

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)	
)	
Inquiry Concerning the Deployment of Advanced)	GN Docket No. 18-238
Telecommunications Capability to All Americans)	
In a Reasonable and Timely Fashion)	

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, hereby comments on certain aspects of the Notice of Inquiry (“*NOI*”) released August 9, 2018 in the above-captioned proceeding.¹

Introduction

WISPA represents the interests of hundreds of small fixed-wireless broadband providers (“WISPs”) that deliver internet connectivity services to more than four million consumers, businesses, first responders and community institutions in areas of the country where other service providers decline to invest. Most WISPs are small businesses, and many have only a handful of employees. To provide their services, WISPs use unlicensed, lightly-licensed and licensed spectrum at low and mid-band frequencies, predominantly in rural, unserved, and underserved areas. In many areas, WISPs provide the only terrestrial source of fixed broadband access. In areas with other broadband options, WISPs provide a local-access alternative that benefits customers by fostering competition, lowering costs and improving features. WISPA has

¹ See *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, Fourteenth Section 706 Report Notice of Inquiry, GN Docket No. 18-238, FCC 18 119 (rel. Aug. 9, 2018) (“*NOI*”).

been a regular participant in prior proceedings concerning the deployment of advanced telecommunications service under Section 706 of the Telecommunications Act.

Discussion

I. THE COMMISSION SHOULD RETAIN ITS EXISTING BENCHMARKS AND EVALUATION CRITERIA FOR FIXED TERRESTRIAL BROADBAND SERVICE, AS PROPOSED.

A. The Commission Should Maintain Its Current Speed Benchmark.

The Commission proposes “to maintain the 25 Mbps/3 Mbps benchmark” for fixed broadband download and upload speeds.² This standard was adopted in the 2015 Section 706 proceeding, a step which produced substantial disagreement among the commenting parties at that time, just a few years ago, as to whether such an increase was warranted.³ Given the fact that the speed required for the applications that most broadband consumers use has not changed substantially since then, and actual subscriptions have not yet consistently surpassed the benchmark level, WISPA agrees with the Commission’s proposal to retain the current standard.

As noted in the *2018 Broadband Progress Report*, released in February, “the current 25 Mbps/3 Mbps fixed speed benchmark reflects current usage patterns and demand, and provides consumers with the ability to receive high quality, advanced services, including HD video streaming and video calling over multiple devices.”⁴ Nothing has changed in the intervening months to disturb this well-supported finding. Because more than 40% of current fixed broadband users are subscribing to service at speeds below the 25 Mbps/3 Mbps benchmark, the adoption rate for service at higher speeds does not yet support an increase in the threshold.⁵

² See *NOI* at 4 (¶ 8).

³ See *2015 Broadband Progress Report*, 30 FCC Rcd at 1377, 1398-1408 (2015).

⁴ See *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion* (“*2018 Broadband Progress Report*”), 33 FCC Rcd 1660, 1668 (¶ 23) (2018).

⁵ See *id.* (¶ 22).

B. The Commission Should Continue to Consider Fixed and Mobile Services as Distinct Technological Offerings.

The Commission also seeks comment on “whether and to what extent fixed and mobile services of similar functionality are substitutes for each other.”⁶ Based on current technology, access to advanced telecommunications capability continues to require the presence of *both* fixed and mobile services. As the Commission observed in the 2017 Section 706 Notice of Inquiry, there are “salient differences in fixed and mobile advanced telecommunications capability,” including their “technical characteristics and limitations.”⁷ For this reason, the two types of service are not direct substitutes for one another; they are instead complementary services, each essential to most users to meet significantly different communications and information needs.

In general, in addition to voice telephony, users employ mobile connectivity for data applications, such as navigation, social media, and picture sharing, that require less throughput and data speed. Although mobile video traffic is increasing, this use is most likely to be for viewing or sharing short online clips. Use of handheld devices on mobile networks to view full-length video entertainment programming is significantly more limited and situational, often a second choice use when higher throughput fixed broadband is not available on other devices or via fixed Wi-Fi connectivity. As one commentator has succinctly observed, “I have not foregone a fixed wireline plan completely because bandwidth-intensive activities (such as Netflix) are more convenient via a fixed connection.”⁸

⁶ *NOI* at 5 (¶ 11).

⁷ See *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, Thirteenth Section 706 Report Notice of Inquiry, GN Docket No. 17-199, 32 FCC Rcd 7029, 7031 & 7033 (¶¶ 5 & 10) (rel. Aug. 8, 2017).

