

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

In the Matter of )  
 )  
Facilitating Implementation of Next Generation ) PS Docket No. 21-479  
911 Services )

**REPLY COMMENTS OF APCO INTERNATIONAL**

The Association of Public-Safety Communications Officials, International (APCO),<sup>1</sup> submits these reply comments related to the Notice of Proposed Rulemaking on Facilitating Implementation of Next Generation 9-1-1 (NG9-1-1) Services.<sup>2</sup> APCO maintains the views expressed in its comments and continues to believe the Commission should take a comprehensive approach to NG9-1-1, require service providers to achieve interoperability, and avoid placing responsibilities on ECCs and 9-1-1 authorities that would more appropriately rest with service providers. Here, we address certain comments related to APCO’s positions and highlight issues that warrant further examination, potentially through a further notice of proposed rulemaking.

I. Adopting the Public Safety Community’s Definition of Next Generation 9-1-1 Will Guide the Commission and Other Stakeholders

Over the past several years, APCO and its partners in the public safety community have sought industrywide adoption of a comprehensive definition of NG9-1-1. APCO has also repeatedly pointed out that ESInets should not be viewed as equivalent to NG9-1-1 or even assumed to provide uniform functionalities. Operating from different interpretations of technical

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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 40,000 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> Facilitating Implementation of Next Generation 911 Services (NG911), PS Docket No. 21-479, *Notice of Proposed Rulemaking*, FCC 23-47 (rel. June 9, 2023) (“NPRM”).

progress and basic terminology has impeded the transition to NG9-1-1 and resulted in excessive costs and delays that have taxed the resources of the public safety community. Unsurprisingly, commenters offer a variety of opinions on how to define NG9-1-1, and confirm that ESInets provide substantially different capabilities depending on the deployment.<sup>3</sup> Thus, the record underscores the need for the Commission to promote a common understanding of the public safety community’s goals and expectations for NG9-1-1.

Several parties reference i3 with respect to defining NG9-1-1 or specifying the IP-based format OSPs should be required to use to deliver 9-1-1 traffic. While i3 has a role in today’s ESInet deployments, the Commission should not incorporate i3 or any other “NG9-1-1” standard into its rules. Several comments demonstrate the risks of this approach, noting the current or expected use of alternatives to the i3 standard.<sup>4</sup> ECCs should have flexibility to pursue their preferred approaches to achieving the operational capabilities envisioned for NG9-1-1 as technology continues to evolve. This is why the public safety community’s comprehensive definition of NG9-1-1 references the use of “commonly accepted standards” rather than identify a particular standard for NG9-1-1.<sup>5</sup>

As noted in APCO’s comments, a comprehensive definition of NG9-1-1 is necessary to achieve the Commission’s objectives that the nation’s 9-1-1 system functions with the most

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<sup>3</sup> See, e.g., Comments of Intrado Life & Safety, Inc., PS Docket No. 21-479, at 5 (“Intrado Comments”) (noting that only some ESInet providers assume carriers will provide additional data repository (ADR), security (e.g., different digital certificate requirements and implementations), data delivery (e.g., some ESInets require data delivery over circuits while others prefer or require Internet only), and location query protocol (e.g., some ESInets prohibit ECCs from querying the ALI database while others allow ALI queries)); Comments of Home Telephone ILEC, LLC, PS Docket No. 21-479, at 12 (“Home Comments”) (“There seems to be little in the way of best practices related to how the actual ESInet is configured.”).

<sup>4</sup> Intrado Comments at 8 (suggesting an ECC readiness rule based on “the then-current applicable industry standard for NG911.”); Comments of the Industry Council for Emergency Response Technologies (“iCERT Comments”), PS Docket No. 21-479, at 4 (noting that standards evolve and suggesting the Commission’s rules require “commonly accepted standards”); Comments of Verizon, PS Docket No. 21-479, at 5 n.9 (explaining that Verizon is pursuing an interconnection solution that entails a more basic form of SIP).

