

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington D.C. 20554

In the Matter of)	
)	
Transition Process for 700 MHz)	PS Docket No. 12-94
Public Safety Broadband Waiver)	
Recipients)	

COMMENTS OF MOTOROLA SOLUTIONS, INC.

I. Introduction and Summary.

Motorola Solutions, Inc. (“MSI”) hereby responds to the Public Safety and Homeland Security Bureau’s request for comments on issues relating to rule waivers issued to several state and local jurisdictions to construct public safety broadband networks in the 700 MHz band.¹

According to the *Public Notice*, this review is prompted by the passage of the Middle Class Tax Relief and Job Creation Act of 2012 that, among other things, reallocates the Upper 700 MHz D Block to public safety and establishes the First Responder Network Authority (“FirstNet”) to oversee the establishment of a nationwide public safety broadband network.²

Notwithstanding any suggestion otherwise, the Spectrum Act does not contemplate, let alone require, that state and local jurisdictions that have been granted a waiver cease their public safety broadband network deployments. On the contrary, Congress understood that the nationwide public safety broadband network would not be constructed in a vacuum, expressly authorizing the Commission to transition the public safety broadband networks currently being

¹ Public Safety and Homeland Security Bureau Seeks Comment on Transition Process for 700 MHz Public Safety Broadband Waiver Recipients, Public Notice, DA 12-555, April 6, 2012 (*Public Notice*).

² See Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156 (2012) (*Spectrum Act*).

built to FirstNet, which has been directed to leverage these projects in the design and construction of the nationwide network.³

In addition to being consistent with the Spectrum Act, allowing the state and local jurisdictions that have been granted a waiver to continue deploying their public safety broadband networks is good policy. These jurisdictions have devoted considerable resources to their network deployments – resources that largely would be wasted if the projects are not permitted to proceed. These projects also are likely to provide FirstNet with empirical results and insight into the design, construction, and operation of public safety broadband networks on a smaller scale, which would be invaluable as FirstNet looks to do the same on a nationwide basis.

The same is true for many of the jurisdictions that have waiver applications now pending with the FCC. Many of these applicants have completed the requisite pre-planning and also have funds available to commence with deployment well ahead of FirstNet. The Commission should review the unique circumstances involved with each of these waiver requests and consider whether these jurisdictions should be allowed to proceed on a case-by-case basis.

To be sure, careful planning for the transition to FirstNet is required so that public resources are not squandered and deployment efforts are not wasted. Accordingly, MSI strongly recommends that the FCC, in coordination with the National Telecommunications and Information Administration (“NTIA”), develop the appropriate regulatory framework that allows the waiver recipients to continue developing and constructing broadband networks without disruption, but do so consistently with Congress’s vision for the nationwide network. Until the nationwide public safety broadband network is operational – which could be years in the making – the networks being developed under this waiver authority will serve a vital role in improving

³ Spectrum Act, § 6206(c)(3).

the communications capabilities of public safety officials. In the meantime, the Commission either has imposed or could impose sufficient conditions on the waiver recipients to ensure that these state and local networks will be interoperable with and will otherwise facilitate the deployment of the nationwide public safety broadband network.

II. State and Local Public Safety Broadband Networks Developed Under FCC Waivers Provide Vital Public Interest Benefits.

The passage of the Spectrum Act represents a major advancement for public safety communications. By providing the necessary spectrum, management and governance structure, Congress has provided the United States with a tremendous opportunity to turn the promise of a nationwide broadband network designed for public safety needs into reality. MSI is committed to working with the FCC, NTIA, FirstNet, our customers and all public safety stakeholders in achieving the shared goal of developing a nationwide interoperable broadband network.

The Spectrum Act is neither the beginning nor the end of this process. It has been nearly 17 years since the Public Safety Wireless Advisory Committee detailed the urgent need for an immediate allocation of 25 MHz of spectrum for public safety voice and data services; a finding that ultimately resulted in the reallocation of 700 MHz spectrum for public safety use.⁴ Further, it has been six years since the idea of developing a nationwide public safety broadband network on those 700 MHz frequencies was first introduced to the FCC.⁵ In the intervening years, an unprecedented amount of work has been done by the Commission, the National Institute of Standards and Technology (“NIST”), public safety officials, and equipment vendors to define

⁴ Final Report of the Public Safety Wireless Advisory Committee to the Federal Communications Commission, September 11, 1996.

⁵ Petition for Rulemaking of Cyren Call Communications Corporation, RM 11348, filed April 27, 2006.

operational needs and interoperability standards to ensure that public safety broadband networks leverage the best practices of commercial networks while satisfying mission critical needs.

The Commission recognized the importance of allowing work to proceed on public safety broadband network deployments, even in the face of uncertainty regarding the ultimate disposition of the 700 MHz D Block and the source of the funds necessary to construct a nationwide network. In granting the waivers, the Commission expressly endorsed these network deployments, noting “there is a critical public safety need for prompt deployment and access to broadband communications infrastructure that meets public safety’s needs.”⁶ The waiver jurisdictions are on the verge of capitalizing on these efforts, and some are only weeks away from initiating broadband service for their first responders. There is no legal or policy reason to stop or slow down this progress.

