



PUBLIC NOTICE

Federal Communications Commission
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DA 23-239

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OFFICE OF ENGINEERING AND TECHNOLOGY SEEKS COMMENT ON WI-FI ALLIANCE REQUEST FOR WAIVER OF SECTION 15.407(L)(2) OF THE COMMISSION'S PART 15 RULES FOR AFC SYSTEM OPERATION IN THE 6 GHZ BAND

ET Docket No. 23-107

Comment Date: April 5, 2023

Reply Comment Date: April 20, 2023

By this public notice, we seek comment on a request by Wi-Fi Alliance to waive Section 15.407(l)(2) of the Commission's rules¹ governing the predictive propagation models that an automated frequency coordination (AFC) system in the 5.925-6.425 GHz and 6.525-6.875 GHz frequency bands (the "6 GHz band") must employ.²

Wi-Fi Alliance is one of the thirteen companies that received conditional approval to operate an AFC system to manage access to 6 GHz spectrum by standard-power unlicensed devices.³ In the *AFC Conditional Approval Public Notice*, the Office of Engineering and Technology (OET) recognized that building entry loss (BEL) could be an input to any predictive propagation model to determine permitted power levels for 6 GHz standard-power devices.⁴ However, OET took no position on whether to permit AFC systems to account for BEL in their calculations. In its Waiver Request, Wi-Fi Alliance seeks flexibility for its AFC system to incorporate BEL attenuation losses when assessing allowable channel availability and power constraints for composite devices that are authorized to operate in both LPI and standard power mode (i.e., indoor only with AFC restrictions devices).⁵ Composite indoor only with AFC restrictions devices adhere to Product Form Factor (PFF) rules that were established for LPI devices to prevent outdoor operation.⁶ Wi-Fi Alliance states its AFC system can differentiate composite indoor

¹ 47 CFR § 15.407(l)(2).

² Authorizing 6 GHz Band Automated Frequency Coordination Systems, ET Docket No. 21-352 (filed February 17, 2023), <https://www.fcc.gov/ecfs/document/10217816203286/1>. (Wi-Fi Alliance Waiver Request).

³ *OET Announces Conditional Approval for 6 GHz Band Automated Frequency Coordination Systems*, Public Notice, DA 22-1146, ET Docket No. 21-352 (rel. Nov. 2, 2022) ("*AFC Conditional Approval Notice*").

⁴ *Id.* at 19.

⁵ *Wi-Fi Alliance Waiver Request* at 2. See also, *Part 15 Subpart E U-NII 6 GHz General Guidance Bands 5,6,7,8*, FCC Office of Engineering and Technology Laboratory Division Publication, Knowledge Database at 10, Table 4, Composite Equipment Class Product 3 "Indoor Only With AFC With Restriction" (May 20, 2022) https://apps.fcc.gov/kdb/GetAttachment.html?id=4iuZjuFgWiNypCLVpSN3cQ%3D%3D&desc=987594%20D01%20U-NII%206GHz%20General%20Requirements%20v01r03&tracking_number=277034 ("*6 GHz General Guidance*").

⁶ The "Product Form Factor (PFF)" restrictions refer to the requirements that an "indoor access point" must be a device that "is supplied power from a wired connection, has an integrated antenna, is not battery powered, and does

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only with AFC restrictions devices from other types of 6 GHz unlicensed devices, thus resulting in the assumption drawn by the AFC system of the composite indoor only with AFC restrictions devices operating indoors.⁷

Part 15.407(l) of the Commission's rules defines the predictive propagation models that an AFC system must use, as well as the interference protection criteria.⁸ AFC systems are required to use the designated propagation models to protect microwave receivers based on the -6 dB I/N metric used in the *6 GHz Report and Order*.⁹ The existing rules do not permit AFC systems to incorporate BEL into their algorithm for determining permissible standard power device operating channels and power levels. However, Wi-Fi Alliance asserts that incorporating BEL attenuation losses in the propagation models to calculate allowed power levels will provide composite indoor only with AFC restrictions devices more power to serve a wider coverage area.¹⁰ Wi-Fi Alliance is seeking a waiver to permit its AFC system to consider such losses when determining spectrum availability and power levels for composite indoor only with AFC restrictions devices. Wi-Fi Alliance asserts that grant of a waiver will enable composite indoor only with AFC restrictions devices to have greater access to available spectrum in the 6 GHz band, will protect incumbent operations from harmful interference and result in wider connectivity that will benefit the American public.¹¹

We seek comment on the Wi-Fi Alliance Waiver Request. To develop a complete record on the issues presented by this request, this proceeding will be treated, for *ex parte* purposes, as "permit-but-disclose" in accordance with Section 1.1200(a) of the Commission's rules, subject to the requirements under Section 1.1206(b). Wi-Fi Alliance filed its petition electronically in ET Docket No. 21-352 in the Commission's Electronic Comment Filing System. We have opened a new docket, **ET Docket No. 23-107** to facilitate consideration of this request and have moved Wi-Fi Alliance's submission into this docket. Parties should file all comments and reply comments in **ET Docket No. 23-107**.

Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <http://apps.fcc.gov/ecfs/>.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

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not have a weatherized enclosure". The device must display a label stating that "FCC regulations restrict operation of this device to indoor use only." See 47 C.F.R. § 15.403.

⁷ Wi-Fi Alliance Waiver Request at 5.

⁸ 47 CFR § 15.407(l)

⁹ *Unlicensed Use of the 6 GHz Band*, Report and Order and Further Notice of Proposed Rulemaking, 35 FCC Rcd 3852 (2020) ("*6 GHz Report and Order*").

¹⁰ Wi-Fi Alliance Waiver Request at 5.

¹¹ Wi-Fi Alliance Waiver Request at 1 and 7.

- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701. U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street NE Washington, DC 20554
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.¹²

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

Parties should also send a copy of their filings to Aniqah Tahsin, Office of Engineering and Technology, Federal Communications Commission, 45 L Street, NE, Washington, DC 20554, or by e-mail to aniqa.tahsin@fcc.gov. Documents associated with this docket will be available for public inspection through the Commission’s ECFS.

By the Acting Chief, Office of Engineering and Technology

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¹² See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, 35 FCC Rcd 2788 (OMD 2020), available at <https://docs.fcc.gov/public/attachments/DA-20-304A1.pdf>.