To: Marlene H. Dortch
Secretary
Federal Communications Commission
45 L Street, NE
Washington, DC 20554

Date: January 6, 2025

Re: PS Docket No.15-80
PS Docket No. 13-75
ET Docket No. 04-35

Introduction

The Association of Public-Safety Communications Officials International, Inc. (APCO)[1], the National Association of State 911 Administrators (NASNA)[2], and NENA: The 9-1-1 Association (NENA)[3] jointly submit this *ex parte* filing to address necessary improvements to the Commission's current rules regarding 9-1-1 outage notifications. Outages impacting 9-1-1 services are growing in frequency and severity. For 9-1-1 professionals working to save lives, timely and actionable outage notifications are critical to their missions. Effective situational awareness enables emergency communications centers (ECCs)[4] to assess the impact of outages affecting 9-1-1 and implement mitigation strategies.

---

[1] 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.

[2] The National Association of State 911 Administrators (NASNA) is comprised of members representing the states and U.S. territories on public policy issues impacting the successful implementation of 911 systems. While each state is unique in its 911 implementation based on its own needs and demographics, members face common issues and challenges. NASNA serves as a centralized information sharing and support network for state 911 program administrators. The 911 leadership represented by the NASNA's membership assists industry associations, public policymakers, the private sector, and emergency communications professionals at all levels in address complex issues surrounding emergency communications.

[3] The National Emergency Number Association (NENA) improves 9-1-1 through research, standards development, training, education, outreach, and advocacy. Our vision is a public made safer and more secure through universally available state-of-the-art 9-1-1 systems and better-trained 9-1-1 professionals.

[4] The term "emergency communications center" (ECC) is more descriptive of and in use by many 9-1-1 centers. It has also been defined by a broad consensus of public safety associations and the industry to better reflect the operations of modern 9-1-1 centers including in a future Next Generation 9-1-1 environment. *See proposed* Spectrum Auction Reauthorization Act of 2023, H.R. 3565, 118th Cong. Section 159(d)(7) (2023). As defined, it encompasses the more limited term "public safety answering point." However, several state statutes and the

Together, our associations propose a path forward to improve notifications of outages that affect the public's ability to access 9-1-1, including ALI/ANI functionalities. Here, we outline key issues with the current outage notification rules, encourage the Public Safety and Homeland Security Bureau (Bureau) to pursue the research mandated by the Commission, and propose a solution to ensure that ECCs receive timely and actionable outage information. Our organizations also believe our proposal will facilitate a systematic and efficient method by which contact data is effectively stored and maintained.

The Current Outage Notification Requirements Do Not Meet the Needs of ECCs

When a network outage occurs that impacts the public's ability to reach 9-1-1, ECCs can take steps to mitigate the impact of the outage on the communities they serve if they have timely and actionable information about the outage. Unfortunately, the Commission's current outage reporting rules combined with the practices of the service providers often result in ECCs not being notified of outages or receiving notifications that are either irrelevant to the ECCs' jurisdiction, provide limited information, are not updated in a timely manner, or are formatted in a way that it is difficult and time-consuming for the ECCs to parse through during an outage situation.

ECCs should be notified of outages and disruptions that could impact communications with ECCs, even if the outage does not meet the high thresholds that trigger a notification requirement in the existing rules. The current approach of basing thresholds on the potential user minutes impacted does not align with public safety considerations. For example, the anticipated time to restore service, the nature of the impact, and the number of people and size of the area affected may be important considerations for an ECC when determining how to mitigate the impacts of an outage, and thus whether they would need to be notified of the outage.

When ECCs receive outage notifications, they need information in a manner that can be easily and quickly reviewed to provide them with information they can act upon. That information necessitates a prompt understanding of the scope, impact, and expected duration of the outage. Furthermore, typical outage notifications are currently presented to ECCs in a dense, text-only format. In addition to useful text information, a real-time web-based visual representation of the outage, including impacted areas and ongoing data from the service providers, would greatly assist the ECCs' situational awareness and ability to respond to the outage. There are similar data-driven models for other vital service outages.

