

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

In the Matter of)	
)	
Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications)	PS Docket No. 11-153
)	
Framework for Next Generation 911 Deployment)	PS Docket No. 10-255
)	
)	
)	

REPLY COMMENTS OF 4G AMERICAS

Chris Pearson, President

4G AMERICAS
1750 112th Ave., N.E.
Suite B220
Bellevue, WA 98004

Patricia J. Paoletta
Renee R. Wentzel

WILTSHIRE & GRANNIS LLP
1200 Eighteenth Street, N.W.
Suite 1200
Washington, D.C. 20036

Counsel to 4G Americas

February 9, 2012

Table of Contents

INTRODUCTION AND SUMMARY..... 1

I. SMS-TO-911 IS NOT AN APPROPRIATE INTERIM SOLUTION FOR NG911 2

II. PROPOSED SMS-TO-911 SOLUTIONS ARE NOT VIABLE 5

III. INDUSTRY IS DEVELOPING A STANDARDS-ALIGNED NG911 SOLUTION..... 7

IV. STATES AND LOCALITIES SHOULD CERTIFY THAT PSAPS HAVE BEEN
UPGRADED BEFORE IMPOSING ANY CARRIER MANDATES 9

V. THERE IS SCARCE CURRENT FUNDING FOR PSAP NG911 UPGRADES..... 11

VI. CONGRESSIONAL DIRECTION DOES NOT SUPPORT TECHNICALLY UNFEASIBLE
MANDATES 13

CONCLUSION..... 15

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

In the Matter of)	
)	
Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications)	PS Docket No. 11-153
)	
Framework for Next Generation 911 Deployment)	PS Docket No. 10-255
)	
)	
)	

REPLY COMMENTS OF 4G AMERICAS

INTRODUCTION AND SUMMARY

4G Americas, the leading industry association in the Americas representing the Third Generation Partnership Project (“3GPP”) family of technologies, including HSPA and LTE,¹ submits these Reply Comments in response to comments filed in the above-captioned dockets regarding Next Generation 911 (“NG911”).² 4G Americas shares the Federal Communications Commission’s (“FCC” or “Commission”) goal of “a broadband-enabled, Internet Protocol (“IP”)-based 911 network [that] will offer far more flexibility, resilience, functionality, innovation potential, and competitive opportunities than is presently possible.”³ To achieve this

¹ 4G Americas’ Board of Governors members include Alcatel-Lucent; América Móvil S.A.B. de C.V.; AT&T Inc.; Cable & Wireless Worldwide PLC; CommScope, Inc.; Ericsson Inc; Gemalto N.V.; Hewlett-Packard Company; Huawei Technologies Co., Ltd.; Nokia Siemens Networks US LLC; Openwave Systems Inc.; Powerwave Technologies, Inc.; QUALCOMM Incorporated; Research in Motion Limited; Rogers Communications Inc.; T-Mobile USA, Inc.; and Telefónica.

² *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications*, Notice of Proposed Rulemaking, 26 FCC Rcd. 13615 (2011) (“*NG911 NPRM*”).

³ *See Framework for Next Generation 911 Deployment*, Notice of Inquiry, 25 FCC Rcd. 17869, ¶ 28 (2010).

goal as soon as possible, 4G Americas recommends that all stakeholders focus their resources on developing or supporting NG911 standards for Internet Protocol Multimedia Subsystem (“IMS”)-based Multimedia Emergency Services (“MMES”),⁴ currently being specified in 3GPP. Only this coordinated path will deliver the functionality, resilience, and flexibility that policy advocates desire in a cost-efficient, effective and timely manner.⁵

I. SMS-TO-911 IS NOT AN APPROPRIATE INTERIM SOLUTION FOR NG911

There is a lack of public safety support for mandating SMS-to-911 as an interim emergency technique for the general public. 4G Americas believes – as do many other commenters in this proceeding – that SMS-to-911 should not be considered as an interim solution before the implementation of NG911.⁶ 4G Americas’ white paper, previously submitted to this docket presents a view of the capabilities, limitations, threats and vulnerabilities of SMS-to-911.⁷ It also bears repeating that the 3GPP SMS standard solution was originally designed for non-real-time and non-emergency applications. Strictly speaking, SMS is not Next Generation 911 Deployment of NG911, as called for by the Commission’s stated goal.

