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| **Radiocommunication Study Groups** |  |
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| Received:  Subject: Proposed modification to Annex 17 to Document 5A/597-E | **Document 5A/xx** |
| **14 – 24 November 2022** |
| **English only** |
| Institute of Electrical and Electronics Engineers | |
| Proposed modification to Annex 17 to Document 5A/597-E | |

**Source Information**

IEEE 802 LAN/MAN Standards Committee (LMSC) respectfully submits this submission to ITU-R Working Party 5A (WP 5A). IEEE 802 is a committee of the IEEE Standards Association and Technical Activities, two of the Major Organizational Units of the Institute of Electrical and Electronics Engineers (IEEE). IEEE has about 400,000 members in over 160 countries. IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity. In submitting this document, IEEE 802 acknowledges and respects that other components of IEEE Organizational Units may have perspectives that differ from, or compete with, those of IEEE 802. Therefore, this submission should not be construed as representing the views of IEEE as a whole[[1]](#footnote-1).

**Introduction**

This document proposes updates to the [Annex 17](https://www.itu.int/dms_pub/itu-r/md/19/wp5a/c/R19-WP5A-C-0597!N17!MSW-E.docx) to [Doc. 5A/597](https://www.itu.int/dms_pub/itu-r/md/19/wp5a/c/R19-WP5A-C-0597!!MSW-E.docx) - Working document towards a preliminary draft new Report ITU-R M.[bb-WAS.freq] - Frequencies used by systems based on radio interface standards for broadband wireless access. The proposed changes are indicated via the ‘track changes’.

As commented in document 5A/547 “Proposed modification to Recommendation ITU-R M.1801-2”, IEEE does not believe that addition of frequency tables to M.1801 is appropriate and does not support that. IEEE believes that M.1801 has never been about frequency ranges and addition of a frequency table and/or a separate frequency document is unnecessary and potentially confusing. Addition of new documents on frequency tables requires keeping the documents synchronized. If this new report is agreed in WP 5A as a companion to M.1801, the proposed edits and comments in this contribution would be IEEE input to the working document towards the new report. In addition, IEEE does not support inclusion of frequencies in this new report to mean removing any frequencies/bands from any other ITU-R recommendations. In other words, this new report should neither require, nor lead to, any changes to any other ITU-R Recommendations.

**Discussion**

IEEE 802 would like to propose edits to [Annex 17](https://www.itu.int/dms_pub/itu-r/md/19/wp5a/c/R19-WP5A-C-0597!N17!MSW-E.docx) to [Doc. 5A/597](https://www.itu.int/dms_pub/itu-r/md/19/wp5a/c/R19-WP5A-C-0597!!MSW-E.docx) for WP 5A consideration.

**Proposal**

Incorporate the proposed updates below in the next revision of “Working document towards a preliminary draft new Report ITU-R M.[bb-WAS.freq] - Frequencies used by systems based on radio interface standards for broadband wireless access”.

**Contact:** LYNCH Michael **E-mail:** [freqmgr@ieee.org](mailto:freqmgr@ieee.org)

**Incl.: Annex 1**

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| **Radiocommunication Study Groups** |  |
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| Subject: Document 5A/TEMP/237 | **Annex 17 to  Document 5A/597-E** |
| **3 June 2022** |
| **English only** |
| Annex 17 to Working Party 5A Chairman’s Report | |
| WORKING DOCUMENT TOWARDS A PRELIMINARY DRAFT  NEW REPORT ITU-R M.[bb-WAS.freq] | |
| Operational Frequencies in systems based on radio interface standards  for broadband wireless access | |

(Questions ITU-R 212-4/5 and ITU-R 238-2/5)

(…)

# 1 Introduction

This Report provides information on the operational frequencies by systems based on radio interface standards for broadband wireless access. The frequencies reported here depend on, *inter alia*, radio interface capabilities, national/regional licensing regulations, device ecosystem and actual deployments. This document is a companion ITU-R Report to Recommendation ITU-R M.1801.

