

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

In the Matter of	)	
	)	
Framework for Next Generation 9-1-1	)	PS Docket No. 10-255
Deployment	)	
	)	
	)	PS Docket No. 11-153
	)	
	)	
	)	PS Docket No. 12-333
	)	

**COMMENTS OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION**

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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.<sup>1</sup> TIA applauds the Commission for issuing a Public Notice seeking comment on the legal and statutory framework for a Next Generation 9-1-1 (“NG9-1-1”) system in preparation for its report to Congress on the topic pursuant to the Middle Class Tax Relief and Job Creation Act of 2012.<sup>2</sup> TIA supported the passage of the Next Generation 9-1-1 Advancement Act and congratulates the Commission on its taking this step towards fulfilling its obligations under the law.

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<sup>1</sup> Public Safety and Homeland Security Bureau Seeks Comment on the Legal and Statutory Framework for Next Generation 9-1-1 Services Pursuant to the Next Generation 9-1-1 Advancement Act of 2012, PS Docket Nos. 10-255, 11-153, 12-333, DA 12-1831 (rel. Nov. 13, 2012) (“PN”).

<sup>2</sup> Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96 (2012), Title VI, Subtitle E (“NG-9-1-1 Act”).

## I. INTRODUCTION AND SUMMARY

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 robust NG9-1-1 deployment will have numerous benefits to the public, including enhanced accessibility 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. On behalf of our hundreds of manufacturers, vendors, and supplier members who are heavily invested in the development and deployment of a NG 9-1-1 system, TIA continues to be eager to support both Congress and the Commission in this examination.<sup>3</sup>

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<sup>3</sup> See, e.g., In the Matter of Facilitating the Deployment of Text-to-9-1-1 and Other Next Generation 9-1-1 Applications; Framework for Next Generation 9-1-1 Deployments, PS Docket Nos. 10-255, 11-153, Notice of Proposed Rulemaking (rel. Sept. 22, 2011) at ¶ 69-75 (“2011 NG9-1-1 NPRM”).

This required examination in preparation for its report to Congress reflects an appreciation that such a system will require a complex and multidimensional implementation over time that must incorporate existing capabilities and technological feasibility to be successful.<sup>4</sup> TIA has previously lauded the Commission for promoting NG9-1-1 such advanced text-to-9-1-1, and multimedia services such as those based on Session Initiation Protocol (“SIP”) and Real Time Text (“RTT”) in its long-term planning.<sup>5</sup> However, we continue to caution the Commission to recognize current technology and feasibility limits, and to avoid prematurely imposing NG-9-1-1 regulations.<sup>6</sup>

In the PN, 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 NG9-1-1 system.<sup>7</sup> As detailed below we believe that the report to Congress should reflect that:

- An adequate recurring funding mechanism is crucial for the success of NG 9-1-1;
- The best path forward includes appreciation of voluntary, consensus-based standardization, as well as flexibility, certainty, and technology neutrality; and
- NG9-1-1 is considered as part of the wider transition of the Public Switched Telephone Network (“PSTN”) to an all-Internet Protocol (“IP”) network.

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<sup>4</sup> See Congressional Research Service, “Funding Emergency Communications: Technology and Policy Considerations,” (Dec. 14, 2011) at 3.

<sup>5</sup> See Comments of TIA, PS Docket Nos. 11-153, 10-255 (filed Dec. 12, 2011) at 5 (“TIA NG9-1-1 NPRM Comments”).

<sup>6</sup> See TIA NG9-1-1 NPRM Comments at 7-13.

<sup>7</sup> See PN at 2-3.

## **II. KEY CONCEPTS THAT PROMOTE THE COMMISSION'S NEXT GENERATION 9-1-1 GOALS**

### **a. Next Generation 9-1-1 Funding Sources**

The essential, threshold issue for Congress to address for NG-9-1-1 deployment, is consistent funding. A significant challenge for any nationwide effort is that current 9-1-1 funding methods systems 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.<sup>8</sup> For one, the Commission's own Communications Security, Reliability and Interoperability Council ("CSRIC") provides an excellent analysis of these issues.<sup>9</sup> 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 such as making sure the correct amount is being collected and remitted; and, diversion of funds for non-9-1-1 purposes.

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<sup>8</sup> See TIA, *TIA 2012 ICT Market Review & Forecast* (2012) at 4-18, available at <http://www.tiaonline.org/resources/market-forecast> ("2012 TIA MR&F").

<sup>9</sup> 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

Regarding funding alternatives, CSRIC noted a lack of consensus in order to make specific recommendations. It 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.<sup>10</sup> 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.”<sup>11</sup> 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.”<sup>12</sup>

TIA therefore supports the Commission recommending to Congress that it establish recurring funding mechanisms for the development and deployment of NG9-1-

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to emergencies that the American public expects and demands.” (“CSRIC 2011 Working Group 4B Final Report”).

