

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

In the Matters of)	
)	
911 Governance and Accountability)	PS Docket No. 14-193
)	
Improving 911 Reliability)	PS Docket No. 13-75
)	

COMMENTS OF COMPETITIVE CARRIERS ASSOCIATION

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Competitive Carriers Association (“CCA”) submits these comments to the Federal Communications Commission (“FCC” or “Commission”) in response to the *Notice of Proposed Rulemaking* (“NPRM”)¹ in the above-captioned proceedings, which seeks comment on specific proposals intended to ensure that the Commission’s 911 rules keep pace with changing technology. In response, the following is respectfully shown:

I. INTRODUCTION AND SUMMARY

CCA is the principal association for competitive wireless providers across the United States, representing the interests of more than 100 carrier members—including rural, regional, and national wireless carriers. CCA’s members share in the Commission’s desire to ensure that new elements of 911 technology are reliable and that appropriate governance mechanisms are available to protect public safety facilities. CCA applauds the Commission for continuing to tackle the important issue of 911 reliability as part of its mandate to “promot[e] safety of life and

¹ *In the Matters of 911 Governance and Accountability; Improving 911 Reliability*, PS Docket Nos. 14-193, 13-75, Policy Statement and Notice of Proposed Rulemaking, 29 FCC Rcd 14208 (2014) (hereinafter the Policy Statement portion of the item will be referred to as “*Policy Statement*” and the Notice of Proposed Rulemaking portion of the item will be referred to as “*NPRM*”).

property through the use of wire and radio communications.”² It is necessary for the nation’s 911 infrastructure, and the Commission’s rules and regulations, to keep pace with changes in technology, particularly as the communications networks transition from TDM- to IP-based architectures. As CCA has cautioned repeatedly, however, the Commission should tread carefully when it comes to placing additional regulatory burdens on smaller carriers. To start, consolidation in the wireless industry is having a detrimental impact on competition, and imposing additional regulatory burdens will consume valuable resources of smaller carriers and stunt their growth. Accordingly, the Commission should not expand its definition of “covered 911 service providers” to include wireless carriers or specific components of their networks, as doing so will breed uncertainty for carriers who have constrained resources, while not mitigating the issues of concern expressed by the Commission in the *NPRM*. If the Commission, nevertheless, expands its definition of “covered 911 service providers” as proposed, “best practices” applied to wireless carriers should be just that—as opposed to affirmative obligations that carry with them penalties for noncompliance.

CCA also has serious concerns with the proposals in the *NPRM* to require entities to share competitively-sensitive information with supposed “911 Network Operations Centers.” The definition of a “major change” to network architecture or 911 services suggested in the *NPRM* likewise poses potential problems. As currently constructed, the definition will stymie routine network maintenance that has little chance of impacting 911 service. Finally, CCA urges the Commission to take this opportunity to consider how reductions in the number of public safety answering points (“PSAPs”) could improve 911 reliability and performance.

² 47 U.S.C. § 151.

II. THE COMMISSION SHOULD MOVE CAUTIOUSLY IN DEFINING “COVERED 911 SERVICE PROVIDERS,” AND LIMIT ITSELF TO ADOPTING NON-PENALIZING BEST PRACTICES

While CCA agrees with the FCC that modernizing its rules and working to limit 911 service outages are important goals, the Commission must be mindful of the consequences of expanding the scope of “covered 911 service providers” so broadly as to cover wireless carriers or specific components of their networks. The Commission already has in place a series of rules that properly govern true 911 service providers—*i.e.*, those entities who provide 911 services (or their functional equivalent) *directly* to PSAPs, typically pursuant to a contractual arrangement with that PSAP.³ As a result, the Commission already properly regulates the most critical part of the 911 ecosystem, and should not overly extend these regulations at this time.

A. Expanding the Scope of “Covered 911 Service Providers” Will Create Substantial Regulatory Burdens Without a Corresponding Benefit to the Public

Expanding the scope of “covered 911 service providers” will result in substantial regulatory burdens being placed on entities that do not have a primary role in transporting communications to 911, and for whom rules are already in place to govern their limited role in this important responsibility.

There are a variety of components involved in 911 call delivery beyond the cell tower. In most instances, wireless providers deliver a 911 call from the user to the cell tower, at which point it is delivered directly to the wired network and routed (via another provider) to a 911 call center. When the Commission looks at the evidence available to date, wireless providers and their networks usually have not been the driver behind 911 call failures or 911 system outages.

