

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

In the Matter of)	
)	
Revision of the Commission's Rules to)	
Ensure Compatibility With Enhanced 911)	CC Docket No. 94-102
Emergency Calling Systems)	
)	
E911 Requirements for IP-Enabled Service)	WC Docket No. 05-196
Providers)	
)	
Wireless E911 Location Accuracy)	PS Docket No. 07-114
Requirements)	
)	
Framework for Next Generation 9-1-1)	PS Docket No. 10-255
Deployment)	
)	

COMMENTS OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION

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Table of Contents

I. INTRODUCTION AND SUMMARY 2

II. TIA SUPPORTS THE COMMISSION’S INQUIRY INTO MLTS LOCATION INFORMATION CAPABILITIES 6

III. A MANDATE FOR MLTS LOCATION ACCURACY IS NOT APPROPRIATE AT THIS TIME 8

 a. Technical Feasibility of Ubiquitous MLTS Location Information Solutions... 8

 b. The State of Standard Development for MLTS Location Accuracy 13

 c. User Implementation Dependency..... 16

 d. Privacy Concerns 18

IV. ADDING E911 REQUIREMENTS TO PART 68 WOULD BE PROBLEMATIC 19

V. TIA’S VIEWS ON THE NENA MODEL LEGISLATION 21

VI. CONCLUSION 25

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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 TIA applauds the Commission for issuing a PN seeking comment on this issue and appreciates the opportunity to discuss the feasibility of Multi-Line Telephone Systems (“MLTS”) manufacturers including mechanisms in all such systems that can provide a sufficiently precise indication of a 911 caller’s location, pursuant to the Middle

¹ Public Safety and Homeland Security Bureau Seeks Comment on Multiline Telephone Systems Pursuant to the Next Generation 911 Advancement Act of 2012, CC Docket No. 94-102, WC Docket No. 05-196, PS Docket No. 07-114, PS Docket No. 10-255, DA 12-798 (rel. May 21, 2012) (“PN”).

Class Tax Relief and Job Creation Act of 2012.² TIA supported and engaged Congress in the passage of the Next Generation 911 Advancement Act, along with the rest of the Middle Class Tax Relief and Job Creation Act of 2012, and congratulates the Commission on its taking steps to fulfill its obligations under the law.

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. 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.

TIA’s TR-41 Engineering Committee (User Premises Telecommunications Requirements)³ develops voluntary standards for telecommunications terminal equipment and systems, specifically those used for voice services, integrated voice and data services, and Internet protocol (“IP”) applications. Together with its three subcommittees and their

² Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96 (2012), Title VI, Subtitle E (“Next Generation 911 Advancement Act”).

³ TIA publishes an annual report that includes the latest actions taken by each respective TIA engineering committee, including TR-41, toward the development of standards for the advancement of global communications. See TIA, 2011-2012 Standards & Technology Annual Report (rel. Apr. 2012) at 9-10, available at http://www.tiaonline.org/standards/about/documents/STAR_2011-2012.pdf.

working groups, the committee develops performance and interface criteria for equipment, systems and private networks, as well as the information necessary to ensure their proper interworking with each other, with public networks, with IP telephony infrastructures and with carrier-provided private-line services. In addition, TR-41 develops criteria for preventing harm to the telephone network, which becomes mandatory when adopted by the Administrative Council for Terminal Attachments (“ACTA”).⁴ The committee is also engaged in providing input on product safety issues, identifying environmental considerations for user premises equipment and addressing the administrative aspects of product approval processes. TIA is accredited by the American National Standards Institute (“ANSI”). Of particular relevance to this proceeding, numerous TIA members, including those who participate in TR-41 standards activities, produce MLTS systems and components of MLTS systems.

TIA supports the Commission’s efforts to improve the ability of MLTS’ to provide information location with as much accuracy as possible. TIA appreciates the contribution that accurately identifying the location of a 911 caller can make in saving lives and preventing the misuse of valuable resources. However location information that is misleading or even inaccurate can significant delay response times with possible tragic consequences.

