

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

In the Matter of)	
)	
Amendments to Part 4 of the Commission's Rules Concerning Disruptions to Communications)	PS Docket No. 15-80
)	
New Part 4 of the Commission's Rules Concerning Disruptions to Communications)	ET Docket No. 04-35
)	
The Proposed Extension of Part 4 of the Commission's Rules Regarding Outage Reporting to Interconnected Voice Over Internet Protocol Service Providers and Broadband Internet Service Providers)	PS Docket No. 11-82
)	

REPLY COMMENTS OF APCO

The Association of Public-Safety Communications Officials-International, Inc. (APCO) hereby submits the following comments in response to the Commission's Further Notice of Proposed Rulemaking in the above-captioned proceeding.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 26,000 members, primarily consisting of state and local government employees who manage and operate public safety communications systems – including Public Safety Answering Points (PSAPs), dispatch

¹ *Amendments to Part 4 of the Commission's Rules Concerning Disruptions to Communications; New Part 4 of the Commission's Rules Concerning Disruptions to Communications; The Proposed Extension of Part 4 of the Commission's Rules Regarding Outage Reporting to Interconnected Voice Over Internet Protocol Service Providers and Broadband Internet Service Providers, Report and Order, Further Notice of Proposed Rulemaking, and Order on Reconsideration, FCC 16-63 (2016) (Further Notice), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0526/FCC-16-63A1.pdf.*

centers, emergency operations centers, radio networks, and information technology – for law enforcement, fire, emergency medical, and other public safety agencies.

APCO agrees that the evolving communications landscape, and particularly the advent of advanced, next generation technologies into public safety communications networks, may warrant adjustments to the Commission’s outage reporting rules. In this respect, we appreciate the Commission’s adoption of a new reporting requirement for outages that significantly degrade communications to PSAPs. While the threshold adopted – at least 80 percent of a 911 service provider’s trunks serving a PSAP – is less than APCO’s original request (50 percent), this new requirement should benefit PSAPs with improved situational awareness of 911 network health.² A 911 service provider must still report “if not all 911 traffic can be re-routed, or if the re-routed traffic cannot be delivered without stripping it of number or location information.”³ This is workable provided that “rerouting” means via backup methods to the same affected PSAP, and not by sending the calls to a secondary (failover) PSAP. Rerouting to a secondary PSAP has the same effect as creating a total outage for the affected PSAP, and does not get the calls to the right jurisdiction.⁴

Need for Updated Broadband Network Disruption and Outage Reporting

APCO agrees that “as NG911 functionality becomes centralized within broadband networks, network vulnerabilities specific to emergency services will emerge, and the Commission should be well-informed of such vulnerabilities.”⁵ Broadband Internet Access

² Section 4.9 requires notifications to PSAP officials of outages affecting 911 special facilities.

³ Further Notice at para. 51.

⁴ NASNA commented that “PSAPs should be notified in the event of a loss of any trunks, even if reporting to the Commission is not required.” Comments of NASNA at 2. We agree in principle, because any loss of trunks can mean an increased likelihood of service failure. We also agree with NASNA that other transport media, specifically broadband media, will be used in an NG911 environment. *See id.*

⁵ Further Notice at para. 104.

Service (BIAS) increasingly plays a role in the access side of 911 service, and as the Commission notes, may serve other 911-related roles, particularly for IP-based components of emerging Next Generation 911 networks.⁶ Further, BIAS supports an increasing number of services that support public safety, such as social media and mobile apps, particularly those employed by public safety agencies. Accordingly, APCO believes that an appropriate outage reporting mechanism should be developed for BIAS in connection with supporting 911 service, akin to other access technologies.

Dedicated services, which, as the Commission notes, may support PSAP or ESINet access to and communications between regional and national 911 databases in an NG911 environment,⁷ may need to be monitored for resiliency. At this stage, however, as APCO commented in a related proceeding on 911 governance, accountability, and reliability, it may be more effective to limit the application of any new outage reporting requirements upon “covered 911 service providers” who would be responsible for the acts of their agents and subcontractors.⁸

Call Failures in the Radio and Local Access Networks

APCO agrees with the Commission’s concern about the impact of congestion in wireless radio access networks (RAN) on the reliability of 911 service. We thus support the proposal in the Further Notice to require reporting of systemic wireless call failures that result from overloading in the RAN.⁹ This information would be very helpful to PSAPs for their situational awareness. Further, reporting should not be limited to congestion but also to any other RAN issues that impact the ability of the network to transmit 911 calls. For example, LTE introduces

⁶ *Id.* at para. 111.

⁷ *Id.* at para. 195.

⁸ See Comments of APCO, PS Docket No. 14-193, PS Docket No. 13-75, at p. 4 (filed Mar. 23, 2015). NASNA similarly noted parallels to covered 911 service providers, and we agree with NASNA that there should be an exception for government-provided ESInets. NASNA Comments at 3-4.

⁹ Further Notice at para. 173.

a more complex environment with priority services and quality of service gradations. PSAPs need to be informed immediately if the general public cannot reliably place a call to 911.¹⁰

Geography-based Wireless Outage Reporting

As APCO commented earlier in this proceeding, APCO supports a separate and additional wireless outage reporting requirement based on the geographical scope of an outage, irrespective of the number of users potentially affected. Specifically, APCO called for a reporting requirement for any outage covering 1/3 of a county or PSAP service area, regardless of the number of users potentially affected.¹¹ The Further Notice proposal is more limited: “we propose to require a wireless provider serving a rural area to file outage reports whenever one-third or more of its macro cell sites serving that area are disabled such that communications services cannot be handled through those sites, or are substantially impaired due to the outage(s) or other disruptions affecting those sites.”¹²

APCO would prefer that the Commission modify this proposal such that it applies everywhere, and not just in rural areas, however “rural” is defined. However, APCO is willing to see how the dual reporting proposed in the Further Notice plays out, i.e. the 900,000 user-minute threshold plus the rural coverage threshold, across all areas including urban, suburban, and rural. The bottom line is that PSAPs must be timely and sufficiently informed about originating service outages or impairments in order to take any steps they can to best protect the safety of the public.

¹⁰ In a separate but related proceeding regarding wireless network resiliency, APCO commented that PSAPs need to be made aware of wireless site and system outages as soon as they occur, ideally through uniform reporting mechanisms, including where and when a site is not operational, the nature of the outage (physical tower down, power out, antenna out of service, etc.), and expected repair time, and to have this information in a format that can be used to easily assess the outage area on the PSAP’s map system. Comments of APCO, PS Docket No. 13-239, PS Docket No. 11-60, at p.2 (filed May 31, 2016).

¹¹ Comments of APCO at 4 (filed Mar. 23, 2015).

¹² Further Notice at para. 186.

CONCLUSION

APCO encourages the Commission to adopt changes to its outage reporting requirements consistent with the comments herein.

Respectfully submitted,

APCO INTERNATIONAL

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September 12, 2016