Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington DC 20554

In the Matter of	)	
	)	
Legal and Statutory Framework for Next Generation 9-1-1 Services	)	DA 12-1831
	)	
	)	PS Docket Nos. 10-255, 11-153, 12-333
	)	

Comments of Motorola Solutions, Inc.

Motorola Solutions, Inc. ("MSI") hereby responds to the Public Safety and Homeland Security Bureau's ("Bureau") request for public input on the appropriate legal and statutory framework for next generation 9-1-1 ("NG9-1-1") services.[1] The Bureau intends to use the information collected in this process to assist the Commission to prepare a report to Congress on these issues as mandated by the Middle Class Tax Relief and Job Creation Act of 2012.[2]

Motorola Solutions has been deeply involved in all aspects of the technical and standards development effort, and is committed to helping to realize a smooth and efficient NG9-1-1 transition. The NG9-1-1 transition demands careful and comprehensive planning at all levels of government and the dedication of significant intellectual and financial resources. The NG9-1-1 transition will take time, but with appropriate leadership and coordination, the public benefits will be substantial.

By providing grant money to support the adoption and operation of NG9-1-1 services and adopting liability protection for 9-1-1 providers, the NG9-1-1 Advancement Act addressed two

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[1] Public Safety and Homeland Security Bureau Seeks Comment on the Legal and Statutory Framework for Next Generation 9-1-1 Services Pursuant to the Next Generation 9-1-1 Advancement Act of 2012, Public Notice, DA 12-1831, November 13, 2012 ("Public Notice").

[2] *See* Middle Class Tax Relief and Job Creation Act of 2012, §§ 6206(b)(1)(C); 6206(c)(3)(A), Pub. L. No. 112-96, 126 Stat. 156 (2012) ("NG9-1-1 Advancement Act").

critical needs in ensuring a workable transition to providing NG9-1-1 services across the country. Additional work remains, particularly with regard to creating secure funding sources for NG9-1-1 deployment. In these comments, MSI addresses the issues surrounding the development of a legal and regulatory structure that will further promote NG9-1-1 development.

I. Local Control of Deployment and Operation, with Uniform State & National Governance

The Public Notice notes that the legacy 9-1-1 system is comprised of approximately 6,800 Public Safety Answering Points (PSAPs); myriad governance structures that vary across state, county, and local jurisdictions; a number of service providers; and funding mechanisms that differ across jurisdictional boundaries. Given the wide variation in state-level approaches to legacy 9-1-1, the Public Notice seeks comment on the ability of states to effectively coordinate the transition to NG9-1-1 and, also, what role the federal government should play in NG9-1-1 oversight. These issues are raised through questions such as:

- ***Should each state or region designate an organization to be responsible for planning, coordinating, and implementing the NG9-1-1 system in that particular state or region?***
- ***Should state or regional oversight bodies have control over the funding of NG9-1-1 services?***
- ***Should a specific federal agency or agencies be responsible for establishing national policy to ensure consistent regulation of NG9-1-1*****?**
- ***Should a specific federal agency or agencies be responsible for enabling and initiating the development and deployment of shared state-wide Emergency Services IP Networks (ESInets) and related cooperative working agreements between federal, state, tribal, and local agencies?***

At a high level, MSI believes that most design, implementation, operation, and regulation of the actual activities of PSAPs must be administered at the state or local level. Although this

may create disjointed provision of services across the country, local control best ensures that new technologies and processes are deployed by PSAPs in a manner appropriate for their local areas. Maintaining local agency control over local 9-1-1 operations is essential, as they have the best understanding of the needs, abilities, and resources of the local area.

Each state or region should be required to designate an organization that is responsible for NG9-1-1 planning, coordination and implementation. These organizations should be required to coordinate their NG9-1-1 program initiatives with a single Federal agency, but should retain the autonomy to define, implement, and deploy within the framework and initiatives that are established and facilitated by the coordination agency.

The ideal structure is not unlike MSI's recommendations for the implementation of the FirstNet Nationwide Network ("FNN") to be operated in the 700 MHz band.[3] In comments recently submitted to the NTIA, MSI stated that while the management of the FNN should be nationally coordinated by FirstNet, it is essential that local public safety users are able to control network resources to best meet local needs that vary significantly among states, regions, localities, and federal agency users. MSI further recommended that FirstNet delegate operational decision-making responsibility to appropriate state and local level authorities, as these entities have the best understanding of coverage, network performance, and other service level needs that are impacted by spectrum availability. MSI believes that similar benefits are derived by maintaining local control for the provision of NG9-1-1 services.