⁴ The ACTA was formed in 2001 through the co-sponsorship and support of the Alliance for Telecommunications Industry Solutions (“ATIS”) and TIA by Commission mandate with the mission to (1) adopt technical criteria for terminal equipment to prevent network harms through the act of publishing such criteria developed by the ANSI-accredited Standards Development Organizations (“SDOs”); and (2) establish and maintain database(s) of equipment approved as compliant with the technical criteria. *See* 2000 Biennial Regulatory Review of Part 68 of the Commission's Rules and Regulations, *Report and Order*, CC Docket No. 99-216, FCC 00-400. *See also* ACTA, *About ACTA*, available at <http://www.part68.org/aboutMain.aspx> (last visited Jul. 5, 2012).

However, TIA would like to stress that a mandate for MLTS location accuracy is not appropriate at this time. TIA urges the Commission to carefully consider the significant hurdles limiting the feasibility of expecting that all MLTSs can provide accurate location information to PSAPs. These include technical and cost feasibility, the need for further standard development, dependence on MLTS users to implement and update location information capabilities, and privacy concerns. The Commission must consider these challenges carefully before requiring a blanket location information requirement for MLTS systems. TIA does not view a national regulatory mandate for MLTS location accuracy information as feasible, especially when various costs are considered.

In addition, TIA urges the Commission to be aware of the negative effect that a one-size-fits-all requirement can have on the further development of capabilities and standards. Continued standard development will be needed, and the Commission should defer regulatory action until standards are more fully complete. TIA also advises that another major factor that should be fully considered is the dependency on user implementation for accurate MLTS location information.

In the comments below, TIA also promotes the idea that it would be problematic to include Enhanced 911 (“E911”) requirements for MLTS in the Commission’s Part 68 rules at this time. Before this step should be taken, TIA believes there must be increased enforcement across Part 68 rules. Without effective enforcement, any changes made to

Part 68 regarding MLTS may have little or no practical effect. TIA does not support the recommendation made in NENA's model legislation for the Commission to place E911 requirements into Part 68 without the aforementioned heightened enforcement.

However, TIA would like to note its qualified endorsement of the inclusion in the NENA Model Legislation of safe harbors. TIA supports standards to be used as safe harbors where necessary, and not as a substitute for more general performance objectives, but TIA believes that standards developed by "non-accredited" standard development organizations are not appropriate. Standards developed under the American National Standards Institute (ANSI)-accredited process, including TIA's, guarantee 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.

II. TIA SUPPORTS THE COMMISSION'S INQUIRY INTO MLTS LOCATION INFORMATION CAPABILITIES

TIA supports the Commission's efforts to improve the ability of MLTSs to provide information location with as much accuracy as possible. There are great benefits to be gained from improving public access to emergency services in a workplace, public place, residential complex, or other business location served by a MLTS, the most notable being a reduction in the time needed to find an injured or distressed 911 caller, resulting in a decrease in exposure to dangerous situations for emergency responders. When emergencies occur at large hospitals, public schools, large businesses, chain stores, and assisted living facilities, it is very important that emergency responders receive timely and accurate information about the location of the emergency. A lack of accurate information results in limited public safety resources being directed to the wrong location, and can be life-threatening if the caller cannot supply the correct location.

TIA understands the concerns that key stakeholders in the first responder business have regarding MLTS and location information. For example, there have been reports of calls from MLTSs referring first responders to a billing address, and not the specific location of the call,⁵ causing response delays and resources to be dispatched to incorrect locations. In addition, 911 calls originating from these systems are sometimes misrouted to the wrong public-safety answering point ("PSAP") and/or the caller ID displayed to

⁵ California Public Utilities Commission ("CPUC") Communications Division, *MLTS E9-1-1 Workshop Report: In Rulemaking 10-04-011 to Improve Public Safety by Determining Methods for Implementing Enhanced 9-1-1 Services for Business Customers and for Multi-line Telephone System Users* (Oct. 2010) at 17 ("CPUC MLTS Report").

the PSAP is not the telephone number of the caller,⁶ resulting in, if the call is disconnected prematurely, the PSAP lacking call-back ability and a considerable disruption as field responders attempt to locate the caller. Location accuracy is also essential to the end user because, in the case of some emergencies, a caller may not know his or her own location to a degree is not being accurately presented to the local 911 call taker. CPUC notes that there are many examples where callers were unable to speak or communicate, but were saved because of location accuracy capability.⁷

We understand the complex nature that implementation of improved MLTS location information to dispatchers entails. TIA supports the Commission in this examination into MLTSs and the delivery of accurate location information, and is prepared to work with the Commission, the public safety community, and the end user community to allow for these important capabilities to improve.

