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February 19, 2025

The Honorable Ted Cruz Chair Committee on Commerce, Science and Transportation U.S. Senate Washington, D.C. 20510 The Honorable Maria Cantwell Ranking Member Committee on Commerce, Science and Transportation U.S. Senate Washington, D.C. 20510

Subject: Shared Spectrum—A Win-Win for U.S. Economic Leadership and National Security

Dear Chairman Cruz and Ranking Member Cantwell,

As your committee returns its attention to the future management of one of our nation's most valuable resources—radiofrequency spectrum— and the strategies our nation must pursue to balance effectively critical commercial, national security and other interests, we urge you to consider the deployment and design of technologies that embrace **shared use of radio spectrum** and coexistence protocols. In certain radiofrequency bands, such strategies are not only the most practical, near-term path for unlocking new commercial access to spectrum, but they increasingly represent the best path to securing and advancing both **national security** and **economic growth**. There is no reason for the United States to choose between increasing spectrum access for private companies and protecting important national security uses. Those who contend otherwise present a false choice.

Historically, and when overall demand for radio spectrum was a small fraction of what is used today, the government sought to resolve conflict between commercial demands and incumbent users, principally with a "clear-and-auction" model, in which federal agencies must vacate spectrum entirely for the exclusive use of a commercial entity. This approach is often not viable or advisable in today's environment. The high costs and long delays demanded by relocation – which in some cases could take decades, cost hundreds of billions of dollars, and risk failed auctions – impede our efforts to quickly bring commercial spectrum into the marketplace, which in turn hinders consumer benefits and job creation. Moreover, continuing to move and compress critical security systems managed by the Department of Defense into smaller and smaller spectrum bands could risk undermining our nation's military readiness as we face growing threats from near-peer competitors such as the People's Republic of China.

Fortunately, thanks to American innovation and engineering, there is a better way. Advances in technology allow commercial users and critical Federal government systems to **coexist**

harmoniously in the same spectrum bands without compromising national security. By leveraging dynamic spectrum management and sensing technologies, co-existence models enable faster, more cost-effective deployment of advanced wireless services while maintaining critical government operations, all without burdensome and time-consuming relocations that would cost taxpayers hundreds of billions of dollars.

Two powerful examples of successful shared spectrum already exist:

- Wi-Fi: Operating in shared, unlicensed spectrum, Wi-Fi has become the backbone of the internet, adding \$2.4 trillion in annual economic value by 2027 and carrying approximately 90 percent of all smartphone data traffic. Wi-Fi technology successfully co-exists with critical Federal and public safety networks in existing bands. This framework could be readily extended into the 7/8 GHz band, enabling sharing with the vast number of diverse incumbent uses, including national security, deep space exploration, border security, energy infrastructure monitoring, and weather data, while simultaneously allowing for the economic and innovative growth derived through Wi-Fi. Indeed, Wi-Fi is an American success story, and its decentralized model has become our competitive advantage against China, which prefers centralized, command and control technologies.
- 2. Citizens Broadband Radio Service (CBRS): In the CBRS band, commercial users share licensed spectrum for mobile and fixed 5G service with the U.S. Navy, allowing competition and innovation to thrive without a single instance of harmful interference to incumbent Federal use. This model has driven widespread innovation, with more than 400,000 deployed base stations, including in manufacturing plants, airports, schools, wireless networks, and military operations. In fact, the Ericsson USA 5G smart factory in Lewisville, TX, which manufactures 5G network equipment, is powered by CBRS shared spectrum. The CBRS auction had nearly ten times more winning bidders than traditional exclusive-license auctions, proving that shared-spectrum models promoting greater access to spectrum, yielding increased competition and broader use. As a result, this band has put the U.S. at the global forefront of private wireless networks, while preserving and advancing military readiness. Policymakers can foster further growth and competition without displacing crucial military radar systems used by warfighters to protect our country domestically and abroad by extending the CBRS framework into the 3.1 GHz band.

As these examples demonstrate, spectrum sharing repudiates the zero-sum narrative in which spectrum policy must choose winners and losers. Rather, **spectrum sharing expands the pie**—bringing new commercial spectrum to market, supporting both 5G and 6G deployment, and fostering private networks for diverse industries—from manufacturing to energy to agriculture to education. Most importantly, it strengthens U.S. national security by ensuring that vital defense systems are not disrupted or relocated.

In short, policymakers do **not** have to choose between a strong economy and a strong national defense. **Shared spectrum enables us to have both.** By embracing coexistence through shared spectrum, Congress can ensure that the United States continues to lead the world in wireless technology while protecting our critical government operations.

As the committee considers the future of spectrum management and actions needed to restore the FCC's commercial auction authority to assign licenses, NCTA and its member companies look forward to continuing to work with you and other members of the committee on these important issues.

Sincerely,

Michael K. Powell President & CEO NCTA – The Internet & Television Association

cc: Committee on Commerce, Science and Transportation Members

The Honorable John Thune The Honorable Roger Wicker The Honorable Deb Fischer The Honorable Jerry Moran The Honorable Dan Sullivan The Honorable Marsha Blackburn The Honorable Todd Young The Honorable Ted Budd The Honorable Eric Schmitt The Honorable Eric Schmitt The Honorable Bernie Moreno The Honorable Bernie Moreno The Honorable Tim Sheehy The Honorable Shelley Moore Capito The Honorable Cynthia Lummis The Honorable Amy Klobuchar The Honorable Brian Schatz The Honorable Ed Markey The Honorable Gary Peters The Honorable Tammy Baldwin The Honorable Tammy Duckworth The Honorable Jacky Rosen The Honorable Ben Ray Luján The Honorable Ben Ray Luján The Honorable John Hickenlooper The Honorable John Fetterman The Honorable Andy Kim