The Honorable Ted Cruz Chairman U.S. Senate Committee on Commerce, Science, and Transportation Washington, DC 20510

The Honorable Brett Guthrie Chairman U.S. House Committee on Energy and Commerce 2125 Rayburn House Office Building Washington, DC 20515 The Honorable Maria Cantwell
Ranking Member
U.S. Senate Committee on Commerce,
Science, and Transportation
Washington, DC 20510

The Honorable Frank Pallone, Jr.
Ranking Member
U.S. House Committee on Energy and
Commerce
2322A Rayburn House Office Building
Washington, DC 20515

Dear Chairman Cruz, Ranking Member Cantwell, Chairman Guthrie, and Ranking Member Pallone:

On behalf of the diverse ecosystem of American technology companies and associations that rely on Wi-Fi connectivity, we write to update the committees on the United States' successful use of the 6 GHz band since it was designated for unlicensed use under the first Trump Administration. American companies are leading Wi-Fi development and helping to ensure United States' leadership in international competitiveness, fostering innovation, and driving economic growth. The 6 GHz band constitutes the foundation for Wi-Fi's continued development and growth, because the band's characteristics are perfectly suited to indoor networking that is the hallmark of Wi-Fi, while being flexible enough to support targeted outdoor uses. In locations ranging from small businesses and homes to stadiums, hospitals, schools, wearables, and advanced manufacturing, Wi-Fi is the workhorse of the internet.

Since the Federal Communications Commission opened the 6 GHz band for unlicensed use during President Trump's first term,<sup>1</sup> enterprises and consumers have been using the band for a wide range of purposes. Shipments of 6 GHz-enabled consumer devices in North America,

<sup>&</sup>lt;sup>1</sup> Unlicensed Use of the 6 GHz Band; Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz, Notice of Proposed Rulemaking, 33 FCC Rcd 10496, 10499-501, paras. 8-13 (2018) (Notice); Unlicensed Use of the 6 GHz Band; Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz, Report and Order and Further Notice of Proposed Rulemaking, 35 FCC Rcd 3852, 3855, para. 7 (2020) (6 GHz Order), reversed in part, aff'd in part and remanded, AT&T Servs. Inc., v. FCC, 21 F.4th 841, 853-54 (D.C. Cir. 2020) (affirming 6 GHz Order and reversing and remanding to address issue of whether to "reserve a sliver of the 6 GHz band for licensed mobile operation"). The 2020 decision opened 6 GHz spectrum to use by Low Power Indoor devices and set the regulatory framework for Standard Power Devices operating pursuant to an Automated Frequency Coordination system, an innovation ultimately approved for commercial use in 2022. OET Announces Conditional Approval for 6 GHz Band Automated Frequency Coordination Systems, Public Notice, 37 FCC Rcd (2022). A subsequent 2024 order added rules that enable Very Low Power devices to operate throughout the band. Unlicensed Use of the 6 GHz Band; Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz, Third Report and Order (rel. Dec.13, 2024).

totaling 95 million last year, are expected to reach nearly 370 million per year by 2029.<sup>2</sup> Businesses across industries have leveraged the enhanced performance of the latest Wi-Fi standards to improve operations, increase productivity, and deliver better services. From hospitals deploying high-density wireless networks to support telemedicine, to factories leveraging robotics and IoT devices for precision work and data-gathering, to schools and libraries deploying Wi-Fi to improve educational experiences, as well as the advanced provision of broadband services broadly throughout the United States by providers in rural areas deploying both Wi-Fi and other broadband technologies, the 6 GHz band has become a critical enabler of innovation. Consumers have benefited from 6 GHz unlicensed broadband connections in rural and other underserved areas, and throughout the U.S. via in-home Wi-Fi networks that make the most of the speed and performance of increasingly fast broadband connections. Indeed, by 2030, most U.S. households will be served by 6 GHz access points utilizing channels as large as 320 megahertz.<sup>3</sup> These deployments demonstrate not only robust demand for improved and more capable Wi-Fi, but also Wi-Fi's ability to coexist successfully with incumbent users, preserving critical operations while unlocking new opportunities.

