

**Before the
UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION
Washington, D.C. 20230**

In the Matter of)
)
Telecommunications/ICT Development Activities,) Docket No. 210503-0097
Priorities and Policies to Connect the Unconnected)
Worldwide in Light of the 2021 International)
Telecommunication Union (ITU) World)
Telecommunication Development Conference)
(WTDC-21))

COMMENTS OF CTIA

I. INTRODUCTION AND SUMMARY.

CTIA¹ respectfully submits these comments in response to the request for public comment by the National Telecommunications and Information Administration (“NTIA”) in the above-captioned proceeding concerning activities, priorities, and policies that advance telecommunications and information and communications technology (“ICT”) development worldwide in preparation for the International Telecommunications Union (“ITU”) World Telecommunication Development Conference (“WTDC-21”).²

¹ CTIA – The Wireless Association® (“CTIA”) (www.ctia.org) represents the U.S. wireless communications industry and the companies throughout the mobile ecosystem that enable Americans to lead a 21st century connected life. The association’s members include wireless carriers, device manufacturers, suppliers as well as apps and content companies. CTIA vigorously advocates at all levels of government for policies that foster continued wireless innovation and investment. The association also coordinates the industry’s voluntary best practices, hosts educational events that promote the wireless industry and co-produces the industry’s leading wireless tradeshow. CTIA was founded in 1984 and is based in Washington, D.C.

² Notice and Request for Public Comment, Telecommunications/ICT Development Activities, Priorities and Policies to Connect the Unconnected Worldwide in Light of the 2021 International Telecommunication Union (ITU) World Telecommunication Development Conference (WTDC-21), U.S. Dep’t of Commerce, NTIA, Docket No. 210503–0097, RIN 0660–XC050, 86 Fed. Reg. 24,391 (May 6, 2021) (“Notice”).

CTIA is committed to working with NTIA and the U.S. government to shrink the digital divide and achieve digital equity. While there are still too many individuals in the nation without access to broadband, the wireless industry is proud to reach more than 99 percent of Americans today and that wireless consumers have been using more services while paying less. To build on U.S. leadership under ITU Development Bureau Director Doreen Bogdan-Martin in fostering the development and deployment of next-generation technologies, the U.S. can highlight policies and initiatives that have encouraged wireless broadband services to develop and provide service to underserved areas throughout the United States, which may be useful in addressing similar challenges across the globe.

In particular, the U.S. approach to spectrum management policy to allow for flexible, exclusive use of spectrum licenses has provided necessary certainty for the U.S. wireless industry to invest more than \$100 billion in the past five years alone. In addition, the U.S. should suggest to the WTDC-21 that the allocation of more wireless broadband spectrum, especially in the mid-band range, will help to maximize the economic and societal potential of 5G broadband services to connect the unconnected. The U.S. should also highlight domestic initiatives to address the affordability and availability barriers through financing mechanisms such as targeted subsidies, which can cover connectivity as well as devices.

II. NTIA SHOULD HIGHLIGHT THE BENEFITS OF THE U.S. SPECTRUM MANAGEMENT FRAMEWORK TO HELP CONNECT THE UNCONNECTED.

The wireless industry has a proven track record of investing in and deploying wireless coverage to all geographies. With more than 99 percent of Americans within wireless coverage areas, and approximately 15 percent of Americans relying on wireless as their primary broadband connection, U.S. spectrum management policies can serve as a successful model for

other countries.³ Specifically, over the last thirty years, the U.S. has utilized a licensing regime that allows for flexible, exclusive use of spectrum licenses.⁴ This framework has enabled the wireless industry to invest more than \$100 billion in the past five years alone, while wireless prices have fallen 45 percent, data usage increased 108x, and broadband speeds increased by 58x over the last decade.⁵ In fact, a recent Pew Research Center study found that 45 percent of Americans without home broadband state that is because their wireless smartphone allows them to do everything they need to do online.⁶

This is notable as Americans continue to connect more wireless devices, with increases in laptops, tablets, and data-only devices, as Internet of Things products grow in availability and adoption. For example, the number of U.S. wireless subscriptions was 442.5 million in 2020, up more than 20 million from the previous year, and the number of wireless-enabled tablets and laptops was up 24 percent since 2018, to 52.6 million.⁷ Moving forward, Americans are using their wireless devices more and more—with the increase in data consumption outpacing the number of new devices added, all while wireless prices have fallen. In 2019, the average

³ See Andrew Perrin, *Mobile Technology and Home Broadband 2021*, Pew Research Center (June 3, 2021), <https://www.pewresearch.org/internet/2021/06/03/mobile-technology-and-home-broadband-2021/> (“*Mobile Technology and Home Broadband 2021*”).

⁴ *Spectrum Considerations For 5G*, CTIA, at 5 (Apr. 2, 2019), <https://api.ctia.org/wp-content/uploads/2019/03/Spectrum-Considerations-for-5G.pdf> (noting the U.S. wireless industry has relied upon exclusive licenses as it migrated through four generations of technology, becoming the global leader in the provision of 4G service).

⁵ See Nick Ludlum, *CTIA 5G Summit: Nationwide 5G Is Here, But It’s Only the Beginning*, CTIA (Nov. 20, 2020); Meredith Attwell Baker, *The Wireless Industry’s Key Role in Closing the Digital Divide*, CTIA (May 7, 2021); Kevin Ryan & Robert Roche, *More for Less: The Actual Story of the Amazing Decline in U.S. Wireless Prices*, CTIA (Mar. 30, 2021) (“For two decades, wireless prices in the U.S. have declined. That holds true regardless of what metric you use: sticker price (down 45% from 2010 to 2019); BLS data (down 40% from 2000 to 2020; or ARPU (down 21% from 2014 to 2019).”).

