

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington D.C. 20554**

In the Matter of	)	
	)	
Unlicensed Operation in the	)	
TV Broadcast Bands	)	ET Docket No. 04-186
	)	
	)	
Additional Spectrum for Unlicensed	)	
Devices Below 900 MHz and in the	)	ET Docket No. 02-380
3 GHz Band	)	

**COMMENTS IN SUPPORT OF EMERGENCY REQUEST**

Shure Incorporated (“Shure”), by its undersigned counsel, hereby respectfully submits these brief Comments in support of the Emergency Request filed October 17, 2008 by the Association for Maximum Service Television, Inc. (“MSTV”), the National Association of Broadcasters (“NAB”), the ABC, NBC, CBS, and FOX Television Networks, and the Open Mobile Video Coalition (“OMVC”) (collectively the “Broadcast Industry”) in the above-captioned proceeding. As detailed below, Shure believes that the Commission should issue a public notice seeking comments on the voluminous report released on October 15, 2008 (the “Report”) by the Office of Engineering and Technology (“OET”). The Report will play an instrumental role in the Commission’s decision-making process in the White Spaces docket. Therefore the public should be given adequate time to carefully review and analyze the Report’s data, analysis, and conclusions. With this opportunity to evaluate the Report, the public will be able to identify the strengths, weaknesses, omissions, discrepancies or errors in the Report, putting before the Commission information and analyses that will enable the Commission to make a reasoned, thoughtful decision in this complex matter. Otherwise the Commission runs the

serious risk of enacting rules that are based on a disputable interpretation of the OET test results, resulting in significant harm to the industries involved in this docket.

The Broadcast Industry points out that millions of viewers of digital television and cable services have a stake in the results of this proceeding, and if the Commission “gets it wrong” there could be huge ramifications for the public at large. Additionally, there are many other members of the public in a wide range of industries that benefit from wireless microphones. This segment of the public also would be severely impacted by the Commission stumbling at the end of this long process by issuing new rules based on faulty conclusions drawn from the Report. Therefore, it behooves the Commission to take the time necessary to study the test results and consider the public’s input on these important tests.

Shure has been an active participant throughout the testing phase as the Commission has examined the impact of prototype white space devices on wireless microphones and other devices currently operating in the broadcast band. In fact, Shure has outlined a solution that will allow the FCC to move forward with authorizing new uses in the TV bands without causing massive disruption and interference to wireless microphone operations.<sup>1</sup> Yet now that OET has compiled the test results, Shure and other active participants have been foreclosed from reviewing the results and offering the Commission their own expert advice and analysis. It is

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<sup>1</sup> In an effort to bring greater certainty to future wireless microphone use, Shure recently took the lead to develop a wireless microphone solution plan in ET Docket No. 04-186 which provides minimally sufficient protected channels for wireless microphones centered around channel 37 in the UHF TV band, where available, and channel 11 in the VHF TV band. This plan requires all new white space devices to be managed by geolocation and a database and calls for 6 protected UHF channels and 2 protected VHF channels. After a three year transition period, these channels would be reduced to 4 UHF and 2 VHF. Shure recommended that microphones using these protected channels be licensed “by rule” in a way that dispenses with onerous and unnecessary individual licensing. For large-scale events, where additional channels are needed for a specific time in a specific location, microphone users would be able to enter their operating parameters in a database that would create a protective zone around the relevant venue where white space devices would not be permitted to operate during that time and at that location. Shure recommended that users given access to this database for expanded coverage be licensed pursuant to rules that expressly expand and clarify the Part 74 eligibility requirements. *See* “Shure Presentation: White Space Solutions” *attached to* Letter from Catherine Wang, Counsel to Shure Incorporated, to Marlene H. Dortch, Secretary, FCC, ET Docket No. 04-186 (filed Sep. 25, 2008).

incomprehensible why the Commission would spend years of testing and extensive resources to reach this point, involving the industry at every step of the way, only to dismiss the input and guidance of the industry at the last and most critical part of the process -- the interpretation of the testing data. It is as if the Commission already knew what results it wanted to see, and did not want to have any input that might rebut those results. This type of decision-making is almost always a recipe for reaching wrong conclusions, resulting in harmful rules and regulations.

And in fact, a quick review of the Executive Summary compared with the testing data shows that there are probably several conclusions reached that are not supported by the data. The Broadcast Industry points to a few of these. Likewise, in Shure's initial review of the Report it also has identified several issues raised within that failed to find their way into the Executive Summary, or conclusions reached that appear to lack support. For instance:

- Unfavorable results from adjacent channel lab tests, where several of the prototypes struggled significantly, are ignored. For example, instead of accurately indicating that the Philips prototype is overwhelmed and has no sensing capability in the presence of a strong adjacent channel +/- 1 or even +/- 2, the Report indicates that "insufficient receiver selectivity and/or receiver desensitization prevented collection of meaningful data." (see p. 22)
- Poor DTV field test results are ignored in the Field Test Summary (see pp. 110-115). False-positive measurements are given credit as accurate scans in the summary. In particular, this dramatically inflates the accuracy of the Philips prototype.
- The Field Test Summary evaluates Motorola's performance with the geolocation feature activated. The geolocation "demonstrations" conducted by Motorola for the staff prior to the sensing tests have now made their way into the official report. Yet the Commission staff did not even test the Motorola prototype during these demonstrations.
- Test data from microphone tests is less favorable to sensing than the DTV data, but gets buried at the back of the Report. It is also heavily redacted. Individual test results are *not* published. Instead, the Commission has only provided sensitivity thresholds where the prototype started to detect the microphone with 100% accuracy and the point at which its accuracy slipped below 50%.
- There is barely a nod to the false detection problem. The only substantive reference to this serious issue appears on page 129, where the Commission notes that "[a]ll of the

WSDs gave false positive indications of microphone detection with DTV signal levels as low as -68 dBm in adjacent channels. The Microsoft device also gave false negative indications with a DTV signal level of -28 dBm in adjacent channels and a microphone power of -80 dBm."

- There is almost no commentary on the test data from the Broadway and FedEx Field tests. Two days of extensive tests are reduced into a cursory acknowledgement that Philips found all channels occupied regardless of whether or not the ESPN microphones were on, and a note that the i2r prototype indicated several channels as available even when the microphones were on.

Therefore, to protect itself and the public from hasty unsupported decisions, the Commission should seek and accept the advice and guidance of the experts in the industry after they have had time to review the test data and submit their conclusions. Accordingly, Shure supports the Emergency Request that the Commission seek public input through initial comments and reply comments.

Respectfully submitted,

/s/

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