Wi-Fi is a vital driver of America's economic strength. A recent study estimates that Wi-Fi technologies, including unlicensed 6 GHz operations, contribute significantly to the U.S. economy, such that by 2027, the annual economic value of Wi-Fi is projected to reach \$2.4 trillion, including an estimated \$514 billion in consumer benefit, \$624 billion in producer surplus, and \$1,286 billion in GDP contribution. Wi-Fi is also projected to support more than 13 million jobs by 2027 and approximately 21 million jobs by 2032, with 6 GHz operations specifically contributing to more than half of those positions. This impact is expected to grow exponentially as new applications and industries adopt next-generation technologies powered by the band. Retaining this spectrum for unlicensed use will continue to generate substantial economic value while reinforcing the United States as a global leader in connectivity and technology development.

Looking ahead, the 6 GHz band will play a pivotal role in enabling the technologies of the next decade, including artificial intelligence (AI), advanced manufacturing, augmented and virtual reality, and other groundbreaking innovations. AI-driven systems, for example, require robust, high-capacity wireless networks to process and transmit massive amounts of data in real time. Similarly, the future of manufacturing relies on smart factories powered by reliable, low-latency wireless connections to optimize efficiency and reduce costs. The 6 GHz band provides the critical infrastructure needed to support these advancements, ensuring that the United States remains at the forefront of technological progress. Unlicensed spectrum is the foundation for all of these advances as it enables permissionless innovation, unlocking the potential of

<sup>&</sup>lt;sup>2</sup> See Andrew Spivey, ABIresearch, "Wi-Fi Innovation and Future Spectrum Allocation," at 4 (2024), <a href="https://go.abiresearch.com/hubfs/Marketing/Whitepapers/Wi-Fi%20Innovation%20and%20Future%20Spectrum%20Allocation/ABI\_Research%20Wi-Fi%20Innovation%20and%20Future%20Spectrum%20Allocation.pdf?hsCtaAttrib=183432523558.

<sup>&</sup>lt;sup>3</sup> *Id.* at 8.

<sup>&</sup>lt;sup>4</sup> Telecom Advisory Services, "Wi-Fi Works: How the Success of Wi-Fi Drives U.S. Job Creation," at 5 (Apr. 2025), <a href="https://wififorward.org/wp-content/uploads/2025/04/Wi-Fi-and-employment\_3.25.25-v259.pdf">https://wififorward.org/wp-content/uploads/2025/04/Wi-Fi-and-employment\_3.25.25-v259.pdf</a>.

<sup>&</sup>lt;sup>5</sup> *Id.* at 4.

entrepreneurs to build the solutions of the future, one of America's strongest competitive advantages globally.  $^6$ 

As the Congress continues work on advancing the next chapter in spectrum policy, we respectfully urge the Committees to continue support for expanded use of the 6 GHz band for unlicensed use. Thank you for your leadership and your continued support of policies that ensure the United States' technological and economic leadership.

## Sincerely,

HEWLETT PACKARD ENTERPRISE

CISCO SYSTEMS, INC.

**TECHNET** 

BROADCOM, INC.

WI-FI ALLIANCE

**WIFIFORWARD** 

INFORMATION TECHNOLOGY INDUSTRY COUNCIL

JUNIPER NETWORKS, INC.

INNOVATION ECONOMY ALLIANCE

INSTITUTE FOR POLICY INNOVATION

CONSUMER TECHNOLOGY ASSOCIATION

APPLE INC.

INSTITUTE FOR LIBERTY

CENTER FOR INDIVIDUAL FREEDOM

WISPA – Broadband Without Boundaries

NCTA – The Internet and Television Association

EXTREME NETWORKS, INC.

CHARTER COMMUNICATIONS, INC.

CONSUMER ACTION FOR A STRONG ECONOMY

CoSN – The Consortium for School Networking

DYNAMIC SPECTRUM ALLIANCE

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<sup>&</sup>lt;sup>6</sup> Brian Rankin, Competitive Enterprise Institute, "No Permission Needed: Unlicensed spectrum, Wi-Fi, and America's Competitive Advantage," (Nov. 24, 2024), https://cei.org/wp-content/uploads/2024/11/OnPoint-298-Rankin-WiFi-Innovation-5.pdf.

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