**3GPP TSG-RAN4 Meeting # 113R4-2418701**

**Orlando, USA, Nov.18th – 22th, 2024**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.174** | **CR** | **0118** | **rev** | **1** | **Current version:** | **16.11.0** |  |
|  | | | | | | | | |
| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)*** *on using this form: comprehensive instructions can be found at  <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:*** | (NR\_IAB-Core) CR on TS38.174\_IAB BS EESS protection | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | ZTE Corporation, Sanechips | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_IAB-Core | | | | |  | ***Date:*** | | | 2024-11-01 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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 can be 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:*** | | To apply the applicability date for the more stringent limit to protect EESS to compliant with EU Decision 2020/590. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Update the applicability notes for EESS protection in the 23.6-24.0 GHz frequency range | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | National/Regional regulations will not be reflected correctly in this specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 2, 9.7.4.5.4.1, 9.7.5.3.3.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | | **X** |  | Test specifications | | | | TS38.176-2 | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | This CR is revised from R4-2418701. | | | | | | | | |

<Start of change >

# 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".

[2] 3GPP TS 38.104: “NR; Base Station (BS) radio transmission and reception”

[3] 3GPP TS 38.101-1: “NR User Equipment (UE) radio transmission and reception; Part 1: Range 1 Standalone”

[4] 3GPP TS 38.101-2: “NR User Equipment (UE) radio transmission and reception: Part 2: Range 2 Standalone”

[5] 3GPP TS 38.101-3: "NR; User Equipment (UE) radio transmission and reception; Part 3: Range 1 and Range 2 Interworking operation with other radios "

[6] 3GPP TS 38.133: “NR: Requirements for support of radio resource management”

[7] 3GPP TS 38.300: "NR; Overall description; Stage-2".

[8] 3GPP TS 38.211: "NR; Physical channels and modulation”.

[9] 3GPP TS 38.212 "NR; Multiplexing and channel coding".

[10] 3GPP TS 38.213: "NR; Physical layer procedures for control".

[11] 3GPP TS 38.214: "NR; Physical layer procedures for data".

[12] 3GPP TS 38.215: "NR; Physical layer measurements".

[13] 3GPP TS 38.304: "NR; User Equipment (UE) procedures in idle mode".

[14] 3GPP TS 38.321: "NR; Medium Access Control (MAC) protocol specification".

[15] 3GPP TS 38.331: "NR; Radio Resource Control (RRC); Protocol specification".

[16] ITU-R Recommendation SM.329: "Unwanted emissions in the spurious domain".

[17] ERC Recommendation 74-01, "Unwanted emissions in the spurious domain".

[18] ITU-R Recommendation M.1545: “Measurement uncertainty as it applies to test limits for the terrestrial component of International Mobile Telecommunications – 2000”

[19] Recommendation ITU-R SM.328: "Spectra and bandwidth of emissions".

[20] "Title 47 of the Code of Federal Regulations (CFR)", Federal Communications Commission.

[21] 3GPP TS 38.141-2: "NR; Base Station (BS) conformance testing; Part 2: Radiated conformance testing".

[22] 3GPP TS 38.141-1: "NR; Base Station (BS) conformance testing; Part 1: Conducted conformance testing".

[23] 3GPP TS 38.521-1: “NR; User Equipment (UE) conformance specification; Radio transmission and reception; Part 1: Range 1 Standalone”.

[24] 3GPP TS 38.521-2: “NR; User Equipment (UE) conformance specification; Radio transmission and reception; Part 2: Range 2 Standalone”.

[25] 3GPP TS 38.176-1: "NR; Integrated Access and Backhaul (IAB) conformance testing; Part 1: Conducted conformance testing".

[26] 3GPP TS 38.176-2: "NR; Integrated Access and Backhaul (IAB) conformance testing; Part 2: Radiated conformance testing".

[27] 3GPP TR 38.901: "Study on channel model for frequencies from 0.5 to 100 GHz"

[28] 3GPP TR 38.101-4: " NR; User Equipment (UE) radio transmission and reception; Part 4: Performance requirements"

[29] Commission Implementing Decision (EU) 2020/590 of 24 April 2020 amending Decision (EU) 2019/784 as regards an update of relevant technical conditions applicable to the 24,25-27,5 GHz frequency band

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##### 9.7.4.5.4 Additional OTA operating band unwanted emission requirements

9.7.4.5.4.1 Protection of Earth Exploration Satellite Service

For IAB-DU and IAB-MT operating in the frequency range 24.25 – 27.5 GHz, the power of unwanted emission shall not exceed the limits in table 9.7.4.5.4.1-1.

Table 9.7.4.5.4.1-1: OBUE limits for protection of Earth Exploration Satellite Service

|  |  |  |
| --- | --- | --- |
| Frequency range | Limit | *Measurement Bandwidth* |
| 23.6 – 24 GHz | -3 dBm (Note 1) | 200 MHz |
| 23.6 – 24 GHz | -9 dBm (Note 2) | 200 MHz |
| NOTE 1: This limit applies to IAB-DU and IAB-MT brought into use on or before 1 September 2027 in countries not adopting EU Decision 2020/590 [29] .  NOTE 2: This limit applies to IAB-DU and IAB-MT brought into use after 1 September 2027 or to IAB-DU and IAB-MT in countries adopting EU Decision 2020/590 [29]. | | |

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##### 9.7.5.3.3 Additional OTA transmitter spurious emissions requirements

These requirements may be applied for the protection of systems operating in frequency ranges other than the IAB-Node. The limits may apply as an optional protection of such systems that are deployed in the same geographical area as the IAB-Node, or they may be set by local or regional regulation as a mandatory requirement for an NR operating band. It is in some cases not stated in the present document whether a requirement is mandatory or under what exact circumstances that a limit applies, since this is set by local or regional regulation. An overview of regional requirements in the present document is given in clause 4.5.

###### 9.7.5.3.3.1 Limits for protection of Earth Exploration Satellite Service

For IAB-DU and IAB-MT operating in the frequency range 24.25 – 27.5 GHz, the power of any spurious emissions shall not exceed the limits in Table 9.7.5.3.3.1-1.

Table 9.7.5.3.3.1-1: Limits for protection of Earth Exploration Satellite Service

|  |  |  |  |
| --- | --- | --- | --- |
| Frequency range | Limit | *Measurement Bandwidth* | Note |
| 23.6 – 24 GHz | -3 dBm | 200 MHz | Note 1 |
| 23.6 – 24 GHz | -9 dBm | 200 MHz | Note 2 |
| NOTE 1: This limit applies to IAB-DU and IAB-MT brought into use on or before 1 September 2027 in countries not adopting EU Decision 2020/590 [29].  NOTE 2: This limit applies to IAB-DU and IAB-MT brought into use after 1 September 2027 or to IAB-DU and IAB-MT in countries adopting EU Decision 2020/590 [29]. | | | |

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