³ See *Reliability and Continuity of Communications Networks, Including Broadband Technologies*, Report and Order, 28 FCC Rcd 17476, ¶ 39 (2013) (“911 Reliability Order”).

Importantly, there are rules already in place requiring wireless providers to file reports regarding outages⁴ and governing their responsibility to provide for reliable 911 call delivery to PSAPs.⁵ With these rules, it is unnecessary to expand the scope of their obligations further. In this instance, the Commission would simply be increasing regulatory burdens without a corresponding increase in public benefit.

In addition, beyond the obligations imposed by the Commission, wireless providers have a strong commercial incentive to provide accurate and reliable 911 service to customers. As CCA and NTCA previously noted in a parallel proceeding, it has been reported that CCA member C Spire did not experience significant service outages during Hurricane Isaac due to its preemptive efforts to secure its network before that storm, and therefore “small carriers directly benefit from maintaining reliable and resilient networks.”⁶ Consumers expect that their wireless carrier will properly deliver their critical 911 calls to the appropriate PSAP, which provides an appropriate market incentive for carriers to harden their networks and provide this critical service.

B. The Proposals in the *NPRM* Directly Conflict With Commission Determinations From One Year Ago

In December 2013 – just over one year ago – the Commission determined what the proper scope of covered 911 service providers should be.⁷ While the pace of technological change is rapid, the Commission should not breed uncertainty by changing the regulatory landscape so quickly. Indeed, in the *911 Reliability Order*, the Commission recommended that

⁴ See 47 C.F.R. § 4.9.

⁵ See 47 C.F.R. § 20.18(b).

⁶ See, e.g., Joint Comments of Competitive Carriers Association and NTCA—The Rural Broadband Association, PS Docket Nos. 13-239, 11-60 at 5-6 (filed Jan. 17, 2014).

⁷ See *911 Reliability Order* ¶ 36.

such a review of these proposed requirements not take place for *five years* after the adoption of the *Order*.⁸ The Commission provides no compelling rationale for such a stark deviation from the policy articulated a mere 15 months ago. And, while the Commission is, of course, free to change its mind, it must “articulate a reasoned basis for the change in policy.”⁹

The *NPRM* fails to provide a reasoned basis for its proposed expansion of these regulatory obligations onto wireless providers. Indeed, the *NPRM* specifically states that the 911 outages over which the FCC is concerned do not “reflect failures in disaster preparedness or in the local configuration of central offices and selective routers.”¹⁰ Rather, those outages “occurred under routine-use conditions, and resulted from the failure of software and databases consolidated in a handful of locations but used to process 911 calls for jurisdictions across the country.”¹¹ While the *NPRM* may potentially provide a reasoned basis for improving the reliability of these software and databases, the proposed expansion of the rules onto wireless providers are not rationally based on, or a logical outgrowth of, the concerns cited by the Commission in the *NPRM*. Of the “recent outage trends” cited by the Commission, at most only one of them points directly to a wireless network failure.¹² Rather than imposing new obligations and reporting requirements associated with every single link in the 911 chain, the Commission should instead focus its attention on resolving the problems at these locations, and ensuring that the entities operating these regional 911 processing facilities are able to properly handle the traffic that they are intended to deliver to PSAPs nationwide.

⁸ *See id.* ¶ 159.

⁹ *See, e.g., FCC v. Fox Television Stations, Inc.*, 129 S. Ct. 1800 (2009).

¹⁰ *NPRM* ¶ 41.

¹¹ *Id.*

¹² *Id.* ¶¶ 19-27.

Finally, it is particularly troubling that the Commission proposes to include those providing text-to-911 service in its definition of covered 911 service providers.¹³ The text-to-911 regulations have only recently gone into effect, and there is still work to be completed (*e.g.*, roaming standards) before text-to-911 is a fully functioning piece of the 911 ecosystem.¹⁴ Additionally, a negligible number of PSAPs have adopted this capability to date.¹⁵ To impose strict new reporting and liability requirements on this interim technology is unwarranted and wasteful of the scarce resources of smaller wireless providers.

C. Any Best Practice Obligations, if Adopted, Should Provide Guidance and Not Impose Penalties

The *NPRM* asks whether the Commission should “establish standards, best practices, or other mechanisms to promote the reliability of IP-based 911 network elements and processes not currently covered” by its rule.¹⁶ While CCA appreciates the Commission’s helpful and practical guidance, proposed efforts in this proceeding will do more harm than good. Creating and codifying hard-and-fast best practices is not only impractical in this instance, but also runs directly counter to the Commission’s own words in the *NPRM* that it does “not intend to impose ‘one-size-fits-all’ mandates on the nation’s 911 infrastructure when different states and communities need flexibility to respond to each situation in the way that best suits their

¹³ *NPRM* ¶ 42.