<sup>10</sup> 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.

<sup>11</sup> CSRIC 2011 Working Group 4B Final Report at ¶ 35.

<sup>12</sup> *Id.* at ¶ 14.

1. In addition, this recurring funding mechanism should account for educating the general public. Congressional action should be flexible enough that it does not undermine existing programs with the loss of committed funding or effectively forcing the retrofitting of existing deployments.

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

In the PN, the Commission requests input on how the Federal government's role should be defined in NG9-1-1 oversight.<sup>13</sup> The Federal government as well as state and local jurisdictions, serve important roles in the planning and deployment of the NG9-1-1 network, along with industry and civil society stakeholders. TIA believes that the Federal government could serve in a facilitating function amongst carriers, manufacturers, public safety agencies, the accessibility community and state and local entities, and that a need exists for a migration plan to promote as smooth a transition as possible to a robust multimedia emergency services system.<sup>14</sup> Just within the Commission, several advisory committees already examine aspects of realizing the NG9-1-1 system, putting it in an advantageous position to lead.<sup>15</sup>

This said, Federal efforts should not impede the development of new technologies and deployments. The Commission should reinforce in any recommendations to

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<sup>13</sup> PN at 3.

<sup>14</sup> See TIA NG9-1-1 Comments at 7; see also Comments of the APCO, PS Docket Nos. 11-153, 10-255 (filed Dec. 12, 2011) at 3-4 ("APCO NG9-1-1 Comments").

<sup>15</sup> These include the Commission's Emergency Access Advisory Committee ("EAAC"); Communications, Security, Reliability, and Interoperability Council ("CSRIC"); and Technical Advisory Council ("TAC").

Congress that cooperative mechanisms, including the promotion of voluntary standards and best practices, are more effective tools to promoting NG9-1-1 deployment than one-size-fits-all mandates. Specifically, we urge the Commission to recommend that Congress refrain from dictating 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 is also a crucial element of success to the NG9-1-1 system.<sup>16</sup> As TIA has noted for the Commission previously, these operators and their vendors are the only parties in a position to make the most appropriate on-the-ground priority determinations for operators' facilities as they improve their networks site-by-site.<sup>17</sup>

It is also crucial that the NG9-1-1 system be integrated into and compliment as much as possible the planned National Public Safety Broadband Network currently being planned by the First Responders Board.<sup>18</sup> 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.

Based on the above, we suggest that the Commission recommend that Congress provide the authority and resources for an advisory committee to ensure that cross-

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<sup>16</sup> See, e.g., Comments of Motorola Solutions, Inc., PS Docket Nos. 11-153, 10-255 (filed Dec. 12, 2011) at 7.

<sup>17</sup> 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.

<sup>18</sup> 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).

industry and public safety concerns and expertise are considered, and to encourage continued dialogue on how best to empower carriers, vendors, and other stakeholders to provide further advanced 9-1-1 technologies.<sup>19</sup> This advisory body should also closely coordinate with FirstNet.

**c. Reinforcing to Congress the Principles for Success of a NG9-1-1 System**

Above all else, the NG9-1-1 system must be cost-effective, able to support mission-critical needs, and exist under a flexible enough architecture that it can be allowed to evolve to new technologies and capabilities without threatening public safety's ability to handle its responsibilities. TIA has long held that market-based standardization efforts, not legal or regulatory mandates, should determine NG9-1-1 solutions.<sup>20</sup> As TIA has noted in the past, fundamental capability developments that are required for the envisioned NG9-1-1 network are not yet attainable, and there is a need for a better consolidation of coordination efforts, the development of operational procedures, and the refinement of technical standards.<sup>21</sup> This view has been echoed by other key stakeholders.<sup>22</sup> Because of these needs, TIA agrees that "individual PSAPs are likely to have highly varying timetables for developing the technical and operational capability to handle incoming texts in the short term, as well as texts and other media in

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<sup>19</sup> See Comments of TIA, PS Docket No. 07-114 (Oct. 3 2011) at 5-7.

<sup>20</sup> TIA NG9-1-1 NPRM comments at 7-13.

<sup>21</sup> See, e.g., Comments of TIA, PS Docket No. 10-255 (filed Feb. 28, 2011) at 3-6.

<sup>22</sup> See, e.g., Comments of the Alliance for Telecommunications Industry Solutions ("ATIS"), PS Docket No. 11-153 (filed Dec. 12, 2011) at 3.

the longer-term implementation of NG9-1-1,”<sup>23</sup> and believes that any recommendation to Congress should include the following priorities:

**d. Encouragement of the Development of Voluntary, Consensus-Based Standards and Best Practices being used as Safe Harbors**

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 the NG9-1-1 system, particularly given the convergence of interests that must be taken into account.<sup>24</sup> Standards for NG9-1-1 networks are already 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.<sup>25</sup> We also note that, as recommended by the Commission’s 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.<sup>26</sup> Embracing the development of

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<sup>23</sup> NG9-1-1 NPRM at ¶ 9.

