

Microphone Interests Coalition Members and Friends:

A great deal of activity has transpired in recent weeks at the FCC regarding wireless microphones and the future of the television band RF spectrum. Shure has continued to stay fully engaged in the various issues and aspects in order to help shape a workable future for professional wireless audio in the United States.

The “White Spaces” Docket 04-186, now in its fourth year, continues to be a source of intense debate by incumbents, prospective new entrants, and policy pundits, with activity increasing as the current administration in Washington comes to a close. In addition to this dialogue, the FCC recently sought comments on proposed rules calling for evacuation of the partially auctioned yet still populated 698-806 MHz (the 700 MHz band) spectrum by wireless microphones as of the February, 2009, DTV transition date. The FCC also asked for comment on a recent complaint that the majority of wireless microphones in the US are not licensed under rules written in 1977 that extend eligibility only to broadcasters and motion picture producers, and therefore not worthy of interference protections. Lastly, the FCC’s Office of Engineering and Technology completed its laboratory and field tests -- which were open to the public -- on interference mitigation technology designed for deployment in future “white space” devices. Interested parties on both sides have expressed their views of the results, however the OET has not yet issued its report.

“Smart” Radios Are Not Smart Enough to Protect Microphones but the FCC Still Wants to Change the Rules:

In Shure’s judgment based on close observation, the FCC’s testing of prototype spectrum sensing technology has shown that it is not yet a suitable means of preventing interference to TV broadcasts and wireless microphone signals. As you are aware, this technology has long been purported to be the answer to successful sharing of the “white space” spectrum. The lack of promise shown to date, however, has not slowed the White Spaces Coalition’s lobbying efforts, and in fact the intensity has dramatically increased, even to the point of discounting the validity of the tests altogether. We believe that the FCC is likely to allow new devices into the TV spectrum even if none of the proposals submitted adequately protects microphones.

Shure Has Proposed A Plan to Protect Wireless Microphones:

It is in this climate that Shure submitted on September 24, 2008, an alternative proposal to the FCC, in order to change the tenor of the debate to a solution-oriented approach. Although the proposal calls for some changes and compromises, we believe that our plan serves the twin goals of allowing for new uses of the TV band without significantly disrupting the use of wireless microphones to produce the wide variety of content enjoyed by the public today.

Briefly, our proposal would concentrate most wireless microphone use into a set of pre-determined ‘Protected Channels’ in each TV market, but allow for the number of Protected Channels to ‘flex’ in order to accommodate the temporary needs of large events. Specifically, we propose the creation of an online database through which consumer “white space” devices would utilize geo-location to determine available channels – that is, those that are not occupied by TV stations, reserved for Public Safety communications, specified for use by wireless microphones, or reserved for medical telemetry or radio astronomy.

Small to Moderate Operations Could Rely on Specific Interference-Free Channels Without Burdensome Licensing:

In each market, two VHF and six UHF protected, unoccupied TV Channels would be established for wireless microphones and other professional audio equipment. This limited amount of spectrum would be minimally sufficient to accommodate small-scale users who typically require only a moderate number of wireless microphones. These users would be “licensed by rule,” meaning permitted to operate on these channels without any burdensome license filings.

Large Scale Events Would Have Necessary Temporary Interference Protection Subject to Updated Licensing Rules:

For larger-scale events where more wireless microphones are required, users (licensed under updated FCC rules that accommodate today’s range of professional applications) would register their equipment in an online database that would include the event location and duration. This would promote more efficient use of spectrum by protecting channels only when and where they are actually needed for an event. This approach would require that the current FCC rules regarding wireless microphone licensing be amended to provide expanded license eligibility to the types of users who typically produce large events.

Shure believes this proposal accommodates the way that wireless microphones are currently used in news, sports, entertainment, corporate, and civic environments today. In addition, the timely creation of a reliable, workable, interference-free operating environment also gives current users in the 700 MHz band a clear transition path to a new section of spectrum. Finally, this spectrum plan will provide the certainty and direction needed for wireless microphone manufacturers to improve the spectral efficiency of their products, thus facilitating even more efficient use of this valuable spectrum over time.

The FCC Needs to Hear From the Wireless Microphone Community:

The companies that want to use the TV band spectrum without adequate protections for wireless microphone operations are lobbying the FCC daily on this issue. The FCC needs to hear from the wireless microphone community that sufficient protections are needed, and we are therefore asking you to support Shure’s proposal at the FCC by filing comments (electronically) in Docket 04-186. Please feel free to contact me with any questions you may have regarding the Shure Proposal, how to support the plan at the FCC, or any of the developments described above. Thank you for your ongoing involvement in the highly complex set of issues surrounding US spectrum allocation for wireless microphones and other professional audio equipment.

Best regards,

Mark Brunner

Senior Director, Public and Industry Relations