



The core TV band is the principal home for secondary Part 74 wireless microphones for several important technical reasons.<sup>3</sup> As a practical matter, the vast majority of the spectrum authorized in the Commission's rules for wireless microphone use is, in fact, not available. The 700 MHz former TV band frequencies were a significant spectrum home for wireless microphone operations for decades but this band has been reallocated to other uses and closed for any wireless microphone uses.<sup>4</sup> Other frequencies are not available because they are occupied by the primary user, not suitable due to their long wavelengths (which preclude use for hand-held or body-worn operations), offer only small slivers of spectrum that cannot support wireless microphone operations, and/or are subject to interference. In this context, proposed reallocation of the core TV spectrum without consideration of wireless microphone use could result in extreme dislocation of incumbent wireless microphone services and users that do not have the ability to resort to alternative spectrum.

Wireless microphone technology exhibits many of the innovative features that the Commission has tried to foster over time: low power with significant frequency reuse and the proven ability to share spectrum with higher power fixed stations.<sup>5</sup> Further, wireless microphone technology is a key enabler to many innovations in American content productions, an area in which the U.S. is the undisputed global leader. It is important to note that production

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<sup>3</sup> Section 74.802(a) of the Commission's Rules identifies various spectrum bands in which low power auxiliary service ("LPAS") wireless microphone operations are permissible on a secondary basis to television. See 47 C.F.R. § 74.802.

<sup>4</sup> The Commission has "tentatively conclude[d] to amend [its] rules to make clear that the operation of low power auxiliary stations within the 700 MHz Band will no longer be permitted after the end of the DTV transition because such operations could cause harmful interference to new public safety and commercial wireless services in the band." *Revision to Rules Authorizing the Operation of Low Power Auxiliary Stations in the 698-806 MHz Band*, WT Docket No. 08-166, *Public Interest Spectrum Coalition, Petition for Rulemaking Regarding Low Power Auxiliary Stations, Including Wireless Microphones, and the Digital Television Transition*, WT Docket No. 08-167, Notice of Proposed Rulemaking and Order, FCC 08-188 at ¶ 2 (2008) ("700 MHz LPAS NPRM").

<sup>5</sup> Part 74 wireless microphones share spectrum with primary TV stations and will share spectrum with higher power fixed TV band white space devices introduced pursuant to rules released by the Commission on November 4, 2008. See *Unlicensed Operation in the TV Broadcast Bands; Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band*, Second Report and Order and Memorandum Opinion and Order, 23 FCC Rcd 16807 (2008) ("White Spaces 2nd R&O").

content that relies on this technology is distributed across all media: terrestrial and wireless broadband, satellite, cable TV as well as over-the-air TV. Wireless microphone technology is also an important part of civic, educational, news and business activities across the Nation. The *increasing* use of wireless microphones across many diverse sectors is a testament to the widespread utility of and demand for this technology.

Shure applauds the Commission's efforts to develop a National Broadband Plan and promote the development of a ubiquitous, technology-neutral broadband infrastructure in the United States. However, Shure strongly cautions that broadband deployment can and should be accomplished without launching radical changes to spectrum allocations that would disrupt and cause widespread harm to existing valuable spectrum services and their many users. The Commission's approach to spectrum changes should be fine-tuned to identifying reasonable opportunities to make additional use of spectrum for this single purpose without wreaking havoc to existing operations. The public interest requires that both emerging entrant *and* incumbent user needs be carefully evaluated. In particular, whatever the Commission ultimately decides with respect to the core TV bands, Shure strongly urges the Commission to consider the needs of wireless microphone operations. Shure looks forward to working with the Commission on these important issues.

Respectfully submitted,

/s/

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Dated: December 21, 2009