<sup>24</sup> 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).

<sup>25</sup> 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](http://www.tiaonline.org/standards/about/documents/STAR_2012_Web.pdf).

<sup>26</sup> See CSRIC, Working Group 4A, Best Practices for Reliable 9-1-1 and E9-1-1, Final Report at 3.

these standards and best practices and avoiding imposing new regulations would streamline this standardization process further.

As TIA has consistently argued, it supports standards to be used as safe harbors where necessary, and not as a substitute for more general performance objectives.<sup>27</sup> We specifically encourage the use of voluntary, consensus-based and open industry standards to be used as safe harbors to guarantee compliance.<sup>28</sup> 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. In the view of TIA, the Commission should further these priorities by recommending to Congress that it instruct Federal agencies to incorporate safe harbors into any regulations they promulgate pursuant to new NG9-1-1 legislation.

The Commission should recommend to Congress that certain widely-accepted “principles of success” be tied to funding, demonstrated by fund recipients as a condition of cost-recovery funding. TIA suggests that states or regions could be required to demonstrate that the jurisdiction has taken steps to eliminate regulatory barriers to

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<sup>27</sup> 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.

<sup>28</sup> 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”).

deployment and that current laws and regulations support the transition to NG9-1-1.<sup>29</sup> In addition, Congress could hinge funding on states or regions conclusively showing that its PSAPs have the equipment in place to accept NG911 data before an obligation to provide NG911 service is triggered and funding is awarded. Undertaking these approaches will enable the most rapid and uniform rollout of NG9-1-1 and this is critical in times of tight budgets.

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

Different needs of NG9-1-1 providers will naturally create necessarily 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.<sup>30</sup> TIA is a long-time supporter of Commission policies that promote technology neutrality and reductions in

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<sup>29</sup> See APCO NG9-1-1 Comments at 16; Comments of CTIA, PS Docket Nos. 11-153, 10-255 (filed Dec. 12, 2011) at 14-15; Comments of King County, PS Docket Nos. 11-153, 10-255 (filed Dec. 12, 2011) at 6 (suggesting that the elements to be demonstrated to justify being designated capable of receiving NG9-1-1 data to include, among others: “NG911 components such as being connected to a regional or statewide ESInet; upgraded PSAP equipment including E911 equipment, CAD system, and logging recorder to be IP-capable and capable of receiving and storing NG911 data; accurate GIS data that is synchronized to the ALI database; operational readiness, including the increased staffing and training necessary to handle the additional workload and data associated with NG911; and a public education plan to inform the public on the appropriate use and capabilities/limitations of the new service.”).

<sup>30</sup> 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.” Comments of Qualcomm, PS Docket Nos. 11-153, 10-255 (filed Dec. 12, 2011) at 10.

regulatory barriers,<sup>31</sup> 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. For example, TIA has previously suggested that, for VoIP, only the most basic functionality should be required (*e.g.*, in terms of codecs, support for the ITU G.711 standard).<sup>32</sup> If requirements are used in this way, it is much more likely that technology and competitive neutrality will be promoted consistent with the Commission's practice, realistic expectations are widely understood, and the private sector can then meet or exceed them.

Any new laws or regulations adopted, if they must be, should reflect that the most effective and efficient means of developing the current national 9-1-1 infrastructure into the conceptualized NG9-1-1 network will be accomplished through the continuation of light-touch, technology neutral regulations that consider distinctive geographic, radio frequency, and technology feasibility characteristics particular to certain areas of the country, as NG9-1-1 deployment will occur through a phased-in approach, and turn on local decisions and funding. The Commission should also ensure that it does not derail any ongoing efforts through the adoption of new rules that would affect that work. Based on this, TIA opposes the creation of any timetables under this docket as they would likely derail ongoing standardization efforts already underway. TIA believes that competition, not prescribed deadlines, should determine the timeline for a NG9-1-1 rollout.

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<sup>31</sup> *See, e.g.*, TIA NOI Comments at 8.

<sup>32</sup> *See* ITU-T Recommendation G.711 - (STD.ITU-T RECMN G.711-ENGL 1989).

We also urge the Commission to reflect in any recommendations that the NG911 applications currently under discussion in front of the Commission are appropriately developed and ready for deployment to support emergency communications services. In the case of each proposed solution, substantial further research and standard development is required before the technologies reach the level of dependability and resiliency needed to support NG9-1-1. For this reason, we again recommend that the Commission explicitly discourage Congress from mandating any specific technology or standard for use in the NG9-1-1 system.

