

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	
Amending the Definition of Interconnected VoIP Service in Section 9.3 of the Commission's Rules)	GN Docket No. 11-117
)	
Wireless E911 Location Accuracy Requirements)	PS Docket No. 07-114
)	
E911 Requirements for IP-Enabled Service Providers)	WC Docket No. 05-196
)	

COMMENTS OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION

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October 3, 2011

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To: The Commission

COMMENTS OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION

I. INTRODUCTION AND SUMMARY

The Telecommunications Industry Association (TIA) hereby submits comments to the Federal Communications Commission (Commission) in the above-captioned proceeding.¹ TIA and its members appreciate the opportunity to provide further stakeholder comment on the issues raised by the Commission on the important priorities related to 911 location accuracy.

TIA represents the global information and communications technology (ICT) industry through standards development, advocacy, tradeshow, business opportunities, market intelligence and

¹ 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 (rel. Jul. 13, 2011) (Location Accuracy NPRM, 3rd R&O, and 2nd FNPRM or FNPRM).

world-wide environmental regulatory analysis. For over eighty years, TIA has enhanced the business environment for broadband, mobile wireless, information technology, networks, cable, satellite, and unified communications. TIA's 600 member companies' products and services empower communications in every industry and market, including healthcare, education, security, public safety, transportation, government, the military, the environment and entertainment. TIA is accredited by the American National Standards Institute (ANSI).

In this comment, TIA re-emphasizes its support for the Commission creating the Communications, Security, Reliability, and Interoperability Council (CSRIC)-recommended E911 Technical Advisory Group (ETAG). The ETAG can provide the Commission with a stakeholder-wide technical and policy consensus on the best path forward for improving location accuracy in emerging technologies, and can specifically address some of the related issues raised in the FNPRM, including privacy, liability, and the integration of emerging technologies such as location based services.

TIA also notes its objection to the proposal to redefine interconnected VoIP for the purposes of 911 only. Having multiple definitions of the same service in the Commission's regulations is certain to lead to increased confusion with the regulations, and would damage the case for investment in new VoIP services. This definitional change could, TIA believes, also extend the reach of 911 location accuracy rules to services which the Commission does not intend and that would not benefit the public.

Last, TIA urges the Commission to recognize that the growth in the VoIP industry has been in significant part due to the current regulatory climate, and that a very strong record first be established that demonstrates technical feasibility and consumer expectations be established before extending VoIP regulations any further. TIA does not believe that this record currently exists, and therefore opposes the proposed general location accuracy governing principles.

Adoption of these principles will indicate intent to further weigh the industry with regulation and will disincentive potential investment. Instead, as with many other issues raised in the FNPRM, the Commission is urged to create the ETAG, as recommended by the CSRIC, and base decisions on the ETAG's multi-sector and consensus-based recommendations.

II. TIA ENCOURAGES THE COMMISSION TO ADOPT CSRIC'S RECOMMENDATION TO FORM AN ADVISORY COMMITTEE TO STUDY THE TECHNICAL, OPERATIONAL AND ECONOMIC ISSUES RELATED TO THE EXTENSION OF 911 AND E911 LOCATION ACCURACY REQUIREMENTS

Given the complexities in and harms to innovation and investment resulting from expanding location accuracy requirements at this time, TIA again recommends that the Commission establish an ETAG as proposed previously by TIA, CTIA, The 911 Industry Alliance, and a host of other interested parties.² In response to the Commission's Notice of Inquiry on 911 location accuracy, commenters from both public safety and industry suggested deference to CSRIC WG 4C reports.³ Finally, in that same report, CSRIC WG 4C strongly recommended the creation of the ETAG to conduct further study, stating:

The Working Group recommends that the FCC establish an E9-1-1 Technical Advisory Group ("ETAG") to address specific location technology issues for 9-1-1. The ETAG concept, which interested stakeholders have championed for several years, offers the best and most constructive path towards improved E9-1-1 accuracy. The ETAG, which should include representatives from all sectors of the industry, including public safety, carriers, technology vendors and key stakeholders, would work cooperatively and expeditiously to enhance location accuracy and to improve the manner in which location accuracy is measured. The ETAG would also validate the feasibility and capabilities of emerging E9-1-1

