

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Amendment of Part 15 of the Commission’s Rules for Unlicensed Operations in the Television Bands, Repurposed 600 MHz Band, 600 MHz Guard Bands and Duplex Gap, and Channel 37, and	)	ET Docket No. 14-165
	)	
Amendment of Part 74 of the Commission’s Rules For Low Power Auxiliary Stations in the Repurposed 600 MHz Band and 600 MHz Duplex Gap	)	
	)	
Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions	)	GN Docket No. 12-268
	)	
To: The Commission		

**OPPOSITION TO PETITIONS FOR RECONSIDERATION  
OF THE WIRELESS INTERNET SERVICE PROVIDERS ASSOCIATION**

The Wireless Internet Service Providers Association (“WISPA”), pursuant to Section 1.429 of the Commission’s Rules,<sup>1</sup> hereby opposes certain petitions for reconsideration filed in this proceeding.<sup>2</sup> WISPA also provides its support to certain aspects of the petitions.

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<sup>1</sup> 47 C.F.R. § 1.429.

<sup>2</sup> *Amendment of Part 15 of the Commission’s Rules for Unlicensed Operations in the Television Bands, Repurposed 600 MHz Band, 600 MHz Guard Bands and Duplex Gap, and Channel 37, et al.*, Report and Order, ET Docket No. 14-165 and GN Docket No. 12-268, FCC 15-99 (rel. Aug. 11, 2015) (“*Report and Order*”). Federal Register publication of the petitions occurred on February 12, 2016 and established a February 29, 2016 deadline for filing oppositions. *See* 81 Fed.Reg. 7491 (Feb. 12, 2016).

## Discussion

### I. THE COMMISSION MUST NOT ELIMINATE THE PROFESSIONAL INSTALLATION OPTION, BUT SHOULD INSTEAD ENSURE THAT THE TV WHITE SPACE DATABASE IS MORE ACCURATE AND RELIABLE.

Despite acknowledging that the Commission will address its concerns in a separate proceeding,<sup>3</sup> the National Association of Broadcasters (“NAB”) repeats its plea that the Commission should eliminate the professional installation option for TV white space devices.<sup>4</sup> GE Healthcare similarly argues that the Commission should “prohibit manual configuration of location device information.”<sup>5</sup>

As it has in the past,<sup>6</sup> WISPA strongly opposes elimination of the professional installation option. First, as WISPA previously explained,<sup>7</sup> and as the Commission acknowledges, “the vertical height accuracy of GPS is typically less than the horizontal accuracy.”<sup>8</sup> Automatic entry of GPS vertical height thus distorts the list of available 4-Watt channels and compromises the protection provided to broadcasters. The Commission thus asks in the Professional Installation NPRM

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<sup>3</sup> See *Report and Order* at ¶21 n.37. The Commission released a Notice of Proposed Rulemaking and Order on February 26, 2016. See *Amendment of Part 15 of the Commission’s Rules for Unlicensed White Space Devices*, Notice of Proposed Rulemaking and Order, ET Docket No. 16-56, RM-11745, FCC 16-23 (rel. Feb. 26, 2016) (“*Professional Installation NPRM*”).

<sup>4</sup> See Petition for Reconsideration of the National Association of Broadcasters, ET Docket No. 15-165 and GN Docket No. 12-268 (filed Dec. 23, 2015) (“NAB Petition”) at 4.

<sup>5</sup> See Petition for Reconsideration of GE Healthcare, ET Docket No. 15-165 and GN Docket No. 12-268 (filed Dec. 23, 2015) (“GE Healthcare Petition”) at 40.

<sup>6</sup> See, e.g., Opposition of WISPA to Emergency Motion for Suspension of Operations and Petition for Rulemaking, RM-11745 (filed May 1, 2015); Letter from Stephen E. Coran, Counsel to WISPA, to Marlene H. Dortch, FCC Secretary ET Docket No. 14-165, GN Docket No. 12-268 and GN Docket No. 12-354 (filed Jan. 21, 2016) (“WISPA Ex Parte Letter”).

<sup>7</sup> WISPA Ex Parte Letter at 2.

<sup>8</sup> *Professional Installation NPRM* at 8.

“whether we should simply allow users to manually enter the height above ground in all cases.”<sup>9</sup>

Second, manual registration is necessary for the TV white space database to determine the azimuth of directional antennas, if the Commission amends its rules.<sup>10</sup> Third, as the Commission

recognizes, “there will be many important applications for fixed white space devices in which the device needs to be installed where an incorporated geo-location capability will not function.”<sup>11</sup>

Finally, professional installation is backstopped by existing Commission rules that require registrants to maintain the accuracy and currency of database registrations<sup>12</sup> and require administrators to correct database inaccuracies in a timely manner.<sup>13</sup>

Rather than eliminate the professional installation option, the Commission should instead take steps to improve its accuracy and reliability in the “holistic” context, as NAB suggests,<sup>14</sup> of the newly commenced *Professional Installation NPRM* proceeding. WISPA has previously stated its belief that professional installers must disclose their identity and contact information so that they can be contacted in the event they make an error, and face enforcement sanctions for repeated

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<sup>9</sup> *Id.*

<sup>10</sup> *See id.* at 8 n.38 (noting that parties have sought reconsideration of the Commission’s decision to not allow database recognition of directional antennas).

<sup>11</sup> *Id.* at 9.

<sup>12</sup> *See* 47 C.F.R. § 15.713(f)(2).

<sup>13</sup> *See* 47 C.F.R. § 15.715(i). The Commission also should grant Microsoft’s request that the Commission clarify that relocating an access point within a house or a building does not require a new professional installation. *See* Petition for Reconsideration and Clarification of Microsoft Corporation, ET Docket No. 15-165 and GN Docket No. 12-268 (filed Dec. 23, 2015) at 17.

