

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 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 3 GHz Band	)	ET Docket No. 02-380

**OPPOSITION OF  
THE ASSOCIATION FOR MAXIMUM SERVICE TELEVISION, INC.  
TO THE PETITION FOR RECONSIDERATION OF  
NEW AMERICA FOUNDATION AND THE  
CHAMPAIGN URBANA WIRELESS INTERNET NETWORK**

To protect the public’s free, over-the-air television service, the Association for Maximum Service Television, Inc. (“MSTV”) respectfully requests that the Commission deny the Petition for Reconsideration (“Petition”) of the New America Foundation *et al.* (“NAF”) to the Commission’s *First Report and Order* (“First R&O”) in the above-referenced proceeding. NAF’s Petition would have the Commission place unlicensed devices into the broadcast spectrum without *any* reliable means for safeguarding reception of local television services.<sup>1</sup> The Commission wisely chose a more prudent approach in its First R&O, and it should continue to uphold its commitment to the viewing public.

First, contrary to NAF’s Petition, the Commission correctly and appropriately decided to seek further comment on whether licensed, as opposed to unlicensed, use of any “white spaces” in the broadcast spectrum would better serve the public interest. As MSTV and

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<sup>1</sup> MSTV, The National Association of Broadcasters (“NAB”), and others have shown that even a small number of these devices could cause wide ranging interference to TV viewers, broadcasters and other licensed operations. NAF’s suggested unlicensed approach, however, provides no restrictions on the number or manner in which these devices could be deployed.

many other parties have documented in this proceeding, particularly in comparison to the severe harms posed by the introduction of unlicensed devices into the broadcast spectrum, licensed use of white spaces will more reliably prevent interference from TV band devices while providing remuneration to the public treasury.

Second, the Commission should also dismiss NAF's attack on the Commission's decision to prohibit personal/portable devices from operating on Channels 14-20.

Personal/portable devices pose severe interference risks to television services, and currently there is no means of preventing such harmful interference. As a result, the Commission should not only prevent personal/portable devices from operating on Channels 14-20, but on the entire broadcast spectrum. In fact, to the extent that the Commission's rationale to prohibit personal/portable operations on Channels 14-20 is to protect mobile operations on these frequencies, the same rationale should apply to all broadcast channels with the advent of A-VSB and other new mobile video applications.

Third, preventing all new devices – whether personal/portable or fixed – from operating in the spectrum before the DTV transition is essential to a successful DTV transition, and the Commission should not waver from its decision in this regard. In the span of the next two years, consumers will purchase billions of dollars of new DTV equipment to continue to receive their local television services.<sup>2</sup> The Commission must not do anything, including granting NAF's petition, which will jeopardize this transition.

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<sup>2</sup> In addition, the Commission must keep in mind the billions of dollars that broadcasters have and will have invested to build out their stations and infrastructure to bring DTV service to the public.

**I. THE COMMISSION WAS CORRECT TO EXAMINE THE MANY BENEFITS OF LICENSING TV BAND DEVICES.**

The Commission's decision to seek further comment in the *Further Notice of Proposed Rulemaking* ("FNPRM") on whether to authorize TV band devices to operate on a licensed basis was (1) procedurally justified, and (2) the proper course of action because an exclusively licensed system will make the most efficient use of the television spectrum, increase accountability, and compensate the public for the use of this valuable spectrum.

**A. NAF's Petition For Reconsideration Of The Commission's Decision To Seek Further Comment On Whether TV Band Devices Should Operate On A Licensed Basis Lacks A Legal Foundation.**

NAF, in its Petition For Reconsideration of the Commission's *First R&O*, fails to provide any legal justification for its allegation that the Commission was not authorized to seek further comment on the issue of licensing. While NAF argues the Commission's decision to reevaluate whether to authorize TV band devices on a licensed basis was arbitrary, NAF mischaracterizes both the record and the legal standard governing administrative rulemakings.

Although the Commission initially proposed to allow TV band devices to operate on an unlicensed basis in its initial *Notice of Proposed Rulemaking* ("NPRM"),<sup>3</sup> it properly re-examined that position after the record of comments submitted in response to that *NPRM* revealed the significant benefits of a licensed system. Multiple parties, including Qualcomm, MSTV and The National Association of Broadcasters ("NAB"), and others, submitted comments detailing the benefits of a licensed system.<sup>4</sup>

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<sup>3</sup>See Petition for Reconsideration of The New American Foundation and The Champaign Urbana Wireless Network, ET Docket Nos. 04-186 and 02-380 (filed Dec. 18, 2006) (NAF Petition) at 5 (citing *Unlicensed Operation in the TV Broadcast Bands*, Notice of Proposed Rulemaking, 19 FCC Rcd. 10018, 10023-24 (2004) (Initial White Spaces NPRM)).

