IEEE P802.18
Radio Regulatory Technical Advisory Group (RR-TAG)

Draft Response to RSPG's consultation on work programme for 2024 and beyond

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This document contains the draft of a proposed IEEE 802 LMSC response to the European Commission Radio Spectrum Policy Group (RSPG)'s consultation "Work Programme for 2024 and beyond," see https://radio-spectrum-policy-group.ec.europa.eu/system/files/2023-10/RSPG23-045final-Draft_RSPG_WP24_and_beyond_proposal.pdf

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Re: RSPG23-045: Work Programme for 2024 and beyond

Dear Radio Spectrum Policy Group,

IEEE 802 LAN/MAN Standards Committee (IEEE 802 LMSC) thanks the Radio Spectrum Policy Group (RSPG) for issuing the consultation "Work Programmer for 2024 and beyond" and for the opportunity to provide feedback.

IEEE 802 LMSC is a leading consensus-based open standards development committee for networking standards that are used by industry globally. It produces standards for networking devices, including wired and wireless local area networks ("LANs" and "WLANs"), wireless specialty networks ("WSNs"), wireless metropolitan area networks ("Wireless MANs"), and wireless regional area networks ("WRANs"). Technologies produced by implementers of our standards are a critical element for all networked applications today.

IEEE 802 LMSC is a committee of the IEEE Standards Association and of Technical Activities, two of the Major Organizational Units of the IEEE. IEEE has about 400,000 members in over 160 countries and its core purpose is to foster technological innovation and excellence for the benefit of humanity. IEEE is also a major accredited standards development organization whose standards are recognized world-wide. In submitting this document, IEEE 802 LMSC acknowledges and respects that other components of IEEE Organizational Units may have perspectives that differ from, or compete with, those of IEEE 802 LMSC. Therefore, this submission should not be construed as representing the views of IEEE as a whole[1].

Please find below the comments of IEEE 802 LMSC on a proposed work item "Long-term vision for the upper 6 GHz band (2030 and beyond)".

Response

IEEE 802 LMSC support the proposed work item and the stated objective of maximizing the contribution of the upper 6 GHz band to the achievement of digital connectivity targets for Europe. In this regard, IEEE 802 LMSC respectfully recommends RSPG to include the following under this work item:

1. **The role of indoor radio local area network (RLAN) networks and seamless handover between outdoor and indoor networks in meeting future sustainability goals for communication networks in the EU.** Ubiquitous deployments of wireless communications based on IEEE 802 wireless technologies are essential to enable the EU's sustainable development goals and achieve its Digital Decade vision. It has been remarked in several studies produced by or for European institutions that networks using IEEE 802 wireless technologies, in combination with wired backhaul over long distances, are the current leaders in terms of energy efficient networks[2,3,4]. The IEEE Std 802.11ax-

[1] This document solely represents the views of IEEE 802 LMSC and does not necessarily represent a position of either the IEEE or the IEEE Standards Association.

[2] WIK-Consult and Ramboll, Final Study Report for EU BEREC "External Sustainability Study on Environmental impact of electronic communications," BoR (22) 34, 15 March 2022.

2021, the ongoing IEEE P802.11be project, IEEE Std 802.15.4z-2020, and the ongoing IEEE P802.15.4ab project for instance, introduce capability to operate in the entire 6 GHz band (i.e., 5925 MHz to 7250 MHz). Extending license-exempt operation to the upper 6 GHz band in Europe is aligned with the RSPG's opinion[5].

2. **Possible rollout of AFC type deployments in the 6 GHz band (especially on the lower 6 GHz band).** AFC system technology is in its last stages of certification in United States of America and Canada. Some other countries have expressed interest and are actively working on authorization and enabling of the AFC operation. There is a good level of confidence that the technology is ready for global adoption. The AFC system technology is designed flexibly and can be easily customized based on local regulatory and operational requirements. AFC system offers coverage/capacity improvement not only for RLAN outdoor operation but also indoor operation and can be used to operate on both Wi-Fi and 3GPP-based license-exempt technologies (e.g. NR-U) in the 6 GHz band. Effective enabling of the Standard Power mode under supervision of the AFC system and scaling of the services highly depends on the extension of the available spectrum in the upper 6 GHz band.

Conclusion

IEEE 802 LMSC thanks the RSPG for the opportunity to provide this submission. We encourage the RSPG in future versions of the document and in deliberations going forward to take into account our recommendations.

Respectfully submitted,

By: /ss/.
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[3] The digital environmental footprint in France: ADEME and Arcep submit their first report to the Government, 19 January 2022. Available online [accessed: 7 December 2023].
[4] Radio Spectrum Policy Group RSPG21-0041-final, RSPG Opinion on the role of radio spectrum policy to help combat climate change. Available online [accessed: 7 December 2023]
[5] Wi-Fi Alliance, Wi-Fi: sustainability (complete information). Available online [accessed: 7 December 2023]