

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Amendment of Part 15 of the Commission’s)	ET Docket No. 14-165
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)	
)	GN Docket No. 12-268
Expanding the Economic and Innovation)	
Opportunities of Spectrum Through Incentive)	
Auctions)	

**Reply to Opposition of
Actors’ Equity
Alliance of Resident Theatres/New York
Association of Performing Arts Presenters
The Broadway League, Inc.
Dance/USA
Educational Theatre Association
League of American Orchestras
OPERA America
Performing Arts Alliance
The Recording Academy
SAG-AFTRA
Theatre Communications Group**

Actors’ Equity, The Alliance of Resident Theatres/New York, The Association of Performing Arts Presenters, The Broadway League, Inc., Dance/USA, The Educational Theatre Association, The League of American Orchestras, OPERA America, The Performing Arts Alliance, The Recording Academy, SAG-AFTRA, and Theatre Communications Group (collectively the “Performing Arts and Theatre Groups”) have professional not-for-profit

members that regularly present stage productions which use fewer than fifty wireless microphones and other communications devices that operate within the TV Band (collectively, “wireless microphones”). Because of this single arbitrary factor, these theatres are not eligible for Part 74 licenses and are directly affected by the Commission’s decision in the August 2015 Report and Order in this proceeding which eliminated database registration and protection for unlicensed wireless microphone users.¹ Without this protection, as the number of unlicensed White Space devices increases, these theatres and performers will have no assurance whatsoever that their performances will not be devastatingly interrupted by co-channel interference. The same future is potentially in store for almost all regional theatres, symphony orchestras, opera and dance companies, educational theater, music venues, presenting organizations, and performing artists.

Shure Incorporated filed a Petition for Reconsideration of several items, including the elimination of database protection. Shure noted that “the complete elimination of the reservation system for unlicensed wireless microphones leaves virtually no possibility for interference-free wireless microphone operations for users that cannot meet the ‘50 microphone’ requirement.”²

The Wireless Internet Service Providers Association (“WISPA”) opposed Shure’s petition, claiming that the Commission had balanced the interests of licensed and unlicensed entities’ access to spectrum in the reconfigured TV bands.³ However, the important balance here is not

¹ *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*, 30 FCC Rcd. 9551 (2015) (the “Report and Order”), ¶¶ 262-266.

² Petition for Reconsideration of Shure Incorporated, December 23, 2015, at 15.

³ Opposition to Petitions for Reconsideration of the Wireless Internet Service Providers Association, February 29, 2016, at 4-5.

between licensed and unlicensed users, but between two very different categories of unlicensed devices. The Commission claimed that its elimination of database protection would “level the playing field” for users of White Space devices and unlicensed wireless microphones.⁴ However, no amount of turf adjustment can make this possible. The White Space devices are expected to carry data streams that can accommodate frequency agility, auto-correct for interference, and continue to operate. On the other side of the field, wireless microphones produce high quality sound to discerning audiences, and interference would be completely disruptive.

To continue the Commission’s sports analogy, the playing field may be flat, but it has the Denver Broncos on one side and the Shakespeare Theatre Company on the other.

The Performing Arts and Theatre Groups support Shure’s petition for reconsideration and oppose WISPA’s theory of balance.

More recently, Sennheiser Electronic Corporation filed an Opposition and Response in which it supported Shure’s petition and called for a path for professional unlicensed microphone operators to register for interference protection.⁵ Sennheiser also called attention to the use of wireless microphones as front-end sources for assistive listening systems mandated by the Americans with Disabilities Act (the “ADA”).

Theatres and performance venues are public accommodations that cannot deny any individual the opportunity to benefit from the full and equal enjoyment of services on the basis of a disability unless the cost of providing assistance would create an undue burden. Theatres across the country that regularly use fewer than fifty wireless microphones have invested thousands of dollar in assistive listening devices that rely on wireless microphones as the source

⁴ Report and Order, ¶ 266.

⁵ Opposition and Response of Sennheiser Electronic Corporation, January 27, 2016, at 7-8.

of high quality sound. These assistive listening devices are invaluable to the enjoyment of performances by the millions of Americans with diminished hearing. Some sources estimate that almost 47 million Americans fall in this category, and the number is increasing rapidly as the Baby Boomer generation ages and realizes the effects of long exposure to high levels of rock music.

For example, the McCarter Theatre Center in Princeton, New Jersey recently spent \$70,000 to upgrade its assistive listening system to deliver the highest possible quality of sound enhancement and provide clear sound to hearing-impaired patrons. Whenever cast members wear wireless microphones, they are routed through the assistive listening system. Even when cast members perform without wireless microphones, McCarter has found that wireless transmitters hidden on the set fill in dead spaces that installed wired microphones miss. McCarter does not regularly use fifty wireless microphones in its performances. Thus, without database protection, it may suffer significant interference from White Space devices, nullifying its efforts and its investment to benefit audience members requiring hearing assistance.

Similar circumstances can be found in Boston at the Huntington Theatre; at the Capital Repertory Theatre in Albany, New York; and at numerous other venues fulfilling their obligations under the ADA with the highest sound quality available. It would be an astonishingly sad result if these efforts were undermined by the Commission's decision to eliminate database protections.

The Performing Arts and Theatre Groups support Sennheiser's Opposition and Response in this proceeding. Performances by opera and dance companies, symphony orchestras, community theaters, and regional theaters reach a combined audience alone of 190 million Americans annually and collectively represent an annual \$7.8 billion industry,

and that is not including live music performances. There are more than 26,000 school theatre programs in the United States, which impact approximately 600,000 enrolled students. Given the thousands of performances held by arts organizations each year, the use of wireless microphones is both essential to producing high-quality performances and also mitigates against significant public safety concerns. Wireless systems are integral to backstage communications used by stagehands to execute complex technical activity. Interference to these backstage communications could compromise the safety of performers, technicians, and audiences.

Respectfully submitted,



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on behalf of:

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Copy to counsel for:

WISPA
Shure Incorporated
Sennheiser Electronic Corporation