

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

In the Matter of)	
)	
Spectrum Horizons)	ET Docket No. 18-21
)	
James Edwin Whedbee Petition for)	RM-11795
Rulemaking to Allow Unlicensed Operations in)	
the 95-1,000 GHz Band)	
)	

REPLY COMMENTS OF COMPETITIVE CARRIERS ASSOCIATION

Competitive Carriers Association (“CCA”)¹ submits these reply comments in response to the record and *Notice of Proposed Rulemaking* (“NPRM”) in the above-captioned proceedings on ways to make spectrum above 95 GHz more readily accessible for new services and technologies.² CCA applauds the Federal Communications Commission’s (“FCC” or “Commission”) efforts to unleash additional spectrum resources to ensure the United States leads the deployment of next-generation technologies on the road to 5G. Given the recent attention on mmW spectrum resources, which promises opportunity for investment, innovation, and competition, it is important that the FCC consider other areas of opportunity where competitive wireless providers can innovate. While CCA encourages the FCC to focus primarily on unleashing as much mid-band and mmW spectrum currently under consideration in the Spectrum Frontiers proceeding, CCA also provides brief comments to ensure all carriers can efficiently

¹ CCA is the leading association for competitive wireless providers and stakeholders across the United States. CCA’s membership includes nearly 100 competitive wireless providers ranging from small, rural carriers serving fewer than 5,000 subscribers to regional and national providers serving millions of customers. CCA also represents associate members consisting of small businesses, vendors, and suppliers that provide products and services throughout the mobile communications supply chain.

² *Spectrum Horizons*, Notice of Proposed Rulemaking and Order, ET Docket No. 18-21 (rel. Feb. 28, 2018) (“NPRM”).

access 95 GHz spectrum and above through policies that are sufficiently flexible to allow for innovation and support terrestrial operations, particularly mobile and licensed use, in the 95 GHz spectrum band and above.

I. THE FCC SHOULD EXPLORE 95 GHz SPECTRUM WHILE PRIORITIZING ACCESS TO mmW RESOURCES

First, CCA agrees that the FCC should seize this opportunity to adopt flexible rules for 95 GHz spectrum and beyond, to allow for future growth in innovation and technologies. As noted in more detail below, the FCC previously used this approach for other novel spectrum bands, like for mid-band and mmW spectrum, which is a prime opportunity for providers to deploy fixed and mobile services. For these reasons, as the FCC pursues a new strategy for 95 GHz spectrum and beyond, CCA likewise agrees with certain stakeholders that the FCC should prioritize access to mid-band and mmW spectrum identified in the Spectrum Frontiers proceeding over 95 GHz spectrum.³

While CCA supports the Commission's goal to unlock unique and potentially untapped spectrum bands, the FCC must ensure that available mmW spectrum can be obtained by providers seeking to deploy in these bands as quickly as possible. Lack of access to spectrum is a significant roadblock on the way to next-generation technologies and 5G. As CCA has noted, mmW spectrum is especially important to many rural carriers' operations and their ability to expand next-generation deployments.⁴ While the FCC should continue to explore additional spectrum resources like 95 GHz and beyond, unleashing mid-band and mmW spectrum already

³ See, Comments of T-Mobile USA, Inc., ET Docket No. 18-21 (filed May 2, 2018) ("T-Mobile Comments"); Comments of CTIA, ET Docket No. 18-21 (filed May 2, 2018) ("CTIA Comments").

⁴ Comments of Competitive Carriers Association, AU Docket No. 18-85 (filed May 9, 2018).

identified as expeditiously as possible will provide industry a meaningful opportunity to develop a dynamic and competitive marketplace today and deploy next-generation 5G services tomorrow.

II. CCA SUPPORTS FLEXIBLE LICENSING AND TECHNICAL RULES FOR 95 GHz SPECTRUM

As noted, CCA supports the FCC's goal to unlock additional spectrum resources, particularly for mobile use, and encourages the Commission to adopt procedures that facilitate investment and innovation. To that end, CCA reiterates near-unanimous comments in the record that support adopting flexible licensing and technical rules at 95 GHz and beyond.⁵ As the NPRM and associated record contemplate, 5G and next-generation technologies will require providers to support inordinate amounts of data consumption and lightning fast network speeds.⁶ Indeed, T-Mobile highlights that "[b]y 2022, the average traffic per subscriber in North America will be 22 GB per month"⁷ and CTIA estimates that "over 800,000 new small cells will be deployed by 2026."⁸ It is therefore important for the FCC to explore unique spectrum resources, like 95 GHz and beyond, to assuage this data drain.