² See, e.g., Comments of TIA, PS Docket No. 07-114 (filed Oct. 14, 2008) at 9; Comments of the Alliance for Telecommunications Industry Solutions (ATIS), PS Docket No. 07-114 (filed Oct. 14, 2008) at 10; Comments of CTIA, PS Docket No. 07-114 (filed Oct. 14, 2008) at 9; Comments of Ericsson, PS Docket No. 07-114 (filed Oct. 14, 2008) at 2-5; Comments of The 911 Industry Alliance, PS Docket No. 07-114 (filed Oct. 14, 2008) at 2; Comments of AT&T, PS Docket No. 07-114 (filed Oct. 14, 2008) at 4, 13; Comments of Nokia Inc. and Nokia Siemens Networks, PS Docket No. 07-114 (filed Oct. 14, 2008) at 6; Comments of Motorola, PS Docket No. 07-114 (filed Oct. 14, 2008) at 4-6; Comments of Sprint Nextel Corporation, PS Docket No. 07-114 (filed Oct. 14, 2008) at 3; Reply Comments of The Emergency Services Interconnection Forum Comments of the Alliance for Telecommunications Industry Solutions, PS Docket No. 07-114 (filed Dec. 4, 2008) at 4-5; Reply Comments of The Center for Democracy and Technology/EFF, PS Docket No. 07-114 (filed Dec. 4, 2008) at 2.

³ See, e.g., Comments of Association of Public-Safety Communications Officials-International, Inc., PS Docket No. 07-114, WC Docket No. 05-196 (filed Jan. 3, 2011) at 5-6; Comments of Motorola Mobility and Motorola Solutions, PS Docket No. 07-114, WC Docket No. 05-196 (filed Jan. 3, 2011) (Motorola Mobility and Motorola Solutions Comments) at 8.

location accuracy technologies in a standardized, real-world test environment. The ETAG should study how to improve location accuracy in challenging environments, including indoor settings, urban canyons, high-rises, rural environments and areas of heavy forestation or mountainous terrain etc.⁴

Based on the consensus of opinions, TIA believes that the decision to move forward and subject nascent services to 911 obligations is not the correct decision for the Commission at this time. The Commission should instead create the ETAG, which will help to ensure that cross-industry and public safety concerns and expertise are considered, and will encourage continued dialogue on how best to empower carriers, vendors, and other stakeholders to provide further advanced E911 technologies.

It is clear to TIA that efficient and accurate implementation of improved location accuracy requirements to increasingly prevalent IP-enabled devices will be impossible without the technical expertise of all stakeholders, including wireless network manufacturers, wireless device manufacturers, carriers, and public safety. TIA members are instrumental in developing technologies for wireless networks and wireless devices related to E911 location provision. Such expertise, complementing that of wireless carriers, vendors of location solutions, and public safety entities is essential in guiding compliance with new E911 accuracy standards. As the CSRIC has made clear, an ETAG will enable experts from all key stakeholder groups to work together on the considerable complexities of carrying out the Commission's new E911 accuracy requirements.⁵ Further, the ETAG would be in the best position to address the specific issues

⁴ See CSRIC, Working Group 4C, Technical Options for E9-1-1 Location Accuracy, Final Report at 60 (CSRIC 4C Final Report).

⁵ *Id.*

raised in the item, including privacy, liability, and the integration of emerging technologies such as location based services.⁶

III. THE COMMISSION SHOULD NOT ALTER ITS DEFINITION OF INTERCONNECTED VoIP IN SECTION 9.3

In the item, the Commission proposes to extend 911 obligations to outbound-only interconnected VoIP service providers.⁷ This would be accomplished by, for the purposes of 911 obligations only, altering the second and fourth prongs of the definition of interconnected VoIP to include services that are available via dial-up as well as broadband by using the term “Internet connection,”⁸ and services that “permit[] users to terminate calls to all or substantially all United States E.164 telephone numbers,”⁹ respectively. For the reasons below, TIA opposes these alterations to the definition of interconnected VoIP based on regulatory consistency principles, and because the definition would sweep in further nascent services than simply outbound-only interconnected VoIP calls which the Commission intends to reach.

