

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matters of))
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)) PS Docket No. 14-193)) PS Do
911 Governance and Accountability) PS Docket No. 14-193)
) PS Docket No. 13-75) PS Doc
Improving 911 Reliability) PS Docket No. 13-75)
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COMMENTS OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION

The Telecommunications Industry Association (“TIA”) hereby submits comments to the Federal Communications Commission (“Commission”) in the above-captioned proceeding.¹

I. INTRODUCTION AND SUMMARY

¹ 911 Governance and Accountability Policy Statement and NPRM, PS Docket Nos. PS Docket Nos. 14-193, PS Docket No. 13-75 (rel. Nov. 21, 2014) (“NPRM”).

TIA represents the global information and communications technology (“ICT”) industry through standards development, advocacy, tradeshow, business opportunities, market intelligence and world-wide environmental regulatory analysis. Its hundreds of member companies manufacture or supply the products and services used in the provision of broadband and broadband-enabled applications, including those which facilitate NG911 systems. Since 1924, TIA has enhanced the business environment for broadband, mobile wireless, information technology, networks, cable, satellite and unified communications. TIA’s standards committees create consensus-based voluntary standards for numerous facets of the ICT industry, for use by both private sector interests and government. TIA is accredited by the American National Standards Institute (“ANSI”).

A transition to a robust NG9-1-1 deployment will have numerous benefits to the public, including enhanced access to 9-1-1 services, improved information sharing with public safety answering points (“PSAPs”) at a quicker rate, and a more diverse, reliable, and resilient communications medium for reaching emergency services. In the NPRM, the Commission seeks comment on a number of issues centering on the coordination amongst, and role of, state, county, and local jurisdictions in advancing the 9-1-1 system.² On behalf of our hundreds of manufacturer, vendor, and supplier members who are heavily invested in the development and deployment of a NG9-1-1 system, TIA continues to strongly encourage the adoption of these advanced services.

² See, NPRM at 64-75.

II. KEY CONCEPTS PROMOTING A RELIABLE AND ENHANCED 9-1-1 SERVICE

1. The Federal Role in Coordinating a Next Generation 9-1-1 System

The NPRM raises a number of issues regarding the Federal government and the FCC's oversight roles for 9-1-1.³ As the Notice notes, the Federal government shares with state and local jurisdictions responsibility for the nation's 9-1-1 network. TIA concurs that an opportunity exists for the Federal government to serve a facilitating function amongst carriers, manufacturers, public safety agencies, and state and local entities, along with industry and civil society stakeholders. The Commission can help facilitate a migration plan to promote as smooth a transition as possible to a robust multimedia emergency services system.⁴ Within the Commission, several advisory committees already examine aspects of realizing the NG9-1-1 system, putting it in an advantageous position to lead.⁵

That said, Federal efforts should not exceed its current role in the development of new technologies and deployments. We urge the Commission to refrain from attempting to dictate any technology or standard as the only path to compliance. Actions such as these negatively affect the ability of state and local jurisdictions to comply with requirements and make targeted, hyperlocal decisions, which is also a crucial element of success to the NG9-1-1 system.⁶ As TIA has noted for the Commission previously, these operators and their vendors are the only parties

³ See, NPRM at 58-62

⁴ TIA NG911 Comments at; APCO NG911 Comments at 3-4.

⁵ These include the Commission's Emergency Access Advisory Committee ("EAAC"); Communications, Security, Reliability, and Interoperability Council ("CSRIC"); and Technical Advisory Council ("TAC").

⁶ APCO NG911 Comments at ; Motorola Solutions NG911 Comments at 7

in a position to make the most appropriate on-the-ground priority determinations for operators' facilities as they improve their networks site-by-site.⁷

It is also crucial going forward that the 9-1-1 system be integrated into and compliment as much as possible the National Public Safety Broadband Network currently being planned by the First Responders Board.⁸ Neither network should be planned and implemented independently of the other. In both networks, states and/or regions certainly have a role in the successful deployment of advanced infrastructure and the facilitation of interoperability.

Speaking for the manufacturers, vendors, and suppliers of the equipment required to realize an enhanced and reliable 9-1-1 system, we note for the Commission that TIA member companies constantly work with PSAPs and operator providers as they invest in improvements in their networks and systems based on hyperlocal requirements and needs.

2. Encouragement of the Development of Voluntary, Consensus-Based Standards and Best Practices

Allowing for the development of voluntary, consensus-based standards – which will naturally include detailed study to ensure that interoperability, portability, and security (among other) concerns are fully addressed – will most efficiently ensure that the Commission reaches its goals for a reliable and enhanced 9-1-1 system.⁹ Standards for NG9-1-1 networks are already

⁷ See, e.g., Comments of TIA, PS Docket Nos. 11-60, 10-92, EB Docket No. 06-119 (filed Jul. 7, 2011) at 5-6.