<sup>14</sup> NAB Petition at 3.

errors.<sup>15</sup> As an alternative to its argument that professional installation should be eliminated, GE Healthcare agrees with WISPA that the Commission should “create a secure authentication process to validate the credentials of professional installers. . . . and store professional installer information in the white space database as part of device registration to support compliance audits, investigations and enforcement actions.”<sup>16</sup>

Making professional installers accountable for their actions is a good start for the discussion that should take place in the upcoming proceeding. WISPA looks forward to engaging with other stakeholders on additional means to improve the database and to participating in the *Professional Installation NPRM*. In the meantime, the Commission should reject the NAB and GE Healthcare petitions to the extent discussed above.

## **II. THE COMMISSION SHOULD REJECT EFFORTS TO RE-INSTITUTE A MICROPHONE RESERVATION SYSTEM.**

Shure seeks reconsideration of the Commission’s decision to eliminate the reservation system for wireless microphones.<sup>17</sup> It asks for reinstatement of that system or a more limited reservation process for users with fewer than 50 microphones.<sup>18</sup> In the *Report and Order*, the Commission appropriately “balanc[ed] the interests [of] licensed and unlicensed entities’ access to

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<sup>15</sup> See WISPA Ex Parte Letter at 2. The *Professional Installation NPRM* proposes to require the database to confirm registration before it shares that information with other databases. See *Professional Installation NPRM* at 14.

<sup>16</sup> GE Healthcare Petition at 40 (footnote omitted). WISPA supports NAB’s request that the Commission clarify the roles and responsibilities of those parties involved in the TV white space device registration process. See NAB Petition at 9.

<sup>17</sup> See Petition for Reconsideration of Shure Incorporated, ET Docket No. 15-165 and GN Docket No. 12-268 (filed Dec. 23, 2015) at 13.

<sup>18</sup> See *id.* at 15.

spectrum in a reconfigured TV bands that would have fewer vacant channels available.”<sup>19</sup> The Commission should therefore not reverse its considered position and re-impose the reservation regime.

### **III. WISPA SUPPORTS COOPERATIVE TESTING TO DETERMINE WHETHER FIXED DEVICES CAN OPERATE CLOSER TO THE TV BAND EDGE WITHOUT CAUSING HARMFUL INTERFERENCE TO STATIONS ENTITLED TO PROTECTION.**

Carlson Wireless Technologies, Inc. and Cal.net, Inc. (“Carlson/Cal.net”) ask the Commission to allow fixed devices operating at 4 Watts EIRP to operate three megahertz away from the edge of an occupied TV channel.<sup>20</sup> Carlson/Cal.net state that, in rejecting its own proposal to allow such operations, the Commission “appears to have wrongly relied on NAB’s analysis” which did not account for a three megahertz buffer between the television channel and the white space device.<sup>21</sup> Carlson/Cal.net also revealed that Carlson and NAB were considering joint testing for adjacent-channel operation, but that after Carlson delivered equipment to NAB, “NAB informed Carlson that it no longer planned to conduct that joint testing.”<sup>22</sup> Carlson/Cal.net state that Carlson remains ready to perform joint testing and to submit the results to the Commission.<sup>23</sup>

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<sup>19</sup> *Report and Order* at ¶ 266.

<sup>20</sup> *See* Petition for Reconsideration of Carlson Wireless Technologies, Inc. and Cal.net, Inc., ET Docket No. 15-165 and GN Docket No. 12-268 (filed Dec. 23, 2015) (“Carlson/Cal.net Petition”) at 2. Carlson/Cal.net also voice their full support for WISPA’s Petition for Partial Reconsideration that would permit the database to recognize directional antennas and to operate at higher maximum elevations. *See id.* at n.3.

<sup>21</sup> *See id.* at 5-6.

<sup>22</sup> *Id.* at 6.

<sup>23</sup> *See id.*

WISPA fully supports cooperative testing. Instead of simply dismissing earlier proposals that were predicated on overseas testing – and apparently, in reliance on a wrong analysis – the Commission should encourage joint testing. If Carlson/Cal.net and NAB demonstrate that there is no harmful interference, the Commission should then amend its rules accordingly.

The benefit of allowing fixed devices to operate at power levels up to 4 Watts EIRP is, as the Commission has pointed out, an increase in spectrum efficiency.<sup>24</sup> Additional, much-needed 4-Watt channels will be available for unlicensed fixed use, increasing the viability of the service. In markets where there are not three, but only two vacant TV channels between TV stations, an additional 4-Watt white space channel will be available.

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<sup>24</sup> See *Amendment of Part 15 of the Commission's Rules for Unlicensed Operations in the Television Bands, Repurposed 600 MHz Band, 600 MHz Guard Bands and Duplex Gap, and Channel 37, et al.*, Notice of Proposed Rulemaking, 29 FCC Rcd 12248, 12259 (2014).

## **Conclusion**

As described above, the Commission should reject efforts to eliminate the professional installation option, and should instead improve the accuracy of the information in the database. The Commission also should allow fixed operations at 4 Watts EIRP three megahertz away from the edge of a TV channel once joint testing demonstrates that TV stations will be protected.

Respectfully submitted,

### **WIRELESS INTERNET SERVICE PROVIDERS ASSOCIATION**

February 29, 2016

By: */s/ Alex Phillips, President*  
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**CERTIFICATE OF SERVICE**

I, Sharon Krantzman, hereby certify that on this 29<sup>th</sup> day of February, 2016, a copy of the foregoing Opposition to Petitions for Reconsideration, was sent by first class, postage prepaid mail to the following:

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