⁴ MMES is the term used by the telecommunications industry to identify standards development of next-generation emergency services utilizing multimedia capabilities.

⁵ See Comments of the Public Safety Communications Office of the California Technology Agency at 5, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011) (The long-term solution is preferable, because short-term text-to-911 will increase time and resources required for PSAPs to process information as compared to voice calls).

⁶ See also Comments by Rave Mobile Safety on Proposed Rule Making at 2, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011) (“*Rave Mobile Comments*”) (any interim solution be strictly voluntary, not mandated, and limited to the deaf and hard of hearing communities); see also Comments of APCO International at 2-3, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011) (“*APCO Comments*”) (SMS may be an appropriate near-term solution for the limited circumstance of people with disabilities, but SMS is not a long-term solution and should not be mandated for wide-spread use by the general public in normal circumstances).

⁷ See 4G AMERICAS, TEXTING TO 9-1-1: EXAMINING THE DESIGN AND LIMITATIONS OF SMS (2010), avail. at <http://www.4gamericas.org/documents/SMS%20to%20911%20White%20Paper%20Final%20October%202010.pdf>.

Many commenters oppose any SMS-to-911 mandates for sound technological reasons. For instance, Blooston Rural Carriers oppose any SMS-to-911 mandate, since Public Safety Answering Points (“PSAPs”) are unequipped to process SMS-to-911 transmission, and the costs associated with upgrading PSAP to achieve SMS-to-911 are too great.⁸ They note that the technical limitations of SMS-to-911 include: 1) no guarantee of message delivery to the PSAP; 2) delays in message delivery; 3) no acknowledgment of receipt is provided to sender; and 4) current SMS standards do not support automated routing to the PSAP or automated location information.⁹ Rather, Blooston Rural Carriers support investing all energy and resources to the deployment of a long-term IP-based solution, as does 4G Americas.¹⁰

4G Americas published “Evaluation of Short-term Interim Techniques for Multimedia Emergency Services” last year, as noted in its initial comments in this proceeding.¹¹ This paper, which examines potential short-term techniques to be utilized by users, wireless carriers and PSAPs, is consistent with the position of Blooston Rural Carriers and other commenters that oppose SMS-to-911 mandates due to operational limitations of SMS.

⁸ See Comments of Blooston Rural Carriers at 2, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011) (“*Blooston Rural Carriers Comments*”).

⁹ *Id.* at 2-3.

¹⁰ *Id.* at 2. Likewise, CTIA—The Wireless Association suggests the Commission focus on long-term rather than interim text-to-911 solutions; Comments of CTIA—The Wireless Association at 6, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011) (“*CTIA Comments*”).

¹¹ See Comments of 4G Americas at 2, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011) (“*4G Americas Comments*”), referencing *Evaluation of Short-Term Interim Techniques for Multimedia Emergency Services* (2011), *avail. at* <http://www.4gamericas.org/UserFiles/file/White%20Papers/Evaluation%20of%20Short-Term%20Interim%20Techniques%20for%20Multi-Media%20Emergency%20Services.pdf>. A copy has been introduced into the record of this proceeding; see Letter from Patricia Paoletta, Counsel to 4G Americas, to Marlene H. Dortch, Secretary, Federal Communications Commission (Aug. 31, 2011).

Some local and state commenters even challenge the benefit of SMS-to-911 for the general public, suggesting voice is the most effective and expeditious method of alerting a PSAP of an emergency.¹² There are very few “silent call” scenarios from hearing people that would benefit from SMS-to-911 capabilities.¹³ It is also notable that public safety interests do *not* support an interim SMS-to-911 capability for the population at large, although they may support an interim solution in the limited circumstance of use by the deaf and hard-of-hearing community.¹⁴

Since NG911, at least as defined in pending House and Senate legislation, requires “emergency call data useful to call routing and handling” and the support of “data or video communications needs for coordinated incident response and management,”¹⁵ SMS cannot be considered a NG911 service. Emergency call routing to the appropriate PSAP and response requires location information. Existing SMS does not support real-time latency, emergency call

¹² See e.g. Joint Comments of the Boulder Regional Emergency Telephone Service Authority and the Colorado 9-1-1 Task Force at 14, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011) (“*Boulder/Colorado Joint Comments*”); see also Blooston Rural Carriers Comments at 3-4.