⁸ See Middle Class Tax Relief and Job Creation Act of 2012 §§ 6201(a), 6206(b) (1), Pub. L. No. 112-96, 126 Stat. 156 (2012).

⁹ See, e.g., TIA NOI Comments at 4 (noting that emergency services networks must be coordinated on a nationwide basis in order to appropriately support the implementation of cyber security protections that will be necessary to prevent attacks that could cripple NG9-1-1 systems).

underway, and the Commission would be remiss not to embrace these efforts into its approach as it determines long-term solutions for the NG9-1-1 system. TIA is a stakeholder in this standards ecosystem as a developer of standards in a broad range of areas, from data center guidelines, to – more recently – a reference architecture for smart device communications.¹⁰

We also note that, as recommended by the Commission’s Communications Security, Reliability and Interoperability Council (“CSRIC”) working group on best practices for reliable 9-1-1 and enhanced 9-1-1 services, the availability and adherence to industry standards and best practices will bring about a successful implementation of 9-1-1 and enhanced 9-1-1 services.¹¹ Embracing the development of these standards and best practices and avoiding imposing new regulations would streamline this standardization process further.

As TIA has consistently argued, voluntary, consensus-based and open industry standards can be used as safe harbors where appropriate, and not as a substitute for more general performance objectives.¹² Furthermore, the Commission should, for purposes of determining compliance with a safe harbor, apply only safe harbors that were recognized industry standards at the time of the design phase for the equipment or service in question.

¹⁰ See, e.g., TIA NG9-1-1 NPRM Comments at 9. TIA publishes an annual report that includes the latest actions taken by each respective TIA engineering committee toward the development of standards for the advancement of global communications. See TIA, *Standards & Technology Annual Report 2011-2012* (2012), available at http://www.tiaonline.org/standards/about/documents/STAR_2012_Web.pdf.

¹¹ See CSRIC, Working Group 4A, Best Practices for Reliable 9-1-1 and E9-1-1, Final Report at 3.

¹² See, e.g., Comments of TIA, CG Docket No. 10-213, WT Docket No. 96-198, CG Docket No. 10-145 (filed Feb. 13, 2012) at 13-15. Also see, as we have explained in a related comment to the Commission, we believe that voluntary consensus-based standards are a most effective tool for organizations of all sizes, private and governmental, and better support innovation as well as increased productivity. Voluntary consensus standards, in the view of TIA, are developed under the open American National Standards Institute process and provide assurance to those considering adopting the standards that the standards represent the agreement amongst a majority of key players within a sector. This process also guarantees that any organization or individual – including a Federal agency – has the opportunity to engage in the process and work with other stakeholders to shape the standard as needed, something that non-consensus standards cannot guarantee. See Comments of TIA, CC Docket No. 94-102, WC Docket No. 05-196, PS Docket No. 07-114, PS Docket No. 10-255 (filed July 5, 2012) at 23-24 (“TIA MLTS Comments”).

3. Flexibility, Certainty, and Technology Neutrality will Produce Market-Driven and Standards-Based Innovation

Different needs of 9-1-1 providers will naturally create different approaches to establishing the NG9-1-1 network. Each stakeholder will need to take a path based on their abilities, requirements, obtainable resolutions, and finances, among other factors. However, a common, standards-based solution to prevent interoperability issues between systems and to ease adoption will be important.¹³ TIA is a long-time supporter of Commission policies that promote technology neutrality and reductions in regulatory barriers¹⁴ in which standards and products are developed by market-driven dynamics and open, transparent processes. Furthermore, any Commission requirements for emerging emergency communications using IP should be kept as simple as possible.

Opportunities for innovation in an all-IP network also include a far broader range of network end-points. These include many points which are no longer analogous to a PSTN connection. For example, Machine-to-machine (“M2M”) technology connects communications machines and devices so they automatically transmit information, serving the growing demand for real-time information. M2M has moved to the consumer market as well, and will be a major driver of the wireless data market.

¹³ TIA agrees that “[f]ocusing on a core group of emergency communications services that can meet requirements will help to ensure a successful deployment. If too many services are included in NG911, it increases the likelihood that PSAPs, network providers, and equipment suppliers will support different subsets, which will lead to fragmented deployments and interoperability issues.” Qualcomm NG911 Comments at 10.

¹⁴ *See, e.g.* TIA NOI Comments at 8.