⁶ See *Mobile Technology and Home Broadband 2021*.

⁷ *2020 Annual Survey Highlights*, CTIA, at 8 (Aug. 25, 2020), <https://api.ctia.org/wp-content/uploads/2020/08/2020-Annual-Survey-final.pdf> (“*2020 Annual Survey*”).

smartphone user consumed 6.6 GB per month, and in 2020, that number was up to 9.2 GB per month.⁸ In total, mobile subscribers used more than 37.06 trillion MBs of data in 2020—a 30 percent growth rate year over year.⁹ COVID-19 presented the ultimate stress test, and America’s wireless networks passed with flying colors. In the span of just one week in March 2020, hundreds of millions of Americans transitioned abruptly from their normal lives to staying at home as much as possible. Not only did wireless networks handle this unprecedented shift and surge in traffic, but they continued to improve their performance, with speeds actually increasing during the pandemic. According to Ookla, following the onset of the pandemic, median wireless speeds increased nearly 50 percent.¹⁰

In addition, mobile broadband offerings are now being supplemented by latest generation fixed wireless options offered over licensed spectrum. While mobile broadband has been a competitive option for U.S. consumers for years, today the industry is expanding on wireless options by introducing and deploying fixed-wireless service capable of over 100 Mbps downstream speeds. These services offer fast and competitive speeds that can meet most consumers’ broadband needs. While speeds will vary by location and demand, most 5G home services already can offer 100+ Mbps down and 20+ Mbps up, with some services reaching up to 1 Gbps down and 50 Mbps up. With streamlined deployments and lowered costs-to-serve, fixed 5G represents a dynamic broadband service that can be deployed rapidly and with superior economics and network efficiencies.

⁸ *Id.* at 9.

⁹ *Id.* at 7.

¹⁰ See *The Wireless Industry Responds to COVID-19*, CTIA, <https://www.ctia.org/homepage/covid-19> (last visited June 30, 2021).

The U.S. should highlight the success of our domestic spectrum management model to help spur the investment and deployment of broadband services. With the right policies in place, 5G will be transformative—making citizens’ lives better, communities safer, and nations more prosperous. Notably, the allocation of more wireless broadband spectrum, especially in the mid-band range, will help to maximize the economic and societal potential of 5G broadband services to connect the unconnected. As NTIA is aware, a mix of low-, mid-, and high-band spectrum is necessary to realize the full potential of 5G, and nations across the world are particularly focused on making mid-band spectrum available to support 5G technologies.¹¹ Nearly every 5G deployment outside the U.S. relies on mid-band spectrum.¹² Despite the good progress made in the past two years and the auction of 350 megahertz of mid-band spectrum, the U.S. will still trail other key countries.¹³ To close the gap, the United States will need to roughly double the amount of licensed mid-band available for commercial use.¹⁴

III. GOVERNMENT SUPPORT CAN HELP CLOSE BROADBAND AFFORDABILITY AND AVAILABILITY GAPS.

While more than nine out of ten adults in the United States are connected through wired or wireless broadband, COVID-19 has highlighted the pressing need for digital equity and the disproportionate disadvantages faced by members of society with lower incomes or living in rural areas.¹⁵ Affordability and availability are significant barriers for many that seek access to

¹¹ See Janette Stewart, Chris Nickerson, Tamlyn Lewis, *5G Mid-Band Spectrum Global Update*, Analysys Mason, at 2 (March 2020).

¹² *Building the 5G Economy, The Wireless Industry’s Plan to Invest and Innovate in the U.S.*, CTIA, at 34 (Jan. 25, 2021).

¹³ *Id.*

¹⁴ *Id.*

¹⁵ See Meredith Attwell Baker, *New Report Offers Good News and Important Implications for the Broadband Infrastructure Debate*, CTIA (June 9, 2021).

broadband services, especially when considering the broad availability of wireless services throughout the country.¹⁶ In response, the U.S. should encourage the adoption of stable and equitable funding mechanisms to provide government support for affordability and availability programs to enable wireless to meet consumer needs in other countries around the world. The U.S. can point to recent domestic successes for support, including the Emergency Broadband Benefit (“EBB”) and the Emergency Connectivity Fund (“ECF”), as examples of the types of targeted approaches that can help connect the unconnected.¹⁷ For example, while still early, over 3 million low-income consumers are already receiving support from the EBB.¹⁸

IV. CONCLUSION.

CTIA is committed to working with NTIA and the U.S. government to shrink the digital divide and achieve digital equity. In support of these efforts, the U.S. should provide feedback to the WTDC-21 process about initiatives that have encouraged wireless broadband services to develop and provide service to underserved areas throughout the United States, including the U.S. spectrum management policies that allow for flexible, exclusive use of spectrum licenses. Finally, the U.S. should encourage the WTDC-21 to address affordability and availability barriers through targeted government support mechanisms.

¹⁶ See *Mobile Technology and Home Broadband 2021* (noting financial barriers are among the more common reasons why Americans do not subscribe to high-speed internet at home).

¹⁷ See *Emergency Broadband Benefit*, FCC, <https://www.fcc.gov/broadbandbenefit> (last visited June 28, 2021); *5G Fund*, FCC, <https://www.fcc.gov/5g-fund> (last visited June 28, 2021); *Emergency Connectivity Fund*, FCC, <https://www.fcc.gov/emergency-connectivity-fund> (last visited June 30, 2021).

¹⁸ See *FCC Announces Release of Regional Emergency Broadband Benefit Program Data, Heading into Week 7 of EBB Program, FCC Shares Additional Enrollment Data, Continues Program Outreach*, FCC (June 29, 2021), <https://docs.fcc.gov/public/attachments/DOC-373674A1.pdf>.

Respectfully submitted,

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