First, creating a new sub-classification for VoIP service, that is treating “outbound-only interconnected VoIP service providers as interconnected for the purposes of 911, but not purposes” as a new category of VoIP would create an unnecessary new layer of confusion and uncertainty.¹⁰ The Commission validly raises the issue of what kind of effect this would have on

⁶ FNPRM at ¶¶ 76-80.

⁷ *Id.* at ¶ 48.

⁸ *Id.* at ¶ 49.

⁹ *Id.* at ¶ 50-51.

¹⁰ *See* VoIP 911 Order, 20 FCC Rcd at 10257-58 ¶ 24; 47 C.F.R. § 9.3.

the Communications and Video Accessibility Act of 2010 (CVAA) and the Truth in Caller ID Act of 2009.¹¹ TIA believes that the Commission’s definition of interconnected VoIP should be consistent, and should not take on different forms for different purposes. To implement multiple definitions for interconnected VoIP as proposed by the Commission would create the situation where a VoIP service provider must evaluate whether they are offering “interconnected VoIP” depending on the context of use, and would create a “third” category of VoIP: “interconnected VoIP,” “non-interconnected VoIP,” and “interconnected VoIP for the purposes of 911 only.” This would increase insecurity in the VoIP marketplace. This effect would be opposite to the Commission’s stated goals.¹²

Were an outbound-only IP service provider offers a service with the primary purpose of smart grid machine-to-machine communications with the additional potential to terminate a voice call to any U.S. telephone number over the Internet, for example , the service provider would be required to consult different definitions of interconnected VoIP for the same offering in order to determine its compliance obligations under the CVAA and 911 location accuracy obligations. There are a number of scenarios in which smart-grid devices could be swept under the proposed “outbound-only VoIP” regulatory status. The most likely would involve devices with “notification function” for an absent user, such as a VoIP call placed to a consumer telephone number by a smart meter by a customer representative of an electric or gas utility as a

¹¹ FNPRM at ¶¶ 100-101.

¹² See The FCC’s Broadband Acceleration Initiative: Reducing Regulatory Barriers to Spur Broadband Buildout (rel. Feb. 3, 2011) available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2011/db0209/DOC-304571A2.pdf. See also Remarks of FCC Chairman Julius Genachowski, Broadband Acceleration Conference (Feb. 9, 2011) at 1-2 (“One thing government at all levels can do is ensuring efficient, effective regulation. We need rules that serve legitimate public needs without erecting costly or unnecessary barriers...Overly burdensome rules and regulations can slow down deployment and raise costs. It also can limit businesses ability to invest in new technologies and hire new workers.”) (FCC Broadband Goals).

notification of a certain level of usage accomplished via an outbound-only interconnected VoIP service. Such a circumstance is foreseeable given the degree of convergence of IP-enabled services, as the Commission has quite recently acknowledged.¹³ TIA believes that this is one example that illustrates that under the proposed definition, the Commission's regulatory regime would have a stifling effect on investment and innovation, and would erect a significant barrier to those considering ventures into the market. This, also, would have an effect opposite to the Commission's stated goals of efficient and effective regulation that does not create unnecessary barriers to investment and innovation.¹⁴

Second, TIA notes that we believe that improvements in automatic location information should be delivered to the public as soon as possible and that achievable goals drive innovation. However, TIA does not believe that the Commission should to extend 911 obligations to outbound-only interconnected VoIP calls at this time, nor that the proposed separate interconnected VoIP definition should be adopted.¹⁵ Because there are a similar amount of subscribers of outbound-only VoIP services as there were at the time that 911 obligations were extended to interconnected VoIP services as currently defined¹⁶ should not serve as a primary tipping point, nor should general public expectations that are uninformed on the state of location

¹³ See *Reliability and Continuity of Communications Networks, Including Broadband Technologies*, PS Docket No. 11-47, *Effects on Broadband Communications Networks of Damage or Failure of Network Equipment or Severe Overload*, PS Docket No. 10-92, *Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*, EB Docket No. 06-119, *Notice of Inquiry*, FCC 11-55 (rel. April. 7, 2011) at ¶ 28 (observing that "...three major industry sectors are converging on ever more extensive use of broadband technologies: public safety, commercial communications, and utilities.").

