

# Morgan Lewis

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May 12, 2016

Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

Re: *Amendment of Part 15 of the Commission's Rules for Unlicensed Operations in the Television Bands, Repurposed 600 MHz Band, 600 MHz Guard Bands and Duplex Gap, and Channel 37, and Amendment of Part 74 of the Commission's Rules for Low Power Auxiliary Stations in the Repurposed 600 MHz Band and 600 MHz Duplex Gap* (ET Docket No. 14-165); *Promoting Spectrum Access for Wireless Microphone Operations* (GN Docket No. 14-166); *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions* (GN Docket No. 12-268)

Dear Ms. Dortch:

On May 10, 2016, Mark Brunner, Senior Director, Global Brand Management and Ahren J. Hartman, Senior Director, Wireless Engineering with Shure Incorporated ("Shure") and Catherine Wang and Denise Wood of Morgan, Lewis & Bockius LLP met with Julius Knapp, Paul Murray, Rodney Small, Rashmi Doshi,<sup>1</sup> and Hugh Van Tuyl from the Office of Engineering and Technology; Scot Stone and Blaise Scinto from the Wireless Telecommunications Bureau; and Gary Epstein of the Incentive Auction Task Force.

During this meeting, we discussed issues being considered in Shure's pending Petitions for Reconsideration in the above-captioned proceedings, including (1) the application of the Section 15.203 antenna connector limitations to wireless microphones; (2) imposition of the onerous -90 dBc requirement outside the European Telecommunications Standards Institute ("ETSI") emission mask adopted in the Commission's order for wireless microphones; and (3) the 30 MHz limitation for wireless microphone users in the 1435-1525 MHz ("1.4 GHz") band. We also discussed plans and procedures to implement modifications of existing wireless microphones to facilitate transition out of 600 MHz spectrum.

Shure reiterated its position that application of the Part 15 antenna connector limitations in Section 15.203 of the Commission's Rules to Part 15 wireless microphones would impose an unreasonable and onerous burden on wireless microphone users and manufacturers with no countervailing public interest benefit. In particular, these limitations are unnecessary to prevent use of a microphone with an antenna inconsistent with the low power use of the microphone, or to

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<sup>1</sup> Participating by telephone.

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address concerns about human safety, interference, or spectral efficiency. Such requirement would also unnecessarily impose different technical requirements on Part 15 and Part 74 wireless microphones that will significantly inhibit manufacturing, raise consumer costs, and cause user confusion. Imposing such disparate requirements on Part 15 wireless microphones would be contrary to the Commission's efforts to harmonize the technical requirements that apply to Part 15 and Part 74 wireless microphones.

Shure also urged the Commission to reconsider the rule that imposes a 90 dB reduction in out-of-band emissions ("OOBE") relative to carrier level ("-90 dBc") beyond plus or minus one megahertz from center frequency. Application of that draconian formulation of an emission requirement is unprecedented and unnecessary and will greatly hinder the manufacture and operation of wireless microphones in the VHF/UHF bands. Shure agrees with Sennheiser and other wireless microphone manufacturers that the ETSI OOBE limits offer a spectrally efficient and viable alternative and should be adopted in its stead.<sup>2</sup>

Shure asked that the Commission to reconsider the 30 MHz cap on wireless microphone access to the 1.4 GHz band absent additional burdensome requests for special temporary authority. Notice and comment was not sought on this unduly restrictive requirement and Shure maintains that coordination procedures with AFTRCC will better determine whether the proposed use of spectrum is appropriate. Elimination of this arbitrary cap on wireless microphone use, notwithstanding coordination with AFTRCC, will be vital to enable the 1.4 GHz band to be used to support large events with 100+ microphones, which require greater than 30 MHz of spectrum, the Commission's intended use for wireless microphones in the 1.4 GHz band.

Shure also discussed infield modifications contemplated by the company to facilitate a smooth transition of certain equipment away from 600 MHz frequencies repurposed in the pending incentive auction while minimizing the impact on wireless microphone users.

Sincerely,

/s/

Catherine Wang  
Denise Wood

*Counsel for Shure Incorporated*

cc:

Julius Knapp	Scot Stone
Paul Murray	Blaise Scinto
Rodney Small	Gary Epstein
Rashmi Doshi	
Hugh Van Tuyl	

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<sup>2</sup> See, e.g., Ex Parte Filing of Sennheiser Electronic Corporation, GN Docket Nos. 12-268 and 14-166; ET Docket No. 14-165; and MB Docket No. 15-146 (filed April 15, 2016).