



**EXECUTIVE DIRECTOR
CHIEF EXECUTIVE OFFICER**

Derek K. Poarch
poarchd@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
2018 – 2019**

EXECUTIVE COMMITTEE

President

Holly E. Wayt, RPL, ENP
holly.wayt@westerville.org

First Vice President

Tracey Hilburn RPL, ENP
hilburn911@bellsouth.net

Second Vice President

Margie Moulin, RPL, CPE
margie.moulin@ecso911.com

Immediate Past President

Martha K. Carter
mcarter@caddo911.com

East Coast Region

David W. Saffel
Frank T. Thomason, ENP

Gulf Coast Region

Angela R. Bowen, RPL, CPE
Becky Neugent

North Central Region

Matthew D. Franke
Jason E. Kern, RPL, CPE

Western Region

Jim Acosta
Desi Calzada

Commercial Advisory Council

Brian A. Hughes

August 7, 2019

Marlene Dortch

Secretary

Federal Communications Commission

445 Twelfth Street, SW

Washington, DC 20554

**Re: Notice of *Ex Parte*, PS Docket Nos. 07-114, 11-60, ET Docket
No. 18-295, GN Docket Nos. 17-183, 11-117**

On August 6, the undersigned met with Will Adams of Commissioner Carr's office to discuss several ongoing proceedings. As summarized below, APCO expressed concern with wireless 9-1-1 location accuracy, the Wireless Resiliency Cooperative Framework, and unlicensed use of the 6 GHz band.

Wireless 9-1-1 Location Accuracy

APCO is concerned that we are on a path where 9-1-1 location information will not end up being useful for 9-1-1 professionals or the public they serve, and carriers will not do all that they can to produce meaningful improvements. Dispatchable location is the gold standard for 9-1-1 and was the goal of the 4th Report and Order.¹ To provide a dispatchable location, the carriers can and should leverage every tool available including: the National Emergency Address Database (NEAD), location information from commercial location-based service and technology providers, carriers' in-home services, GPS, handset sensors, enterprise WiFi-based location systems, location-purposed Bluetooth devices, and known subscriber information such as home address. APCO is especially concerned that the carriers have remained mainly silent about implementing dispatchable location solutions that could be achieved without the NEAD at all, through their own WiFi and other home and business products, or with emerging 5G offerings.

APCO clarified that, while the Commission's rules set requirements for the NEAD, a dispatchable location can be provided without using the NEAD at all. The NEAD is just one of many tools the carriers could use for determining a dispatchable location. Also, using the NEAD does not automatically mean that the location provided constitutes a dispatchable location. The carriers should pursue any and all technologies at their disposal.

¹ See Wireless E911 Location Accuracy Requirements, Fourth Report and Order, 30 FCC Rcd 1259 (2015) (4th Report and Order).

Yet the carriers appear overly focused on the NEAD for deriving a dispatchable location, have described implementation challenges such as reference point provisioning and handset support,² and have not provided information about other methods they should be exploring.

In this context, APCO is concerned that carriers might abandon dispatchable location solutions altogether in lieu of a z-axis approach that would leave public safety worse off than the original 2014 proposal that APCO, NENA, and the carriers sought to improve upon. Consistent with the 4th Report and Order, the Commission should forego adoption of a z-axis metric and thereby require carriers to rely on dispatchable location solutions.³

Under the proposed z-axis metric, 9-1-1 professionals would not receive vertical location information that is actionable for dispatching first responders. While some public safety agencies state they have the resources to procure technologies capable of operationalizing an estimated height above mean sea level or a three-dimensional (xyz) point in space, the Commission should ensure that carriers make location information available in a format that is actionable by all 9-1-1 emergency communications centers throughout the nation. The Commission's 4th Report and Order was supposed to be based on a major commitment by the carriers, rooted in employing location technologies that are being used for commercial location-based services for 9-1-1 purposes. At a minimum, the z-axis metric should include a requirement for delivering a floor level estimate with the z-axis information. Ultimately, wireless carriers should not be able to comply with the 4th Report and Order by abandoning dispatchable location altogether and providing, for example, location information that is only an estimate in meters above sea level, or information that Emergency Communications Centers (ECCs) have no means to make actionable.

