

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

In the Matter of	)	
	)	
Recommendations Approved by the Advisory	)	IB Docket No. 04-286
Committee for the 2012 World	)	DA 10-1408
Radiocommunication Conference	)	July 30, 2010
	)	

To: The Commission

**Comments of EIBASS**

Engineers for the Integrity of Broadcast Auxiliary Services Spectrum (EIBASS) hereby respectfully submits its comments in the above-captioned rulemaking relating to the position of the United States at the 2012 World Radiocommunication Conference (WRC-12).

**I. Proposal Would Cause Interference to 161 MHz RPU Operations**

1. This filing in response to DA 10-1408, dated July 30, 2010, requesting comment on recommendations approved by the Advisory Committee for WRC-12. EIBASS' concern is regarding document WAC/068(28.07.10). Specifically, Appendix 18 (*Tables of Transmitting Frequencies in the VHF Maritime Mobile Frequency Band*), at pages 7 and 8, where it is proposed to allow maritime coast stations to use 161.500 through 161.950 MHz in 25-kHz steps; that is, nineteen contiguous 25-kHz wide channels. The problem as EIBASS sees it is that seven of these channels would be co-channel to all of the Part 74, Subpart D 161.625–161.775 MHz RPU band used in all U.S. areas other than Puerto Rico and the Virgin Islands. See the attached Figure 1.

2. EIBASS finds no discussion explaining how co-channel operation at 161 MHz by Maritime coast stations would not cause harmful interference to 161 MHz RPU operations in areas such as Boston, Los Angeles, Miami, New York, Portland, San Diego, San Francisco or Seattle, or any other large metropolitan area with many radio and TV stations as well as significant port operations. Thus, EIBASS objects to allowing Maritime coastal stations to operate on any of the 25-kHz wide 161 MHz channels that would be co-channel to existing 161 MHz RPU operations.

## **II. The 161 MHz RPU Is Already Heavily Used by Broadcasters**

3. First, it must be realized that while Section 74.402(b)(3) shows twenty frequencies, these are 7.5-kHz wide segments. Almost all 161 MHz RPU operations use 25 kHz wide channels, requiring aggregation of four segments.<sup>1</sup> That is, just like with Part 74, Subpart H, Low Power Auxiliary (LPA) wireless microphones, broadcasters' requirements for both good fidelity and low delay require analog channels. A 25-kHz wide channel has reasonable fidelity and dynamic range, and works well for a pre-delay feed so real-time interactions with talent can be accomplished. Thus, in reality, there are effectively only five 161 MHz RPU channels, not twenty.

4. With the advent of digital TV, more and more digital In Band On Channel (IBOC) FM, and widespread conversion of radio station studios to digital operation, the listening public more often than not receives broadcasts delayed by several seconds. This broadcast latency has forced stations to develop pre-delay feeds to live remote events. Combined with the reallocation of 166.250 MHz and 170.150 MHz for federal use, broadcasters could no longer use these two VHF high band RPU frequencies for interrupted fold back (IFB) operations.<sup>2</sup> This put a heavier load on the five effective 161 MHz RPU channels. For example, in San Francisco two of these five channels are now nearly full-time pre-delay feeds. This would effectively preclude any shared use with Maritime coast stations in large broadcast markets that also have port operations. Further, should this proposed allocation be adopted there would be a risk of interference to marine communications from Part 74 RPU transmissions.

## **III. Summary**

5. EIBASS finds no discussion in the DA 10-1408 documents about how 161 MHz Maritime coast stations operating co-channel with existing, heavily used 161 MHz RPU channels could successfully co-exist. This proposal inherently carries a risk of interference to marine life safety communications. Life safety aside (which EIBASS hopes everyone agrees should never be the case), there are continuing critical broadcast operational needs, as EIBASS has outlined, that cannot be met with the additional interference potential that this proposed co-channel use would cause. While EIBASS realizes that as the proposed newcomer user Maritime coast stations

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<sup>1</sup> Thus having an "official" channel bandwidth of 30 kHz. However, the actual channel bandwidth is 25 kHz. EIBASS notes that pursuant to Paragraph 13 of the October 20, 2003, ET Docket 01-75 MO&O, it is acceptable to have a signal bandwidth that is less than the channel bandwidth.

<sup>2</sup> Section 74.402(e)(8) specifies that RPU operations on 166.250 MHz and 170.150 MHz must not cause harmful interference to present or future government stations.

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would be obligated to protect earlier-in-time RPU licensees<sup>3</sup>, we see serious challenges to real-time frequency coordination between marine operations and broadcast RPU operations. In the larger broadcast markets that also have port operations, this would effectively mean that no new 161 MHz Maritime coast station operations would be possible. For this reason EIBASS objects to the proposed allocation of co-channel Maritime coastal stations at 161 MHz.

### Figure List

6. The following figure has been prepared as a part of these IB Docket 04-286 comments:
  1. Figure showing proposed Maritime coast station frequencies versus 161 MHz RPU band frequencies.

Respectfully submitted,

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<sup>3</sup> The entirely equitable and appropriate principal that between co-equal or co-primary users the newcomer user must protect earlier-in-time incumbent users was established at Paragraphs 53 and 58 of the February 7, 2002, ET Docket 98-142 Report & Order (R&O), and again at Paragraph 21 of the April 2, 2003, ET Docket 98-142 Memorandum, Opinion and Order (MO&O). This rulemaking dealt with MSS feeder downlinks sharing the 7 GHz TV Broadcast Auxiliary Services (BAS) band.