# 2 Relevant ITU-R Recommendations and Reports

*[Editor’s note: Other relevant ITU-R Recommendations and Reports applicable to all the Annexes listed below should be added].*

[Recommendation ITU-R M.1450](https://www.itu.int/rec/R-REC-M.1450/en), “Characteristics of broadband radio local area networks”

[Recommendation ITU-R M.1801](https://www.itu.int/rec/R-REC-M.1801/en), “Radio interface standards for broadband wireless access systems, including mobile and nomadic applications, in the mobile service”

Recommendation ITU-R M.1457, “Detailed specifications of the terrestrial radio interfaces of International Mobile Telecommunications-2000 (IMT-2000)”

Recommendation ITU-R M.1457, M.2012, “Detailed specifications of the terrestrial radio interfaces of International Mobile Telecommunications Advanced (IMT-Advanced)”

Recommendation ITU-R M.1457, M.2150, “Detailed specifications of the terrestrial radio interfaces of International Mobile Telecommunications-2020 (IMT-2020)”

# Recommendation ITU-R M.2003, “Multiple gigabit wireless systems in frequencies around 60 GHz” 3 Operational Frequencies in systems based on radio interface standards for broadband wireless access

This information is provided in Annexes 1 to 9.

**List of annexes**

Annex 1 Broadband radio local area networks: operational frequencies in systems

Annex 2 IMT-2000 terrestrial radio interfaces: operational frequencies in systems

Annex 3 IMT-Advanced terrestrial radio interfaces: operational frequencies in systems

Annex 4 IMT-2020 terrestrial radio interfaces: operational frequencies in systems

Annex 5 Harmonized IEEE and ETSI radio interface standards, for broadband wireless access (BWA) systems including mobile and nomadic applications in the mobile service: operational frequencies in systems

Annex 6 ATIS WTSC radio interface standards for BWA systems in the mobile service: operational frequencies in systems

Annex 7 “eXtended Global Platform: XGP” for broadband wireless access (BWA) systems in the mobile service: operational frequencies in systems

Annex 8 IEEE 802.20: Standard air interface for mobile broadband wireless access supporting vehicular mobility: operational frequencies in systems

Annex 9 Air interface of SCDMA broadband wireless access system standard: operational frequencies in systems

Annex 1  
  
Broadband radio local area networks

Broadband radio local area network standards are included in Recommendation ITU‑R M.1801, and can be grouped as follows:

– IEEE 802. 11 Wireless LAN

– ETSI BRAN HIPERLAN

– ARIB HiSWANa

# IEEE 802.11 Wireless LAN

Operational frequencies for IEEE 802.11 are listed in Table NNN.

Table NNN. Operational frequencies for IEEE 802.11

| IEEE 802.11 Technology | IEEE Std 802.11-2020 (Clause 16, commonly known as 802.11b) | IEEE Std 802.11-2020 (Clause 17, commonly known as 802.11a) | IEEE Std 802.11-2020 (Clause 18, commonly known as 802.11g) | IEEE Std 802.11-2020 (Clause 17,  Annex D and Annex E, commonly known as 802.11j) | IEEE Std 802.11-2020 (Clause 19, commonly known as 802.11n) | IEEE Std 802.11-2020- (Clause 20, commonly known as 802.11ad) | IEEE Std 802.11-2020 (Clause 21, commonly known as 802.11ac) | IEEE Std 802.11-2020 (Clause 23, commonly known as 802.11ah) | IEEE Std 802.11ax-2021 | IEEE Std 802.11ay-2021 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Frequency Band | 2 400-2 483.5 MHz | 5 150-5 250 MHz5 250-5 350 MHz5 470-5 725 MHz 5 725-5 825 MHz | 2 400-2 483.5 MHz | 4 940- 4 990 MHz  5 030-5 091 MHz  5 150-5 250 MHz5 250-5 350 MHz5 470-5 725 MHz 5 725-5 825 MHz | 2 400-2 483.5 MHz 5 150-5 250 MHz5 250-5 350 MHz5 470-5 725 MHz 5 725-5 825 MHz | 57-71 GHz | 5 150-5 250 MHz5 250-5 350 MHz5 470-5 725 MHz 5 725-5 825 MHz | 755-787 MHz  779-787 MHz  863-868.6 MHz  902-928 MHz  916.5-927.5 MHz  917.5-923.5 MHz | 2 400-2 483.5 MHz  5 150-5 250 MHz  5 250-5 350 MHz  5 470-5 725 MHz  5 725-5 825 MHz  5 825-5 850 MHz  5 850-5 895 MHz  5 925-7 125 MHz | 57-71 GHz |

# ETSI BRAN HIPERLAN

[TBD]

# ARIB HiSWANa

[TBD]

# References

[1] IEEE 802.11-2020

[2] IEEE 802.11ax-2021

[3] IEEE 802.11ay-2021

1. This document solely represents the views of the IEEE 802 LAN/MAN Standards Committee and does not necessarily represent a position of either the IEEE, the IEEE Standards Association or IEEE Technical Activities. [↑](#footnote-ref-1)