⁶ *Id.* at 18

⁷ *Id.*

III. A MANDATE FOR MLTS LOCATION ACCURACY IS NOT APPROPRIATE AT THIS TIME

There are a number of hurdles that currently exist related to the rollout of a ubiquitous capability for MLTS location accuracy information to be shared with PSAPs. These challenges include technical feasibility issues not yet addressed through standard development, dependency on MLTS system owners in enabling effective location accuracy, and privacy concerns, among others. We urge the Commission to consider that (1) these must all be fully and carefully considered before requiring a blanket location accuracy requirement for MLTS systems, and (2) that the setting of a date certain for such a requirement is inappropriate at this time.

a. Technical Feasibility of Ubiquitous MLTS Location Information Solutions

In the PN, the Commission seeks comment on “the feasibility of MLTSs to provide the precise location of a 911 caller, including any costs and technical issues that are associated with MLTSs offering E911 capabilities.”⁸ Specifically, comment is sought on “the feasibility of MLTS manufacturers to include within all of their systems manufactured or sold after a date certain, one or more mechanisms to provide a precise indication of a 911 caller’s location,” and what an appropriate date certain might be.⁹ TIA agrees with the Commission that the delivery of accurate location information and callback number is vital for a local emergency response to be effective and is in the best

⁸ PN at 2-3.

⁹ *Id.* at 3.

interest of the public.¹⁰ Due to the wide variety of MLTS systems available and in development, and the issues associated with implementation, TIA does not view a national regulatory mandate for MLTS location accuracy information as feasible.

The definition of MLTS provided by Congress in the Next Generation 911 Advancement Act¹¹ indicates Congress' intent to examine a wide range of solutions available. There are numerous MLTSs currently available that are unique and require different solutions for determining location information.¹² For many traditional systems, the MLTS will consist of a Private Branch Exchange ("PBX"). PBXs are owned by enterprises and located on their premises, and are best suited for large companies with a single location. Internal lines are generally identified by four-digit numbers, and calls between employees are routed internally – the PBX is in effect a private switchboard – without going through the public network and without incurring network charges. The savings can be considerable for large companies where many calls are made between employees. Using a three-digit prefix, the lines can also be accessed directly by outside callers. Outgoing trunk lines are shared, saving on line charges. To make an outgoing

¹⁰ See e.g., Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, *Notice of Proposed Rulemaking*, 9 FCC Rcd 6170 (1994).

¹¹ Next Generation 911 Advancement Act at § 6502(2) (defining a MLTS as "a system comprised of common control units, telephone sets, control hardware and software and adjunct systems, including network and premises based systems, such as Centrex and VoIP, as well as PBX, Hybrid, and Key Telephone Systems [as classified by the Commission under part 68 of title 47, Code of Federal Regulations], and includes systems owned or leased by governmental agencies and non-profit entities, as well as for profit businesses.").

¹² We believe that data and trends related to PBXs, key systems, Centrex, and Hosted IP systems can be used to inform the Commission on the projected growth in the use of MLTSs. TIA monitors, among others, the enterprise telephone market, and provides comprehensive distilled data and analysis on industry trends and market forecast in its Market Review and Forecast publications. See TIA, *TIA's 2012 Market Review and Forecast* (2012), available at <http://www.tiaonline.org/resources/market-forecast> ("TIA 2012 Market Review and Forecast").

call, users must first access an outside line from the pool of available trunk lines by using an access number – generally 8 or 9.

