



IEEE 802 LAN/MAN Standards Committee (LMSC)

IEEE 802 LMSC VIEWS ON WRC-19 AGENDA ITEMS

For consideration in APG-19 Working Party 2

Introduction

IEEE 802 LMSC is a leading consensus-based industry standards body, producing standards for wireless networking devices, including wireless local area networks (“WLANs”), wireless specialty networks (“WSNs”), wireless metropolitan area networks (“Wireless MANs”), and wireless regional area networks (“WRANs”). We appreciate the opportunity to provide these comments to APT.

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 420,000 members in about 190 countries and supports the needs and interests of engineers and scientists broadly. 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 whole¹.

IEEE 802 LAN/MAN Standards Committee (LMSC) respectfully submits its views for consideration of WRC-19 Agenda Items 1.13 (66-71GHz), 1.16 (5150-5925 MHz) and 9.1.5 (5150-5250MHz, 5250-5350MHz & 5470-5725MHz).

Agenda Item 1.13 (66-71GHz)

Due to the following developments, IEEE 802 recommends that WRC-19 not consider 66-71 GHz for IMT identification.

- On July 14, 2016, FCC published a Report and Order and Further Notice of Proposed Rulemaking (FCC 16-89) [https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-89A1.pdf] to adopt 64-71 GHz band for License Exempt operation.
- In January 2018, the ITU-R published Recommendation M.2003-2 [<https://www.itu.int/rec/R-REC-M.2003-2-201801-I/en>] wherein this band was indicated for Multigigabit Wireless Systems. This facilitates the introduction of IEEE 802 technologies that are capable of supporting 5G use cases under the existing Mobile Allocation.
- In February 2018, the Radio Spectrum Policy Group of the European Union (RSPG) published their Second Opinion on 5G [<http://rspg-spectrum.eu/2018/02/>] in which they recommended making this band available on a general authorized access basis.

We believe that a wide variety of 5G services and use-cases will be deployed in this band globally without the need for an IMT identification. Wi-Fi plays an important role in and

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is an integral part of 5G driven by new technologies such as [IEEE P802.11ax](#), [IEEE P802.11be](#), [IEEE Std. 802.11ad](#) and [IEEE P802.11ay](#), operating in sub-6GHz and mmWave spectrum. In fact, IMT identification could bar some key 5G technologies from operating in this band.

IEEE 802 recommends supporting CPM-19 Report Method J1 (Section 2/1.13/4.10.1).

Agenda Item 1.16 (5150-5925 MHz)

Since the 1990s, IEEE 802 has been actively developing standards for Wireless LAN technologies that operate in the 5 GHz bands. Among these is IEEE 802.11, which is the basis for Wi-Fi, the most successful, most used and most demanded 5 GHz wireless technology. IEEE 802.11 is carrying the vast majority of wireless internet traffic and is essential for commercial services, education, communications and social interactions, creating industries and providing jobs and economic growth around the world.

IEEE 802 recommends that any regulatory action should not disadvantage any IEEE 802 standard or add any additional regulatory burdens for its use of the 5 GHz bands. More specifically, for 5725-5850 MHz, any actions should not impose additional constraints such as DFS, Tx Power restriction or Indoor restrictions. Moreover, IEEE 802 would like to have expanded access in 5150-5250 MHz through higher Tx Power and outdoor operations.

Agenda Item 9.1 Issue 9.1.5 (5250-5350 MHz & 5470-5725 MHz)

In preparation for WRC-15 and WRC-19, ITU-R carried out a significant amount of work to study coexistence between RLANs and new radar systems, such as bi-static and fast frequency-hopping radars. These studies confirm that the technical and regulatory impacts of requiring the mobile service to protect new radars types would impose undue constraints on RLAN operation in the 5250-5350 MHz and 5470-5725 MHz frequency ranges. The reference to ITU-R M.1638-0 should not be updated to ITU-R M.1638-1 in footnotes RR Nos. 5.447F and 5.450A. Given that both ITU-R M.1638-0 and M.1849-1 Recommendations require essentially the same protection requirements, adding a new reference to ITU-R M.1849-1 is redundant and unnecessary.

IEEE 802 recommends supporting CPM-19 Report Approach B (Section 2/9.1.5/4.2).

Conclusion

IEEE 802 LMSC appreciates the opportunity to share its view of the WRC-19 agenda items above and hopes that it will provide APT further insight on how to approach them during WRC-19.