<sup>5</sup> Next Generation 9-1-1 Act of 2023, H.R. 1784, 118th Cong. § 2 (d)(12) (2023).

advanced capabilities available,<sup>6</sup> interoperability,<sup>7</sup> and with the ability to transmit text, photos, videos, and data.<sup>8</sup> By adopting the public safety community’s comprehensive definition of NG9-1-1, the Commission will be providing a north star that facilitates a common understanding and progress toward the enhanced emergency services we’re pursuing.

## II. Require Service Providers to Achieve and Maintain Interoperability

APCO continues to believe that the greatest impact the Commission can have on facilitating the transition to NG9-1-1 would be to require interoperability between OSPs and 9-1-1 service providers, and among 9-1-1 service providers.<sup>9</sup> The record includes support for this position.<sup>10</sup> Further, several commenters urge the Commission to ensure its rules promote competition,<sup>11</sup> and interoperability is perhaps the strongest driver of a competitive marketplace.

To achieve the Commission’s intent that the nation’s 9-1-1 systems function with interoperability,<sup>12</sup> the Commission must affirmatively require it. The Commission should reject assertions that interoperability will be achieved as a result of requiring delivery of 9-1-1 traffic in an IP-based format or by requiring use of the i3 standard. Several years of work to implement i3-based ESInets has not resulted in uniform ESInet functionality, let alone interoperability

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<sup>6</sup> NPRM at para. 3.

<sup>7</sup> *Id.* at para. 10.

<sup>8</sup> *Id.*

<sup>9</sup> Comments of APCO International, PS Docket No. 21-479, at 5 (“APCO Comments”).

<sup>10</sup> See Comments of Livingston Parish Sheriff’s Office and Livingston Parish Communications District, PS Docket No. 21-479, at 1 (“We urge the Commission to require all OSPs and 9-1-1 service providers achieve interoperability. Doing so would meet an important operational objective for public safety and help to resolve other issues raised in the NPRM such as how OSPs will deliver 9-1-1 traffic in an IP format ECCs can receive and simplify the issues related to the showings ECCs would need to make to request delivery of 9-1-1 traffic in an IP format.”).

<sup>11</sup> See iCERT Comments at 3 (“As the Commission considers how to change its rules to ensure the timely deployment of NG911, it is critical to ensure that any new or modified rules will promote, not hinder, innovation and competition.”); Comments of Ad Hoc NG911 Service Providers Coalition, PS Docket No. 21-479, at 3 (“In this proceeding, it is critical that the Commission ensure that any new or modified rules will support effective competition...the status quo has created uncertainty, protracted disputes, and extreme delays to NG911 deployments.”).

<sup>12</sup> See NPRM at para. 10.

between them.<sup>13</sup> The use of IP-based formats and specific standards might *facilitate* interoperability, but to meet public safety's needs, the Commission must require service providers to actually *achieve* interoperability.

III. The Record Includes Strong Support for the Commission's Proposal that Demarcation Points Should be Designated by 9-1-1 Authorities

The record includes strong support for the Commission's proposal to require wireline, CMRS, interconnected VoIP, and Internet-based TRS providers to transmit IP-based 9-1-1 traffic to the point(s) determined and designated by the 9-1-1 authority, which could include an ESInet, individual ECCs, or other designated point(s). This support comes from representatives of 9-1-1 authorities and ECCs, 9-1-1 service providers, and OSPs.<sup>14</sup> Thus, the Commission has a solid basis for adopting its proposal. As APCO explained, empowering 9-1-1 authorities to designate the appropriate points for 9-1-1 traffic delivery and making service providers responsible for the costs of delivery will resolve disputes and give 9-1-1 authorities the flexibility they need to pursue innovative, efficient approaches to NG9-1-1.<sup>15</sup>