¹³ Comments of the King County E911 Program at 3, PS Docket Nos. 10-255 and 11-153 (filed Dec. 13, 2011); Boulder/Colorado Joint Comments at 17 (“The vast majority of calls to 9-1-1 do *not* involve silent-call scenarios and are not from the speech and hearing impaired community.”) (emphasis in original).

¹⁴ See APCO Comments at 2 (“there are serious, inherent deficiencies in SMS as a 9-1-1 delivery mechanism. While SMS may be appropriate as a near-term solution for limited circumstances, it is not a long-term solution for the general public...SMS for text-to-911 capability should not be mandated for wide-spread use by the general public in normal circumstances.”); Comments of the National Association of State 9-1-1 Administrators at 4, PS Docket Nos. 10-255 and 11-153 (filed Dec. 9, 2011) (“*NASNA Comments*”) (“Deployment of interim short-term text-to-9-1-1 solutions must be strictly voluntary and limited to assisting the deaf and hard of hearing community.”)

¹⁵ See Middle Class Tax Relief and Job Creation Act of 2011, H.R. 3630, 112th Cong. § 4002(18)(C) and § 4002(18)(E) (2011) (“*JOBS Act*”); Public Safety Spectrum and Wireless Innovation Act, S. 911, 112th Cong. § 601(3)(C) and § 601(3)(E) (2011) (“*S. 911*”). See also discussion of pending NG911 legislation, *infra.* at §§ IV, V, VI.

routing, location information, ordered delivery, or call back indication to the PSAP. Even the proposed House bill’s definition of “emergency call” requires “real-time communications with a public safety answering point” that SMS cannot be relied upon to deliver.¹⁶

II. PROPOSED SMS-TO-911 SOLUTIONS ARE NOT VIABLE

Some vendors and academics have suggested that there are currently-available solutions for SMS-to-911.¹⁷ But the solution offered by one vendor uses proprietary, experimental technology for a specific PSAP.¹⁸ That vendor’s proprietary technology was not subject to an open, inclusive evaluation process that included analysis of its ability to meet all of the mandatory requirements of emergency calling, nor analysis of the related costs of its implementation and operation on a nationwide basis. Additional harm could be caused by the as-yet-unknown impact of that proprietary, experimental technology on the signaling traffic. Deployed nationwide, a non-standardized E911 SMS approach would pose substantial costs for the required interoperability tests and any subsequent system deployment.

One university program suggested in their comments that technology had been developed to provide confirmation of text message delivery, and that “many international systems address this concern by the initial call taker responding with a text message back to the sender.”¹⁹ However, it is questionable whether the architecture proposed could deliver accurate location information to the PSAP simultaneously with a SMS-to-911 message. 4G Americas doubts the efficacy of those systems, since there is no guarantee of SMS delivery at the PSAP, or indeed of

¹⁶ See JOBS Act § 4002(13).

¹⁷ See e.g. Comments of Telecommunications Systems, Inc. at 11, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011); Comments of Intrado Inc. at 5, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011) (“*Intrado Comments*”).

¹⁸ See Intrado Comments at 7-10.

¹⁹ See Comments of the University of Colorado, Interdisciplinary Telecommunications Program at 4, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011) (“*Colorado ITS Comments*”).

a return text from the PSAP to the initial texting party. Because SMS is not a reliable communication method, a response from the initial call taker could also be lost or delayed in the network. If the initial texting party did not receive the response immediately, he or she might interpret that delay as a sign that the SMS was not delivered. Such a user could feel uncertain or even panicked, and could resort to generating more SMS messages, creating an unnecessary load on the network. Further, since SMS messages may arrive out of order, a PSAP acknowledgement (or a caller's resending), might be interpreted as a reply to a different message, thus creating confusion, and potentially hampering emergency response efforts. For example, a reply of "yes" sent in reply to "Are you outside the burning building?" could be delivered after a query of "Is anyone else inside?" Other vendors have similar concerns about the inability to locate the origin of an SMS message with any accuracy.²⁰

The same university program also alleges that "technology has been developed that can route a string of text message[s] to the same PSAP and/or 911 call taker."²¹ 4G Americas questions whether SMS technology providing the required continuity and consistent contact with 911 call takers, deployable on a nationwide level, has in fact been developed, when the referenced technology was not developed consistent with GSM standards and has not been subject to GSM standards conformance tests.²² The lab study described was executed in an academic environment with a pre-determined technology and setting. The study did not involve

²⁰ See Comments of True Position, Inc. at 2, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011).