⁸ Daniel Lyons, “Broadband deployment: How fast is fast enough?,” AEIdeas (Aug. 11, 2017), available at <https://www.aei.org/publication/broadband-deployment-how-fast-is-fast-enough-and-does-it-matter-how-its-delivered/>.

As of June 2018, Xfinity reported that its customers' median monthly fixed broadband data usage was 151 GB per month for the immediately preceding six months,⁹ although this figure actually is somewhat lower than the average household monthly usage of approximately 190 GB reported in late 2016 by IGR Research.¹⁰ Regardless of the current average level of monthly broadband use, which appears to be in the 150-200 GB range, it is expected that such usage will continue to increase substantially in the coming years with two factors as principal drivers: continuing upgrades by households from older, lower-speed connections, and increasing use of higher-definition video. The average cost for residential fixed broadband was about \$60 per month according to a recent report.¹¹ In contrast, a mobile user accessing a volume of data over 150 GB would either incur huge overage charges, if on a capped data plan, or more likely, would choose to pay for an "unlimited" plan with a significantly higher upfront cost, and the potential that data use may still be constrained at peak usage times once internal benchmarks are exceeded. A middle tier, three-line unlimited family plan from Verizon Wireless, for example, currently costs \$150 per month (while the Verizon 5G ultrawideband fixed service now being introduced will cost just \$50 per month).¹² But even this "beyond unlimited" plan, while controlling total costs by eliminating variable overage fees, is both substantially more costly than a fixed broadband link and not really "unlimited" at all, in that it may offer reduced speeds in

⁹ See Xfinity website, FAQs <https://www.xfinity.com/support/articles/data-usage-average-network-usage>.

¹⁰ See Joan Engebretson, "iGR: Average Monthly Broadband Usage is 190 Gigabytes Monthly Per Household," Telecompetitor, September 26, 2016, available at <http://www.telecompetitor.com/igr-average-monthly-broadband-usage-is-190-gigabytes-monthly-per-household/>.

¹¹ Eli Blumenthal, "Internet bill too high? Here's how to save," USA Today (Updated Jan. 9, 2018), available at <https://www.usatoday.com/story/money/personalfinance/budget-and-spending/2018/01/08/internet-bill-too-high-heres-how-save/429890001/>

¹² Compare Verizon Wireless website, Unlimited at <https://www.verizonwireless.com/plans/unlimited/> & 5G Home at <https://www.verizonwireless.com/5g/home/>

times of peak congestion once a 22 GB monthly data threshold is exceeded.¹³ In such cases, the service is at once more expensive and more restrictive than is available via fixed broadband, particularly given the likelihood that mobile providers may downgrade video resolution to 480p when capacity is constrained. Due to these cost and convenience considerations, smartphone users are more often connected using fixed Wi-Fi, either at home or via out-of-home hotspots, rather than their mobile network – and the traffic volume of smartphone users on Wi-Fi networks is typically higher because fixed broadband users seldom must worry about data caps.¹⁴

For all these reasons, the Commission should not abandon its well-supported treatment of fixed and mobile broadband as separate types of services that are suited to different uses and are not substitutable for each other. The Commission should continue to evaluate the availability of each type of broadband connectivity independently in determining whether each one of these distinct services is being made available to all Americans in a reasonable and timely fashion.

C. The Commission Should Continue Its Progress-Based Approach to Evaluating Broadband Deployment and Maintain Its Focus on Census Blocks to Make This Annual Evaluation.

WISPA urges the Commission to continue using “a progress-based approach” in completing its next Broadband Deployment Report, as it proposed in the *NOI*.¹⁵ To the extent the Commission adopts Form 477 requirements that require reporting at the sub-census block level, it should adopt WISPA’s proposal to allow filers to provide geospatial data that reflects RF propagation over an area.¹⁶ Unlike census blocks or, for that matter, any geographic unit,

¹³ *Id.*

¹⁴ See Fredrik Jungermann, “Is High Mobile Data Usage Cannibalising Fixed?,” tefficient blog, 22 August 2017, available at <https://tefficient.com/is-high-mobile-data-usage-cannibalising-fixed/>.

¹⁵ See *NOI* at 3 (¶ 6).

¹⁶ See Comments of WISPA, WC Docket No. 11-10 (filed Oct. 10, 2017); Reply Comments of WISPA, WC Docket No. 11-10 (filed Oct. 24, 2017).

polygons depicting spectrum-based coverage will be less likely to overstate or understate broadband coverage, providing more accurate and precise data on where the Commission should be supporting broadband through its Connect America Fund.