Finally, when ECCs self-discover a potential outage, they need to be able to quickly contact their service providers to inform them of the outage and find out more information. ECCs need a single two-way database to quickly identify their service providers' contact information during an emergency. We believe creating a centralized two-way database would also be a more

Commission's rules continue to use the term "public safety answering point" (PSAP). For ease of reference in this filing, the use of the term ECC includes the term "PSAP."

cost-effective way for communications providers to meet their obligations for maintaining ECC contact information under the rules.[5]

The Bureau Should Complete its Research on Outage Reporting

In 2022, the Commission directed the Bureau to gather information on the number of 9-1-1 outages that go unreported under the existing outage notification thresholds and to investigate the feasibility of including graphical information in outage notifications.[6] Our associations would welcome completion of the Bureau's work. This information would help identify the full scope of outages impacting 9-1-1 calls, many of which are unreported under the current thresholds, and thereby inform the best approach to meeting the needs of ECCs. We believe that realistic minimum threshold parameters are consistent and will work well with the outage database with dashboard (outage dashboard) concept proposed below. Additionally, the Bureau's research regarding the feasibility of including graphical information in outage notifications could better inform the Commission about what rule changes would be necessary to facilitate our proposed outage dashboard.

A Secure, Two-Way Outage Dashboard Would Ensure ECCs Receive Timely and Actionable Outage Information

APCO, NASNA, and NENA have collaborated to present a solution to address the current gaps in the Commission's outage reporting rules and ensure that ECCs receive timely and actionable outage information. Collectively, we suggest the Commission require the service providers to implement, host, maintain, and operate a secure two-way outage dashboard with a comprehensive at-a-glance dashboard to provide real-time, actionable information about outages impacting 9-1-1. This system would also be able to initiate the outage notifications to ECCs and could be directly accessed by ECCs.

Under this approach, the service providers would be responsible for providing real-time outage information to the outage dashboard. This information would be accessible to ECCs, and to authorized state and local 9-1-1 authorities in graphical format depicting the geographic area impacted by the outage. It would also provide other needed information such as nature/source of the outage, estimated time to repair, status of the outage, etc. Similar models already exist in the

[5] *See* Amendments to Part 4 of the Commission's Rules Concerning Disruptions to Communications, Improving 911 Reliability, New Part 4 of Commission's Rules Concerning Disruptions to Communications, PS Docket Nos. 15-80, 13-75, ET Docket No. 04-35, *Second Report and Order*, FCC 22-88, at paras. 8-9 (2024) ("Second Report and Order") (requiring that the service providers must use "special diligence" to maintain contact information for ECCs). *See also* Amendments to Part 4 of the Commission's Rules Concerning Disruptions to Communications, Improving 911 Reliability, New Part 4 of Commission's Rules Concerning Disruptions to Communications, PS Docket Nos. 15-80, 13-75, ET Docket No. 04-35, *Order on Reconsideration*, FCC 24-73, at para. 23 (2024) (confirming that the service providers could comply with the Commission's rule to use special diligence by creating a database).

[6] Second Report and Order at para. 23 n.86, para. 15 ("We direct the Public Safety and Homeland Security Bureau to gather for future consideration information on the volume of 911 outages that may go unreported under the Commission's existing outage notification thresholds and seek additional comment on possible alternative outage reporting thresholds"; "We direct the Public Safety and Homeland Security Bureau to gather for future consideration additional information on 911 special facilities' capabilities to use graphical outage information, the utility of that information for 911 outage remediation, and the formats in which the graphic information would be feasible for service providers to produce.").

utility industry to provide status maps that the public can access during power outages.[7] We think this type of situational awareness tool is common for service providers' internal purposes and the information could be provided automatically into the dashboard.

In addition, ECCs would be responsible for inputting their individual agency information and preferences for receiving notifications, including the threshold parameters to be met for them to be notified of an outage. The threshold parameters could include population impacted, geographic scope, and duration, among others. Using the data provided by the service providers and ECCs, the outage dashboard would automatically send notifications to ECCs in accordance with their threshold preferences and the method of notification. The information included in the notifications from the outage dashboard would align with the Commission's requirements for material information to be included in outage notifications.[8]

Both the service providers and the ECCs would provide, and routinely update, their communication preferences, including contact information and, for ECCs, whether they'd like to receive notifications via phone, email, or both.

To ensure the functionality of the outage dashboard meets public safety's needs, we recommend the Commission require the service providers to adhere to the following requirements:

- Each of the participating service providers, and any third-party vendors used to establish, host, or maintain the outage dashboard, must adhere to strict privacy and security requirements. These requirements could include requiring the creation of a privacy and security plan subject to public notice and comment, collaboration with privacy and security stakeholders with expertise in public safety communications, and requiring limitations on the use of the information contained in the database.[9]

- Service providers should remain liable for ensuring the reliability, availability, integrity, and security of the outage dashboard.

