
As indicated in its initial comments, APCO supports the need for better means and strategies to prevent future network outages that impact the public’s ability to seek emergency assistance by calling 9-1-1. The Commission and other parties have identified a range of potential improvements in that regard. Indeed, there appears to be little dispute that all parties need to do more to limit network outages and the impact on 9-1-1 service. Where there is disagreement, and legitimate concerns, is whether this is an area requiring new FCC regulations, industry standards, best practices, State and local regulation, or merely better service contracts.

To some extent, the answer is “all of the above.” Some issues do require FCC regulation at this point, provided that the FCC has adequate jurisdiction. However, many of the problems identified in the NPRM and by other parties may be best addressed, at least initially, through standards adopted by ANSI-certified Standards Development Organizations or State and local regulations. Best practices adopted by CSRIC or other appropriate entities (such as the recently
Task Force on Optimal Public Safety Architecture) may also be appropriate, though in many cases consensus based, and potentially enforceable, ANSI standards are preferable and more quickly achieved. Improved contracts for PSAP-related services may be a by-product of new standards and best practices, but that, by itself, is not an adequate or timely solution. Finally, State and local regulations are also appropriate in many cases, especially as to matters that are traditionally within State or local jurisdiction. PSAPs are inherently local entities, and the complex relationships between carriers, other 9-1-1 service providers, and PSAPs vary substantially from PSAP to PSAP, provider to provider, and State to State. Overly-specific federal regulations in those instances could create more harm than benefit.

APCO reiterates its view, also expressed by many other comments (e.g., NASNA), that Covered 9-1-1 Service Providers must be responsible for the actions of their agents and subcontractors. Thus, the Commission’s rules should be clear that it falls on the shoulders of Covered 9-1-1 Service Providers to ensure that agents and subcontractors are capable of fulfilling their responsibilities. That is likely to be a better, and less contentious, approach than the Commission attempting to expand the definition of Covered Service 9-1-1 Provider to include such agents and subcontractors.

APCO agrees with the recommendation of ATIS that the Commission expand Section 12(c)(3) certifications to include network monitoring, subject to a reasonable implementation timeframe. We also share ATIS’ view that other modifications to the certification requirements may be appropriate, such as certifications regarding load-balancing and geographic distribution with respect to IP-based 9-1-1 architecture, and certifications regarding continuity of service during planned maintenance and/or software and database updates.

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1 A standards-based approach that combines both NENA i3 and IMS-based ESINets will best facilitate a full deployment of NG9-1-1.
On the issue of reporting “major changes,” APCO generally agrees with the comments submitted by NASNA. In particular, major change notifications should be from the Covered 9-1-1 Service Provider directly to relevant PSAPs or 9-1-1 authorities. Notifications should not be routed through third parties that have no legal relationship with the PSAP or 9-1-1 authority. Notifications from Covered 9-1-1 Service Providers must include major changes undertaken by their agents and subcontractors. APCO also agrees with the many comments that express concern that there needs to be a clearer definition of what constitutes a “major change.” A best practices development approach may be most useful to help better define a “major change.” In any event, major changes made at the request of a PSAP or 9-1-1 authority should be included, as such changes could impact other PSAPs in the relevant area.

APCO shares the concerns of the Commission and many commenters that there needs to be appropriate mechanisms, whether through Section 214 approvals or otherwise, to ensure that critical services provided to PSAPs and 9-1-1 authorities are not discontinued without adequate opportunities to prevent gaps in 9-1-1 functionality. At minimum, that should include discontinuance of legacy systems that impact 9-1-1, including selective routers, copper lines and routing or transport to PSAPs. Further refinement of the approval process for service discontinuance may require additional input from the Task Force on Optimal Public Safety Architecture or CSRIC.