Four years since adoption of the 4th Report and Order, the landscape has evolved in terms of the companies that are offering new wireless communications services to the public or developing location technologies for mass consumer consumption. While the Commission's wireless 9-1-1 location accuracy rules hold the carriers accountable for improvements, entities including the cable industry, Apple, and Google have responsibilities, too, for taking reasonable steps to contribute to public safety by ensuring ECCs receive actionable dispatchable location information. APCO believes that many of the challenges for the carriers to achieve dispatchable location, whether populating the NEAD with data held by other industries and companies, or accessing location technologies developed by companies like Apple and Google, are business matters for the carriers to resolve. However, the Commission may need to consider exercising its broad authority to promote safety of life and property⁴ to the extent necessary to ensure carriers are held to the stated intent and spirit of the 4th Report and Order and, more importantly, that ECCs receive the location information they need to protect the public.

Wireless Resiliency Cooperative Framework

For several years, APCO has filed comments with the Commission and asked carriers to provide a contact database for carriers and ECCs, as well as actionable situational awareness information, for use during known or suspected outages. When a network outage occurs, ECC directors frequently are limited to social media and ad hoc communications with their peers to discern what might be happening in carrier networks. This is an

² See Letter from Matthew Gerst, CTIA, to Marlene H. Dortch, Secretary, Federal Communications Commission, PS Docket No. 07-114 (filed May 23, 2019).

³ See Comments of APCO, PS Docket No. 07-114 (filed May 20, 2019) and Comments of APCO, PS Docket No. 07-114 (filed Oct. 1, 2018).

⁴ See Title I, Section 1 of the Communications Act, 47 U.S.C. § 151 (establishing the Commission "for the purpose of promoting safety of life and property through the use of wire and radio communication").

unacceptable situation that limits ECCs' ability to communicate vital information to the public about how to get help, especially in the event of wide-scale emergencies. Despite multiple requests and the related commitments of the Wireless Resiliency Cooperative Framework, the carriers have not established a contact database that would serve this very basic and important need. The Commission should set a deadline for the carriers and make clear that it is their responsibility to promptly establish, maintain, and make available to ECCs a secure database to ensure that ECCs know who to contact in the event of an outage and for carriers to promptly notify ECCs of known and suspected outages.⁵

As APCO has also repeatedly advocated, the Commission should also make clear to carriers that ECCs should receive outage information in an easily accessible format that provides situational awareness of the timing, nature, and scope of any impacts to communications with ECCs. The Commission should require carriers to provide actionable information about network outages in a format that ECCs could use to easily assess the impact on their communities.

Unlicensed Use of the 6 GHz Band

APCO remains concerned with the Commission's proposal to introduce significant unlicensed operations into the 6 GHz band, which is heavily used by public safety agencies for mission critical communications. The public safety systems in this band are designed for highly-reliable, interference-free operation, and other bands are not sufficient alternatives. Identifying sources of interference could require substantial effort, and a single instance of interference could result in fifteen minutes or more for restoration. This would be unacceptable for mission critical uses such as public safety dispatch or first responder voice communications.

While APCO remains amenable to assessing technical solutions, to date APCO remains unconvinced that the technical showings put forth by advocates of unlicensed sharing of the band are taking into account the real-world implications of the deployment of hundreds of millions of devices, or the specific nature of public safety microwave systems that are designed for very high reliability. Even if the Commission is able to develop strong protections and an Automated Frequency Coordination (AFC) system is proven effective for protecting incumbent users, APCO is further concerned that consumers or manufacturers could defeat the technical limitations or AFC controls. With hundreds of millions of unlicensed devices in the stream of commerce, when interference occurs, it will be impossible to identify and eliminate the source. This could result in irreparable loss of mission critical communications and leave public safety without recourse. At a minimum, the Commission should delay action on the 6 GHz band, pending further research into the risk of interference and the effectiveness and enforceability of its technical rules and AFC requirements.

Pursuant to Section 1.1206 of the Commission's rules, this letter is being filed electronically with your office.

Respectfully submitted,

/s/

Jeffrey S. Cohen

⁵ Certain carriers have maintained ECC contact lists pursuant to consent decrees, at least for assisting carriers with contacting ECCs. *See* Order and Consent Decree, DA 18-649 (EB Jun. 28, 2018) and Order and Consent Decree, DA 15-808 (EB rel. Jul. 17, 2015).

Chief Counsel

/s/

Mark Reddish
Senior Counsel

CC (via email):

Will Adams