

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

In the Matter of)
)
Inquiry Concerning the Deployment of Advanced)
Telecommunications Capability to All Americans)
In a Reasonable and Timely Fashion, and Possible) GN Docket No. 14-126
Steps to Accelerate Such Deployment Pursuant to)
Section 706 of the Telecommunications Act of)
1996, as Amended by the Broadband Data)
Improvement Act)

To: The Commission

**COMMENTS OF
THE WIRELESS INTERNET SERVICE PROVIDERS ASSOCIATION**

The Wireless Internet Service Providers Association (“WISPA”), pursuant to Sections 1.415 and 1.419 of the Commission’s Rules, submits these Comments in response to the Notice of Inquiry (“*NOI*”) released by the Commission on February 4, 2015 in the above-captioned proceeding.¹ Specifically, WISPA responds to the Commission’s request for comment “on additional ways to remove barriers to infrastructure investment and promote competition,”² as well as “on any steps the Commission could take . . . to accelerate deployment of advanced telecommunications capability to all Americans.”³

As discussed herein, WISPA enthusiastically supports Commission “actions that will accelerate the rate at which [high quality broadband] service is deployed.”⁴ To best achieve this objective, the Commission should: make additional spectrum available for unlicensed use; take

¹ *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, 2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment, GN Docket No. 14-126, FCC 15-10 (rel. Feb. 4, 2015) (“*NOI*”).

² *Id.* (¶ 155).

³ *Id.* (¶ 156). See Telecommunications Act of 1996, Pub. L. No. 104-104, Section 706.

⁴ *Id.* (¶ 157).

immediate action to implement a robust, technology-neutral Remote Areas Fund plan; avoid allocating Connect America Fund support in a manner that would subsidize overbuilding of existing broadband networks deployed by “unsubsidized competitors” using private capital; and require municipalities subject to the Commission’s exercise of preemption authority to interconnect with private providers.

About WISPA

WISPA is the trade association that represents the interests of wireless Internet service providers (“WISPs”) that provide IP-based fixed wireless broadband services to consumers, businesses and anchor institutions across the country. WISPs use unlicensed spectrum that lowers barriers to entry so that they can provide high-quality and affordable service in unserved, underserved and competitive areas. WISPA estimates that WISPs serve more than 3,000,000 people, many of whom reside in rural, unserved and underserved areas where wired technologies like FTTH, DSL and cable Internet access services may not be available. In some of these areas, WISPs provide the only terrestrial source of fixed broadband access. In areas where other broadband options are available, WISPs provide a local access alternative that fosters competition in service, cost and features.

Discussion

I. THE COMMISSION SHOULD MAKE ADDITIONAL SPECTRUM AVAILABLE FOR UNLICENSED USE.

In the National Broadband Plan, the Commission acknowledged the important benefits that “innovative spectrum models” such as those employed by WISPs play in reaching unserved and underserved communities and pledged to expand on such opportunities:⁵

⁵ FCC, *Connecting America: The National Broadband Plan* (March 17, 2010) at 94.

The innovations spurred by unlicensed device usage have occurred because of benefits associated with such usage, including low barriers to entry and faster time to market, that have reduced costs of entry, spurred innovation and enabled very efficient spectrum usage. Taken together, these benefits have allowed many communities to rapidly deploy broadband systems. *Often, as has been the case for many WISPs, this has occurred in rural or previously underserved communities.*⁶

In examining its past efforts to stimulate broadband deployment, the Commission should be mindful of the impact that spectrum availability can have. Formerly dismissed as “junk” bands,⁷ unlicensed spectrum helped launch the WISP industry and is now embraced by other industries for small cells and Wi-Fi offload as licensed networks become more congested.

In the coming months, the Commission has the opportunity to significantly increase the availability of spectrum for fixed and mobile wireless broadband use. With access to more spectrum, WISPs and other fixed broadband providers would, in turn, put such spectrum to use by deploying broadband in more areas, with greater speeds, higher throughput and better overall service to satisfy consumer demand, consistent with the objectives of Section 706.