Key systems are also privately-owned telephone systems located on premises, but they do not operate as private switchboards. Instead, each user has a separate outside line that connects directly to the public telephone network. Generally, incoming calls ring on all phones, and all available lines can be accessed from any phone. Lines are accessed by pressing their associated button, which was originally a mechanical key. Internal calls can be made through an intercom button and, like the PBX, bypass the public telephone network, eliminating public telephone charges. Key systems cannot support a large number of lines but are more economical than PBXs for a small number of lines. Consequently, key systems are typically used by small companies, generally with 40 or fewer lines.

Centrex, or hosted PBX service, by contrast, is provided by carriers and is not owned by the enterprise. Instead, Centrex customers rent part of the carrier's central office (CO) equipment, although in some cases the carrier's equipment may be housed on the customer's premises. Each phone has a direct line to the CO. The principal advantage of Centrex is that the enterprise does not have to pay for control units, software or hardware upgrades, or maintenance. By outsourcing their telephone system, companies can devote more of their focus and resources to their core businesses. Lines can be added easily, and there are no space requirements for equipment. A unified Centrex system permits free intra-company calls for companies with multiple locations. Centrex charges

are based on the number of lines provided and the features allocated to each phone. Centrex can be considered an expensible monthly charge, avoiding the capital expenditures associated with PBX systems. The disadvantage of Centrex is that monthly fees are 20–50 percent higher than the cost of operating PBXs or key systems, and the enterprise does not own or control the system.

Hosted IP systems, provided by third parties as well as by traditional carriers, are suited for companies that either have no main office or have many mobile workers. They are also suitable for companies that offer toll-free service. Hosted IP, some of which is based on cloud computing platforms, provides functionality between internal lines and mobile phones — incoming calls can be routed to wireless phones — and supports toll-free service. In effect, hosted IP provides PBX functionality as a service. Enterprises can use hosted IP to route calls among multiple locations, masking the location at which the response is taking place. While increasing their flexibility in meeting consumer call demand, this has the inadvertent impact of undermining location accuracy.

Each of the above-described solutions comprises the diverse enterprise telephone market. Over time, MLTSs have evolved from switch board hardware systems to software-based, IP-enabled switches. This development has resulted in a panoply of systems being deployed, ranging from main office public switched telephone network (“PSTN”) systems that can utilize voice over IP (“VoIP”) gateways, to IP-based systems which include satellite locations that enable telecommuting. Advances in IP technology have enabled new ways to integrate MLTS with smart network equipment and to more

frequently update the caller's location information, but have also enabled new nomadic connections that complicate the provision of accurate location information, such as systems that employ cordless telephones that utilize Institute of Electrical and Electronics Engineers ("IEEE") 802.11 standards ("Wi-Fi") or Digital Enhanced Cordless Telecommunications ("DECT") technology. Some MLTS systems also allow for wired or unlicensed nomadic capability at the user's option. While wireline MLTS are increasingly being deployed with location information capabilities already installed,¹³ we strongly urge the Commission to recognize the limitations that still exist for certain MLTS, especially those utilizing the nomadic handset capability where location information solutions are not technically feasible at this time.

The Commission should include in its feasibility considerations the various costs associated with MLTSs offering E911 capabilities. Depending on whether the MLTS is already installed or being purchased as a brand new system, these costs can create a barrier to implementation, particularly for small- and medium-sized businesses ("SMBs") which may not have robust resources.¹⁴ Costs may include hardware upgrades, software upgrades, customer service costs, decreased innovation and investment in services, market exit, liability concerns, as well as other potential costs. For industry, these costs are also factored into competitive considerations as MLTS manufacturers strive to meet customer demands. Whatever methodology is used to calculate the benefits that would

¹³ CPUC MLTS Report at 7 (noting that "[f]or the last ten years, major equipment manufacturers have built E9-1-1 capabilities into new models and PBX upgrades. It is very rare to find a PBX in use that cannot be programmed to deliver the caller ID needed to retrieve caller location information.").

