

# Leaders in Public Safety Communications®

#### **CHIEF EXECUTIVE OFFICER EXECUTIVE DIRECTOR**

Mel Maier. CPE maierm@apcointl.org

#### **HEADQUARTERS**

J. Rhett McMillian, Jr. Building 351 North Williamson Boulevard Daytona Beach, FL 32114-1112 386-322-2500

### **EXECUTIVE OFFICES Gregory T. Riddle Building** 1426 Prince Street

Alexandria, VA 22314 571-312-4400

www.apcointl.org

**BOARD OF DIRECTORS** 2023 - 2024

#### **EXECUTIVE COMMITTEE**

#### President

Becky Neugent, CPE becky@autauga911.com

#### **First Vice President**

Stephen P. Martini, RPL, CPE stephen.martini@nashville.gov

#### **Second Vice President**

Mark Spross, RPL, CPE mark.spross@metcom911.com

#### **Immediate Past President**

Angela R. Batey, RPL, CPE abatey@gpstc.org

## **East Coast Region**

David D. Dodd, RPL Brian E. LaMonica, RPL, CPE

#### **Gulf Coast Region**

Paul A. McCallister, RPL, CPE Jack Varnado, RPL

#### **North Central Region**

Jessica Loos, RPL Michael R. O'Connor

#### **Western Region**

Jennifer Reese, CPE Melissa Stroh, MBA, CPM

## **Commercial Advisory Council**

Jessica Long

April 4, 2024

Marlene Dortch Secretary Federal Communications Commission 45 L Street, NE Washington, DC 20554

Re: Notice of Ex Parte, ET Docket No. 21-352

Dear Ms. Dortch,

We write on behalf of the Association of Public-Safety Communications Officials (APCO), International, to express public safety concerns regarding approval of automated frequency coordination (AFC) systems pursuant to the recent *Public Notice* approving seven AFCs. In particular, APCO is concerned with the requirement that the approved systems establish a centralized means to receive and address complaints regarding harmful interference. APCO agrees with other representatives of incumbent 6 GHz users that, absent input from incumbents and oversight from the Commission, this resource for mitigating interference will fail to provide what's needed for critical communications.<sup>2</sup>

OET conditioned the approval of the AFC systems on their establishment of a centralized interference reporting mechanism.<sup>3</sup> In doing so, however, OET overlooked lessons from the 6 GHz Multi-Stakeholder Group – created at the Commission's urging following the 2020 Order – which spent considerable time attempting to develop procedures for notifying AFC operators of suspected interference. The Multi-Stakeholder Group's "Best Practices and Recommended Procedures for Interference Detection, Reporting, and Resolution to Protect Fixed Microwave Service Receivers in the 6 GHz Band"<sup>4</sup> offers several insights for OET relevant to the centralized reporting

<sup>&</sup>lt;sup>1</sup> OET Announces Approval of Seven 6 GHz Band Automated Frequency Coordination Systems for Commercial Operation and Seeks Comment on C3 Spectra's Proposed AFC System, Public Notice, DA 24-166 (rel. Feb. 23, 2024) ("AFC Notice").

<sup>&</sup>lt;sup>2</sup> See Letter from Aryeh Fishman, Associate General Counsel, EEI, Robin Cohen, President/CEO, EWA, Ken LaSala, Director of Government Relations and Policy, IAFC, and Brett Kilbourne, Counsel, UTC, to Nicholas Oros, OET, FCC, ET Docket 21-352 (filed Mar. 25, 2024).

<sup>&</sup>lt;sup>3</sup> See AFC Notice at para. 18.

<sup>&</sup>lt;sup>4</sup> Letter from Richard Bernhardt, National Spectrum Advisor, WISPA, Don Root, Spectrum Committee Chair, NPSTC, Edgar Figueroa, CEA, Wi-Fi Alliance, and Brett Kilbourne, Counsel, UTC, to Marlene H. Dortch, Secretary, FCC, ET Docket No. 18-295 (filed July 11, 2022), attaching "Best Practices and Recommended

mechanism AFC operators must establish.

First, incumbents and RLAN proponents were unable to agree upon appropriate interference reporting procedures. Instead, the report presents a list of mutually-exclusive "alternative viewpoints," demonstrating that AFC operators, if left to their own devices, are unlikely to adopt an interference reporting mechanism that will meet the needs of public safety users.