II. MAKING ADDITIONAL SPECTRUM AVAILABLE AND REDUCING REGULATORY BURDENS GENERALLY WILL ENHANCE THE COMMISSION’S EFFORTS TO CLOSE THE DIGITAL DIVIDE.

The Commission seeks comment “on the ongoing effects of [its] efforts in spurring broadband deployment and additional efforts the Commission might undertake” to achieve its goals.¹⁷ WISPA believes that there continues to be a significant shortfall in achieving universal access in all parts of the nation to advanced telecommunications, which dictates that the Commission should continue to take affirmative steps toward correcting this imbalance and closing the “digital divide” that separates rural and other typically unserved or underserved areas from areas with substantially greater connectivity service and service options.

A. Reducing Barriers to Investment

With respect to reducing existing barriers to investment, the Commission asks how its “efforts thus far have stimulated broadband deployment and whether there are other actions that we could undertake to speed deployment of next-generation wireline and wireless facilities.”¹⁸ WISPA appreciates all efforts that the Commission has undertaken to remove barriers to investment in new broadband facilities, particularly those targeted toward easing restrictions on wireless infrastructure. Unfortunately, the Commission has also taken some recent actions that have had a counterproductive impact on the deployment of fixed wireless broadband services. For example, the Citizens Broadband Radio Service (“CBRS”) as adopted in 2015 included significant provisions designed to foster participation by new entrants and smaller service

¹⁷ See *NOI* at 10 (¶ 23).

¹⁸ *NOI* at 10 (¶ 24).

providers, including WISPs – (1) authorizing Priority Access Licenses (“PALs”) by census tracts to enable small providers to participate in a planned auction, and (2) limiting the license period for these authorizations to three years, non-renewable, to ensure spectrum would be used quickly, not warehoused. Two years into the process of long-term planning, marshalling investment and deploying service in reliance on those rules, however, the Commission significantly changed course under heavy lobbying from incumbent mobile service providers, and it adopted a new Notice of Proposed Rulemaking to consider substantial changes, including increases in both the geographic size and duration of these licenses.¹⁹ As WISPA and many other organizations have shown, these proposed rule changes would “devastate opportunities for WISPs and many other smaller and varied entities... ability to enter, use, and provide services under CBRS,” and would “undermine [] existing investment in 3650-3700 GHz spectrum and inhibit further investment and deployment in the entire 150 Megahertz of spectrum.”²⁰ About 60 percent of WISPA operator members responding to a survey reported that they had curtailed investment in the 3550-3700 MHz band because of the mere threat of new rules. One WISP noted that “[c]ontinued investment in a band that we may lose is extremely risky.”²¹ This uncertainty stands in the way of expeditious service deployment and calls into question whether use of this band can be maximized to help close the digital divide.²²

¹⁹ See *Promoting Investment in the 3550-3700 MHz Band*, Notice of Proposed Rulemaking and Order Terminating Petitions, 32 FCC Rcd 8071 (2017).

²⁰ See WISPA Reply Comments, GN Docket No. 17-258 (filed Aug. 8, 2018), at 22, *quoting* Letter from Richard Bernhardt, Managing Director, Bernhardt Communications Company, to Marlene H. Dortch, FCC Secretary, GN Docket No. 12-354 (filed July 24, 2017) at 2.

²¹ *Id.* at 5, *quoting* Letter from Mark Radabaugh, President, Amplex Electric, Inc., to Marlene H. Dortch, FCC Secretary, GN Docket No. 12-354 (filed July 24, 2017) at 1.

²² See WISPA Comments, GN Docket Nos. 14-177, 15-319, 17-183 & 17-258 (filed Sept. 11, 2018) (because of the rulemaking proceeding initiated in 2017, results of 2015 rules “have failed to meet the expectations of WISPA’s members and rural Americans that continue to lack access to fixed broadband service”).

Abrupt and material regulatory changes – or even the threat of such changes – create significant uncertainty for all businesses. Such shifts have a particularly harmful impact on small and start-up businesses, however, because these companies have fewer resources to draw upon in weathering and adapting to such unexpected changes. The result is investments that are stranded – or never occur at all – due to the inability to rely on a stable regulatory environment.

Similarly, the Commission should avoid imposing new regulatory requirements on broadband providers while also reducing existing, unnecessary regulatory burdens generally. The additional costs and record-keeping obligations imposed by such regulations, particularly on small service providers, divert critical resources away from high value service deployment and enhancement initiatives and toward much lower value regulatory compliance duties,²³ which is counter to Section 706’s mandate to promote and accelerate service deployment.