The Commission should act expeditiously to adopt rules in a number of open spectrum proceedings. In its proceeding to allow shared commercial use of the 3550-3650 MHz band, the Commission should implement a three-tiered Spectrum Access System model that enables unlicensed or “license-by-rule” spectrum access when and where spectrum is not being used for Incumbent Access and Priority Access use.⁸ Through this novel approach, and assuming the adoption of appropriate technical and operating rules, the Commission will make available an additional 100 megahertz of spectrum for higher-power fixed broadband service in rural areas and for lower-power small cells in urban areas.

⁶ *Id.* at 95 (emphasis added).

⁷ *Id.* at 94.

⁸ *See, e.g.*, Comments of WISPA, GN Docket No. 12-354 (filed July 14, 2014); WISPA Reply Comments, GN Docket No. 12-354 (filed Aug. 15, 2014).

The Commission also can minimize the impact of the loss of unlicensed TV band spectrum in the incentive auction by adopting new rules that will make TV white space spectrum more flexible and spectrally efficient to deploy. For instance, as WISPA recommended, the Commission should open up restricted channels for unlicensed use, reduce adjacent-channel protection requirements, allow higher power in rural areas and authorize the TV bands database to recognize intermediate power levels and directional antennas.⁹ In addition, the Commission should authorize LPTV channel sharing and employ post-auction displacement practices that will, through “spectrum neighborhoods,” promote efficient use of the remaining unoccupied TV channels.¹⁰ WISPA believes that adopting these rules will stimulate investment in TV white space equipment and make the business case more viable for rural broadband deployment.

The Commission has taken action to authorize outdoor use of the 5150-5250 MHz band, and it should move forward with proceedings in the 5350-5470 MHz band and the 5850-5925 MHz band where testing for interference is ongoing.¹¹ In his recent speech at WISPAmerica, Commissioner O’Rielly stated that:

The UNII-2B and UNII-4 bands in 5 GHz are prime examples. The Commission must take the necessary steps to facilitate unlicensed use in a band that is already used for Wi-Fi systems. This increased bandwidth will allow the deployment of the latest technologies that will relieve congestion and bring higher speeds. Hopefully, the actions of the Commission, combined with the reintroduction of the Wi-Fi Innovation Act in the House and Senate, will spur the stakeholders – the Wi-Fi community and transportation sector – to come to a quick resolution that will allow unlicensed and DSRC to harmoniously exist in the UNII-4 band.¹²

⁹ See generally WISPA Comments, ET Docket No. 14-165 and GN Docket No. 12-268 (filed Feb. 4, 2015); WISPA Reply Comments, ET Docket No. 14-165 and GN Docket No. 12-268 (filed Feb. 25, 2015).

¹⁰ See Comments of WISPA, GN Docket No. 12-268 (filed Jan. 25, 2013) at 23; Reply Comments of WISPA, MB Docket No. 03-185, GN Docket No. 12-268 and ET Docket No. 14-175 (filed Feb. 2, 2014) at 6-7; Comments of WISPA, MB Docket No. 03-185, GN Docket No. 12-268 and ET Docket No. 14-175 (filed Jan. 12, 2015) at 4.

¹¹ See Michael O’Rielly and Jessica Rosenworcel, “Driving Wi-Fi Ahead: the Upper 5 GHz Band,” (Feb. 23, 2015), available at <http://www.fcc.gov/blog/driving-wi-fi-ahead-upper-5-ghz-band>. (“O’Rielly/Rosenworcel Post”).

¹² Remarks of Commissioner Michael O’Rielly, Federal Communications Commission Before WISPAmerica 2015 February 24, 2015 (as delivered).

Commissioners Rosenworcel and O’Rielly also noted in a recent joint blog post that “it is time for the Commission to develop a compromise that allows both unlicensed and DSRC use in the U-NII-4 band.”¹³

The Commission also should adopt a notice of proposed rulemaking for commercial use of the 10 GHz band, in response to the petition for rulemaking filed by Mimosa Networks, Inc.¹⁴ Although questions remain about potential interference to governmental and amateur users and the appropriate licensing scheme, the Commission need not delay in commencing a rulemaking proceeding. Recently, a bicameral bipartisan group of Congressional representatives urged the Commission to explore this band for commercial use, stating that “[s]haring opportunities in the 10 GHz band . . . could also provide an opportunity to expand affordable, high-speed Internet access to Americans living in urban and rural communities.”¹⁵

In each of these proceedings, the Commission can make more spectrum available for broadband use, or can modify its rules to make existing commercial use more robust and viable. These bands are all suitable for rural broadband deployment in rural areas, the very areas of the country that the Commission cites as being most underserved by “advanced telecommunications capability.”¹⁶ Moreover, unlike CAF programs that involve the distribution of subsidies, the spectrum proceedings will not cost anything. To the contrary, making spectrum available as described above will stimulate private investment, innovation and broadband deployment.