¹⁴ *In the Matter of Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications; Framework for Next Generation 911 Deployment*, PS Docket Nos. 11-153, 10-255, Second Report and Order and Third Further Notice of Proposed Rulemaking, 29 FCC Rcd 9846 (2014).

¹⁵ See Text-to-911 Master PSAP Registry, available at <http://www.fcc.gov/text-to-911> (last updated Mar. 2, 2015).

¹⁶ *NPRM* ¶ 47.

particular circumstances.”¹⁷ Contrary to the *NPRM*’s own admonition against this, creating an enforceable set of best practices for the provision of 911 services would create just the sort of unwieldy “one-size-fits-all” approach that the Commission appears keen to avoid. Instead of mandating a certain approach, any best practices adopted by the Commission or by industry groups, such as CSRIC, should be designed to provide helpful and flexible guidance to 911 service providers, rather than saddle them with potentially inapplicable or inappropriate regulatory obligations.

While CCA believes that such best practices or guidelines would be counterproductive in this instance, if the Commission does proceed, it should make certain that its *guidelines* are not *requirements*. Imposing penalties for static “best practices” is a sure way to limit innovation and discourage the advancement of wireless network technology. If wireless providers are bound by yesterday’s best practices, they will be unable to properly update their networks as they advance—or be incented to develop tomorrow’s best practices.

III. THERE ARE SERIOUS CONCERNS WITH THE COMMISSION’S SITUATIONAL AWARENESS AND REPORTING PROPOSAL

Although CCA supports the concept of increased coordination among stakeholders during a 911 outage, with the goal of restoring service as promptly as possible, it has serious concerns about overbroad information sharing requirements in this regard. The Commission already obligates carriers to file reports during 911 outages which helps parties (as well as other vendors) work together to restore 911 service to consumers as promptly as possible.¹⁸ Requiring additional information to be shared poses competitive and security threats, and is unnecessary based on the lack of evidence in the record of directly related harms.

¹⁷ *Id.* ¶ 37.

¹⁸ *See* 47 C.F.R. § 4.9.

First, the information sharing proposals in the *NPRM* raise competitive concerns. Indeed, the Commission itself recognizes these concerns in the *NPRM*, asking which parties “should be given access to such data, and how can the Commission ensure that privacy and confidentiality are protected.”¹⁹ It is important to recognize that the restoration of service after network outages often requires an inquiry into the gritty technical details of a carrier’s network architecture. If this information is required to be shared with competitors or potential competitors, not only would they have access to the frequency and duration of a carrier’s outages (enabling them to use this information for competitive advantage, rather than for public benefit), but the competitor also would gain access to sensitive network architecture information. In many cases, the methods by which networks are tuned and operated are closely held business practices that carriers are not eager to share with their competitors.

Perhaps more importantly, providing open access to this sort of detailed network information also poses a serious network security concern. While carriers themselves are obviously incented to protect their own sensitive network information, competitors and potential competitors lack the same incentive to secure this type of information on behalf of other carriers. Further, the mere transmission of this information opens the door to unlawful intercept of network architecture details by parties who would do harm to the nation’s communications infrastructure. It would be the height of misfortune if, by attempting to better resolve 911 issues during an outage, carriers provided hackers with a roadmap to taking down their 911 systems on a longer-term basis.

¹⁹ *NPRM* ¶ 71. The *NPRM* also correctly posits that there may be “laws, regulations, or contractual provisions that would preclude such information-sharing,” due to the sensitive nature of the information being shared. *Id.* ¶ 75.

As currently constructed, the Commission’s outage reporting system provides a practical and workable solution that helps aid the prompt restoration of 911 services in nearly all circumstances. The *NPRM* suggests “a need for better coordination and information-sharing among communications providers themselves and any subcontractors or vendors that provide components of the nation’s 911 networks,” alleging that “restoration of 911 service is likely to be significantly delayed when it is unclear which part of the 911 system has failed and which provider is responsible for repairs.”²⁰ However, no actual examples are provided of instances in which such increased coordination was necessary or would have improved 911 service resolution or response time—or provided any benefits to public safety. In fact, the more likely outcome is that this additional regulation will burden smaller carriers and divert resources from improving service to customers. Smaller carriers have substantially limited resources, both in terms of available capital and personnel, and any further regulatory obligation necessarily siphons funds and manpower from improving network infrastructure, upgrading systems and maintaining the carrier’s current services.²¹

IV. THE COMMISSION SHOULD BETTER TAILOR ANY REQUIREMENTS APPLIED TO “MAJOR CHANGES” TO NETWORKS

As CCA has cautioned repeatedly, the Commission should tread carefully when it comes to placing additional regulatory burdens on smaller carriers. The wireless industry is consolidating rapidly, and smaller, rural and regional carriers find it increasingly difficult to

²⁰ *NPRM* ¶ 64.