²¹ Colorado ITS Comments at 4.

²² The proposed interoperability solution has not had interoperability tested with all various standard release GSM networks. 4G Americas cautions that due to being outside the GSM standards conformance testing parameters, the test described in the Comments of the University of Colorado's ITP is the responsibility of communities using this non-GSM based technology.

a large number of subscribers, and hence, no real-world traffic conditions. In addition, the technology referenced in the university's comments – "technology has been developed" to "route a string of text message to the same PSAP" – is not consistent with developed GSM standards. As such, that one university's experiment cannot be deemed a reliable indicator of the performance of SMS in a real-world setting. Indeed, another university program found rather substantial limitations regarding the suitability of SMS in an emergency situation.²³

III. INDUSTRY IS DEVELOPING A STANDARDS-ALIGNED NG911 SOLUTION

As 4G Americas and other associations noted in their comments, standards for IP-based emergency services are generally aligned, and standards-setting bodies are collaborating.²⁴ 4G Americas and its members have worked diligently towards the realization of NG911's benefits, expending substantial resources participating in various standards bodies. In particular, 4G Americas is working to facilitate feature-rich, robust MMES through 3GPP. Many of its member companies also participate in the Alliance for Telecommunications Industry Solutions ("ATIS"), with which 3GPP coordinates. With standards alignment, NG911 systems can be built utilizing IMS-based technology without the need to implement a separate backbone network, which would raise costs and delay progress towards nationwide NG911 availability.²⁵ As other

²³ See PATRICK TRAYNOR, GEORGIA INSTITUTE OF TECHNOLOGY, CHARACTERIZING THE LIMITATIONS OF THIRD-PARTY EAS OVER CELLULAR TEXT MESSAGING SERVICES (2008), *avail. at* http://4gamericas.org/documents/Characterizing_the_Limitations_of_3rd_Party_EAS-Traynor_Sept08.pdf.

²⁴ 4G Americas Comments at 3-4; Comments of the Alliance for Telecommunications Industry Solutions at 3, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011) ("*ATIS Comments*"); Comments of the National Emergency Number Association at 3, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011).

²⁵ As 4G Americas noted in its comments, standards alignment also eliminates the need to use a protocol conversion gateway between SIP-based IMS and NG911 systems, and provides standardized interoperable emergency functionality to support additional video, picture, and text messages from IMS originating networks, avoiding costs to convert messages between

commenters noted, a long-term solution will develop if National Emergency Number Association (“NENA”) and Internet Engineering Task Force (“IETF”) work with ATIS and 3GPP to ensure compatibility across technologies.²⁶

The leading NG911 technology is IMS-based MMES, currently being developed by 3GPP. Release 11 – the most current work plan for 3GPP released in January 2012 – calls for members to study non-voice emergency services and work on IMS Emergency PSAP Callback (Stage 3).²⁷ MMES is generally aligned with the relevant documented requirements of other standards-setting bodies. Having all stakeholders discuss implementation issues in collaboration will minimize unexpected challenges as the United States moves forward with NG911.

4G Americas agrees with ATIS’s position that stakeholders direct their resources to migrating from ATIS’s IP Relay short-term Interim Non-voice Emergency Services (“INES”) Incubator to long-term MMES. As several commenters note, IP Relay today is deployed and supported by the Federal Telecommunications Relay Service (“TRS”) fund, which, among other things, facilitates access to 911 by consumers with hearing or speech impairments.²⁸ The Commission has a duty to ensure that service providers’ contributions into the TRS fund are used in an efficient manner, consistent with the public interest.

disparate systems, as well as additional delays, traffic capacity constraints, and application selection limitations.

²⁶ See, e.g., Comments of Neustar, Inc. at 13-14, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011); Comments of QUALCOMM Incorporated at 10, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011); ATIS Comments at 19.

²⁷ See 3GPP, Overview of 3GPP Release 11 VO.0.9 (Jan. 18, 2012), *avail. at* http://www.3gpp.org/ftp/Information/WORK_PLAN/Description_Releases/.

