

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

In the Matter of)	
)	
The State of Fixed Broadband Competition)	GN Docket No. 18-231
)	
)	

COMMENTS OF USTELECOM

Pursuant to the Public Notice issued in this docket,¹ (USTelecom)² respectfully submits these comments on the current state of competition in the Fixed Broadband marketplace and the criteria and metrics that should be used in making this determination.

Historically, the Fixed Broadband marketplace has always been a dynamic one. Static analyses³ are inadequate for assessing fixed broadband competition because they do not reflect that the technology is in a constant state of change such that competition is intensifying within and across non-traditional sectors. Therefore, accounting for both actual and potential competition (as the Commission did in BDS context) is essential to making determinations about the state of competition.⁴

¹ See “Wireline Competition Bureau Seeks Comment on the State of Fixed Broadband Competition,” Public Notice, CN Docket No. 18-231 (DA 18-784) (Jul. 27, 2018) (PN).

² *USTelecom* is the nation’s leading trade association representing service providers and suppliers for the broadband innovation industry. Its diverse member base ranges from large publicly traded communications corporations to small companies and cooperatives – all providing advanced communications and broadband services to hundreds of millions of customers around the world.

³ Examples of static analyses include traditional antitrust tools such as SSNIP (small but significant non-transitory increase in price) tests; Herfindahl-Hirschman Index (HHI) analysis; and, generally, snapshots in time that look at static market shares and arbitrary speed cut-offs. USTelecom does not disagree with considering prices in competitive analysis, but broadband pricing must be considered in the context of real output (e.g., volume of actual data consumed as well as the quality of the content).

⁴ *In the Matter of Business Data Services in an Internet Protocol Environment; Technology Transitions; Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation*

For purposes of these comments and the attached reports, fixed broadband includes wired broadband (e.g., xDSL, fiber, and cable) plus fixed wireless (e.g., terrestrial fixed wireless and satellite, though the USTelecom analyses excludes satellite unless specifically stated).

One key indicator of competition is broadband deployment by multiple providers in the same geographic areas. USTelecom has analyzed the current state of competition and deployment in the attached slide deck (Exhibit A)⁵ and research brief (Exhibit B).⁶ The broadband availability analysis uses CensusNMB data to analyze the overlap of competitive footprints at a range of speeds.⁷ The attached Exhibits show the current levels of competition for wired broadband and the state of competition for fixed broadband (including fixed wireless, but excluding satellite).⁸

It is important to note that the analyses in the attached are not limited to arbitrary speed categories. It is good to be aspirational in assessing broadband availability at certain higher speed thresholds; but it also essential to use a framework that takes account of how broadband is actually deployed over time. First, the underlying foundation of fixed broadband infrastructure is widely deployed: 96 percent of households have at least one wired broadband option; 98 percent if fixed wireless is included; and nearly the entire country if satellite is

of ILEC Rates for Interstate Special Access Services, Report and Order, __ FCC Rcd 3459 (Apr. 20, 2017).

⁵ “USTelecom Metrics and Trends 2018,” Slide Deck by Patrick Brogan, VP – Industry Analysis, USTelecom, March 1, 2018 (Exhibit A)

⁶ “U.S. Broadband Availability Year End 2016,” Research Brief by Patrick Brogan, VP – Industry Analysis, February 22, 2018 (Exhibit B).

⁷ See Exhibit A at 13, 20-22 and Exhibit B at 10, Charts 9 & 10 which show the current levels of competition for wired broadband and at 11, Charts 11 & 12 which shows the state of competition for fixed broadband (including fixed wireless, but excluding satellite). CensusNMB derives its broadband deployment data from the Commission’s Form 477 data from 2014 to 2016 and the National Broadband Map for prior years. CensusNBM uses Census population and household data. See Exhibit B at 15-17 for a detailed explanation of the data and methodology.