²¹ The *NPRM* also contains a proposal that may further muddy the waters in times of crisis. The Commission’s information clearinghouse proposal would extend not only to outages as currently defined, but also to “significant degradation[s] in service,” an as-yet undefined term. *NPRM* ¶ 66, n.131. The Commission already has clear benchmarks as to what constitutes an outage for the purposes of its reporting rules, and broadening the scope further is likely to result in dedicating resources to regulatory calculations that should be devoted to restoring service.

compete against their larger, nationwide counterparts. In such an environment, the Commission should not make it more difficult for smaller carriers to compete by saddling them with additional regulatory burdens that they are far less equipped to bear than are their larger competitors. Competitive carriers stake their place in the wireless market by providing better, more innovative service than the largest carriers, particularly in rural areas where many of CCA’s members operate—and 911 service is no exception. To that end, the Commission should not proceed with requiring the reporting of instances of “major changes in any covered 911 service provider’s network architecture or scope of 911 services that are not otherwise covered by existing network change notification requirements.”²² Depending on the manner in which a “major change” is defined, this could result in a heavy burden on competitive carriers.

For instance, in the *NPRM*, the Commission proposes that “changes with impact [*sic*] on 911 service in more than a single state should be among the changes considered major.”²³ Unfortunately, this proposed definition has the potential to be both substantially over- and under-inclusive. By proposing this definition of “major change,” the Commission misguidedly focuses on the *scope* of the change, rather than the *impact* of the change. For example, given the interconnected nature of today’s networks, it is possible that the most inconsequential of changes could potentially implicate network points in more than one state, and thus be reportable, even though these changes have no significant impact on 911 functionality. At the other end of the spectrum, massive 911 network overhauls impacting only a single state could potentially be implemented without any reporting obligation, when such a change has a meaningful chance of impacting 911 service to customers. A definition that allows for this type of misplaced focus

²² *NPRM* ¶ 50.

²³ *Id.* ¶ 52.

misses the point of why a “major change”—that is, a change that could fundamentally impact the ability of consumers to complete 911 calls—would be worthwhile for the Commission to be informed of in the first instance.

On the other hand, additional reporting requirements may have the perverse impact of actually making the management of 911 networks more difficult for carriers. Rather than being able to engage in restoration and management of their networks, providers would be required to jump through a series of hoops before making even the most minor change to how 911 calls are handled. As Commissioner Pai argues in his dissent to the *NPRM*, “the proposed rules will hamstring 911 service providers and prevent them from quickly making necessary improvements.”²⁴ Commissioner Pai explains the fundamental nature of this problem, noting that:

[b]efore making any number of changes—including how they route 911 calls or assign responsibility for technical support—[covered 911 service providers] would need to file a public notice with the FCC, provide detailed information about the proposed change, and then wait at least 60 days before moving forward. Imposing mandatory, across-the-board waiting periods will not produce an agile, responsive 911 system.²⁵

This creates a serious problem for carriers that are looking to promptly implement important changes.

These requirements will not only have a damaging effect on the ability of carriers to manage their networks, but also on the incentive of carriers and other stakeholders to innovate in the 911 service space. If experimenting with new network structures or 911 services is subject to extended waiting periods and onerous reporting requirements, carriers and developers will be

²⁴ *In the Matters of 911 Governance and Accountability; Improving 911 Reliability*, PS Docket Nos. 14-193, 13-75, Policy Statement and Notice of Proposed Rulemaking, 29 FCC Rcd 14208, 1462 (2014) (Dissenting Statement of Commissioner Ajit Pai).

²⁵ *Id.* at 1-2.

less inclined to invest in or cultivate new technologies. In short, these rules will have a chilling effect on the development of advanced 911 systems. To guard against such an unintended impact, the Commission must ensure that “major changes” truly capture “major changes,” and not be construed so broadly as to cover minor network events that could prevent carriers from flexibly managing their networks.