²⁸ See ATIS INES INCUBATOR, ATIS INTERIM NON-VOICE EMERGENCY SERVICES (INES) REPORT AND RECOMMENDATIONS 7 (2011); see Comments of T-Mobile USA, Inc. at 13-16, PS Docket Nos. 10-255 and 11-153 (filed Dec. 12, 2011) (“*T-Mobile Comments*”).

4G Americas also cautions that IP networks have special cybersecurity concerns that were not prevalent with circuit-switched networks, which still characterize many PSAPs today. 4G Americas noted in its comments that IMS-based MMES being specified by 3GPP will likely be supported in LTE, an IP-based technology, as is MMES.²⁹ The FCC currently requires Commercial Mobile Radio Service (“CMRS”) carriers to deliver all calls to 911 regardless of the service initialization status of the handset. This is known as the “all calls rule.” As a result, carriers redesigned their systems to skip the user registration processes if the dialed digits are 911. Today, all handsets, even those without a service plan, can call 911.

Since LTE is an IP-based technology, allowing unregistered LTE handsets to make 911 or any other calls would create potential vulnerabilities to the LTE IP network. These vulnerabilities could allow a variety of cyber attacks, which could shut down the CMRS network. Further, because the NG911 network will be IP-based, it too could be vulnerable to attack or shutdown. The FCC should therefore work with industry and public safety interests to consider changes to the all calls rule in future network configurations after NG911 is deployed, or during an interim period when a carrier’s network is LTE, but the PSAP is still on a circuit-switched network.

IV. STATES AND LOCALITIES SHOULD CERTIFY THAT PSAPS HAVE BEEN UPGRADED BEFORE IMPOSING ANY CARRIER MANDATES

Given the large number of PSAPs, disparate governance and funding models, and number of competitive providers, it will take a significant amount of time before nationwide deployment of NG911 can be achieved, despite industry’s current standards-setting efforts. That period of time will be shortened if the various stakeholders coalesce around a defined migration path. The National Association of State 911 Administrators (“NASNA”), the National Emergency Number

²⁹ 4G Americas Comments at 5.

Association (“NENA”) and several state and local governments caution that it is inefficient and counter-productive to impose carrier mandates until the PSAPs have upgraded and can receive NG911 messages.³⁰

To be effective in a region – and in particular to allow effective load-sharing during high-call volume incidents and fail – over when the PSAP itself is affected by a disaster – a critical mass of interconnected PSAPs must be upgraded to NG911. As noted above, some emergency service authorities believe live audio communications are the most effective alerting technique.³¹ Preference for audio communication may impact the rate by which PSAPs are upgraded in a region, if at all.³² In certain service areas, because of local government resistance and lack of funding, NG911 with full multimedia services likely will not be available for some time.

Congress appears to agree with respect to the importance of NG911 receipt capabilities. Both of the recent House and Senate spectrum bills define NG911 in terms of the “delivery” of IP-based emergency messages.³³ If a PSAP cannot receive a NG911 message, then no amount of carrier network retrofitting can make the message NG911. It would be inconsistent with the definition of NG911 in Congress’ latest pronouncements on emergency services to mandate

³⁰ Blooston Rural Carriers Comments at 6.

³¹ See *supra* at n. 12, citing Boulder/Colorado Joint Comments and Blooston Rural Carriers Comments.

³² By contrast, SMS is not a reliable, delay-free, real-time messaging system and with respect to those criteria, SMS is not comparable with an audio communication.

³³ The U.S. House of Representatives Middle Class Tax Relief and Job Creation Act of 2011, H.R. 3630, Title IV, and the Senate’s Public Safety Spectrum and Wireless Innovation Act, S.911, Title VI, define NG911 as, in relevant part, “an IP-based system comprised of hardware, software, data, and operational policies and procedures that *delivers* the emergency calls, messages, and data to the appropriate public safety answering point and other appropriate emergency entities” (emphasis added); JOBS Act § 4002(18)(D) (2011); see S. 911§ 601(3)(D) (2011).

NG911 network or handset technologies prior to the ability of the appropriate PSAP to receive NG911 messages.³⁴

A defined and coordinated migration plan is critical to deliver NG911 to consumers who are able to benefit from them the soonest, with the minimal waste of industry and public safety resources. Local PSAP readiness to receive NG911 messages should be determined and certified by state and local governments.³⁵ This would allow the industry to better plan its NG911 deployment schedule, and to do so in a more cost-efficient manner.