A rapidly growing component of the data services market is M2M services, growing 20 fold between 2009 and 2017.¹⁵ M2M devices have moved to the consumer market and are routinely embedded in new automobiles. In automobiles, real-time traffic information can be downloaded, engine diagnostics can assist in the servicing and repair of vehicles, and accidents can be communicated from vehicle to vehicle, alerting drivers about potential dangers. The utilities, healthcare, and home security markets are also among the fastest- growing M2M sectors. Automatic meter reading and the ability to determine energy usage of different devices are among the more popular applications. In healthcare, cardio, diabetes and blood pressure readings can be sent automatically to physicians, and the onset of problems can be quickly determined.¹⁶

TIA projects the M2M market to be one of the fastest growing components of the data services market. The number of M2M connections will more than triple, and spending will more than quadruple, comprising nearly 10 percent of the wireless data market by 2015. M2M spending on data will overtake data spending by feature phone users in 2014, reflecting a fifteen-fold increase in spending from 2008.¹⁷ TIA expects that M2M communications will play a dramatically increased role in the future in providing public safety information with PSAPs. Yet technology mandates could discourage the development of these exciting new services. From a regulatory and revenue perspective, care should be taken not to treat all categories of communications as though identical to a legacy PSTN connection. Similar additional charges, especially if structured for each individual connection, could significantly inhibit these nascent

¹⁵ See TIA MRF 2014 Major Trends 2.11 and TABLE 2-1.1.

¹⁶ See, 2014 TIA MR&F at 4-5.

¹⁷ See, *Id.* at 4-0 and Table 4-1.3.

services. Notwithstanding the Commission’s expressed intention that its new certification process “would not require Commission approval of new entrants or delay the introduction of innovative new 911 technologies,”¹⁸ the proposal introduces a significant new regulatory hurdle to the introduction of M2M NG9-1-1 applications. PSAPs should have the flexibility to set their own pace for integrating these M2M communications into the information they respond to.

4. Next Generation 9-1-1 Funding Sources

An essential, threshold issue for reliable and enhanced 9-1-1 deployment, is consistent funding. A significant challenge for any nationwide effort is that current 9-1-1 funding methods vary widely. Among state and local jurisdictions, these range from surcharges from wireline and wireless consumers to general tax funds. Various additional funding sources have provided one-time support, including grants for specific and narrowly defined purposes. Overlaying this diversity of funding support is a recurring problem that revenues from common support methods are eroding as more and more wireline subscribers disconnect their traditional wireline service in favor of wireless.¹⁹ For one, the Commission’s CSRIC provides an excellent analysis of these issues.²⁰ The CSRIC has observed that the existing 9-1-1 funding model is also challenged by a variety of other factors, including inequity in collections across types of telecommunication service; shifting use of communications technologies by the subscriber where there are varying levels of surcharges; collection challenges with services such as prepaid wireless, auditing issues

¹⁸ See, NPRM at 59

¹⁹ See, TIA, TIA 2014 ICT Market Review & Forecast (2014) at 4-18, available at <http://www.tiaonline.org/resources/market-forecast> (“2014 TIA MR&F”).

²⁰ See, CSRIC Working Group 4B Final Report March 2011 at 4 (Noting that that “[f]or those 9-1-1 Authorities with sound fund management processes and established equitable funding structures, the erosion of funds does not appear to be as significant a problem. However, the processes used by 9-1-1 Authorities vary significantly. In some cases, the technological challenges, coupled with increasingly difficult economics and funding challenges barely permit operation to keep pace in providing the response to emergencies that the American public expects and demands.”) (“CSRIC 2011 Working Group 4B Final Report”).

such as making sure the correct amount is being collected and remitted; and, diversion of funds for non-9-1-1 purposes.

Regarding funding alternatives, CSRIC noted a lack of consensus in order to make specific recommendations. The advisory group recommended that a Blue Ribbon Panel be convened to address 9-1-1 funding issues and make recommendations for methods of cost-recovery funding for construction and maintenance of NG9-1-1 systems.²¹ Additionally, CSRIC noted that “While the 9-1-1 Authority is necessarily focused on the NG9-1-1 aspects of that environment, the overall emergency communications system complexity cannot be ignored.”²²

TIA concurs with CSRIC’s conclusion that:

“Congressional action is needed to establish an adequate and sustainable funding mechanism and federal leadership and fortitude will be essential. Although the transition to NG9-1-1 will not be inexpensive, the nation cannot afford to not move forward. Not only is it essential for the nation’s communication system to keep pace with communication technologies used by our citizens, the current 9-1-1 system neglects a growing population of people with disabilities, who remain un-underserved.”²³

Especially in light of the devolved responsibility for state and localities to pay for NG9-1-1 enhancements, it is appropriate for the Commission to proceed cautiously before imposing new requirements on these services.

²¹ See, CSRIC 2011 Working Group 4B Final Report at ¶ 12. See also Comments of AT&T, Inc., CC Docket No. 94-102, WC Docket No. 05-196, PS Docket Nos. 07-114, 10-255 (filed Jul. 5, 2012) at 5.

²² CSRIC 2011 Working Group 4B Final Report at ¶ 35.

²³ *Id.* at ¶ 14.

III. CONCLUSION

For the foregoing reasons, TIA urges the Commission to take into consideration its views in this proceeding.

Respectfully submitted,

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