⁸ See Exhibit B at 11.

included. Second, higher speeds are routinely deployed through upgrade cycles.⁹ Third, new technologies and players from outside the industry emerge to challenge existing technologies and providers.¹⁰

As demonstrated in the attached slide deck, deployment at higher speeds is continually increasing in a process of competitive leapfrog. There were at least two providers of basic wired broadband infrastructure available to 86 percent of U.S. households as of the end of 2016—90 percent if fixed wireless is included.¹¹ In addition, competitive deployment of wired broadband – areas where at least two wired providers have deployed facilities – is increasing over time at higher speeds as providers upgrade networks for faster service.¹² The portion of U.S. households with two or more wired broadband providers available at 10 Megabits per second download and 1 Megabit per second upload grew from 59 percent in 2012 to 67 percent in 2016.¹³ The portion of U.S. households with two or more wired broadband providers available at 25 Mbps download and 3 Mbps upload grew from 25 percent to 50 percent.¹⁴

Broadband adoption and subscription data from the Commission’s Form 477 data provide further evidence that there is no dominant provider and that the market is functioning well. First, the subscription data show that adoption at higher speeds is growing. See, for example, page 18 of Exhibit A, which indicates that consumer demand for better, faster

⁹ See e.g., Exhibit A at 17. Note that USTelecom only provides data for “wired” broadband in its historical broadband deployment analyses because the National Broadband Map, which was in use from 2010 through 2013, did not report a fixed broadband category that included both wired and fixed wireless broadband.

¹⁰ See e.g., Microsoft Airband Initiative (<https://www.microsoft.com/en-us/airband>) (visited August 16, 2018) and Facebook’s Terragraph initiative (<https://www.nextgov.com/analytics-data/2018/02/facebook-continues-its-rural-broadband-quest/146242/>) (visited August 16, 2018).

¹¹ See e.g., Exhibit A at 13 and 20; and Exhibit B at 3, Chart 2, and 11, Chart 11.

¹² See Exhibit A at 22 and Exhibit B at 3, Chart 3. Historical data are available only for wired broadband.

¹³ Id.

¹⁴ Id.

service is driving ongoing investment in competitive supply at higher and higher speeds over time. Moreover, subscription share data indicate that fixed broadband has been competitive from its inception. As demonstrated on page 19 of Exhibit A, at the end of 2016, cable providers held 63 percent of the overall fixed broadband market, telephone companies (DSL or fiber) held 35 percent, and satellite and fixed wireless providers held two percent.¹⁵ In other words, The Commission's Form 477 broadband subscription data, in combination with the Commission's Form 477 broadband deployment data, demonstrate that consumer demand for greater speeds is driving constant cycle of competitive investment to supply greater speeds.

The Commission should not limit analysis narrowly to "fixed" broadband, because mobile technology is increasingly competing for fixed broadband business and traditional notions of fixed broadband are changing, however while mobile increasingly is a substitute for fixed, the reverse is not true. Today's fourth Generation (4G) mobile speeds are on par with some DSL services.¹⁶ A portion of customers use mobile broadband only and some portion of these consumers appear to have a choice.¹⁷ When 5G mobile becomes available, all indications are that it will be even more powerful. While the Commission recently found that mobile broadband services are not "currently full substitutes for fixed service," that is not true

¹⁵ See Exhibit A at 19.

¹⁶ See e.g., "State of Mobile Networks: USA (July 2018)" at <https://opensignal.com/reports/2018/07/usa/state-of-the-mobile-network> (visited August 9, 2018) (showing download speeds ranging from more than 10 Mbps to more than 20 Mbps and upload speeds between 2 Mbps to 4 Mbps) . Compare to Exhibit B at Appendix A (showing DSL available to 87 percent of households at any speeds and 57 percent with at least 10 Mbps download and 1 Mbps upload).

