

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

In the Matter of )  
 )  
Wi-Fi Alliance Request for Waiver ) ET Docket No. 23-107

**Comments of APCO International**

The Association of Public-Safety Communications Officials (APCO) International, Inc.,<sup>1</sup> submits these comments regarding the request for waiver of Wi-Fi Alliance.<sup>2</sup> Wi-Fi Alliance seeks a waiver of the rules to permit its 6 GHz AFC system’s predictive propagation model to take building entry loss into account for “composite” devices – devices that are authorized to operate in both low power indoor and standard power modes, but intended for indoor use only – under control of an AFC.<sup>3</sup> Wi-Fi Alliance has failed to demonstrate that the Commission’s standard for a waiver of the rules has been met. Therefore, the Office of Engineering and Technology (OET) should deny the request.

A Commission rule may be waived for good cause shown.<sup>4</sup> Waiver of a rule is appropriate if special circumstances warrant a deviation from the general rule and such deviation will serve the public interest and will not undermine the policy underlying the rule.<sup>5</sup> Wi-Fi

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<sup>1</sup> Founded in 1935, APCO is the nation’s oldest and largest organization of public safety communications professionals. APCO is a non-profit association with over 39,000 members, primarily consisting of state and local government employees who manage and operate public safety communications systems – including 9-1-1 Emergency Communications Centers (ECCs), emergency operations centers, radio networks, and information technology – for law enforcement, fire, emergency medical, and other public safety agencies.

<sup>2</sup> Wi-Fi Alliance Request for Waiver, ET Docket Nos. 21-352, 23-107 (filed Feb. 17, 2023) (“Wi-Fi Alliance Waiver Request”).

<sup>3</sup> *Id.* at 2.

<sup>4</sup> 47 CFR § 1.3 (providing for suspension, amendment, or waiver of Commission rules, in whole or in part, for good cause shown).

<sup>5</sup> *Northeast Cellular Telephone Company v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990); *NetworkIP, LLC v. FCC*, 548 F.3d 116, 127-128 (D.C. Cir. 2008).

Alliance has not demonstrated that special circumstances warrant deviation from the rule. Nor has it shown that such deviation will serve the public interest.

I. Wi-Fi Alliance has not Demonstrated that Special Circumstances Exist

In the order granting conditional approval to entities to serve as AFC operators, OET declined to permit AFCs to account for building entry loss for indoor standard-power devices, given the “developmental state of these location determining technologies” and the lack of a professional installer requirement for 6 GHz standard-power devices.<sup>6</sup> OET cited commenters questioning how AFCs would implement models for building entry loss and claiming that the industry has not reached agreement on how building entry loss should be applied for standard power devices that are indoors.<sup>7</sup>

Rather than permit AFCs to account for building entry loss, OET acknowledged that there may be methods for AFC systems to determine that a device is, in fact, located indoors and noted that entities could seek a waiver if their “unique” situation or technology merits flexibility.<sup>8</sup> OET was clear that such requests “must provide full support for how standard power devices will be constrained to indoor locations, how interference protection to incumbent spectrum users will be provided, and any arrangements with AFC providers to ensure that indoor versus outdoor location data is being properly transmitted, interpreted, and acted on appropriately.”<sup>9</sup>

Wi-Fi Alliance’s waiver request does not demonstrate that it has a unique situation or technology, and fails to provide “full support” for how standard power devices will be

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<sup>6</sup> OET Announces Conditional Approval for 6 GHz Band Automated Frequency Coordination Systems, DA 22-1146, *Public Notice*, ET Docket No. 21-352, at para. 40 (rel. Nov. 2, 2022) (“AFC Conditional Approval Notice”).

<sup>7</sup> *Id.* at para. 39.

<sup>8</sup> *Id.* at para. 40.

<sup>9</sup> *Id.*

constrained to indoor locations and how interference protection to incumbent spectrum users will be provided. The solution Wi-Fi Alliance describes essentially entails the AFC using a composite device's unique FCC ID and certified Equipment Class information to identify that it is intended for indoor-only operations. Far from unique, these types of devices and AFC capabilities were known to OET when it issued the instruction that entities could seek waiver requests if their unique situation or technology merits flexibility.

As Wi-Fi Alliance concedes, its AFC is capable of retrieving and verifying the FCC IDs of certified standard-power device from the Commission's Equipment Authorization System *because its AFC is designed pursuant to the Commission's rules.*<sup>10</sup> And Wi-Fi Alliance's waiver request cites OET guidance regarding these devices that was published six months before the Public Notice granting conditional AFC approvals in which OET declined to permit AFCs to take building entry loss into account.<sup>11</sup> Thus, in the Public Notice granting conditional AFC approvals, OET could have permitted AFCs to apply building entry loss for indoor-only composite devices using the device's unique FCC ID and certified Equipment Class information, but OET chose an approach more protective of incumbent licensees.