One organization within the Federal government should be established to serve a role similar to that envisioned for FirstNet. There are multiple agencies – the FCC, NTIA, DHS and

[3] In the Matter of Development of the Nationwide Interoperable Public Safety Broadband Network, Comments of Motorola Solutions Inc., Docket No. 120928505-2505-01, *available at* http://www.ntia.doc.gov/files/ntia/msi_firstnet_noi_comments_11_09.pdf.

NHTSA – that could fulfill this role due to their existing oversight of 9-1-1. To avoid duplication of effort, MSI recommends that Congress specify and fund one organization to operate as the NG9-1-1 coordinating body. This agency should have responsibility and authority for establishing a minimum set of NG9-1-1 requirements to help guide the deployment of and ensure interoperability of state/regional/local level NG9-1-1 services. This would be similar to the minimum set of technical requirements defined by the Commission's Interoperability Board that were distributed to FirstNet. While state and local authorities would retain the fundamental responsibility to deploy, there is benefit to a national benchmark that affords interoperability.

The Federal coordinating body should also be responsible for ensuring that funds appropriated for 9-1-1 and NG9-1-1 are secure. Funds and fees collected and monies appropriated for NG9-1-1 need to be reserved only for use in connection with 9-1-1-related operations and development. The Commission should work with Congress and the states to ensure that funds are identified, secured, and appropriately used.

II. Standards and Standardized Architecture.

The Public Notice solicited comments on what oversight structure would best promote the development of a standardized architecture for NG9-1-1 and to ensure compliance with such standards.

- ***Would the formation of state or regional oversight bodies better ensure adherence to a standardized architecture that facilitates greater levels of functionality*?**
- ***Should a single federal entity be established or designated to oversee the transition to NG9-1-1, and/or to ensure compliance with required standards, coordination, implementation, and policies*?**

Deployment of NG9-1-1 involves a transition to an entirely new communications system that has necessitated a significant research, engineering, and development process involving

standards bodies, public safety entities, telecommunications service providers, technology developers, and representatives of federal, state, and local governments. Thanks to the work of groups like the National Emergency Number Association ("NENA"), APCO, the Internet Engineering Task Force ("IETF"), the Alliance for Telecommunications Industry Solutions ("ATIS"), the 3rd Generation Partnership Project ("3GPP"), and the Organization for the Advancement of Structured Information Standards ("OASIS"), the standards development process is well under way. Many of the key technical and functional design documents related to the development of emergency services IP networks ("ESInets") and the PSAP infrastructure required to support NG9-1-1 have been published, and other key standards-related documents are in the advanced stages of drafting. It is essential that uniform, nationwide standards emerge that are vendor neutral and create a level playing field to promote innovation.

MSI believes that state, regional and local governing entities should be held accountable for the implementation and deployment of the approved standards-based technology as NG9-1-1 initiatives are deployed. Most design, implementation, operation, and regulation of the actual activities of PSAPs are administered at the state or local level. Local control best ensures that new technologies and processes are deployed by PSAPs in a manner appropriate for their local areas. Maintaining local agency control over local 9-1-1 operations is essential, as they have the best understanding of the needs, abilities, and resources of the local area.

While local control is important, however, there is also a need for uniformity in state and national governance of the 9-1-1 system. Coordinated governance at the state and Federal levels will help to ensure that NG9-1-1 deployments proceed in an interoperable, standards-based manner, and that 9-1-1 funds are distributed and used efficiently for 9-1-1 projects. Similarly, guidance on issues related to funding and liability protection might appropriately come from the

federal level. As suggested by the Public Notice, a single Federal entity should maintain this oversight responsibility to avoid unnecessary and inconsistent regulation.