From its past efforts, 4G Americas observes that local government involvement is critical. 4G Americas recommends – as reflected in the comments of several local government authorities – that the transition to NG911 occur not on a PSAP-by-PSAP basis, but rather at an intra-state – *e.g.*, county or region within a state – and/or statewide basis. To maximize efficient expenditure of limited resources, state and/or local authorities should require PSAPs to demonstrate their ability to receive text and other media before network operators are obligated to provide NG911 service. The transition to NG911 must also be effectively conveyed to consumers by government authorities, who will be dependent on 911 emergency services throughout the transition period.³⁶

V. THERE IS SCARCE CURRENT FUNDING FOR PSAP NG911 UPGRADES

Regrettably, there is no ready source of funding for PSAP upgrades in all 57 States and territories. Thus, 4G Americas believes that in the current budget environment, it would do little

³⁴ See *supra* at n. 6, citing Rave Mobile Comments and APCO Comments.

³⁵ See NASNA Comments at 8; CTIA Comments at 16.

³⁶ See *e.g.*, T-Mobile Comments at 17-18 (The East Coast Earthquake of August 2011 showcased consumers' need for public safety education regarding the role and functionality of 911. Numerous 911 callers asked 911 call-takers whether they knew what happened or to report on the earthquake generally, rather than to request specific assistance).

good to mandate carrier near-term deployment of technologies that would require massive investments by PSAPs or require a complete overhaul of existing emergency communications systems.

State budgets remain pressured. The U.S. House of Representatives' JOBS Act bill allocated \$250 Million for NG911 upgrades, to be funded through future spectrum auctions.³⁷ However, that legislation has not yet passed. Currently, the JOBS Act is included in the proposed payroll tax extension bill as a mechanism to pay for the tolling of the payroll tax. The Senate counterpart to the JOBS Act – S. 911, Public Safety Spectrum and Wireless Innovation Act – does not fund NG911.³⁸

Congressional conferees are attempting to identify programs that pay for non-imposition of the payroll tax. There is limited support for programs that pose additional outlays. Even if the grant program in the House bill were to become law this year, the \$250 million would be split among grants for 911 and E-911 as well, and not for NG911 alone. And 911, E-911 and NG911 grant recipients would have to wait in line, in “order of priority” behind funding for the administration of the public safety broadband plan, state implementation of the plan, actual build-out of the public safety broadband network, and more than \$20 billion in deficit reduction.³⁹

The timeline is unclear for incentive broadcast spectrum auctions or auctions of federally-relocated spectrum – the source of intended NG911 grants – due to a number of exigencies in the marketplace and the slow pace of federal relocation planning.⁴⁰ In a budget-strapped

³⁷ See JOBS Act § 4241(b)(5).

³⁸ Public Safety Spectrum and Wireless Innovation Act, S. 911, 112th Cong. (2011).

³⁹ See JOBS Act at § 4241(b)(1)-(5).

⁴⁰ See *id.* at §4101 and §§ 4103-04.

environment, and with a mounting national deficit, it is therefore critical that the most cost-efficient path forward be pursued – coordination among NENA, the Internet Engineering Task Force (“IETF”), ATIS and 3GPP on IMS-based MMES.

VI. CONGRESSIONAL DIRECTION DOES NOT SUPPORT TECHNICALLY UNFEASIBLE MANDATES

Nothing in the Twenty-First Century Communications and Video Accessibility Act⁴¹ (“CVAA”) mandates SMS-to-911, or authorizes the FCC to impose mandates that are not technically feasible. ATIS, APCO International, the Telecommunications Industry Association (“TIA”) and others oppose mandates. Moreover, nothing in Congress’ last articulation on NG911 – the JOBS Act and S. 911 – suggests that Congress intends to give the Commission the power to mandate SMS-to-911 as an interim solution, or to expand the Commission’s NG911 authority in any way. Instead, the JOBS Act identifies the National Telecommunications and Information Administration (“NTIA”) and the Department of Transportation’s National Highway Traffic Safety Administration (“NHTSA”) as the key federal agencies with respect to NG911.