¹⁴ We note that growth in the PBX market is being driven by SMBs, which, despite their small size, accounted for approximately half the lines sold in 2011. Many large manufacturers now offer small IP PBX systems targeted to SMBs when, as recently as 2009, they did not offer small IP PBXs, although they were the leading sellers of large IP PBXs. *See* TIA 2012 Market Review and Forecast at 3-14 – 3-17.

result from extending E911 service requirements to MLTS, aside from consideration of the above we also urge the Commission to more concretely quantify some of the benefits noted in the PN, such as “an increased sense of security.”¹⁵

b. The State of Standard Development for MLTS Location Accuracy

TIA has long held the position that the development of voluntary consensus-based standards should be deferred to over prescriptive regulations,¹⁶ and we urge the Commission to be cognizant of the negative effect a one-size-fits-all requirement would have on the further development of capabilities and standards. Standard development has been an important driver in the development of MLTS location information capabilities. TIA has developed standards to enable enhanced location accuracy for MLTSs. For example, TIA developed TIA-689-A, which addresses dialing, routing, local notification, and network interface technical specifications associated with outgoing 911 calls from MLTS stations.¹⁷ In addition, TIA has also issued TIA TSB-146-A, which provides

¹⁵ PN at 3.

¹⁶ *See, e.g.*, Comments of TIA, WT Docket No. 10-254 (filed Feb. 14, 2011) at 4.

¹⁷ TIA-689-A addresses technical issues associated with MLTS support of Enhanced 911 Emergency Calling Service. It specifically addresses dialing, routing, local notification and network interface technical specifications associated with outgoing 911 calls from MLTS stations. It does not address technical issues associated with incoming 911 calls to MLTS equipment that may be used in a PSAP. This standard also does not address the unique considerations that apply to multiple extensions that pick-up on a single line. Nor does it address the unique considerations that apply to 911 calls made by persons with hearing or speech disabilities, which require the use of text telephones. *See* http://www.tiaonline.org/standards/buy-tia-standards?iframeurl=search.cfm?standards_criteria=tia-156-a.

guidance on gaining certification regarding E911 support by VoIP systems.¹⁸ TIA's TR-41 is open to discussing further areas where standard development is needed for MLTS location accuracy.

The development of standards is directly tied to the deployment of a ubiquitous capability in the ICT sector, and TIA believes that the case of MLTS location information for emergency services is a prime example. Given the diverse and dynamic nature of MLTS solutions that exist and are in development, continued standard development will be needed. For example, currently, there are no nomadic Wi-Fi/DECT standards for precise MLTS location accuracy,¹⁹ and location identification remains an issue for nomadic devices.²⁰ However, TIA is aware of examinations by the Internet Engineering Technical Forum ("IETF") to develop "location by reference" methods, where home gateways and devices would deliver a uniform resource locator ("URL") to the public safety answering point ("PSAP") which would then determine from a service provider

¹⁸ Technical Service Bulletins (TSBs) describe the process a manufacturer or supplier of telecommunications terminal equipment should follow in order to achieve approval by the Supplier's Declaration of Conformity method or Telecommunications Certification Body certification. TSB-146-A covers issues associated with support of emergency calling solutions ("ECS") from IP telephony terminals connected to an enterprise network, and describes new network architecture elements needed to support ECS and the functionality of those new elements in North America. This TSB addresses ECS calls placed from fixed, mobile, remote dial-in, or wireless access VoIP terminals. This TSB does not address scenarios for devices connected to VoIP networks through gateways. *See* http://www.tiaonline.org/standards/buy-tia-standards?iframeurl=search.cfm?standards_criteria=tia-156-a.

¹⁹ As TIA has previously noted for the Commission, nomadic devices used with MLTS have location requirements that are quite similar to other IP-based access devices, and could therefore be regarded under consistent, if not the same, requirements as those which may be defined for Wi-Fi hot spots. *See* Comments of TIA, PS Docket No. 10-255 (filed Feb. 28, 2011) at 5.

²⁰ *See, e.g.*, Comments of VON Coalition, PS Docket No. 07-114, WC Docket No. 05-196 (filed Jan. 19, 2011) (describing the technical and operational obstacles of providing wireless location in WLAN networks and "hot spots," and the practical realities of making that technical information useful to first responders).

database the caller location,²¹ but this solution would still require this information to be input beforehand (see Section III(c) below). Furthermore, other areas remain unaddressed, such as what information would be delivered in the event that multiple extensions use the same line. For these reasons, the Commission should defer regulatory action until standards are more fully complete.

