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

November 1, 2024

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

Re: Notice of *Ex Parte*, Docket Nos. PS 07-114, PS 21-479, PS 18-64

On October 31, the undersigned met with Carmen Scurato, Legal Advisor, Consumer and Public Safety, for Chairwoman Jessica Rosenworcel. Provided below is a summary of our discussions.

Wireless 9-1-1 Location Accuracy

The Commission's rules require wireless carriers to provide a height estimate for 9-1-1 callers expressed as a "height above ellipsoid" (HAE) and, "when feasible," dispatchable location information. It remains the case that few 9-1-1 emergency communications centers (ECCs) have the resources to explore how to make use of HAE-based vertical information (for which the Commission's metric, if met, still allows for +/- one floor of accuracy).[1] Implementing an HAE-based location solution would also require that ECCs expend substantial costs and resources to operationalize this data into something that could be readily used for dispatch, including, at a minimum, the creation, maintenance, and storage of detailed floor plans for every building in their service areas.

At the same time, the promise of dispatchable location has substantially faded since it was heralded by the industry and identified as the gold standard for public safety in the Commission's 2015 order, nearly 10 years ago. While wireless carriers may be delivering dispatchable locations for a small number of wireless 9-1-1 calls, the methods being used and whether/how any testing has been conducted are unknown. Further, there is a lack of uniformity among the reports produced by the carriers, which makes it difficult to compare and evaluate their efforts. It is also unclear whether the carriers intend to pursue additional methods to provide dispatchable location as the 9-1-1 Location Technologies Test Bed, LLC, created to carry out the directive of the 2015 Order to test location

[1] HAE measurements are also highly sensitive to even minor discrepancies in the horizontal location estimate, which can be challenging to pinpoint as well inside buildings.

technologies in an independent and transparent manner, does not have any testing planned of dispatchable location solutions including existing and potential solutions available to the carriers themselves.

APCO has pointed to potential technologies that carriers could be using to provide dispatchable location for indoor wireless 9-1-1 calls, such as the various in-home and in-business 5G solutions on the market today. The carriers should be required to leverage all available technologies to provide dispatchable location and test any potential solutions in an open process.

Accordingly, further Commission action is needed to explore ways to (1) improve the transparency and reliability of testing to verify that HAE-based z-axis estimates meet the Commission's +/- 3 meter metric and ensure testing is conducted of currently in use and potential dispatchable location solutions available through carriers' own products and services as well as by third party location solutions providers, (2) make carrier reports more uniform and informative to better understand and compare dispatchable location methods in use, (3) explore the role of mobile device manufacturers and mobile operating system developers in contributing to dispatchable location solutions, and (4) provide more robust and accountable requirements for carriers to deploy methods, several of which are likely feasible today, to provide dispatchable location as soon and as frequently as possible.

Next Generation 9-1-1 Interoperability

APCO continues to appreciate the Commission's action in July adopting its first rules concerning Next Generation 9-1-1 (NG9-1-1). Having rules in place that require service providers to deliver 9-1-1 traffic, including routing and location information, in an IP-based format to one or more points specified by a state or local 9-1-1 authority that meets certain readiness criteria will be very beneficial. The Commission rightly specified that service providers will be responsible for associated costs and testing. We also welcomed the deference this Order appropriately affords to state and local public safety officials to designate the point(s) of delivery and indicate their readiness to receive 9-1-1 traffic in IP-based format. In this regard, we look forward to further guidance from the Public Safety and Homeland Security Bureau concerning how 9-1-1 authorities can file valid requests and promptly notify OSPs of their readiness to quickly and efficiently facilitate this transition.[2]

While the focus of the Order is on the call delivery portion of NG9-1-1, the Commission has also set the right path for full NG9-1-1 deployment by adopting a technology-neutral approach and recognizing the comprehensive vision for NG9-1-1 supported by the public safety community. Notably, the Commission codified the term "commonly accepted standards" that has been agreed upon by a broad consensus of national public safety associations. This will allow for a variety of technologies, standards, and architectures to implement NG9-1-1, ensuring that ECCs have the flexibility to continually benefit from ongoing innovation.[3] Also of significant importance, the Commission defined NG9-1-1 in a comprehensive, multimedia-capable, end-to-end manner as that term has also been agreed upon by the public safety community. Defined this way, the Commission agreed with APCO

[2] Facilitating the Implementation of Next Generation 911 Services (NG911), Location-Based Routing for Wireless 911 Calls, PS Docket Nos. 21-479, 18-64, *Report and Order*, FCC 24-78, para. 108 (2024) ("Order")("We direct PSHSB to develop, implement, and maintain a centralized electronic registry for submission of Phase 1 and Phase 2 requests by 911 Authorities...We further direct PSHSB to open a new docket and issue guidance regarding filing of NG911 valid requests, and to work with OSPs, 911 authorities, and industry organizations such as CTIA to ensure that all OSPs receive timely notice of valid requests.").

[3] APCO also supports the flexible definition of "emergency services IP network" or ESInet, described as "used for emergency services communications." *See id*. at para. 53. This is important to account for emerging technologies that do not depend on the existence of a traditional ESInet such as cloud-based applications and video-to-911 offerings.

that NG9-1-1 entails more than replacing legacy infrastructure with IP-based connections, and thus does not yet exist anywhere in the United States.[4]

To take the next step toward achieving public safety's vision for NG9-1-1, the Commission should initiate a further notice of proposed rulemaking to address interoperability requirements for 9-1-1 service providers and other elements of the emergency communications chain. ECCs that have transitioned to ESInets still incur interoperability challenges, in some cases even with ESInets provided by the same vendor.

The Commission can help solve this problem by adopting the definition of interoperability that the public safety community has agreed to, and which term is referenced in both the definitions of "commonly accepted standards" and "Next Generation 9-1-1":

> "The capability of emergency communications centers to receive 9-1-1 requests for emergency assistance and information and data related to such requests, such as location information and callback numbers from a person initiating the request, then process and share the 9-1-1 requests for emergency assistance and information and data related to such requests with other emergency communications centers and emergency response providers without the need for proprietary interfaces and regardless of jurisdiction, equipment, device, software, service provider, or other relevant factors."[5]

The Commission should also consider adopting reasonable requirements on IP-based 9-1-1 service providers. ECCs need to be able to transfer 9-1-1 traffic and incident-related data to other ECCs as part of mutual aid, correcting misroutes, and for other purposes. While it will probably be ECCs with adjacent service areas that are most often needing to exchange information, ESInets should be interoperable whenever they are providing connectivity between ECCs.

Accordingly, the Commission should seek comment on a rule that would require 9-1-1 service providers to enable the ECCs they serve to exchange all forms of 9-1-1 traffic with ECCs in different states and/or served by different 9-1-1 service providers. Each 9-1-1 service provider could demonstrate compliance with this interoperability requirement by certifying that the ECCs it serves are able to exchange 9-1-1 traffic with at least three ECCs located in different states and/or served by other 9-1-1 service providers. Such a certification should include an attestation that the 9-1-1 service provider has confirmed interoperability through real-world testing at its sole cost. As part of the proposed interoperability requirement for 9-1-1 service providers, the Commission could also expand its inquiry to the role of call-handling solutions, record management solutions, computer aided dispatch, and emerging over-the-top solution providers in interoperability.

APCO looks forward to further Commission action in support of the above-described priorities.

Respectfully Submitted,

APCO INTERNATIONAL

By:

[4] *See id*. at para. 16.
[5] *See id*. at para. 24 n.161.

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

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

CC (via email):

Carmen Scurato