The core of the *NG911 Advancement Act* included in the JOBS Act directs NTIA and NHTSA to develop a NG911 plan through their joint 911 Implementation Coordination Office (“ICO”). The Commission’s primary role in the bill, other than a rulemaking on a do-not-call registry for PSAPs, is to seek public comment on the feasibility of requiring Multi-line Telephone Systems (“MLTS”) to include “a sufficiently precise indication of a 9-1-1 caller’s

⁴¹ Twenty-First Century Communications and Video Accessibility Act of 2010, Pub. L. No. 111-260, 124 Stat. 2751 (2010).

location.”⁴² Importantly, the *NG911 Advancement Act* cautions that any such requirement shall avoid “the imposition of undue burdens on MLTS manufactures, providers, and operators.”⁴³

Likewise, the S. 911 provisions regarding NG911 – Title VI, *Studies on Next Generation 9-1-1 Services* – give no authority to the Commission to mandate SMS-to-911 or impose any other short-term, interim texting technology. Title VI of S. 911 – like the House’s *NG911 Advancement Act* – requires NHTSA, in consultation with the Commission and the Department of Homeland Security, following a year’s study, to submit a report “that analyzes and determines detailed costs for specific Next Generation 9-1-1 service requirements and specifications.”⁴⁴ Both the JOBS Act and S. 911 then direct the Commission to spend a year preparing a report with recommendations for the legal and *statutory* framework for NG911 services.⁴⁵ The reference to “statutory” suggests that Congress itself intends to establish the framework before delegating any additional power to the Commission to impose undue burdens on providers and operators.⁴⁶ In verbatim language, the two bills direct the Commission to include in their recommendations for “the transition from legacy 9-1-1 to Next Generation 9-1-1 networks” legal mechanisms to “ensure efficient and accurate transmission of 9-1-1 caller information to emergency response agencies.” Unfortunately, SMS-to-911 simply cannot ensure the efficient and accurate transmission of caller location information to PSAPs.

⁴² JOBS Act § 4266(b)(1).

⁴³ *Id.*

⁴⁴ JOBS Act § 4270(a); S. 911 § 602(a).

⁴⁵ JOBS Act § 4271; S. 911 § 603 (emphasis added).

⁴⁶ In the National Broadband Plan, the Chairman himself suggested that Congress enact a national framework for NG911 regulation; see FEDERAL COMMUNICATIONS COMMISSION, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN 326, Recommendation 16.14 (2010), *avail. at* <http://www.broadband.gov/download-plan/> (Legislation should give the FCC authority to implement a NG911 federal regulatory framework, coordinated with a NHTSA report on the costs of deploying a nationwide NG911 system.)

Given the provision in the two bills for a year-long study, resulting in *recommendations* from the Commission to Congress, it would be premature, and contrary to the authorizing Congressional Committees' intent, for the Commission to mandate SMS-to-911 as a short-term technique.

CONCLUSION

The use of smartphones and tablets with broadband communication capabilities is growing rapidly. These advanced mobile devices have received wide acceptance from U.S. consumers in large part because they provide greater convenience, information and entertainment to the mobile public. The market has delivered this innovation – not government mandates. Instead of paving the road for an interim solution that threatens the pace of development of innovative mobile technologies and devices, 4G Americas suggests that stakeholders progress towards a long-term solution and focus on evaluating and selecting one solution compatible with NG911 service capabilities. As others have cautioned, any interim solution must not hinder progress towards a long-term solution.⁴⁷

4G Americas believes the public interest in facilitating NG911 is best achieved by focusing efforts on IMS-based MMES. The disability community has stated that they do not want special solutions designed solely for users with hearing or speech impairments, since those solutions may be more costly, have less over-all functionality, and rapidly become technology islands. To avoid that result, and to bring the benefits of NG911 to the disabled and the general public as soon as possible, 4G Americas recommends that stakeholders direct efforts towards MMES. 3GPP Release 11 has set targets for MMES in a continuous development process that is well underway.

⁴⁷ Rave Mobile Comments at 2.

By contrast, mandating requirements on device and network requirements that the device functions were not designed or intended to perform, such as SMS-to-911, would threaten the mobile device ecosystem, and impose costs on consumers and local governments without commensurate public gain.

Respectfully submitted,



Patricia J. Paoletta

Renee R. Wentzel

Chris Pearson, President

4G AMERICAS
1750 112th Ave., N.E.
Suite B220
Bellevue, WA 98004

WILTSHIRE & GRANNIS LLP
1200 Eighteenth Street, N.W.
Suite 1200
Washington, D.C. 20036

Counsel to 4G Americas

February 9, 2012