Specifically, the FCC should adopt flexible licensing rules for 95 GHz spectrum. The record highlights that 95 GHz spectrum and above can support wide bandwidths and carry data

⁵ Comments of Apple, ET Docket No. 18-21 (filed May 2, 2018) ("Apple Comments"); Comments of the Consumer Technology Association, ET Docket No. 18-21 (filed May 2, 2018) ("CTA Comments"); CTIA Comments; Comments of Ericsson, ET Docket No. 18-21 (filed May 2, 2018) ("Ericsson Comments"); Comments of Google LLC, ET Docket No. 18-21 (filed May 2, 2018) ("Google Comments"); Comments of Qualcomm Incorporated, ET Docket No. 18-21 (filed May 2, 2018) ("Qualcomm Comments"); Comments of Starry, Inc., ET Docket No. 18-21 (filed May 2, 2018) ("Starry Comments"); Comments of the Telecommunications Industry Association, ET Docket No. 18-21 (filed May 2, 2018) ("TIA Comments"); T-Mobile Comments.

⁶ T-Mobile Comments at 2.

⁷ *Id.*

⁸ *Id.* at 3 (*citing*, CTIA, Infrastructure, <http://www.ctia.org/positions/infrastructure/> (last visited Apr. 16, 2018)).

over short ranges in anticipation of massive 5G data traffic.⁹ CCA therefore agrees that the Commission must seize this opportunity to forge the road for potential mobile use of these bands.¹⁰ At the same time, potential services and devices for 95 GHz spectrum have yet to be developed and the FCC must ensure that rules adopted in this proceeding are sufficiently flexible to support future technologies. As a result, CCA echoes recommendations asking the Commission to refrain from taking action that would restrict future licensed mobile wireless operations.¹¹

More specifically, the FCC should not impose proscriptive technical regulations for 95 GHz at this time. As CTIA aptly notes, the FCC should avoid “rigid allocations and rules....[] that would require a rulemaking if technology evolves to support mobile wireless in these bands.”¹² As noted throughout the NPRM, technologies, services, and equipment to use 95 GHz are still being developed.¹³ The FCC must be careful not to foreclose innovation with overly restrictive rules.¹⁴

III. THE COMMISSION SHOULD ANTICIPATE LICENSED AND UNLICENSED USE OF 95 GHz SPECTRUM

CCA reiterates the record’s support for both licensed and unlicensed use of spectrum at 95 GHz and above.¹⁵ In contrast to certain arguments claiming that licensed use of the band will

⁹ T-Mobile Comments at 4.

¹⁰ CTIA Comments at 4.

¹¹ *See, id.* at 5; T-Mobile Comments at 5; TIA Comments at 4.

¹² CTIA Comments at 4-5.

¹³ NPRM ¶¶ 11-15.

¹⁴ *See, e.g.*, Apple Comments, CTIA Comments, T-Mobile Comments.

¹⁵ *See supra*, note 3.

cap unlicensed services,¹⁶ the Commission can strike a careful balance for both licensed and unlicensed uses. As the record in this proceeding and NPRM recognize, the FCC adopted smart policies for mmW spectrum in the Spectrum Frontiers proceeding, which ultimately allowed for, and spurred the development of, fixed and mobile use in these bands.¹⁷ Along with many commenters, CCA generally supports the FCC's proposed approach to use 70/80/90 GHz band rules as a model for 95 GHz spectrum, so long as the Commission considers how it might allow for mobile use of these bands in the future.¹⁸

Finally, the FCC's proposal to make available 102.2 GHz of licensed and 15.2 GHz of unlicensed spectrum could be sufficient to support unlicensed operations in these bands. Rather than prematurely sanction a large swath of spectrum solely for unlicensed use, as some commenters suggest,¹⁹ the FCC would be wise to implement flexible rules that support exploration of both licensed and unlicensed operations. As the Wi-Fi Alliance notes, the FCC should postpone decisions that would be "difficult to modify in the future."²⁰ This will allow all innovative technologies and services to flourish while the bands are being developed.

¹⁶ See, Apple Comments at 4-5; Comments of Wi-Fi Alliance, ET Docket No. 18-21 at 4 (filed May 2, 2018) ("Wi-Fi Alliance Comments").

¹⁷ NPRM ¶ 5; T-Mobile Comments at 5. See also, *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, et al.*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 8014, ¶¶ 30-31, 76 (2016); *Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, et al.*, Second Report and Order, Second Further Notice of Proposed Rulemaking, Order on Reconsideration, and Memorandum Opinion and Order, 32 FCC Rcd 10988, ¶ 22 (2017).

¹⁸ See, CTIA Comments at 3; T-Mobile Comments at 6.

¹⁹ See, e.g., Apple Comments; Wi-Fi Alliance Comments.

²⁰ Wi-Fi Alliance Comments at 4.

IV. CONCLUSION

For the forgoing reasons, the FCC should adopt flexible rules that support terrestrial operations, particularly mobile and licensed use, in the 95 GHz spectrum bands and beyond to promote competition and innovation throughout the mobile ecosystem, as detailed herein.

Respectfully submitted,

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