



October 11, 2021

## **Shure's comments to MCMC's public consultation on "Wireless Local Area Network (WLAN) in the 6GHz Frequency Band"**

Dear MCMC Executives and Staff,

Shure Incorporated applauds the work of the MCMC and welcomes the opportunity to provide its response to the above-mentioned MCMC's public consultation.

For more than 95 years, Shure has been a leading manufacturer of high-quality, innovative audio products. Shure's products ([www.shure.com](http://www.shure.com)) are utilized worldwide in applications known as audio Programme Making and Special Events (PMSE)<sup>1</sup>, which includes deployments in industries such as broadcast and film production and other professional indoor and outdoor media content creation, in addition to a variety of other civic, business, and special event contexts. These applications continue to grow in scale and density to meet the needs of broadcast and event producers engaged in increasingly complex productions to meet audience expectations.

Audio is of prime importance in the world of PMSE. Without the "audio" part of an event, CEOs, politicians, and entertainers cannot communicate with impact to their audience. The importance of audio to these events can be seen in the on-going Expo 2020<sup>2</sup>, a World Expo, currently hosted by Dubai in the UAE from 1 October 2021 to 31 March 2022 where we can witness "the best of Malaysia's culture in a net-zero carbon pavilion"<sup>3</sup> and many other events.

Shure has actively participated for many years in various spectrum proceedings around the world, e.g. by filing comments to consultations from Saudi Arabia (CITC)<sup>4</sup>, United Arab Emirates (TDRA)<sup>5</sup>, United Kingdom (OFCOM)<sup>6</sup>, European Commission Radio Spectrum Policy Group (RSPG)<sup>7</sup> and U.S. Federal Communications Commission – (FCC)<sup>8</sup>.

Given that the extensive growth of Wi-Fi needs more spectrum, we support the opening of the whole frequency range from 5925 MHz to 7125 MHz ("6 GHz") by MCMC for WLAN use. While the use of the upper 6 GHz for IMT is under study for WRC-23, we note that no regulator has issued rules for IMT use of that band. While certain entities are asking to wait for WRC-23 decision before deciding on the use of the upper 6 GHz band, we are of the view that MCMC should open that band as soon

---

<sup>1</sup> ITU's inclusive term consisting of radio microphones, in-ear monitors, wireless cameras, talkback systems, etc

<sup>2</sup> <https://www.youtube.com/watch?v=Rb5m8nT7meo>

<sup>3</sup> <https://www.expo2020dubai.com/en/understanding-expo/participants/country-pavilions/malaysia>

<sup>4</sup> <https://www.citc.gov.sa/en/new/publicConsultation/Pages/144201.aspx>

<sup>5</sup> <https://www.tdra.gov.ae/en/media-hub/press-releases/2021/10/6/tdra-releases-a-public-consultation-on-spectrum-resources.aspx>

<sup>6</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0017/55601/shure.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0017/55601/shure.pdf)

<sup>7</sup> <https://rspg-spectrum.eu/public-consultations/>

<sup>8</sup> [https://www.fcc.gov/ecfs/search/filings?proceedings\\_name=RM-11821&q=\(filers.name:\(\\*shure\\*\)\)&sort=date\\_disseminated,DESC](https://www.fcc.gov/ecfs/search/filings?proceedings_name=RM-11821&q=(filers.name:(*shure*))&sort=date_disseminated,DESC)

as possible on an unlicensed basis so that its citizens can benefit from the 6 GHz Wi-Fi ecosystem enjoyed by the USA, Canada, Brazil and South Korea.

In addition, technology neutral rules would also allow development of ecosystems in 6 GHz which are not based on Wi-Fi, like 3GPP NR-U or ETSI PMSE Wireless Multi-Channel Audio System (WMAS)<sup>9</sup>.

Furthermore, to make more efficient use of the spectrum, enable new use cases and benefit from the unlicensed ecosystem emerging from the USA, MCMC could consider the FCC's regulations as follows:<sup>10</sup>

- low power restricted to indoor use *without* an Automated Frequency Coordination (AFC) system across the whole 1.2 GHz of spectrum with:
  - Access Points at a Maximum Equivalent Isotropic Radiated Power (EIRP) of 30 dBm and EIRP Power Spectral Density (PSD) of 5 dBm/MHz.
  - Client Devices at EIRP of 24 dBm and EIRP PSD of -1 dBm/MHz to ensure that client devices remain in close proximity to the indoor access points.
- higher standard power indoor and outdoor operations controlled by an AFC<sup>11</sup> system that would prevent interference to any incumbent fixed systems with:
  - Access Points Power up to 36 dBm EIRP (EIRP PSD of 23 dBm/MHz).
  - Client Devices power up to 30 dBm EIRP (EIRP PSD of 17 dBm/MHz).

The FCC's regulations could also be considered to protect incumbent Fixed Satellite Service uplink operation:

- Standard power access points and fixed client devices located outdoors must limit their maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon to 21 dBm (125 mW) to protect fixed satellite services.

Please contact the undersigned if you have any questions.

Respectfully submitted,  
*/s/ Prakash Moorut*

Prakash Moorut  
Senior Director, Spectrum & Regulatory Affairs  
Shure Incorporated  
5800 West Touhy Avenue  
Niles, IL 60714  
United States  
Phone: +1 312 874 0830  
Email: moorut\_prakash@shure.com

---

<sup>9</sup> See [https://www.etsi.org/deliver/etsi\\_en/300400\\_300499/30042201/02.01.02\\_60/en\\_30042201v020102p.pdf](https://www.etsi.org/deliver/etsi_en/300400_300499/30042201/02.01.02_60/en_30042201v020102p.pdf)

<sup>10</sup> <https://docs.fcc.gov/public/attachments/FCC-20-51A1.pdf>

<sup>11</sup> See <https://docs.fcc.gov/public/attachments/FCC-21-100A1.pdf>