<sup>4</sup>See Joint Comments of MSTV and NAB, ET Docket No. 04-186 (filed Nov. 30, 2004); Comments of Qualcomm, ET Docket No. 04-186 (filed Nov. 30, 2004).

As the Commission explained in the *FNPRM*, it sought further comment on the licensing issue, in spite of its tentative conclusion in the *NPRM*, because the record on this issue had not been fully developed.<sup>5</sup> Notwithstanding NAF's efforts to characterize this as a "sudden reversal,"<sup>6</sup> it was merely a decision to ask for further comment on an issue still pending before the Commission. Given the significant comments filed in support of a licensed regime, the Commission's allowance for further comment before reaching a final decision was anything but arbitrary. In fact, giving all parties an opportunity to sufficiently comment on an issue before promulgating a final rule is vital in order for the Commission to satisfy its notice and comment obligations.<sup>7</sup>

Despite NAF's attempts to argue that the Commission's decision to examine the issue of licensing in its *FNPRM* was an unsupported and improper "change in direction,"<sup>8</sup> whether the Commission provided a detailed explanation of its decision is irrelevant in this situation because the Commission has simply sought further comment, not enacted a rule. As support for its assertions, NAF cites to the DC Circuit Court opinion in *Environmental Integrity Project v. EPA*, a case dealing with an agency's obligation to provide sufficient notice and opportunity to comment.<sup>9</sup> In this decision the court specified that because of an agency's notice and comment obligations, a "proposed rule and [a] final rule may differ only insofar as the latter

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<sup>5</sup> See *Unlicensed Operation in the TV Broadcast Bands*, First Report and Order and Further Notice of Proposed Rulemaking, ET Docket No. 04-186, FCC 06-156 (rel. Oct. 18, 2006) (First R&O and *FNPRM*) at ¶¶26-32 (the Commission cites to nine different sets of comments addressing the merits of a licensed system and states that "no party provided specific recommendations for how spectrum in the TV band could be assigned on a licensed basis for the devices contemplated in the *Notice*. In the interest of obtaining a further record on this issue, we seek comment on whether proposed low power operations in the TV bands should be allowed on an unlicensed, licensed, or hybrid basis").

<sup>6</sup> See NAF Petition at 6.

<sup>7</sup> See 5 U.S.C. 553 (b) & (c).

<sup>8</sup> NAF Petition at 5.

<sup>9</sup> See *Id.* (citing *Environmental Integrity Project v. EPA*, 425 F.3d 992 (D.C. Cir. 2005)).

is a “logical outgrowth” of the former.”<sup>10</sup> What NAF fails to recognize, however, is that the standard governing final agency action is inapplicable to the Commission’s decision to seek further comment in the *FNPRM*. In fact, the Court’s discussion of its concerns in *Environmental Integrity* bolsters this position; the Court stated that it “has refused to allow agencies to use the rulemaking process to pull a switcheroo on regulated entities,” and that a “flip-flop complies with the APA only if preceded by adequate notice and opportunity for public comment.”<sup>11</sup> The Commission’s decision to seek further comment in the *FNPRM* is an attempt to comply with these notice and comment requirements and ensure a complete record. Consequently, NAF lacks any procedural basis to challenge the *First R&O and FNPRM* on these grounds.

**B. Authorizing TV Band Devices To Operate On An Exclusively Licensed Basis Is The Proper Course Of Action.**

Not only was the Commission’s decision to seek further comment on the relative benefits of exclusive licensing procedurally proper, it was also a wise policy decision. As MSTV, NAB and others have consistently demonstrated, TV band devices should only be able to operate on an exclusively licensed basis.<sup>12</sup> Licensed “white spaces” will carry numerous public interest benefits that would be lost forever in an unlicensed devices regime. The Commission should be focused on four main reasons why a licensed system is more beneficial:

First, the accountability of any TV band devices allowed to operate in the broadcast spectrum is a huge concern. A licensed system will better allow the Commission to keep track of all operators and control any interference that might occur. That is, if a device

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<sup>10</sup> *Environmental Integrity*, 425 F.3d at 996.

<sup>11</sup> *Id* at 996-97.