The Commission asks whether it should require entities that propose to provide one or more of the capabilities of a Covered 9-1-1 Service Provider, but do not provide such capabilities prior to November 21, 2014, to certify they are capable of providing reliable 911 service (among other certifications if they also rely upon IP-based networks). APCO appreciates the need to ensure that new entrants are qualified. At the same time, certain states and PSAPs have
mechanisms in place to ensure their vendors will provide reliable and secure services, whether through existing laws or by contract. Thus, as an alternative to the Commission’s proposal, the matter of Covered 9-1-1 Service Provider qualifications could be the subject of best practices development, which could then be used as guidance for 9-1-1 authorities and PSAPs across the country.

Several parties, such as NASNA, share APCO’s concerns regarding the suggestion that the Commission require establishment of 9-1-1 Network Operation Center (NOC) providers. A better approach may be the NOCs already established by many Covered 9-1-1 Service Providers. There is certainly room for improvement in the number and operation of such NOCs, but APCO continues to question whether this is a subject appropriate for federal regulation.

Finally, the NPRM wisely seeks comment on matters of cybersecurity. Specifically, the Commission inquires whether certifications should be expanded to include factors such as cybersecurity and supply chain risk management, as well as the extent to which 9-1-1 NOC providers (in whatever manner this concept may get implemented) should be responsible for addressing cybersecurity risks and sharing information with other stakeholders in the event of a cyber attack.

Cybersecurity is an important factor in the design, deployment, and successful operation of any network. Given the critical nature of public safety networks and systems, cybersecurity should be given consideration in the 9-1-1 certification process. The extent to which cybersecurity should be incorporated into any certification process depends upon the nature of the network itself, as well as the types of interconnections to other agencies and entities. As a result, it may be difficult to implement cybersecurity certifications of individual entities or network elements.
There are a number of active initiatives aimed at developing appropriate means to secure public safety networks, including 9-1-1 systems, from cyber threats. The NENA Security for Next-Generation 9-1-1 Standard (NG-SEC), in conjunction with work done by NIST (both the Framework for Improving Critical Infrastructure Cybersecurity and the National Initiative for Cybersecurity Education (NICE) National Cybersecurity Workforce Framework), DHS and APCO - which collectively include recommendations for a comprehensive cyber strategy comprised of both network and human elements and encompassing multiple levels of protection from core services to applications - may provide some good guidelines for PSAPs and emergency communications networks in general.

Further, the Commission’s own actions include the Public Safety Bureau’s Public Notice (DA 15-354) seeking comment on the recommendations of CSRIC IV on cybersecurity risk management and assurance (with initial comments due May 29, 2015), with 9-1-1 networks among the critical services that were explored. In addition, Working Group 1 of the Task Force on Optimal PSAP Architecture has been asked to focus on optimal cybersecurity for PSAPs, including making recommendations for PSAP-specific cybersecurity practices based on the NIST Cybersecurity Framework and other foundational sources; identifying resources and tools for PSAPs to use when developing cybersecurity strategies; and making recommendations for PSAP cybersecurity workforce development and training. The first report of Working Group 1 is due to the Task Force in September 2015. Accordingly, the forthcoming outcomes of public comment on CSRIC IV and the Task Force may provide up-to-date guidance in this area and could be considered as another resource.

From the cybersecurity perspective, APCO recommends following these “big picture,” cooperative approaches, in order to permit and foster local participation and discretion based on
best practices and lessons learned from previous work and research. At the same time, the Commission can continue to help lead in this area by providing significant input and direction to the public safety communications sector, and monitoring progress.

Accordingly, APCO suggests that the above activities run their course prior to considering new certifications. If the Commission were to pursue a new certification to address cybersecurity, one approach might be to require the Covered 9-1-1 Service Provider to certify that it has developed a systems-level view of vulnerabilities and a plan for how those vulnerabilities are addressed both at the core network and between the core network and the customer elements. In this context reference to core networks may include, but is not limited to, any centralized or hosted services related to 9-1-1 call routing, delivery, or security services.
CONCLUSION

APCO urges the Commission to proceed with appropriate steps to promote more reliable 9-1-1 service, consistent with the comments set forth above and in APCO’s initial comments.

Respectfully submitted,

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April 21, 2015