHz  |
| NOTE 1: For a IAB supporting non-contiguous spectrum operation within any *operating band* the emission limits within sub-block gaps is calculated as a cumulative sum of contributions from adjacent sub blocks on each side of the sub block gap. Exception is Df ≥ 10MHz from both adjacent sub blocks on each side of the sub-block gap, where the emission limits within sub-block gaps shall be -28 dBm/100kHz.NOTE 2: For a *multi-band RIB* with Inter RF Bandwidth gap < 2\*ΔfOBUE the emission limits within the Inter RF Bandwidth gaps is calculated as a cumulative sum of contributions from adjacent sub-blocks or RF Bandwidth on each side of the Inter RF Bandwidth gap.NOTE 3: The requirement is not applicable when Δfmax < 10 MHz.NOTE 4: The test requirement is derived from the basic limit a scaling factor of 9 dB and any applicable TT.NOTE 5: Y = 10log10(NTXU,OTApercell) dB |

**--------------End of change-------------**