<sup>12</sup> See Joint Comments of MSTV and NAB, ET Docket No. 04-186 (filed Nov. 30, 2004) (2004 MSTV/NAB Comments) at 24-28; Joint Comments of MSTV and NAB, ET Docket No. 04-186 (filed Jan. 31, 2007) (Jan. 2007 MSTV/NAB Comments) at 36-39; Joint Comments of MSTV and NAB, ET Docket No. 04-186 (filed March 2, 2007) at 29-33 (March 2007 MSTV/NAB Comments).

operating in licensed “white space” were to interfere with the public’s access to free, over-the-air television, the licensee responsible for the spectrum used by that device could be identified and made accountable for remedying the problem.

Second, a licensed system will most efficiently make use of any available “white spaces” that may exist. Incentives are a driving force in any system, and scholars studying spectrum allocations have found, that an unlicensed system is not preferable, because “the costs created by the sender are borne by the users as a whole, but the benefits accrue to the sender,” which can create a tragedy of the commons whereby “each individual is tempted to defect, and enough do so that the resource becomes overwhelmed.”<sup>13</sup> In a licensed system, however, licensees will have strong incentives to decrease noise levels and the corresponding interference.

Third, a licensed system benefits the economy and American taxpayers more effectively than an unlicensed system. Spectrum is a valuable resource, but in an unlicensed system the public is unable to reap any economic benefits. In an article discussing the lack of licensed spectrum for wireless services, the authors found that an unlicensed system for cellular services “deprives consumers--under very modest assumptions-- of tens of billions of dollars annually in lost benefits.”<sup>14</sup>

Fourth, the Commission has already dedicated ample spectrum to unlicensed use. In light of the interference and accountability concerns, the possibility that the spectrum will become unusable, and the economic losses in an unlicensed system, the Commission should authorize TV band devices to operate on an exclusively licensed basis.

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<sup>13</sup> Stuart Minor Benjamin, *Spectrum Abundance and the Choice Between Private and Public Control*, 78 NYU L. Rev. 2007 (2003).

<sup>14</sup> Thomas W. Hazlett, Matthew L. Spitzer, *Advanced Wireless Technologies and Public Policy*, 79 SCA L. Rev. 595 (2006).

## II. PERSONAL/PORTABLE TV BAND DEVICES SHOULD BE PROHIBITED FROM OPERATING IN THE TELEVISION BAND.

The Commission should not only prohibit personal/portable TV band devices from operating on channels 14-20 (as proposed in the *First R&O*), but should not authorize these devices to operate *anywhere* in the broadcast spectrum. The record compiled throughout the course of this rulemaking clearly indicates that the Commission's decision to limit its current proposal to authorize *only fixed* TV band devices is the proper and correct course of action. Simply put, no method exists today (or in the foreseeable future) to prevent interference from personal/portable devices to consumers' reception of digital television (DTV) services. Further, it is only fixed TV band devices, rather than personal/portable devices, that advance the Commission's goal of providing increased broadband access services to underserved areas. As the record lacks both technical and policy justifications for the introduction of personal/portable TV band devices into the broadcast spectrum, they should not be permitted.

MSTV and NAB, in addition to many other parties, have submitted comments describing the problems associated with personal/portable devices.<sup>15</sup> One of the biggest problems, previously discussed by MSTV and NAB, is that once personal/portable are allowed into the market, these devices are totally uncontrolled and can be located and operated anywhere.<sup>16</sup> Accordingly, it will be difficult, if not impossible, to identify and resolve the interference from these devices when it occurs. It is important to note that IEEE 802 has

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<sup>15</sup> See especially, Jan. 2007 MSTV/NAB Comments; Comments of IEEE 802, ET Docket No. 04-186 (filed Jan. 31, 2007); Joint Comments of Broadcasters, ET Docket No. 04-186 (filed Jan. 31, 2007); Comments of Microphone Interests Coalition, ET Docket No. 04-186 (filed Jan. 31, 2007); Comments of Professional Audio Manufacturers Alliance, ET Docket No. 04-186 (filed Jan. 31, 2007); Comments of Qualcomm, ET Docket No. 04-186 (filed Jan. 31, 2007); Comments of Shure Incorporated, ET Docket No. 04-186 (filed Jan. 31, 2007); Comments of Wireless Internet Service Providers Association, ET Docket No. 04-186 (filed Jan. 31, 2007) (WISPA Comments); Comments of Cox Broadcasting, ET Docket No. 04-186 (filed Jan. 31, 2007) (Cox Comments); Comments of Medial General, ET Docket No. 04-186 (filed Jan. 31, 2007).