¹⁴ See FCC Broadband Goals.

¹⁵ FNPRM at ¶ 51.

¹⁶ *Id.* at ¶ 46.

accuracy standards and best practices.¹⁷ Reliance on either metric as a primary indicator of a need to extend further regulations lacks the full contemplation of stakeholders which could be attained through the ETAG, which, as described below, will be in the best possible position to determine “the potential benefits of extending location accuracy requirements to interconnected VoIP services.”¹⁸

Instead, TIA advocates for the same definition, as it sits today, to remain in use for all purposes of the Commission, and that the Commission create the ETAG which could then advise the Commission on how to proceed. Furthermore, to increase market certainty, TIA again urges the Commission to classify interconnected VoIP as an information service, and closing the outstanding IP-enabled services proceeding.¹⁹ This would be consistent with the Commission’s own view of converging IP-based services, and would spur investment and innovation by reducing uncertainty.

IV. IMPOSING A ‘USER LOCATION TRACKING MANDATE ON IP DEVICES’ FOR E911 REQUIRES A STRONG RECORD

The Commission should proceed carefully before imposing further user location tracking mandates on IP-enabled devices. As a threshold question, before addressing the issues of technological feasibility, the Commission should establish a solid record that there is stronger public interest in creating a broader location identification functionality within IP-enabled

¹⁷ *Id.* at ¶ 43.

¹⁸ FNPRM at ¶ 74.

¹⁹ *See* Comments of TIA, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 07-135, WC Docket No. 05-337, CC Docket No. 01-92, CC Docket No. 96-45, WC Docket No. 03-109 (filed Apr. 18, 2011) at 15-16.

services that exceeds user expectations of personal privacy. As the Commission notes, privacy protections for telecommunications users are a critical part of obligations that the industry operates within.²⁰ This framework has created among the strictest privacy protection regime of any industry sector. Before proceeding with expanded location tracking requirements, it is essential to first establish that users actually have an expectation that their location can be ascertained. Unless users actually expect their IP-enabled devices or services to be able to make emergency communications, then adding tracking functionality to them would have both limited public safety benefit and would come at the cost of undermining the trust they have in telecommunication services. As a result, a careful balance needs to be struck between these two competing interests of user privacy and public safety.

TIA believes that further extension of 911 obligations past their current reach to emerging technologies is premature and would hurt investment and innovation. Further research and development is needed first.²¹ TIA supports the Commission's decisions to refer the indoor testing issue to the CSRIC for further development of technical recommendations,²² and TIA also believes that new location accuracy rules adopted in the same item where the Commission proposes further rules should be given time for implementation over the eight year phase in, and allow for further transitional decisions to fully consider ETAG recommendations. Through

²⁰ FNPRM at ¶ 76.

²¹ *See, e.g.*, Comments of AT&T, PS Docket No. 07-114, WC Docket No. 05-196 (filed Jan. 3, 2011) at 5; Comments of ATIS, PS Docket No. 07-114, WC Docket No. 05-196 (filed Jan. 3, 2011) at 9; Motorola Mobility and Motorola Solutions Comments at 4-5, 15; TIA Comments at 7-9; Comments of Verizon, PS Docket No. 07-114, WC Docket No. 05-196 (filed Jan. 3, 2011) at 16-17; Comments of the Voice over the Net Coalition, PS Docket No. 07-114, WC Docket No. 05-196 (filed Jan. 3, 2011) ; Comments of Vonage Holdings Corp., PS Docket No. 07-114, WC Docket No. 05-196 (filed Jan. 3, 2011) at 11-14.