III. Liability Protection.

Noting that the NG9-1-1 Advancement Act provides liability protection to providers of NG9-1-1 services,[4] the Public Notice asks whether the Commission should recommend that Congress take further steps to provide for liability protection to promote the development of NG9-1-1. Specifically, the Public Notice seeks input on the following issues:

- ***Does existing law provide the Commission with authority to provide adequate liability protection to NG9-1-1 providers, including carriers, vendors, and PSAPs*****?**
- ***Should Congress take steps to further encourage or require states to extend liability protection to 9-1-1 and NG9-1-1 services*****?**
- ***Should Congress provide direct liability protection for NG9-1-1 services at the federal level*****?**

Providing appropriate liability protection to the public safety agencies and commercial entities involved in the delivery of NG9-1-1 services is an essential prerequisite to enabling an effective NG9-1-1 transition. As MSI has previously explained, in light of the host of new liability concerns raised by the variety of different technologies and media that will interface

[4] Section 6506 of the NG9-1-1 Advancement Act provides that "a provider or user of Next Generation 9-1-1 services…shall have immunity and protection from liability under Federal and State law [to the extent provided under section 4 of the Wireless Communications and Public Safety Act of 1999]," with respect to "the release of subscriber information related to emergency calls or emergency services," "the use or provision of 9-1-1 services, E9-1-1 services, or Next Generation 9-1-1 services," and "other matters related to 9-1-1 services E9-1-1 services, or Next Generation 9-1-1 services."

with NG9-1-1 systems, state, local, and federal liability protections need to be strengthened to ensure that uncertainty does not delay NG9-1-1 deployment.[5]

National consistency in liability protection is essential to encouraging investment and promoting a smooth NG9-1-1 transition. As currently conceived, PSAPs will make decisions about the appropriate NG9-1-1 features to deploy on a local, regional, or statewide basis depending on their resources and needs. Without adequate liability protection, public safety agencies and their commercial partners may be unwilling to engage in the experimentation and innovation contemplated in this vision.

While the protections afforded by the NG9-1-1 Advancement Act are a step in the right direction, MSI believes that the provisions of Section 6506 are limited in scope and that its protections may not extend to a variety of entities that will be part of the planning, deployment, and operational management of new NG9-1-1 solutions. Unlike the legacy 9-1-1 system, in which communications are largely originated and transited over networks managed by Commission licensees, many of the entities involved in NG9-1-1 communications may not fall under the Commission's jurisdiction. For a non-interconnected VoIP call placed over a mobile device operating on a private Wi-Fi network, it is not immediately clear over whom the Commission has jurisdiction sufficient to require compliance with its 9-1-1 rules. MSI believes that the Commission should consider recommending to Congress that the liability protection provided to carriers be extended to all entities that are involved in deploying any portion of NG9-1-1 solutions and services.

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[5] *See* Comments of Motorola Solutions, Inc., PS Docket No. 10-255, at 12-13 (filed Feb. 28, 2011).

MSI also urges the Commission to recommend that Congress should require states to extend liability protection to 9-1-1 and NG9-1-1 services while providing direct liability protection for NG9-1-1 services at the federal level. These additional steps are necessary to facilitate the autonomous entities to move forward with NG9-1-1 initiatives in a timely fashion. A centralized policy of minimum limits of liability protection should be developed with further limits, as necessary, to be defined and approved by the governing autonomous bodies.

IV. Local Control of Collected Information.

In response to Section 6509(2) of the NG9-1-1 Advancement Act, the Public Notice seeks comment on whether the Commission should recommend that Congress implement any specific legal mechanisms to ensure the transmission of efficient and accurate 9-1-1 caller information to PSAPs. Specifically, the Public Notice asks the following:

- ***Should Congress enact legislation to require or incentivize the development of technologies that provide more accurate and efficient transmission of 9-1-1 caller information in an NG9-1-1 environment*?**
- ***Should Congress authorize the Commission or another federal agency to measure accuracy and efficiency of 9-1-1 caller information in an NG9-1-1 environment*?**
- ***Are there other mechanisms that would improve data collection in an NG9-1-1 environment? For example, should the Commission collect additional data about NG9-1-1 capabilities in its PSAP database that the Public Safety and Homeland Security Bureau maintains*?**

For NG9-1-1 to be successful, accurate location information is essential. Thus, improvements in the technologies to provide accurate location information should be encouraged. However, the Commission and Congress should avoid premature mandates that exceed the standards setting process.

NG9-1-1 development processes are still ongoing in a variety of public safety, industry, and technical forums. Many of the functional requirements and expected capabilities of the NG9-1-1 system have already been determined, and Motorola Solutions refers the Commission to the work that has already been completed by NENA and others,[6] and the CSRIC Working Group 4B report, provide significant technical detail on these matters.