¹³ See “O’Rielly/Rosenworcel Post.”

¹⁴ See Petition for Rulemaking of Mimosa Networks, Inc, RM-11715 (filed May 1, 2013); *Public Notice*, Report No. 3002 (March 11, 2014).. WISPA filed Comments in support of Mimosa’s request for the Commission to initiate a rulemaking proceeding. See WISPA Comments, RM-11715 (filed Apr. 10, 2014).

¹⁵ See Letter from Rep. Doris Matsui, Rep. Brett Guthrie, *et al.* to the Honorable Tom Wheeler, FCC Chairman (March 2, 2015).

¹⁶ *NOI* (¶ 6).

II. THE COMMISSION SHOULD SUPPORT A ROBUST, TECHNOLOGY NEUTRAL REMOTE AREAS FUND PROGRAM.

The Commission has issued a number of notices and inquiries regarding a program that holds tremendous promise for extending broadband service to those currently without: the Remote Areas Fund (“RAF”).¹⁷ Now, it is time to move the RAF program forward. Remaining issues need to be finalized, robust funding needs to be allocated, and the program needs to launch. The program should be open and welcoming to *all* providers of broadband services – including those such as fixed wireless broadband providers who are most likely to put funding to work in rural and underserved areas – not just to a chosen few traditional telecommunications carriers using a particular technology platform. Put simply, “the Commission should fully commit itself to completing a plan for the Remote Areas Fund to ensure that the hardest to reach consumers are not left behind indefinitely.”¹⁸ Implementing the RAF would help “accelerate deployment of advanced telecommunications capability to all Americans,”¹⁹ especially those in rural and remote areas that lack access to high-speed Internet services.

III. THE COMMISSION SHOULD AVOID DEPLOYING CONNECT AMERICA FUND SUPPORT FOR PURPOSES OF OVERBUILDING EXISTING NETWORKS.

In the *Progress Report* that precedes the *NOI*, the Commission altered the definition of what constitutes “advanced telecommunications capability” for purposes of Section 706. According to the FCC, 4 Mbps/1 Mbps broadband service, or even 10 Mbps/1 Mbps service, is no longer sufficiently “advanced.” Now, the Commission raises the bar to 25 Mbps/3 Mbps, because, as it strains to explain, “the average [family] household size is as high as 4.3 [people, and] [w]e take the needs of multiple users into account when considering what level of service is

¹⁷ See, e.g., *Public Notice, Wireline Competition Bureau Seeks Further Comment on Issues Regarding the Design of the Remote Areas Fund*, DA 13-69 (rel. Jan. 17, 2013).

¹⁸ *NOI*, Dissenting Statement of Commissioner Michael O’Rielly.

¹⁹ *NOI* (¶ 156).

necessary to be considered advanced telecommunications capability.”²⁰ Those “needs,” according to the FCC, include streaming numerous HD videos on multiple separate devices while also participating in Skype video chats and playing online video games, downloading photos, uploading large data files for work, completing homework, paying bills, and streaming music – all at the same time.²¹

WISPA has made known its views on this strained interpretation of Section 706, and continues to believe that myopically focusing on the purported “need” for households to simultaneously operate multiple high data-intensive applications on a plethora of separate devices, does a disservice to those millions of Americans who have no, or minimal, access to broadband service – let alone service capable of supporting the unrealistic, concurrent single household uses that the Commission describes in almost romantic terms. Be that as it may, if 25 Mbps/3 Mbps is to be the new standard for what constitutes “advanced,” the Commission must *not* allow this new definition to place it in a position of choosing “winners” and “losers” when it comes to federal funding to promote broadband deployment. The Commission could become just such an arbiter if it contemplates allocating CAF (or any other program) funding to price cap carriers so that they can build 25 Mbps/3 Mbps-capabilities in areas already served by smaller, unsubsidized carriers. It is one thing to re-define “advanced telecommunications capability” for purposes of the *Progress Report*, another thing to require faster speeds as a condition to

²⁰ *Id.* (¶ 3).