<sup>16</sup> See March 2007 MSTV/NAB Comments at 3-7; Jan. 2007 MSTV/NAB Comments at 35-36.

submitted a proposal detailing an interference avoidance regime for TV band devices, but the technical protections afforded by IEEE 802's proposal are only aimed at preventing interference caused by *fixed* TV band devices and will be ineffective to prevent the potential interference from personal/portable TV band devices.<sup>17</sup> It would be entirely premature to allow personal/portable TV band devices to operate without extensive study by IEEE 802 and others. In light of the unique and currently insurmountable challenges posed by the introduction of personal/portable devices into the broadcast spectrum, the Commission should not authorize any such devices at this time or in the foreseeable future.

In addition to the technical uncertainties of personal/portable devices, these devices also lack a nexus to the Commission's broadband policies. One of the main goals of this proceeding has been to provide new broadband services, especially to rural and underserved areas of the United States.<sup>18</sup> MSTV and NAB fully support this goal, but it is the introduction of fixed devices, rather than personal/portable TV band devices, that furthers this goal.<sup>19</sup> Indeed, the interference caused by uncontrolled personal/portable devices may inhibit the deployment of fixed broadband operations. Simply stated, allowing personal/portable devices in the TV band will be counterproductive to the goal of promoting rural broadband. By authorizing only fixed TV band devices to operate, accompanied by proper protections, the commission can promote a broadband plan without endangering television reception.

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<sup>17</sup> See Comments of IEEE 802, ET Docket No. 04-186 (filed Jan. 31, 2007) (IEEE 802 Comments).

<sup>18</sup> See First R&O and FNPRM at ¶ 2.

<sup>19</sup> See March 2007 MSTV/NAB Comments at 11-13; Comments of RoadStar Internet, ET Docket No. 04-186 (filed Jan. 31, 2007) (RoadStar Comments); Cox Comments at 4; WISPA Comments.

### **III. THE COMMISSION MUST NOT PERMIT THE MARKETING OR OPERATION OF TV BAND DEVICES UNTIL AFTER THE DTV TRANSITION.**

The Commission must deny NAF's petition to reconsider the Commission's decision to delay authorization of TV band devices until after the completion of the DTV transition, as NAF is asking the Commission to put the DTV transition at risk. The Commission has carefully examined this issue, given parties an opportunity to comment, and concluded that TV band devices should not be allowed to operate in the television band until after February 17, 2009.<sup>20</sup> As the Commission stated in the *First R&O and FNPRM*, "we believe that the risk of creating uncertainty that would impede the DTV transition outweighs the benefit of allowing operation of low power devices at a slightly earlier date."<sup>21</sup> Chairman Martin, in his statement, reiterated that "allowing the use of low power devices immediately could impede the progress of the DTV transition."<sup>22</sup> NAF has failed to provide any justification for its request that the Commission overturn its well reasoned decision.

Over the next few years, consumers will spend billions of dollars on new digital receiving equipment, and the government will spend 1.5 billion dollars on a subsidy to fund digital to analog converter boxes. At a minimum, consumers will be replacing or updating approximately 70 million television receivers that rely exclusively on over the air television reception.<sup>23</sup> The Commission must make certain that these millions of television viewers, who will have spent a significant amount of money to receive digital television signals, are not adversely impacted by any TV band devices that may operate within the broadcast spectrum.

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<sup>20</sup> See First R&O and FNPRM at ¶22.

<sup>21</sup> *Id.*

<sup>22</sup> First R&O and FNPRM, Statement of Chairman Kevin J. Martin.

<sup>23</sup> In addition to complete replacement, consumers will also have the option to use a digital-to-analog converter or set-top box with the existing analog television as the display. The digital-to-analog converter is basically a digital TV receiver without a display. These converters generally have the same performance characteristics (or perhaps poorer performance due to lower cost components) as a DTV set including with regard to interference rejection.

The DTV transition is a particularly sensitive time in which to allow the unprecedented sharing of spectrum among licensed television services and TV band devices. If allowed to operate before the transition, TV band devices would be squeezed in between more than 3200 analog and digital signals, significantly increasing the likelihood and impact of harmful interference to TV viewers and consumer disenfranchisement. Allowing their operation before February 2009 could indefinitely delay the digital transition. The Commission has already determined that it will not jeopardize the DTV transition by introducing TV band devices into the band before February 17, 2009;<sup>24</sup> this prudent decision should not be disturbed as it is essential to the protection of television services.

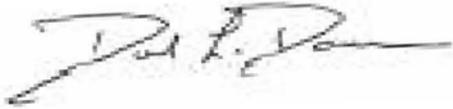
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<sup>24</sup> See First R&O and FNPRM at ¶ 22.

## CONCLUSION

In order to protect existing services in the television band, the Commission should deny NAF's Petition.

Respectfully submitted,



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