¹⁷ See e.g., Pew Research Center, "Internet/Broadband Fact Sheet" at <http://www.pewinternet.org/fact-sheet/internet-broadband/> (visited August 9, 2018) (showing that 20 percent of U.S. adults own smart phones but do not use broadband at home). See also, Pew Research Center, "U.S. Smartphone Use in 2015" (April 2, 2015) at <http://www.pewinternet.org/2015/04/01/us-smartphone-use-in-2015/> (visited August 9, 2018) at 3 (stating that three percent of the ten percent of U.S. adults surveyed in October 2014 who had smartphones only lived in locations where they had home broadband service available).

for an increasing number of consumers. The Commission thus must continue to monitor developments as technology and markets evolve.¹⁸ As an indicator of the potential for fixed-mobile broadband substitution, in voice, mobile substitution started out small but gradually took a lot of share. In 2003, wireless-only voice households accounted for only five percent of telephone households but now they account for over 60 percent. Additionally, 5G fixed wireless has the potential to be a competitive alternative to traditional fixed broadband.¹⁹ Satellites are also getting more powerful.²⁰

Taken with subscription share data and ongoing deployment data, growth is also an indicator the competition is thriving. For example, fixed and mobile subscriptions continue to grow²¹ and online traffic growing at a faster rate than subscriptions.²²

While it is important to understand that most international comparisons are unreliable because those comparisons do not account for variation in the cost to deliver the service such as relative densities, lack or presence of implicit subsidies, as well as currency conversion issues, those comparisons can also give a benchmark to determine if competition is driving growth and innovation. For example, there has been significantly more competitive deployment in United States vs. Europe.²³ In addition, the United States generates disproportionate share of global traffic²⁴ and more IP traffic per user than other industrialized

¹⁸ FCC 2018 Broadband Deployment Report at 8. FCC 18-10. (Rel. Feb 2, 2018). GN Docket No. 17-199 In the Matter of Inquiry Concerning Deployment of Advanced Telecommunications Service.

¹⁹Verizon Press Release, *Verizon 5G home internet service coming to Indianapolis* (August 14, 2018) available at <https://www.verizon.com/about/news/verizon-5g-home-internet-service-coming-indianapolis> (visited August 17, 2018) (stating that Verizon will have deployed 5G residential broadband and television service via fixed wireless in Houston, Indianapolis, Los Angeles, and Sacramento in 2018).

²⁰ See Reply Comments of Hughes Network Systems, GN Docket 17-199 (Oct. 6, 2017).

²¹ See e.g., Exhibit A at 14, 15, 16, and 18.

²² See e.g., *Id.* at 29 and 30.

²³ See *Id.* at 24.

²⁴ See *Id.* at 32.

nations.²⁵

Furthermore, it is also important to note that fixed broadband does not reach everywhere in rural America, in part because there is simply no business case for providers to build networks out into these less dense, very high cost areas of the country. Therefore, it is important for the Commission to fully fund programs such as CAF and find other means to assist providers in closing the digital divide.

Consistent with the express intent of the RAY BAUM's Act to eliminate redundancies and silos in the Commission's reports to Congress,²⁶ USTelecom urges the Commission to look for ways to consolidate and streamline *provider's* reporting obligations, as well. In particular, providers would welcome the elimination of any reporting requirements rendered unnecessary and/or duplicative as a result of Section 402 of the RAY BAUM's Act.²⁷ At a minimum, the Commission should consolidate, streamline, and harmonize reporting requirements and dates now that so many of the Commission's reports to Congress have been eliminated. Such efforts hopefully would enable the Commission to lighten the burden associated with such requirements, as well as ensure that the data on which the Commission relies for the communications marketplace report is cohesive, comprehensive, and consistent with Congress's goals.

²⁵ See *Id.* at 35.

²⁶ RAY BAUM's Act § 402. See also *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, Fourteenth Broadband Deployment Report Notice of Inquiry, GN Docket No. 18-238, FCC 18-119 ¶ 5 (rel. Aug. 9, 2018) (stating that, although the RAY BAUM's Act "does not amend section 706 of the 1996 Act[,] ... in even numbered years, the Broadband Deployment Report will be included as part of the Communications Marketplace Report").m

²⁷ See *Id.*

USTelecom applauds the Commission's effort to gain an in depth understanding of the state of fixed broadband competition in the United States. Our members believe that the factors described herein and the accompanying research will be helpful to the Commission in this effort.

Respectfully submitted,

USTELECOM

By: 

B. Lynn Follansbee
Patrick Brogan
Jonathan Banks

601 New Jersey Avenue NW, Suite 600
Washington, D.C. 20001
202-326-7300

August 17, 2018