



April 25, 2024

Via ECFS

Marlene H. Dortch
Secretary
Federal Communications Commission
Washington, DC 20554

Re: ET Docket No. 18-295, *Unlicensed Use of the 6 GHz Band*, GN Docket No. 17-183,
Expanding Flexible use in Mid-Band Spectrum Between 3.7 and 24 GHz

The Computer & Communications Industry Association (CCIA) submits these reply comments in the ongoing Federal Communications Commission (FCC) proceeding regarding expanded unlicensed use of spectrum in the 6 GHz band.¹ CCIA will focus on a proposal that several commenters have set forth in their joint March 27 comments in which they ask the FCC to establish and authorize a new, independent class of device for the 6 GHz band: geofenced variable power (GVP) devices.²

In its initial comments, CCIA supported the FCC's proposals (1) to expand very low-power (VLP) wireless devices to operate in the U-NII-6 and U-NII-8 bands, *2d FNPRM* ¶ 104, (2) to allow these devices to operate on an unlicensed basis at a higher power level subject to geofencing, *id.*, and (3) to authorize direct low-power indoor (LPI) Client-to-Client (C2C) communications in the 6 GHz band, *id.* ¶¶ 187-194.³ Enabling such expanded uses of the 6 GHz band will foster innovation, competition, and the efficient use of scarce spectrum resources. CCIA maintains its support of these proposed FCC actions.⁴

CCIA now adds its support to the proposal advanced by Apple, Broadcom, Google, Intel, Meta, Microsoft, and Qualcomm for a new higher-power, portable class of device governed by geofencing to enhance the reliability, consistency, and performance of portable unlicensed devices while guaranteeing full protection of incumbent users. As these commenters note, the FCC's aim in this proceeding is to "set the stage for 'exploring a framework to provide additional flexibility to spur even more innovation.'"⁵ The actions already taken, such as authorizing VLP devices in the U-NII-5 and U-NII-7 bands, and the proposed actions that have received so much record support in this comment period, such as expanding that authorization

¹ ET Docket No. 18-295, GN Docket No. 17-183, *Second Report and Order, Second Further Notice of Proposed Rulemaking, and Memorandum Opinion and Order on Remand*, FCC 23-86 ¶ 2 (rel. [Nov. 1, 2023](#)), published at 89 Fed. Reg. 14015 (Feb. 26, 2024). CCIA will refer to the request for comment portion of this document as the "*2d FNPRM*" and the final order portion as the "*2d R&O*".

² ET Docket No. 18-295, GN Docket No. 17-183, Comments of Apple Inc., Broadcom Inc., Google LLC, Intel Corp., Meta Platforms, Inc., Microsoft Corp., and Qualcomm Inc. at 23-41 ([Mar. 27, 2024](#)) (the "Joint Comments"). For a list of CCIA members, go to www.ccianet.org/members.

³ ET Docket No. 18-295, GN Docket No. 17-183, CCIA Comments at 2-3 ([Mar. 27, 2024](#)).

⁴ Apple, *et al.* support expanded authorization of LPI C2C communications as well. Joint Comments at 4-5, 47-49; *see also* ET Docket No. 18-295, GN Docket No. 17-183, Comments of Apple Inc., Broadcom Inc., Google LLC, Intel Corp., Meta Platforms, Inc., Microsoft Corp., and Qualcomm Inc. at 3-16 ([Mar. 27, 2024](#)).

⁵ Joint Comments at 23 (quoting *2d FNPRM* ¶ 3).



to the U-NII-6 and U-NII-8 bands and raising the power limit for VLP devices, certainly serve the FCC’s objectives. The Joint Commenters’ suggestion that a new GVP class be authorized for the 6 GHz band is simply an incremental, logical next step for maximizing use of this spectrum via rules that are consistent, clear, and harmonious.

In the *2nd FNPRM*, the FCC seeks comment on whether it should establish a power limit “up to 21 dBm EIRP”⁶ for client VLP devices operating in the 6 GHz band. Existing geofencing technology, together with use of “exclusion zones” that expand as power levels rise, makes that higher power limit attainable without risk of harmful interference to incumbents.⁷ CCIA therefore agrees that the FCC should permit devices to operate up to 21 dBm if they comply with geofencing requirements. The geofences themselves can be facilitated by employing state-of-the-art automated frequency coordination (AFC) technology. And for this higher power limit, subject to these conditions, it is sensible to establish a new class of device – GVP.

Establishing this higher-power (but still comparatively low-power) GVP class – one that is separate from the extant VLP class – for the 6 GHz band will serve the public interest. Increased power while protecting incumbents via use of geofences means better performance and reliability, which ensures better user experiences. Increased power also would support more data-intensive applications and make devices more able to overcome signal attenuation caused by the human body (“body loss”). When deployed subject to the geofences created by using AFC technology as explained in the Joint Comments, these higher-power devices will truly maximize the use of 6 GHz spectrum in furtherance of the FCC’s policy goals.⁸

CCIA appreciates the FCC’s ongoing work in this docket and is available to provide further information regarding these reply comments if it would be helpful.

Sincerely,

Stephanie Joyce
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CCIA

⁶ *2d FNPRM* ¶ 107.

⁷ Joint Comments at 24.

⁸ *2d R&O* ¶ 12.