²² FNPRM at ¶ 88.

consideration of the detailed study within the ETAG can the Commission adequately determine whether it is appropriate to further extend 911 obligations.

TIA agrees that the dynamic VoIP marketplace will be put in danger of decreased investment and innovation should the Commission assert jurisdiction over new IP-services to what is currently considered non-interconnected VoIP.²³ The VoIP services marketplace generally has thrived by remaining largely outside the FCC's direct jurisdiction. This dynamic sector has continued to innovate and develop new products and services with remarkable speed. Location accuracy innovation enhancements in the VoIP space are due in large part to the voluntary and consensus-based efforts of standard development and best practices. Development of such standards is ongoing – for example, TIA has very recently developed its third iteration of J-STD-036, a standard for enhanced Phase II location accuracy.²⁴ TIA reiterates that new regulations at this time will inhibit or discourage such standards development, and that the most effective way for the Commission to facilitate improvements in location accuracy is to support the implementation of standards and best practices, namely by refraining from creating more regulatory burdens to innovation.²⁵ In support of this belief, TIA notes that the FCC's CSRIC Working Group 4A (Best Practices for Reliable 9-1-1 and E9-1-1) has acknowledged that “the successful implementation of 9-1-1 and enhanced 9-1-1 for voice over IP (VoIP)

²³ See, e.g., Comments of the VON Coalition, PS Docket No. 07-114, WC Docket No. 05-196 (filed Jan. 19, 2011) at 13.

²⁴ TIA's J-STD-036 joint standard defines the messaging required to support information transfer to identify and locate wireless emergency services callers. It provides a solution for the handling of Wireless Enhanced Emergency Calls for the FCC E911Phase II mandate. This standard has been updated as recently as June of 2011 to support emerging technologies including femtocells, CDMA MiFi, and others. Carrier position reporting to emergency services systems, as mandated by the FCC has been addressed by this standard without considering position reporting privacy restrictions that may be desirable for other position reporting services. See <http://bit.ly/rga1eG>.

²⁵ See Comments of TIA, PS Docket No. 07-114, WC Docket No. 05-196 (filed Jan. 19, 2011) at 8-9.

services depends on the availability of, and adherence to, industry standards and best practices.”²⁶

Further, in the view of TIA, this expanded definition at this time could have several adverse effects on PSAPs. One key benefit of the current definition of interconnected VoIP is that services included within it allow for a PSAP to call back a 911 call that disconnects. In instances where the ALI is not available either at all or lacks sufficiency, such a capability is critical to the ability of a PSAP to determine the actual location of a party placing the call. TIA believes that proscriptively mandating ALI for outbound-only interconnected VoIP will likely result in less-than-optimum solutions being developed in response to regulation. To require such capabilities will also create unrealistic expectations among consumers. Consumer education efforts could resolve this problem until such a capability exists, but the issue should be further explored by, in the immediate term, the new CSRIC Working Group 3 (E9-1-1 Location Accuracy), but ultimately and finally by the CSRIC-recommended ETAG.

Therefore TIA, while commending the Commission for appreciating the need for “flexibility to develop technologically efficient and cost-effective solutions,” also opposes the Commission’s proposal to adopt general location accuracy governing principles at this time for interconnected VoIP service providers and over-the-top VoIP service providers.²⁷ These will likely be regarded as initial steps towards increased regulation and translate to barriers to innovation, disincentivating investment. The Commission is urged instead to allow for a full discussion and examination of

²⁶ CSRIC, Working Group 4A, Best Practices for Reliable 9-1-1 and E9-1-1, Final Report at 3 (CSRIC 4A Final Report).

²⁷ FNPRM at ¶ 72-73.

the topic, as well as others related to 9-1-1 location accuracy, to the Federal Advisory Committee landscape through the ETAG, and to reserve judgment until an ETAG is formed and submits detailed recommendations to the Commission to ensure the most informed decisions is made.

V. CONCLUSION

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

Respectfully submitted,

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