Failing to explain how these devices involve a unique situation or technology, Wi-Fi Alliance relies on the fact that the composite devices share comparable restrictions to low power indoor devices: the device doesn't have a weatherized enclosure, is not battery powered, etc. Wi-Fi Alliance has not explained how it will ensure the devices are operating indoors as intended, as opposed to operating on a rooftop or other outdoor location where they will pose an enhanced threat of harmful interference to public safety systems. Contrary to Wi-Fi Alliance's claim that

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<sup>10</sup> Wi-Fi Alliance Waiver Request at 4.

<sup>11</sup> *Id.* at 2 (citing *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)).

these are the circumstances that OET contemplated when it invited waiver requests, OET's instructions clearly called for something more.

## II. Wi-Fi Alliance's Waiver Request is not in the Public Interest

Wi-Fi Alliance has failed to demonstrate that granting its waiver request is in the public interest. Wi-Fi Alliance argues that its proposed expansion of unlicensed use will better promote use of the band for "ever-growing" connectivity requirements.<sup>12</sup> However, Wi-Fi Alliance has not demonstrated that the demand for connectivity exceeds the current capabilities of unlicensed devices or that granting the waiver request will result in a meaningful improvement. This is too ambiguous and speculative to satisfy the Commission's high bar for granting a waiver request.

The countervailing public interest, preventing harmful interference to licensed operations like public safety communications, would be threatened by the expanded use of 6 GHz, but Wi-Fi Alliance neglects this risk. As AT&T has explained, Wi-Fi Alliance's waiver request does not address standard power client devices that are associated with composite devices.<sup>13</sup> Standard power client devices operate at substantially higher power than low power indoor devices, are not required to be designed for indoor-only operation, and thus pose a significant interference threat to primary FS microwave incumbents.

In addition to the specific concerns raised by permitting AFCs to take building entry loss into account for composite devices, Wi-Fi Alliance's waiver request highlights the need for thorough real-world testing to examine whether the assumptions that formed the basis of the new 6 GHz rules were correct and how procedures for identifying and eliminating interference need to be augmented. How often will the probabilistic approach for building entry loss parameters<sup>14</sup>

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<sup>12</sup> *Id.* 6-7.

<sup>13</sup> Opposition of AT&T Services, Inc., ET Docket No. 21-352 at 3 (Feb. 27, 2023).

<sup>14</sup> See Unlicensed Use of the 6 GHz Band, 35 FCC Rcd 3889, *Report and Order and Further Notice of Proposed Rulemaking*, ET Docket No.18-295 at paras. 100, 128, n.297, Table 4 (2020).

result in instances of indoor-only devices operating at power levels that exceed building entry loss and cause harmful interference to public safety licensees? In those situations, what will be the impact on public safety? How will public safety licensees be able to identify the harmful interference, and how will the Commission promptly identify and eliminate the source of harmful interference?<sup>15</sup> These questions are fundamental for public safety across the nation, yet they remain unanswered.

Because Wi-Fi Alliance has not demonstrated that special circumstances exist or that granting its waiver request would be in the public interest, its request should be denied. If the waiver request is granted, the Commission should ensure that real-world testing fully addresses the concerns regarding the threat of harmful interference to public safety licensees.

Respectfully submitted,

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<sup>15</sup> See Letter from Richard Bernhardt, Don Root, Edgar Figueroa, and Brett Kilbourne, Chairs of the 6 GHz Multi-Stakeholder Group to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket No. 18-295 (filed July 11, 2022), attaching “Best Practices and Recommended Procedures for Interference Detection, Reporting, and Resolution to Protect Fixed Microwave Service Receivers in the 6 GHz Band.” From any read of this report, the 6 GHz Multi-Stakeholder Group failed to provide meaningful guidance on the highly important matters of how to detect, identify, and resolve harmful interference caused to public safety communications from both low power indoor and standard power devices. See also Ex Parte of APCO International, ET Docket No. 18-295, 21-352, GN Docket No. 17-183, (Nov. 22, 2022) (describing an ongoing case of harmful interference to a public safety agency’s 6 GHz microwave system that demonstrates that the Enforcement Bureau process for resolving interference complaints is not well-suited for eliminating interference from the types of part 15 devices permitted by the 6 GHz Order, even with attention from Bureau leadership).

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