

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of )  
 )  
Unlicensed White Space Device ) ET Docket No. 20-36  
Operations in the Television Band )  
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**REPLY COMMENTS OF ACT | THE APP ASSOCIATION**

ACT | The App Association (App Association) submits the following reply comments in response to the Federal Communications Commission’s (FCC or Commission) Notice of Proposed Rulemaking (NPRM) in the above-captioned proceeding.<sup>1</sup>

The App Association represents approximately 5,000 small and medium-sized software application development companies and technology firms that create software apps used on mobile devices and enterprise systems around the globe. Today, the ecosystem the App Association represents—which we call the app economy—is valued at approximately \$1.7 trillion and is responsible for 5.9 million American jobs.<sup>2</sup> The dynamic app ecosystem continues to produce innovative and efficient solutions that leverage mobile technologies to drive the global digital economy and support consumer interactions and experiences throughout their lives.

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<sup>1</sup> Unlicensed White Space Device Operations in the Television Bands, ET Docket No. 20-17, Notice of Proposed Rulemaking (rel. March 2, 2020) found here: <https://www.federalregister.gov/documents/2020/04/03/2020-06569/unlicensed-white-space-device-operations-in-the-television-bands>. (hereinafter 2020 TVWS NPRM)

<sup>2</sup> ACT | The App Association, *State of the App Economy*, 7th Edition (2020) (forthcoming May 2020) (hereinafter 2019 ACT | The App Association – *State of the App Economy* Report).

The App Association supported and continues to support the Commission's efforts to bring better broadband to Americans by reducing regulatory burdens and opening more spectrum.<sup>3</sup> Our membership includes small to medium-sized app developers across all 435 congressional districts, and many of our members live or work in rural areas that traditional networks cannot reach. Television white spaces (TVWS)-enabled wireless connectivity, along with the Commission's work related to wireless infrastructure deployment, will allow these small businesses to grow and contribute to local economies. Furthermore, this NPRM will contribute to the Commission's continued efforts to bridge the digital divide.

The Commission plays an integral role in closing the digital divide, and the App Association commits to working alongside the FCC to bring broadband access to all Americans. The Commission made and continues to make great strides to reduce barriers and encourage the activation of broadband infrastructure,<sup>4</sup> and we believe unlicensed TVWS bands play a significant role in the United States' interconnected ecosystem. By enabling TVWS devices and deploying the needed broadband infrastructure, the United States will be able to support the present and future internet of things (IoT) services through an innovative and efficient approach to last-mile connectivity that is demonstrated to avoid harmful interference to shared and adjacent spectrum users.

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<sup>3</sup> *In the Matter of Wireless Telecommunications Bureau and Wireline Competition Bureau Seek Comment on WIA Petition for Rulemaking, WIA Petition for Declaratory Ruling, and CTIA Petition for Declaratory Ruling*, Public Notice, WT Docket No. 19-250, et al. (2019). Available at <https://docs.fcc.gov/public/attachments/DA-19-913A1.pdf>; *In the Matter of Amendment of Part 15 of the Commission's Rules for Unlicensed White Space Devices, et al.*, Report and Order and Order on Reconsideration, ET Docket No. 16-56, et al. (2019). Available at <https://docs.fcc.gov/public/attachments/FCC-19-24A1.pdf>.

<sup>4</sup> *E.g., Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, Second Report and Order, WC Docket No. 17-84 (2018); *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, Declaratory Ruling, Report and Order, 33 FCC Rcd. 9088 (2018).

The record demonstrates that the Commission’s efforts are critical in providing countless Americans in rural areas across the country with broadband access, and that robust broadband connectivity is necessary to reinforce countless new consumer and enterprise services that we develop, which in turn empower increased societal opportunity and participation.

The record also supports that the unique characteristics of TVWS spectrum make this technology an important tool for bridging the digital divide. It allows for better coverage with signals traveling further, penetrating trees and mountains better than other spectrum bands. The App Association again notes its support for Commission proposals to adopt rules governing narrowband IoT deployments, geofenced mobile platform operations, and broader coverage through increased antenna height and power, with appropriate interference protections. We encourage the Commission to adopt final rules as that reflect that testing shows high power TVWS devices can safely operate closer to broadcast channels than currently allowed, and to enable this operation for the benefit of countless rural American communities.

As TVWS represents a crucial use case of efficient last-mile wireless connectivity, Commission action unleashing TVWS technology and connectivity that offers higher transmission rates, more reliable connectivity, and lower latency is fully aligned with its overarching goals to advance 5G deployments. App Association economic analysis shows that deployment of 5G wireless networks will create 8.5 million jobs in the United States over the next five years, enabling improvements in economic productivity, employment, and consumer value.<sup>5</sup> 5G will affect the labor market through direct and indirect means; while the additional labor required to build out the network to deploy 5G will certainly create the most immediate

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<sup>5</sup> James Prieger, “An Economic Analysis of 5G Wireless Deployment: Impact on U.S. and Local Economies” (Feb. 2020), *available at* <https://ecfsapi.fcc.gov/file/10417521421416/ACT%20Ex%20Parte%20Notice%20re%205G%20Economic%20Analysis%202020.pdf>.

demand for new jobs, the broadest impact on the labor market comes from new employment opportunities through the way 5G will enable new applications, services, ways of doing business, and general growth of businesses. Workers enabled by this will earn more than \$560 billion during that time, create \$1.7 trillion in additional output, and add over\$900 billion to U.S.GDP.<sup>6</sup>

Amidst the current COVID-19 public health emergency, it is increasingly evident that while the United States has made progress to provide broadband connectivity to many Americans, it still has a long way to go. With stay-at-home orders in place across the country, reliable broadband connectivity is now essential to do our daily activities from home, including for children to keep up with their schoolwork, for doctors to treat and monitor their patients, to do our jobs, and to connect and check in on our loved ones. Further, tightened margins across the economy demand the most efficient deployment of wireless infrastructure. The Commission's efforts are essential in making sure that both rural American consumers and businesses are not left behind as efforts to reduce the digital divide advance. The records clearly supports that, regardless of the specific needs of a locality, strong last-mile wireless broadband connectivity is a necessity for countless IoT use cases the Commission seeks to advance and should be prioritized.

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<sup>6</sup> *Id.*

The App Association urges the Commission to move forward with its proposed rules as soon as practicable and appreciates the Commission's request for public input in this proceeding and urges consideration of the views and data provided herein.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "B. Scarpelli", written in a cursive style.

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