TIA's analysis of the enterprise voice equipment market projects expansion at an 8.6 percent compound annual rate during the next four years, rising to \$42 billion in 2015 from \$30.1 billion in 2011.²² This environment should not be disrupted. A requirement for the universal capability for delivery of MLTS location information on a date certain would further weigh the industry with regulation and create a disincentive for potential investment in a market that is already including information location capabilities at increased rates. We recognize and appreciate the public safety need for accurate location information, including when that information is delivered through MLTS. However, setting a prescriptive ceiling at a date certain is not an appropriate vehicle to deliver this capability universally.

While TIA does not believe it would be appropriate to set a date certain for ubiquitous MLTS location information delivery capabilities, if the Commission nonetheless proceeds down this path a very strong record should first be established which demonstrates technical feasibility before examining MLTS location information

²¹ See, e.g., Letter from Mary L. Brown, Director, Cisco Government Affairs to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket No. 11-117, PS Docket No. 07-114, WC Docket No. 05-196 (Jun. 8, 2012).

²² TIA 2012 Market Review and Forecast at 3-15, Figure 3-2.2.

delivery to be required at a date certain. The Commission should work with both hardware and service providers to define the requirements for these important standards. As described in further detail below, standard development processes such as TIA's allow for government representatives to participate in an open and fair process under ANSI rules. Finally, we also note our support of a Commission effort to identify best practices in this area.²³

c. User Implementation Dependency

Another major factor that should be fully considered is the dependency of accurate MLTS location information delivery on user implementation. MLTS equipment alone is insufficient to provide accurate location information to emergency dispatch. When a party places an E911 call from a telephone station served by a MLTS, the PSAP receiving the call may not be able to identify the detailed location of the caller unless the E911 database has been populated in advance with the granular location of the telephone station. As recently as 2010, it has been noted that "70% of PBXs are not E9-1-1 compliant," with the main causes being "a lack of public understanding and knowledge of the PBX caller location problem, and a lack of compliance with laws that may exist."²⁴ For the most accurate information to be shared with dispatch the system settings must be correctly implemented by the system administrator and all necessary system maintenance must be performed.

²³ PN at 4.

²⁴ CPUC MLTS Report at 21.

It has been argued that there is a need for a legal requirement on PBX/MLTS owners with penalties for non-compliance because MLTS manufacturers and service providers are unable to compel MLTS owners to provide and maintain accurate callers' location.²⁵ The Commission is not in a jurisdictional position to address this issue, but a number of states have adopted the NENA Model Legislation for MLTS E9-1-1, which does place this burden on MLTS system administrators.²⁶ TIA members understand the critical need to educate MLTS operators and do so as part of the sales and ongoing product support process. The Commission could aid in these education efforts by issuing a Public Notice with guidance on the importance of accurately programming and maintaining location information, and urging them to consult proper state-level authorities and location information database managers.

²⁵ See CPUC MLTS Report at 9.

²⁶ NENA Technical Requirements Document on Model Legislation E9-1-1 for Multi-Line Telephone Systems, NENA 06-750, Version 2, 2009. Eighteen states have now adopted legislation or regulations requiring E911 service for MLTS. See NENA, MLTS & PBX Project, available at http://www.nena.org/?page=MLTS_PBX (last visited Jul. 5, 2012). After Alaska, Arkansas, Colorado, Connecticut, Florida, Illinois, Kentucky, Louisiana, Maine, Massachusetts, Minnesota, Mississippi, Texas, Vermont, Virginia, and Washington, the most recent additions to this group of states are Michigan and New Hampshire. See Posting of Mark J. Fletcher, Avaya, *MLTS Legislation - And then there were 18 . . .*, <http://www.avaya.com/blogs/archives/2012/06/mlts-legislation---and-then-there-were-18.html> (Jun. 17, 2012) (last visited Jul. 5, 2012).

d. Privacy Concerns

As the Commission has previously noted in its recent wireless location accuracy proceeding, privacy protections for telecommunications users are a critical part of obligations that the industry operates within.²⁷ This framework has produced among the most stringent privacy protection regimes of any industry sector. If the Commission proceeds to set a date certain for ubiquitous MLTS location information, it is vital to first determine whether users anticipate their location to be ascertained, and ensure that they are fully informed on the capabilities of MLTSs. For example, unless users actually expect their Wi-Fi/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 MLTSs would have both limited public safety benefit and would come at the cost of undermining the trust they have in MLTSs. Furthermore, inevitably some consumers will find the capability to be infringing on their right to privacy 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.