V. RELIABILITY AND PERFORMANCE OF 911 SERVICE CAN BE IMPROVED BY REDUCING THE NUMBER OF PSAPS

The *NPRM* also seeks comment on other ways to improve the reliability and performance of the nation’s 911 network. One way this could be accomplished is by reducing the number of PSAPs that handle 911 calls.²⁶ By having PSAPs that cover larger geographic areas and populations, the number of sites with which carriers are required to interact is reduced, thereby instantly reducing the likelihood of compatibility issues. If coordination were required with a manageable number of PSAPs, as opposed to the nearly 6,000 PSAPs currently in service across the communications network,²⁷ carriers and public safety officials alike may be more easily able to test the transmission of 911 call information, and also could more easily resolve problems when they do arise. Indeed, at the inaugural meeting of the Commission’s Task Force on Optimal Public Safety Answering Point Architecture (“TFOPA”), a task force on which a CCA representative serves and is actively involved, Commissioner O’Reilly stated that “the current [911] structure would be able to operate at optimal efficiency with as few as three [PSAPs]

²⁶ See, e.g., Reply Comments of Competitive Carriers Association, PS Docket Nos. 11-153 and 10-255 at 7, n.28 (filed Feb. 8, 2013); Letter from Rebecca Murphy Thompson, General Counsel, CCA to Marlene H. Dortch, Secretary, FCC, PS Docket Nos. 11-153 and 10-255 at 1 (filed Nov. 5, 2012); Letter from Rebecca Murphy Thompson, General Counsel, CCA to Marlene H. Dortch, Secretary, FCC, PS Docket Nos. 11-153 and 10-255 at 1-2 (filed Mar. 12, 2013).

²⁷ See “9-1-1 Statistics,” National Emergency Number Association, *available at* <https://www.nena.org/?page=911Statistics> (noting that “[a]s of March 2015, the United States has 5,906 primary and secondary PSAPs” across 3,135 counties nationally).

nationwide.”²⁸ Taking the step of reducing the number of PSAPs with which carriers are required to coordinate would go a long way towards reducing the sort of complexity that the Commission appears to express concerns about in the *NPRM*.

Proof that the number of PSAPs should be reduced was recently on display outside of Atlanta, Georgia.²⁹ After an accident resulted in a woman’s car sinking into a pond, she called 911 to report the emergency. Unfortunately, although the 911 call went through, it was routed to a PSAP in Alpharetta, Georgia, with the result being that the Alpharetta-based 911 operator was unfamiliar with the location in neighboring Cherokee County, Georgia, that the woman was describing. Due to this confusion the response time to the scene was significantly delayed at a time when every minute was critical. If the PSAP had been designed to cover a larger geographic area, however, help may have been sent far sooner. The Commission should take into account these types of occurrences in the consideration of this item. As Chairman Wheeler recently stated, “[M]obile has changed the nature of 911,” and the focus can no longer simply be “about the signal coming from the caller” but should instead be “about what happens to make sure that signal is used.”³⁰

²⁸ Donny Jackson, “How many PSAPs do we need? O’Rielly’s challenge could portend a new era for 911 operations,” Urgent Communications (Feb. 3, 2015), *available at* <http://urgentcomm.com/blog/how-many-psaps-do-we-need-o-rielly-s-challenge-could-portend-new-era-911-operations>.

²⁹ See Michelle Babcock, “Woman dies after crashing into pond last month,” Cherokee Tribune (Jan. 9, 2015) *available at* http://www.cherokeetribune.com/view/full_story/26345287/article-Woman-dies-after-crashing-into-pond-last-month (last visited Mar. 19, 2015).

³⁰ *Oversight of the Federal Communications Commission: Hearing Before the Committee on Commerce, Science and Transportation, United States Senate, 114th Cong.* (2015) (statement of Chairman Tom Wheeler, Federal Communications Commission), *available at* http://www.commerce.senate.gov/public/index.cfm?p=Hearings&ContentRecord_id=cdebb3c8-ffa1-4a4c-89d6-79db0dcc7f91&ContentType_id=14f995b9-dfa5-407a-9d35-56cc7152a7ed&Group_id=b06c39af-e033-4cba-9221-de668ca1978a.

VI. CONCLUSION

While CCA fully supports the Commission's efforts to improve 911 service to wireless providers' customers, such efforts must be tempered with a recognition of current practical realities. In this instance, rather than impose additional unnecessary regulation, the Commission—and the public—would be better served by exercising restraint and focusing on known areas of the 911 ecosystem that can be improved. CCA respectfully urges the Commission to consider the recommendations set forth herein when adopting any rules in connection with the *NPRM*.

Respectfully submitted,

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