

STATEMENT OF CONCERN
PROTECTING WIRELESS TECHNOLOGY FOR THE ARTS & MEDIA
FEDERAL COMMUNICATIONS COMMISSION

It is essential that the FCC offer interference protection to performing arts entities since they provide valuable public service. Congress should urge the FCC to restore access to a reliable geo-location database and preserve nonprofit performing arts, education, and media organizations' financial investments in technical equipment.

- **Provide professional wireless capability, with interference protection that works successfully, to the performing arts and community media sector.** Performances by opera and dance companies, symphony orchestras, community theaters, and regional theaters reach a combined audience of 190 million Americans annually and collectively represent an annual \$7.8 billion industry. There are more than 26,000 school theater programs in the United States which impact approximately 600,000 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.
- **Restore access to a reliable geo-location database** which will avoid interference between wireless microphones and TV band devices. Interference protection is critical for professional performing arts performances and for school theaters, community theaters, and media productions across the country. The FCC should be urged to maintain access to the geo-location database for these entities whether or not they operate under Part 15 or Part 74 rules. Interference protection is critical for performances and TV band devices: the database is the only interference protection mechanism available since the safe-haven channels for wireless microphones have been eliminated.
- **Offer some form of interference protection to performing arts entities.** The FCC decided to limit use of the geo-location database to performing arts entities regularly using 50 or more wireless devices. This arbitrary decision *excludes* almost all regional theaters, symphony orchestras, opera companies, educational theater, and presenting organizations.
- **We urge Congress to recognize the investment that organizations in the performing arts, education, and media community have made in wireless microphones** and communications devices used for backstage communications in order to produce and present performances of the highest caliber. Performing arts, education, and community media organizations provide demonstrable service to the public in improving quality of life; preserving our cultural heritage; in providing jobs, education, enlightenment, entertainment; and of course, contributing to local economies in every community across this country. K-16 schools committed to the performing arts and media literacy as part of their core curriculum have also expended considerable funding to ensure that their students have the opportunity to learn and train on up-to-date audio equipment.
- **We urge Congress to consider the financial burden already borne by performing arts, education, and media organizations, and allow these wireless microphone users the ability to use current equipment as long as possible.** The valuable public benefits produced by our nation's performing arts sector should be considered in plans to require that wireless microphones operate in a different part of the broadcast spectrum. This change will most likely demand the purchase of new sound equipment—a challenge to the limited budgets of nonprofit performing arts organizations, educational institutions, and community media centers. It has been conservatively estimated that \$17.5 million—a fraction of the actual cost—would be needed to defray equipment replacement costs for the performing arts community.

BACKGROUND

For 35 years, wireless microphone technology has allowed users unrestricted on-stage movement and helped to create sophisticated sound. Nonprofit performing arts organizations, commercial theaters, schools, and performers have all relied on this equipment operating within the “white space” radio frequencies between broadcast channels of the television band. Wireless systems are also 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. Community media studios also use wireless microphone technology, removing the hazards of cords.

The FCC ruled on September 23, 2010 that portions of the broadcast spectrum called “white space” would be shared by wireless microphones used in the performing arts and new white space devices (aka TV band devices), such as PDAs, cordless phones, and wireless laptops. In order to implement the rule, the FCC ordered several protection measures including the establishment of a geo-location database (or multiple databases) which would allow the new devices and wireless microphones to share spectrum without interference. In addition, the FCC set aside two safe-haven channels for use by wireless microphones.

Wireless microphone users were mandated to move operations in the broadcast spectrum as a result of an FCC rule that required cessation of operations in the 700 MHz band by June 12, 2010. For many performing arts and community media organizations, that migration caused unanticipated expenses of \$25,000–\$100,000 for the purchase of sound equipment that would operate in a different area of the broadcast spectrum.

The FCC allowed the geo-location database to become operational nationwide in December 2012 and allowed new white space devices to operate nationally as of March 2013.

In October 2012, the FCC issued a Notice of Proposed Rulemaking, as it worked to implement the *Middle Class Tax Relief and Job Creation Act of 2012* which transitions spectrum from TV broadcasting to wireless broadband through spectrum auctions. The FCC will ‘repack’ or reorganize the broadcast spectrum following the incentive auctions—which could result in another relocation for wireless microphones and likely the costly replacement of sound equipment.

On August 6, 2015, the FCC eliminated the ability of unlicensed wireless microphones to access the database for protection from white space devices. The Commission also began laying out the process by which wireless microphones will be moved to new spectrum following the spectrum auction in 2016. The two safe-haven channels that had previously been set aside for wireless microphones have been eliminated.

Bipartisan letters of support were sent to the FCC in October 2013 and May 2015 in support of wireless microphones signed by Members of Congress: Reps. Lance (R-NJ), Slaughter (D-NY), Blackburn (R-TN), Engel (D-NY), Cramer (R-ND), Nadler (D-NY), Young (R-AK), Pingree (D-ME), DeFazio (D-OR), Lewis (D-GA), Cohen (D-TN), Green (D-TX), Lujan (D-NM), Pitts (R-PA), Olson (R-TX), Bilirakis (R-FL), Long (R-MO), Pompeo (R-KS), and Rush (D-IL). The Wireless Microphone Users Interference Protection Act of 2013 (H.R. 2911), introduced by Rep. Rush (D-IL), had five cosponsors: Reps. Castor (D-FL), Cohen (D-TN), Green (D-TX), Lujan (D-NM), and Maloney (D-NY).

Representative Walden (R-OR) and Rep. Eshoo (D-CA), the senior members of the Communications and Technology Subcommittee of the Energy and Commerce Cmte, held an FCC oversight hearing in July, 2016, during which they voiced strong bipartisan support for the nonprofit performing arts and protection of wireless microphones used in theaters. They followed up by sending a letter to Federal Communications Commission Chairman Tom Wheeler on August 8, 2016, urging the FCC to “provide relief” to users of fewer than 50 wireless microphones, the threshold below which interference protection through registration in a geo-location database would be unavailable under the new rules. The FCC promised to work on the issue.