²⁷ In the Matter of Amending the Definition of Interconnected VoIP Service in Section 9.3 of the Commission's Rules; Wireless E911 Location Accuracy Requirements; E911 Requirements for IP-Enabled Service Providers, *Notice of Proposed Rulemaking, Third Report and Order, and Second Further Notice of Proposed Rulemaking*, GN Docket No. 11-117, PS Docket No. 07-114, WC Docket No. 05-196, FCC 11-107 at ¶ 76 (rel. Jul. 13, 2011).

IV. ADDING E911 REQUIREMENTS TO PART 68 WOULD BE PROBLEMATIC

In the PN, the Commission seeks comment on whether the Commission should modify its Part 68 rules to include E911 requirements for MLTS,²⁸ as the NENA Model Legislation recommends that the FCC incorporate MLTS E911 requirements into the Commission's Part 68 rules.²⁹ We believe that taking this step alone would be problematic because (1) increased enforcement across Part 68 rules is first needed and (2) such a change may put the ACTA in the position of making 911 applicability determinations.

As noted above, TIA is a founding member of the ACTA. We strongly value the partnership that ACTA and the FCC have in making Part 68 successful. We specifically applaud the Commission's recent engagement with the ACTA. Since over ten years ago when the Commission directed the telecommunications industry, through the co-sponsorship and support of TIA and ATIS to establish the ACTA and assume Part 68 activities the Commission previously performed, the ACTA has been the designated body charged with administrating certain Part 68 rules over customer premises equipment connections to the PSTN and certain private-line services.³⁰ In this role, the ACTA is responsible for: (1) adopting technical criteria and acting as the clearing-house for the publication of technical criteria for terminal equipment developed by ANSI-accredited standards development organizations; and (2) establishing and maintaining a registration

²⁸ PN at 4.

²⁹ NENA Model Legislation at 11.

³⁰ In the Matter of 2000 Biennial Review of Part 68 of the Commission's Rules and Regulations, *Report and Order*, CC Docket No. 99-216 (rel. Dec. 21, 2000).

database of equipment approved as compliant with the technical criteria. However, the Commission, not the ACTA, has enforcement authority over Part 68.³¹ TIA agrees that there is a need for greater education and enforcement of the Commission's Part 68 rules, and some manufacturers may be ignoring them.³² Without effective enforcement, any changes made to Part 68 regarding MLTS may have little or no practical effect. We reiterate our support to the proposal from the ACTA for the Commission to increase enforcement of Part 68 rules. TIA member companies take seriously, and expend resources to ensure strict compliance with, Part 68 rules and wish to note the anti-competitive effects non-enforcement of these rules will continue to have. To encourage compliance, TIA suggests: (1) diligent enforcement efforts against violators of Part 68 rules; and (2) issuance of a related Enforcement Advisory as soon as possible.³³

Furthermore, TIA believes that it would be problematic for the Commission to place E911 requirements in Part 68 because, were the Commission to place E911 obligations in Part 68, the ACTA would be placed in a position of making determinations of applicability of these rules, much like it does for such areas as terminal equipment registration requirements. Part 68 rules have the purpose and effect of preventing harm to the network and further, as the ACTA has previously noted, the Commission has not yet made clear that all devices which connect to the PSTN must be compliant with Part 68

³¹ Part 68 of the Commission rules govern the direct connection of terminal equipment ("TE") to the Public Switched Telephone Network ("PSTN"), and to wireline carrier-owned facilities used to provide private line services. Part 68 also contains rules concerning Hearing Aid Compatibility and Volume Control (HAC/VC) for telephones, dialing frequency for automated dialing machines, source identification for fax transmissions, and technical criteria for inside wiring. *See* 47 C.F.R. Part 68.