²¹ See *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, Tenth Broadband Progress Notice of Inquiry, GN Docket No. 14-126, FCC 14-113 (rel. Aug. 5, 2014) at Table 2 (discussing such simultaneous usage as one user watching a “super HD movie,” while another makes an “HD video call,” while yet another saves large data files to “the cloud”); and *NOI*, Statement of Chairman Tom Wheeler (“On any given evening, it would not be surprising to see one child doing online homework, another streaming a movie, one parent uploading data files for work, and another parent paying bills or downloading photos while also streaming music or video”).

obtaining CAF Phase II support, and quite another to adopt 25 Mbps/3 Mbps as a new definition of “unsubsidized competitor” for determining where to allocate CAF support.

The Commission must absolutely resist any temptation to take this last step.²² Such subsidization could potentially destroy the unsubsidized providers that have already successfully built networks to serve areas that the price cap carriers themselves initially chose not to serve. Re-defining “unsubsidized competitors” to raise again the broadband speed would enable price cap carriers to obtain subsidies to overbuild existing networks built with private funds by smaller companies that for the last several years were deemed to be compliant with the Commission’s rules and that are providing valuable service in the public interest.

IV. THE COMMISSION SHOULD REQUIRE MUNICIPALITIES SUBJECT TO THE COMMISSION’S PREEMPTION AUTHORITY TO INTERCONNECT WITH PRIVATE PROVIDERS.

The Commission recently decided to preempt state laws in Tennessee and North Carolina that prohibit municipalities from deploying broadband in areas outside the municipal boundaries.²³ The Commission rooted its decision to preempt in Section 706(b), which requires the Commission to “take immediate action” to encourage broadband deployment.²⁴ Although WISPA opposed preemption on both legal and policy grounds, it recommended that any approval of the preemption petitions be conditioned upon a requirement for the municipalities to interconnect with privately funded networks upon request.²⁵ By enabling access to middle-mile facilities owned by municipalities, the Commission would encourage private providers to deploy to areas that municipalities may not wish to serve, and promote competition in other areas.

²² WISPA hopes that the Commission remains true to the statement that “[a]lthough we find that a 25 Mbps/3 Mbps benchmark is appropriate here, the Commission has adopted different speeds in different contexts.” *NOI* (¶ 54).

²³ See News Release, “FCC Grants Petitions to Preempt State Laws Restricting Community Broadband in North Carolina, Tennessee,” (rel. Feb. 26, 2015).

²⁴ Telecommunications Act of 1996, Pub. L. No. 104-104, Section 706(b).

²⁵ See WISPA Comments, WCB Docket Nos. 14-115 and 14-116 (filed Aug. 29, 2014); WISPA Reply Comments, WCB Docket Nos. 14-115 and 14-116 (filed Sept. 29, 2014).

Requiring such interconnection would also be consistent with rules adopted for American Recovery and Reinvestment Act broadband stimulus projects,²⁶ which required all recipients of federal Broadband Initiatives Program and Broadband Technology Opportunities Program recipients to “offer interconnection, where technically feasible without exceeding current or reasonably anticipated capacity limitations, *on reasonable rates and conditions to be negotiated with requesting parties*. This includes both the ability to connect to the public Internet and physical interconnection for the exchange of traffic.”²⁷

In addition, the Commission should require municipalities to forego providing service to an area if (a) it is then being served by a non-public, privately funded broadband provider, and (b) the municipalities do not at such time have facilities capable of providing service in such area. Under this condition, privately funded broadband providers that desire to serve unserved areas will not be subject to competition from a publicly funded entity (but could be subject to competition from another privately funded entity), thereby stimulating investment in the private network and deployment of service to unserved areas. Such requirements also would leverage existing infrastructure while encouraging the more rapid deployment of broadband services.

²⁶ See American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, 123 Stat. 115 (2009).

²⁷ *Broadband Initiatives Program; Broadband Technologies Opportunities Program*; Notice of Funds Availability, 74 Fed. Reg. 130 at 33111 (2009) (emphasis added).

Conclusion

WISPA is pleased to offer these steps that the FCC could take to remove barriers to competition, promote competition, and accelerate prompt deployment of broadband services.

Respectfully submitted,

WIRELESS INTERNET SERVICE PROVIDERS ASSOCIATION

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