**f. Incorporating Consideration of the Overall Transition from the Public Switched Telephone Network to an All-Internet Protocol Network**

TIA encourages the Commission to safeguard an all-inclusive methodology that understands the intricacy and range of issues related to the evolution of the PSTN to an all-IP network. This transition is a large concern to all stakeholders in the communications space,<sup>33</sup> particularly recently, and we ask that the Commission regard their examinations of, among other topics, legal and statutory issues for NG9-1-1, under this paradigm.<sup>34</sup> FCC Chairman Genachowski's recent announcement of the formation of an agency-wide Technology Transitions Policy Task Force is a significant and encouraging step. TIA strongly commends the FCC for looking at the related issues of IP

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<sup>33</sup> See FCC Technical Advisory Council, *Status of Recommendations*, at 11, 15-16 (Jun. 29, 2011), available at <http://transition.fcc.gov/oet/tac/TACJune2011mtngfullpresentation.pdf>. See also AT&T, Inc., Petition to Launch a Proceeding Concerning the TDM-to-IP Transition (filed Nov. 7, 2012), available at [http://www.att.com/Common/about\\_us/files/pdf/fcc\\_filing.pdf](http://www.att.com/Common/about_us/files/pdf/fcc_filing.pdf).

<sup>34</sup> See Press Release, FCC Chairman Julius Genachowski Announces Formation of 'Technology Transitions Policy Task Force' (rel. Dec. 10, 2012), available at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-317837A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-317837A1.pdf).

transition, public safety communication, disability access and broadband deployment together. The Chairman appropriately recognizes the interrelationship among these issues, as well as the potential benefits from reviewing them in a unified manner. The FCC should inform Congress of the part these issues will have for NG-9-1-1 and the role they will have in the Task Force's agenda.

Speaking for the manufacturers, vendors, and suppliers of the equipment required to realize a NG9-1-1 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. We have also recently expressed this to the Commission regarding specific issues related to enabling text messages to reach PSAPs.<sup>35</sup>

An all-IP network also includes a far broader range of network end-points than the PSTN. 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.

A rapidly growing component of the data services market is M2M services, which generated \$3.2 billion in 2011, or approximately 4 percent of the data services market.

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<sup>35</sup> See *Ex Parte* Letter from Danielle Coffey, Vice President & General Counsel, Government Affairs, TIA, to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket No. 11-117; WC Docket No. 05-196; PS Docket Nos. 11-153, 10-255, and 07-114 (filed Dec. 3 2012).

M2M has traditionally been a service for the trucking industry, helping fleet owners track shipments. 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.<sup>36</sup>

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.<sup>37</sup>

TIA expects that M2M communications will play a dramatically increased role in the future in providing public safety information with/to 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

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<sup>36</sup> See 2012 TIA MR&F at 4-5.

<sup>37</sup> See *Id.* at 4-0 and Table 4-1.3.

charges, especially if structured for each individual connection, could significantly inhibit these nascent services.

The issues associated with IP- network transitions underscore the need for consumer education. A collateral risk associated with increasing the modes of communications that the public can use to access emergency communication is that public expectations could exceed the PSAP's actual capabilities, or even reduce information required by first responders. For example, emergency communicators are trained to obtain critical information from their interactions. Direct, real time interaction allows emergency communicators to effectively elicit information essential for first responders. Consumer education can help the public to communicate effectively with PSAPs. In addition, consumer education plays an important role in other areas, including awareness of technical limitations<sup>38</sup> and privacy expectations.<sup>39</sup>

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<sup>38</sup> See, e.g., APCO NG9-1-1 Comments at 4 (noting that “NG9-1-1 and the capabilities for data and multimedia will require a focused and funded public education plan. Consumers must be made aware of the limitations of 9-1-1 location accuracy and they must be cognizant of the role that they need to play in “managing their emergency.” With regard to any interim 9-1-1 text solution, the public must be advised that accurate –9-1-1 location information will generally NOT be available.”).

<sup>39</sup> See, e.g., TIA MLTS Comments at 18. (Noting that “it is vital to...determine that users anticipate that their location can be ascertained, and that they are fully informed on the capabilities of MLTS’. For example, unless users actually expect their WiFi/DECT-enabled MLTS devices to be able to accurately communicate their precise location to emergency responders, then adding a mandate for this functionality – technical feasibility aside – to MLTS’ would have both limited public safety benefit and would come at the cost of undermining the trust they have in MLTS’. Furthermore, inevitably some consumers will find the capability to be infringing and will seek to opt out. As a result, a careful balance needs to be struck between these two competing interests of user privacy and public safety.”)

### **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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