B. Universal Service Funding

The Commission also seeks comment “on the effectiveness of USF funding in driving the deployment of advanced telecommunications capability.”²⁴ The recently concluded Connect America Fund (“CAF”) Phase II reverse auction is a significant recent success in this area, as it will direct significant new funding to fixed wireless broadband deployment. A number of WISPs were successful auction winners,²⁵ and, if they are ultimately approved for funding, will be allocated more than half of the \$1.488 billion in support to provide service to about 40 percent of the subsidized locations in the country.

²³ See, e.g., WISPA Comments, GN Docket No. 17-199 (filed Sept. 21, 2017), at 13, *citing* WISPA Comments, WC Docket No. 17-108 (filed July 17, 2017), at 11-12.

²⁴ *NOI* at 11 (¶ 25).

²⁵ See *Public Notice*, “Connect America Fund Phase II Auction (Auction 903) Closes,” AU Docket No. 17-182 & WC Docket No. 10-90, DA 18-887 (rel. Aug. 28, 2018), at Attachment A. Many winning bidders are members of WISPA that have deployed broadband over fixed wireless networks.

Nonetheless, USF subsidies have also erected major barriers to expansion by new wireless service providers due to the ability of some large incumbent carriers to obtain funding to overbuild in areas that they have not previously served, but where WISP or other small providers have already utilized their own capital to invest in new equipment and infrastructure. In Comments it recently filed with the Rural Utilities Service (“RUS”), and consistent with the views expressed by Senate leadership,²⁶ WISPA strongly urged RUS to coordinate with the Commission and other agencies “to ensure that funding is provided in areas that really need it, and to not duplicate the efforts of other agencies to achieve similar goals under their established programs.”²⁷ Indeed, funding overbuilding would undercut the substantial reliance interests and business plans of those CAF recipients charged with deploying service to unserved areas.

C. Access to Spectrum

The Commission recounts several recent rulemaking efforts directed toward either “facilitating the efficient and effective use of spectrum” or “increasing the amount of spectrum that may be used to enhance bandwidth and capacity” for fixed and mobile broadband use and seeks comment on “whether there are any other ways to expand access to spectrum for wireless and satellite broadband services.”²⁸ The Commission should take additional positive steps to facilitate rural and underserved-area broadband construction by providing finality for the

²⁶ See Letter from Sens. John Thune and Roger Wicker to Secretary Sonny Purdue, U.S. Department of Agriculture (Aug. 22, 2018) (“One key component of the CAF program is the long-range planning required on behalf of the federal government and infrastructure provider, which is designed to prevent overbuilding. It is crucial that RUS plan projects and coordinate the distribution of funds under the pilot program with the FCC, to ensure that the pilot program does not result in overbuilding in areas covered by current and planned CAF deployments.”).

²⁷ See Comments of WISPA, Docket No. RUS-18-TELECOM-0004 (filed Sept. 10, 2018) at 5. See also “Delivering Broadband to All Americans,” NCTA Issue Brief, NCTA – The Internet & Television Association, at 7 (June 2017) (“any money that the government spends in areas that already are served is wasteful spending because it does nothing to fill these gaps and bring broadband to people that do not have it today”).

²⁸ NOI at 12 (¶ 26).

development of the CBRS under a broadly-endorsed compromise proposal that would maximize the service development opportunities for a wide range of spectrum users,²⁹ and moving forward expeditiously with the planned auction of available licenses. As noted in the *NOI*, the Commission should also implement additional spectrum allocations for fixed point-to-multipoint wireless use in its pending 3.7-4.2 GHz spectrum proceeding.³⁰

Conclusion

In undertaking its statutory obligations, the Commission should retain its existing criteria for defining “advanced telecommunications capability” and continue to promote accelerated deployment of high quality broadband services by allocating additional fixed wireless spectrum, expediting the availability of this spectrum for the provision of new service, and both reducing existing and avoiding new regulatory burdens.

Respectfully submitted,

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²⁹ See, e.g., CBRS Coalition *Ex Parte* Letter, GN Docket No. 17-258 (filed May 29, 2018), at 5 (“By promoting a diverse CBRS ecosystem, the Commission can ensure the success of the 3.5 GHz innovation band and galvanize the deployment of 5G networks and a multitude of other wireless services in the United States”). WISPA is a participant in the CBRS Coalition.

³⁰ See *Expanding Flexible Use of the 3.7 to 4.2 GHz Band*, FCC 18-91 (rel. July 13, 2018).