The NG9-1-1 transition must keep up with increasing consumer expectations about the ability to request emergency services. Advanced communications technologies have been widely and enthusiastically adopted by consumers across the country. However, the 9-1-1 system has not kept pace with the evolution of communications technology. Existing circuit-switched 9-1-1 systems are generally unable to receive and transmit many forms of advanced communications. Even for some communications that PSAPs can receive, such as interconnected VoIP and commercial mobile calls, the provision of accurate automatic location information ("ALI") continues to be challenging. Ensuring that PSAPs can take advantage of the latest advances in technology and that citizens can effectively request emergency services over the most appropriate medium for them are two of the primary goals of the NG9-1-1 transition.

It is important that, when fully deployed, the NG9-1-1 system in the PSAP be capable of receiving and integrating into the public safety workflow multi-media emergency communications sent via popular consumer technologies like VoIP, text messaging, and video. Beyond enabling new means of communication, these functionalities will be essential to ensure that the 9-1-1 system lives up to consumer expectations and that during times of emergency, when every second counts, citizens can successfully request emergency services on their first

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[6] *See* National Emergency Number Association, "NG9-1-1 Project", http://www.nena.org/?NG911_Project (last visited Dec. 12, 2012).

attempt and in the manner most appropriate to their situation and needs. With appropriate standards in place, PSAPs and emergency responders could be able to access any broadband enabled source of such content, providing a window to the scenes of emergencies that could make a major difference in terms of responder preparedness and efficiency.

MSI believes that it is important to allow standards bodies the opportunity to sort through these issues and to endorse methods and technologies that provide the best approach, considering the multiple tradeoffs, *e.g*. cost, technical feasibility, *etc*. associated with implementation. For the FCC to identify or recommend standards while these deliberations continue would be premature. The Commission should be mindful to ensure that any actions or statements it makes on next generation technologies do not chill progress on or divert resources from the completion of essential standards development and study efforts that are currently underway. To this end, MSI notes and supports the most recent Commission action to accelerate the nationwide availability of text-to-911 service by wireless carriers.[7] By working with carriers that have voluntarily committed to making text-to-911 available in the near future, the Commission has avoided mandating technology solutions prematurely. Coupled with a strong consumer education program, the Commission's actions will add significant functionality to existing 9-1-1 services.

V. Updating 9-1-1 Legacy Requirements.

The Public Notice points out that in the legacy 9-1-1 system, incumbent local exchange carriers are typically the primary 9-1-1 System Service Provider (SSPs) but that in a NG9-1-1

[7] Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications, Framework for Next Generation 911 Deployment, *Further Notice of Proposed Rulemaking*, PS Docket Nos. 11-153, 10-255, FCC 12-149 (rel. Dec. 13, 2012).

environment, there are likely to be multiple SSPs offering a variety of service capabilities and options. The Public Notice seeks input on the following issues:

- ***Should Congress enact legislation to encourage or require states to update or streamline their SSP certification provider processes to facilitate certification of NG9-1-1 SSPs*?**
- ***Should Congress encourage or require existing state regulations, laws, or tariffs to be modified to ensure that NG9-1-1 governing authorities or new 9-1-1 SSPs are entitled to receive relevant routing, location, and other related 9-1-1 information at reasonable rates and terms?***

In order to achieve greater redundancy and competition in the delivery of NG9-1-1 services, streamlined processes for approving multiple SSPs are essential. In addition, successful implementation of NG9-1-1 requires that all SSPs should have access to all relevant routing and location information for all media. Local governing bodies should not only work to ease the SSP certification process, they should also provide relevant routing and location information under fair and reasonable terms. The FCC should assess the progress being made at the state level to update legacy regulations such as these before recommending Congressional action.

VI. Conclusion.

The momentum generated by the adoption of the NG9-1-1 Advancement Act must be maintained so that NG9-1-1 support for multimedia services can become a reality across the country. Improving the distribution of critical information between incident scenes and emergency responders will improve public safety and help save lives. MSI appreciates the Commission's commitment to this goal and respectfully requests that it consider these comments as it prepares its report to Congress recommending a final legal and regulatory structure to oversee this transition.

Respectfully submitted,

/s/ *Chuck Powers*

Chuck Powers
Director,
Engineering and Technology Policy
Motorola Solutions, Inc.
1455 Pennsylvania Avenue, N.W.
Washington, DC 20004
(202) 371-6900

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