- The outage dashboard must be tested and proven to work in advance to ensure it meets the requirements of ECCs before relieving the service providers of their current obligations to directly notify ECCs of outages impacting 9-1-1.[10]

- The outage dashboard must be directly accessible 24/7/365 to ECCs and state and local 9-1-1 authorities at no cost.

---

[7] By way of example, FirstEnergy in Pennsylvania: https://outages-pa.firstenergycorp.com/ and Consumer's Energy in Michigan: https://www.consumersenergy.com/outagemap.

[8] 47 CFR § 4.9.

[9] *See, e.g.*, Wireless E911 Location Accuracy Requirements, PS Docket No. 07-114, *Fourth Report and Order*, FCC 15-9, para. 59 (2015). In particular the [database] participants committed to (1) "engage with various industry experts on privacy and security to ensure that best practices are followed in the development and operation of the database"; and (2) "require the vendor(s) selected for the [database]administration to develop a Privacy and Security Plan in advance of going live and transmit it to the FCC."

[10] 47 CFR § 4.3 et seq.

- The outage dashboard must include the ability for ECCs to input their preferred threshold parameters. Should an ECC decline to participate in the outage dashboard or fail to provide threshold preferences, the service providers should be required to provide direct notifications to the ECC in accordance with the minimum thresholds required in the Commission's rules.[11]

- The outage dashboard must include a secure repository for contact information that both the ECCs and the service providers can update and include the ability for ECCs to identify their preferred methods of communication.

- While the outage dashboard would enable ECCs to identify their preferred threshold for receiving outage notifications, the Commission's rules should still include a minimum reporting threshold to serve as the floor for when service providers must provide notifications. This threshold should be informed by the Bureau's pending research on the existing outage notification thresholds.

- Once the outage dashboard is established and tested in advance, there should be a grace period during which the service providers remain required to directly notify ECCs of outages that may be impacting them, while simultaneously providing information in real-time to the outage dashboard. This would ensure that there are no unforeseen gaps in ECCs remaining notified of 9-1-1 outages.

A Secure, Two-Way Outage Dashboard Could Solve the Challenges ECCs are Facing Under the Current Outage Notification Requirements

A secure, two-way outage dashboard would enable ECCs and other authorized state and local 9-1-1 authorities to monitor the progress of the outage in real-time, visualize the impact, and better adjust their operations to mitigate the impacts. This approach would ensure that ECCs receive timely, actionable outage information in a manner that aligns with their needs.

The capability for an ECC to customize the threshold parameters for when they receive an outage notification would ensure that ECCs are notified of all outages they wish to be notified of. The outage dashboard would only notify ECCs of outages impacting the geographic areas the ECC specifies, thus eliminating the current and growing problem of ECCs receiving overly broad notifications of outages impacting jurisdictions that are irrelevant to their operations.

The outage dashboard would also alleviate the burden of combing through dense, text-only notifications by providing a visual representation of the outage. Once an ECC receives an alert, they can immediately access the database to gain a clear understanding of the scope and impact of the outage and better tailor their response. Further, if an ECC discovers a potential outage but has not yet been notified, its staff can access the database to confirm the outage rather than needing to contact the service providers directly, thus saving time and allowing the ECC to focus on mitigating the impact of the outage.

[11] Any ECCs that choose not to participate in the outage dashboard will be assumed to maintain their current relationships with the service providers including regularly responding to requests for updated contact information.

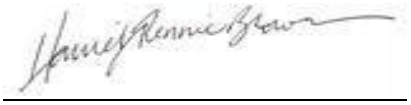
The two-way contact information repository included in the database would enable service providers to quickly contact impacted ECCs as necessary. Establishing a single centralized outage dashboard would likely reduce costs for service providers that presently maintain separate, static contact lists and spare ECCs the burden of responding to contact information requests from various service providers multiple times a year. Furthermore, participation in the outage dashboard could help the service providers meet the special diligence requirements for maintaining ECC contact information under the rules.[12]

Respectfully submitted,

APCO International

Mel Maier
CEO and Executive Director
APCO International
1426 Prince St.
Alexandria, VA 22314

NASNA



Harriet Rennie-Brown
Executive Director, NASNA
1105 Hill St.
Traverse City, MI 49684

NENA: The 9-1-1 Association

Brian F. Fontes
CEO
National Emergency Number Association
2700 Diagonal Road, Suite 500
Alexandria VA, 22314

[12] *See supra* note 5.