



July 26, 2007

Ambassador Richard Russell
U.S. Representative to the World Administrative Radio Conference (WARC) and Associate Director and Deputy for Technology
Office of Science and Technology Policy
The White House
Washington, D.C. 20502

## Dear Ambassador Russell:

As you know, the White Spaces Coalition<sup>1</sup> is advocating that the Federal Communications Commission (FCC) allow portable unlicensed devices, such as in-home networking systems, PDAs and radio-controlled toys, to use the spectrum dedicated to television broadcasters. The National Association of Broadcasters (NAB) and Association for Maximum Service Television (MSTV) are very concerned this action will jeopardize the success of the impending digital television (DTV) transition.

Having seen the data firsthand as well as the broadcast industry analysis of the FCC numbers, I know you share our concern that any utilization of the white spaces be done in properly and with great sensitivity to the immense challenges and risks to the digital television transition. Your unique position in this process provides you with a complete picture of all the potential implications of outside forces on our collective success as we move closer to February 2009.

Because of significant interference concerns with consumer's new digital television sets, on behalf of the television station membership of our joint organizations, we are writing to ask that you oppose opening the broadcast spectrum to portable unlicensed devices, such as wireless laptops, PDAs and remote-controlled devices. The DTV transition is an unprecedented nationwide migration from analog to digital television signals that will occur in only 20 months. This transition will not only allow local broadcasters to broaden their programming offerings and offer viewers crystal clear television images, but it will also free up spectrum for public safety organizations to better communicate during emergencies and allow for new and enhanced mobile broadband applications.

In order to receive a digital signal, television sets that are not connected to cable or satellite, or do not have a built-in digital tuner, will need a digital-to-analog converter box to continue receiving broadcast television signals after the transition occurs. Ensuring

<sup>&</sup>lt;sup>1</sup> The White Spaces Coalition includes: Microsoft, Dell, HP, Intel, Philips, Earthlink and Google.

that television households remain connected is no small task. There are 21 million homes – nearly one in five of all television-equipped households – that rely on free, over-the-air broadcasts. Of those households, nearly half have annual incomes of less than \$30,000, and two-thirds are headed by an individual over age 50 or a native Spanish speaker. Of those households, nearly half have annual incomes of less than \$30,000, and two-thirds are headed by an individual over age 50 or a native Spanish speaker. To ensure that these groups, and others, are not disenfranchised as part of the DTV transition, it is imperative that the transition runs smoothly.

Opening up the digital broadcast spectrum to portable unlicensed devices as the White Spaces Coalition is proposing, however, would turn the DTV transition on its head. On March 30, 2007, the FCC's Office of Engineering and Technology released a study showing that the reception interference from these unlicensed devices to television sets will be substantial. When analyzed, the FCC data indicates that digital television sets will be susceptible to interference from these devices in 80 to 87% of a typical television station's service area. In fact, the study indicates that 84% of American's televisions are in areas that receive a weak signal. Further, the report data from the FCC and others demonstrates that portable unlicensed devices as proposed by the White Spaces Coalition would create interference in at least 80 percent of the television station's service area. Unfortunately, unlike an analog signal where interference will cause a gradual degradation of the picture, interference to a digital signal renders the television unwatchable. And the interference from unlicensed devices will not only affect television sets, but will also interfere with the digital-to-analog converter boxes that are necessary for the DTV transition to succeed.

Should the FCC allow the use of unlicensed devices, consumers will have nowhere to go for help with interference to their set or converter box. As an "unlicensed device," the FCC will have no record as to when or where such devices are operating. Should interference occur, there is no way of determining if the interference is coming from a next door neighbor, a passing car or even within one's own home. Moreover, once the unlicensed devices are in the market, there is no way to extract them. The FCC lacks the means, and most likely the authority, to find and shut down interfering devices. In fact, in its rulemaking the FCC prohibited use of unlicensed devices in the public safety spectrum.<sup>4</sup>

Over the next few years, consumers will spend billions of dollars on new digital television sets. Congress has appropriated \$1.5 billion to the NTIA, which is now in the midst of implementing the program to distribute \$40 coupons that can be used to alleviate the cost of converter boxes. Additionally, the broadcast industry has spent upwards of \$5 billion upgrading their facilities from analog to digital, which does not include the

<sup>&</sup>lt;sup>2</sup> Interference Rejection Thresholds of Consumer Digital Television Receivers Available in 2005 and 2006, Office of Engineering and Technology, Federal Communications Commission, March 30, 2007.

<sup>&</sup>lt;sup>3</sup> Reply Comments of MSTV and NAB to the OET Measurement Report on OET Receiver Interference Rejection Capabilities, ET Docket 04-186, May 15, 2007, at 5.

<sup>&</sup>lt;sup>4</sup> In the Matter of Unlicensed Operation in the TV Broadcast Bands, ET Docket No. 04-186, October 12, 2006, ¶21.

millions of dollars that are being spent to educate consumers about the transition. With these extraordinary public and private resources invested in the DTV transition over the past two decades, it would be a monumental mistake to allow portable unlicensed devices into the broadcast spectrum before the transition was allowed to flourish and succeed.<sup>5</sup>

Given these significant interference concerns, we urge you to protect the integrity of the DTV transition. We have only one opportunity to get it right, and it is the obligation of government and industry to ensure that happens for the American viewers. We should not corrupt one of our nation's most valuable assets — broadcast spectrum — without a guarantee that consumers and their investment in the transition will be protected. Your keen understanding of the potential harm that white space utilization could cause the transition is a tremendous asset to our country and your thoughtful consideration of any prospective implications is greatly appreciated.

Best Wishes.

Sincerely,

David K. Rehr

President & CEO

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National Association of Broadcasters

David Donovan

President

Association for Maximum Service Television

<sup>&</sup>lt;sup>5</sup> NAB and MSTV are not opposed to fixed rural broadband services being offered within the broadcast spectrum after the DTV transition. We are however opposed to portable unlicensed devices at anytime.