³² *See* Letter from Thomas Goode, ATIS General Counsel, on behalf of the ACTA to Marlene H. Dortch, Secretary, Federal Communications Commission, CC Docket No. 99-216, (Jan. 30, 2012) ("ACTA *Ex Parte*").

³³ *See* Comments of TIA, CG Docket No. 10-266 (filed Feb. 22, 2011).

rules and register in the ACTA database.³⁴ Compounding a new purpose to Part 68 rules and without this requested clarity, it will be difficult for the ACTA to make fully accurate determinations for parties requesting their status of the ACTA. Because MLTS location information's accuracy can affect lives, this also raises the seriousness of decisions that the ACTA makes.

V. TIA'S VIEWS ON THE NENA MODEL LEGISLATION

Finally, in the PN the Commission seeks comment on recommendations that the Commission undertake several specific actions related to MLTS and on the NENA Model Legislation more generally.³⁵ The NENA Model Legislation specifically recommends that the Commission to take action to “incorporate into Part 68 requirements for MLTS that will facilitate the implementation of Enhanced 9-1-1 on MLTS i.e. PBX, Key, Hybrid, VoIP and Centrex systems;”³⁶ and to “[t]ake the lead” in “encouraging industry to develop needed standards.”³⁷

While, as noted above, we believe that states are in the best position to bring into reality the effective delivery of accurate MLTS location information to emergency dispatch, we disagree with the recommendations specific to the Commission in it. For the reasons listed above, we do not support NENA's recommendation for the Commission to

³⁴ *Id.*

³⁵ PN at 4.

³⁶ NENA Model Legislation at 11-12.

³⁷ *Id.* at 18-19.

place E911 requirements into Part 68 without heightened enforcement and needed clarification.

TIA does agree that the Commission has a key role in the development of future industry standards related to MLTS location information and its delivery. Consistent with our positions stated above, we believe that the Commission can encourage the development of these standards by (1) abstaining from adopting further prescriptive regulations in this area and (2) proactively engaging in standard development efforts related to MLTS location accuracy.

The PN specifically requests input on whether MLTS standards be national or set on a state-by-state basis.³⁸ As the Commission is aware, it is not jurisdictionally able to set standards for intra-state telecommunications and for this reason TIA supports that as MLTS standards are adopted and requirements are placed on MLTS operators it be done on a state-by-state basis. The Commission could, however, collaborate with industry to formulate recommended practices for MLTS operators, which could then be shared publicly to influence these requirements at the state level.

We specifically wish to note our qualified endorsement of the inclusion in the NENA Model Legislation of safe harbors,³⁹ as described below. As TIA has consistently argued, it supports standards to be used as safe harbors where necessary, and not as a

³⁸ PN at 4.

³⁹ *Id.* at 18-19.

substitute for more general performance objectives.⁴⁰ We specifically encourage the use of voluntary, consensus-based and open industry standards to be used as safe harbors to guarantee compliance. 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.

TIA does however object to the portion of the safe harbor recommendation which would allow for “non-accredited” standard development organizations’ standards to be used to comply with laws and regulations.⁴¹ 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 ANSI 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. Because of this crucial characteristic – consensus – these standards promote efficiency and interoperability by enhancing industry collaboration to solve market-driven demands and customer needs. Voluntary consensus standards also enable access to new technologies and markets by (i) helping diffuse innovative solutions across the industry while

⁴⁰ 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.

⁴¹ NENA Model Legislation at 18.

maintaining respect for intellectual property rights and supporting incentives for companies to further invest in related R&D,⁴² and (ii) creating opportunities for further competition among differentiated implementations and products, which in turn provides stimulus for more innovation and choice for customers and users.

⁴² TIA, *Intellectual Property Rights Standing Committee Paper on Open Standards* (Jun. 20, 2008), available at http://www.tiaonline.org/standards/about/documents/TIA-IPR_20080620-003_TIA_OPEN_STANDARDS.pdf.

VI. CONCLUSION

For the foregoing reasons, TIA urges the Commission to act consistent with the recommendations above.

Respectfully submitted,

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