Some parties express concerns with the potential cost for transmitting 9-1-1 traffic to the point(s) designated by the 9-1-1 authority and seek to impose limits on 9-1-1 authorities' ability to designate the point(s) that meet their needs. These parties' concerns may prove unwarranted. Much of the concern relates to the prospect that an OSP could be required to deliver 9-1-1 traffic

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<sup>13</sup> Comments of NENA: The 9-1-1 Association, PS Docket No. 21-479, at 4 ("NENA Comments") (noting that configurations for local systems, vendor feature support, and/or local policies may continue to cause interoperability issues between systems). Additionally, APCO disagrees with suggestions that industry testing programs have been successful at ensuring interoperability or that any existing program will be effective at doing so without an underlying regulatory or legislative requirement to follow. *See* Comments of Brian Rosen, PS Docket No. 21-479, at 4 ("Vendor testing at NENA ICE events and bilateral testing between vendors are proving interoperability today.") Descriptions of closed-door lab testing cannot refute the real-world experiences for 9-1-1 directors who are fighting against the status quo of interoperability barriers in public safety communications.

<sup>14</sup> *See, e.g.*, Comments of Motorola Solutions Connectivity, Inc., PS Docket No. 21-479, at 5; NENA Comments at 2; Comments of the Nebraska Public Service Commission, PS Docket No. 21-479, at 2; Comments of AT&T Services, Inc., PS Docket No. 21-479, at 2-3.

<sup>15</sup> APCO comments at 6.

to a point outside of its service area. However, parties offer differing opinions on whether 9-1-1 traffic must be delivered over traditional dedicated lines or instead could leverage alternative solutions.<sup>16</sup> These alternative approaches for delivering 9-1-1 traffic have significant implications for costs, reliability, and security.

Unless reply comments bring clarity to these issues, the Commission should invite additional input to create a more detailed record on the disagreement between service providers over how 9-1-1 traffic must be delivered to the point(s) designated by a 9-1-1 authority in an NG9-1-1 environment. This will be helpful for resolving disagreement in this proceeding and for providing the 9-1-1 community with a better understanding of the tradeoffs for various options for implementing NG9-1-1.

Some commenters suggest, contrary to the Commission's proposal that OSPs be responsible for delivering 9-1-1 traffic in an IP-based format, that 9-1-1 authorities or ESInet providers should be responsible for converting TDM traffic with a legacy network gateway. APCO is wary of this approach. ESInets do not provide uniform capabilities. Yet even if ESInets uniformly included legacy network gateways, shifting responsibility onto ESInet providers effectively shifts the costs onto the 9-1-1 authorities that are contracting for ESInet services. In addition to shifting costs, adopting rules that rely on 9-1-1 authorities to purchase or subscribe to ESInets that provide this functionality could entrench suboptimal arrangements for ECCs and 9-1-1 authorities, which would limit opportunities for innovation. APCO is willing to consider an approach to NG9-1-1 that achieves greater efficiency so long as the end result is not shifting

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<sup>16</sup> See, e.g., Intrado Comments at 6 (noting an option for connectivity over the Internet via a Virtual Private Network); see also *id.* at 9 (arguing that "State boundaries and service areas should not matter with IP interconnection to ESInets from a technical perspective."). But see, e.g., Home Comments at 11 ("While a cloud-to-cloud public Internet connection would be a simple, fast, efficient way to move traffic from RLEC's end-users to an Aggregator ESInet point of interconnection, this type of connection is clearly not secure or reliable enough to depend on for potential life-threatening emergency service requests.").

costs and responsibilities from OSPs or 9-1-1 service providers to ECCs or 9-1-1 authorities. If the Commission deviates from its proposal to require OSPs to deliver 9-1-1 traffic in an IP-based format, even from non-IP networks, it should identify a mechanism that avoids shifting costs onto 9-1-1 authorities, such as permitting 9-1-1 service providers operating a legacy network gateway to charge OSPs reasonable rates for converting the traffic to IP.

Respectfully submitted,  
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