

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

In the Matter of	)	
	)	
Service Rules for Advance Wireless Services in	)	
the 1915-1920 MHz, 1995-2000 MHz, 2020-2025	)	WT Docket No. 04-356
MHz and 2175-2180 MHz Bands	)	
	)	
Services Rules for Advanced Wireless Services	)	WT Docket No. 02-253
in the 1.7 GHz and 2.1 GHz Bands	)	

**REPLY COMMENTS OF THE  
NATIONAL ASSOCIATION OF BROADCASTERS**

The National Association of Broadcasters (“NAB”)<sup>1</sup> hereby submits its reply comments in the above-captioned proceeding concerning service rules for Advanced Wireless Services (“AWS”) operating in the 2 GHz band.<sup>2</sup> NAB supports the position of the Society of Broadcast Engineers (“SBE”) as described in SBE’s initial comments.<sup>3</sup>

Specifically, NAB agrees with SBE that, in order to protect Broadcast Auxiliary Service (“BAS”) stations operating above 2025 MHz from interference caused by AWS stations operating in the 2020-2025 MHz band, the Commission must adopt more stringent out-of-band emission (“OOBE”) requirements than those suggested in the *Notice*. *Notice* at 19301-02. We also support SBE’s request that the FCC provide an efficient means for broadcasters to upload

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<sup>1</sup> NAB is a nonprofit, incorporated association of television and radio stations that serves and represents the American broadcasting industry.

<sup>2</sup> *Notice of Proposed Rule Making* in WT Docket Nos. 04-356 and 02-353, 19 FCC Rcd 19263 (2004) (“*Notice*”).

<sup>3</sup> *See* Comments of the Society of Broadcast Engineers, Inc. in WT Docket Nos. 04-356 and 02-353 (filed Dec. 8, 2004) (“SBE Comments”).

data about their BAS receive antennas to the Commission's Universal Licensing System ("ULS") so that AWS licensees can effectively coordinate their facilities.

In the *Notice*, the Commission tentatively concludes that a fixed or mobile AWS station operating in the 2020 - 2025 MHz band would not cause harmful interference to BAS receivers operating in the upper adjacent band (2025 – 2110 MHz), if the AWS transmitter's OOB was suppressed by the Commission's standard quantity of  $43 + 10\log P$  dB. *Id.* at 19302. SBE's comments demonstrate that a suppression requirement of  $43 + 10\log P$  for a 1 watt (30 dBm) AWS transmitter would result in an OOB of  $-13$  dBm being radiated into the 2025 – 2110 MHz band. SBE Comments at 2. This level of OOB could cause significant interference to a typical BAS receiver as close as 0.587 km. SBE further shows that, to avoid causing interference, a 1 watt AWS transmitter with this level of OOB suppression would have to be located at least 6.7 km away from an analog BAS receiver and at least 7.5 km away from a digital BAS receiver. Moreover, SBE points out that placing a filter on the BAS facility will not help because the receiver will see the OOB from the AWS transmitter as co-channel interference. Thus, it is important that the Commission require an appropriate level of suppression for AWS transmitters in order to protect BAS operations in the upper adjacent band. *Id.* at 2-3.

NAB therefore endorses SBE's call for a more stringent OOB limit of  $67 + 10\log P$  dB and a minimum separation distance between AWS base stations and BAS receives sites of 0.5 km.<sup>4</sup> Protecting television stations' BAS operations is critically important. BAS represents a vital avenue for the delivery of breaking news and emergency information to the American

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<sup>4</sup> We concur with SBE that this level of suppression should be obtainable, since the Commission has adopted even more stringent OOB limits ( $70 + 10\log P$  dB) for 3G services in another proceeding. *Third Report and Order* in ET Docket No. 00-258, 18 FCC Rcd 23638, 23663-64 (2003).

public. BAS is used for electronic newsgathering (“ENG”) to transmit live, on-the-spot news reports to local studios and in preparation for local newscasts. BAS is also used to transmit point-of-view camera transmissions that enhance coverage of special events, such as blimp shots during sporting events and shots from roving reporters along parade routes. In addition, studio-to-transmitter (“STL”) and inter-city (“ICR”) fixed links in the 2 GHz BAS band enable stations in less urban areas to relay programming from the station’s main studio to the transmitter facility or to deliver signals to remote communities. For example, BAS operations made possible the extensive, extraordinary coverage of the September 11 terrorist attacks, and more recently, the multiple hurricanes that hit Florida and other areas in the Southeast during 2004. Thus, BAS operations are one of the important tools that broadcasters use to fulfill their public interest obligations to provide local programming. Effective BAS is important to promoting localism.

Furthermore, BAS services have increased over the last few years. In 2003, for purposes of the Commission’s proceeding concerning the relocation of BAS operations in the 2 GHz band, the broadcasting industry collected and submitted data on the amount of BAS equipment owned and operated by local television stations nationwide.<sup>5</sup> The *2003 BAS Survey* revealed several unexpected changes concerning the breadth of use of BAS equipment. First, the *2003 BAS Survey* illustrated that use of BAS equipment is now fairly evenly distributed among television stations located in large, mid-sized and smaller-sized markets, perhaps due to the introduction of many more local newscasts in the latter two categories, or the expansion of existing newscasts to deliver at-the-scene news coverage. *2003 BAS Survey* at 4-5. Second, the *2003 BAS Survey* showed an expanded use of BAS for STLs and ICRs. BAS fixed links have always been vital for

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<sup>5</sup> *2003 2 GHz Census & Digital Conversion Cost Estimate*, Ad Hoc 2 GHz Reallocation Committee, attached to Joint Broadcasters *ex parte* comments filed in ET Docket 00-258 on October 16, 2003 (“*2003 BAS Survey*”).

local stations in relatively rural areas that relay their newscasts to distant viewers, but the survey also showed a marked increase of BAS fixed links in mid-sized and larger television DMAs. *Id.* at 5. If nothing else, the *2003 BAS Survey* illustrated an ever-growing use and importance of BAS facilities to local broadcasters. These factors will only make it more important for AWS stations to coordinate their systems with nearby BAS operations.

Finally, in this vein, NAB joins SBE in urging the Commission to modify its ULS to enable BAS licensees to enter and upload information showing the location and height of their BAS receive antennas. NAB believes this marks at least the third time SBE has asked the Commission to explore ways to improve the ULS system. Without this capability, it will be impossible for AWS licensees using the ULS to identify and fully protect nearby BAS receive facilities from harmful interference.

For the foregoing reasons, NAB respectfully registers its support for SBE's initial comments, and encourages the Commission to take account of SBE's suggestions as it crafts AWS service rules.

Respectfully submitted,

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