Second, the interference reporting issues that the MSG failed to reach consensus on were non-trivial, and many of the unresolved issues from the MSG report remain critical gaps in OET's mandate for AFC operators:

- When should public safety licensees report interference to the AFCs' interference reporting mechanism, the Commission's (Public Safety) Radio Frequency Service Interference Complaint Portal, directly to Enforcement Bureau personnel, or all of these? Time is of the essence and lives are at stake when a 6 GHz public safety link fails. The reporting and resolution process must be clear and rapid.
- What transparency, if any, will an AFC-managed interference reporting mechanism have for the Commission, AFC operators, and incumbents? Information about 6 GHz interference reports will be critical for tracking AFC operators' progress on interference mitigation, identifying patterns in interference that might indicate AFC parameters or the Commission's rules require updating, and resolving interference from devices that are not subject to AFC control such as low power indoor and very low power devices.
- How much detail about the suspected interference will be required to trigger action by AFC operators? Interference reporting should be straightforward, without imposing undue technical or procedural barriers that could delay the submission and resolution of complaints.
- How will the AFCs' interference reporting mechanism take into account the facts that incumbents' systems are often unable to detect harmful interference until after it produces communications failure and incumbents are unlikely to be capable of identifying the source of interference without investigative support?
- Following a report of interference, what steps will AFC operators take to eliminate interference and determine the source? Will AFC operators require different degrees of certainty before responding to a complaint, and will they implement uniform procedures to immediately expand the protection zones for the impacted incumbent system, investigate the source of interference, and revise AFC parameters? The process must prioritize quick and effective responses to interference complaints, with clear guidelines for immediate action to mitigate harmful interference while a permanent solution is sought.

Incumbents – the entities that will be the recipients of harmful interference – should be involved with the development of the AFCs' interference reporting mechanism. At a minimum, the process for working with AFC operators to resolve interference complaints should be disclosed in full and subject to public comment.

In addition to concerns with the AFCs' centralized interference reporting mechanism, APCO worries that the lack of uniformity and transparency for AFC propagation models will make it harder to prevent and eliminate interference. APCO is also concerned that changes to AFC systems might not be subject to additional testing or public trials. <sup>5</sup> Prospective AFC operators have already proposed a modification to their operating parameters,

Procedures for Interference Detection, Reporting, and Resolution to Protect Fixed Microwave Service Receivers in the 6 GHz Band."

<sup>&</sup>lt;sup>5</sup> AFC Notice at para. 13 ("Depending on the significance and complexity of the modification, OET may require some form of testing or verification.").

even before going live and collecting real-world data. OET acknowledges that challenges during the AFCs' public trial resulted in AFC applicants modifying their AFC systems but does not describe a process for additional public trials when AFC operators seek to modify their systems. APCO worries that, absent transparency and effective evaluation of AFC system parameters, harmful interference to public safety systems will become more frequent and more difficult to resolve. As OET considers additional AFC applications and proposed modifications, APCO encourages OET to require testing, standardization, and transparency in a manner that maximizes protection for critical incumbent users.

Ensuring the protection and reliability of communications, particularly for public safety operations, is of paramount importance. APCO urges the Commission to adopt clearer guidelines, enhance transparency, and facilitate a more inclusive approach to the development and modification of AFC systems and procedures that impact critical communications.

Respectfully Submitted,

APCO INTERNATIONAL

By:

Jeffrey S. Cohen Chief Counsel (571) 312-4400 ext. 7005 cohenj@apcointl.org

Mark S. Reddish Senior Counsel (571) 312-4400 ext. 7011 reddishm@apcointl.org

Alison P. Venable Government Relations Counsel (571) 312-4400 ext. 7004 venablea@apcointl.org

3

<sup>&</sup>lt;sup>6</sup> See Letter from Christopher Szymanski, Broadcom, Inc., Alex Roytblat, Wi-Fi Alliance Services Corporation, and Bruno Tomas, Wireless Broadband Alliance, to Marlene H. Dortch, Secretary, FCC, ET Docket 21-352 (filed Mar. 20, 2024).

<sup>7</sup> AFC Notice at para. 10.