A. The Commission Retains Jurisdiction/Legal Authority Over Early Deployment Waivers Under the Spectrum Act.

Although the Spectrum Act put in place the spectrum, funding sources, and governance structure for the nationwide public safety broadband network, it did nothing to alter the early deployment waivers the Commission granted to public safety jurisdictions. The Spectrum Act does not require the Commission to rescind the existing waivers or defer their consideration and oversight to FirstNet. Indeed, the Spectrum Act cannot reasonably be read to suggest that Congress intended the Commission to revisit the waiver authority it had previously granted to various state and location jurisdictions. Congress was certainly aware of the existence of these

⁶ See Requests for Waiver of Various Petitioners to Allow the Establishment of 700 MHz Interoperable Public Safety Wireless Broadband Networks, PS Docket 06-229, Order, 26 FCC Rcd 6783 (PSHSB 2011) (*Texas Waiver Order*) at 8.

waivers when it passed the Spectrum Act, and had Congress intended for the Commission to rescind or suspend the waivers, it could readily have said so.⁷

Instead, Congress vested the Commission with the legal authority to permit the continued deployment and operation of the early deployment networks, consistent with the requirement that they be interoperable with the nationwide network. While the Spectrum Act conveys significant duties and responsibilities to FirstNet in ensuring the development of the national broadband network, the Commission retains its traditional role as regulator of this non-government spectrum allocation.⁸ The Commission’s fundamental authority is confirmed under Section 6201 of the Spectrum Act, which makes clear that FirstNet will be an FCC licensee and that the renewal of its license will be subject to the FCC’s review of FirstNet’s performance to properly execute its statutory duties and obligations. Section 6201 also empowers the Commission to facilitate the transition of the existing public safety broadband spectrum now licensed to the Public Safety Spectrum Trust (“PSST”) to FirstNet, which necessarily encompasses the spectrum leased to the state and local jurisdictions to which the Commission has granted waivers. The

⁷ It is always appropriate to “assume that Congress is aware of existing law” and legislates in its light. *Miles v. Apex Marine Corp.*, 498 U.S. 19, 32 (1990); see *Cannon v. Univ. of Chicago*, 441 U.S. 677, 696-97 (1979) (“It is always appropriate to assume that our elected representatives, like other citizens, know the law ...”); *Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Curran*, 456 U.S. 353, 379 (1982) (interpreting the Commodity Exchange Act in light of pre-enactment case law). Thus, the Commission must assume that Congress was aware of the waivers granted to various state and local jurisdictions and, by not prohibiting these jurisdictions from proceeding with their public safety broadband network deployments, did not intend to disturb the Commission’s waiver decisions.

⁸ The Spectrum Act contains numerous examples of the FCC’s continuing regulatory role with respect to the public safety broadband spectrum. Section 6003 authorizes the Commission to implement and enforce the Spectrum Act. Section 6201 authorizes the Commission to issue a license to FirstNet and to rule on its license renewal application. Section 6203 authorizes the Commission to provide FirstNet with recommended minimum technical requirements to ensure interoperability while Section 6206 implement these standards without material change. Section 6302 authorizes the Commission to review and approve the interoperability showings submitted by States that wish to opt out of FirstNet’s nationwide network.

Spectrum Act does not mandate that the Commission provide FirstNet this license without conditions or encumbrances. As a means of facilitating this transition and meeting its obligations under Section 6201, the Commission could certainly develop a framework that provides the waiver recipients with leased access under the license to be held by FirstNet.

B. The Public Interest Will Be Served by Enabling FirstNet to Gain the Benefit of Lessons Learned from Early Deployments.

Allowing the waiver deployments to continue is good policy. In granting the waivers, the Commission recognized the significant benefits of “early deployments,” which the Commission reasoned would provide valuable insights into “what additional issues may arise for public safety in connection with the larger goal of establishing a nationwide interoperable broadband network and serve better to inform all parties as we proceed with the related rulemaking proceedings.”⁹ This same essential point was recently expressed by NTIA when it informed Congress that the \$382 million in Federal grant money that it issued for projects to deploy public safety broadband networks were “designed to serve as a critical set of demonstration projects to help guide the future nationwide, interoperable public safety wireless broadband network that was authorized by the Middle Class Tax Relief and Job Creation Act of 2012.”¹⁰ Suspending or de-authorizing these activities at this time will prevent these benefits from ever being realized. If all state and local jurisdictions that have been granted waivers must cease deploying their public safety networks – particularly those waiver recipients and applicants that are funded and ready to proceed with deployment – it will be detrimental to FirstNet, which will learn little regarding the design, construction and operation of public safety broadband networks.

⁹ *Texas Waiver Order* at 8.

¹⁰ Broadband Technology Opportunities Program (BTOP) Quarterly Program Status Report, March 2012, National Telecommunications and Information Administration, *available at* <http://www.ntia.doc.gov/report/2012/twelfth-quarterly-status-report-congress-regarding-btop>.

C. Early Deployment Networks Will Facilitate FirstNet’s Ability to Provide Nationwide Coverage and Reduce Backhaul Costs.

In addition to first-hand operational experience, the early deployment networks also present an excellent opportunity for FirstNet to incorporate this existing plant and infrastructure into the national network. This will help expedite coverage across the country, and the state and local core facilities now being deployed can provide significant savings to the nationwide network by reducing the costs of backhauling traffic. It also would be consistent with Congress’s express direction to FirstNet that it leverage existing “Federal, State, tribal, or local infrastructure” “to the maximum extent economically desirable” in the construction of the nationwide network.¹¹ Continued deployment by the waiver jurisdictions could make available network infrastructure that will be invaluable to FirstNet in achieving its goals.

D. Funding Associated with Early Deployment Networks Will Serve As Bridge Funding for the Nationwide Network Before Most of the \$7 Billion Allocated Under the Spectrum Act Becomes Available.

A number of waiver jurisdictions already have obtained funding, either through BTOP or other sources (including state, local, and third-party resources). These additional funds can serve as an invaluable supplement to the \$7 billion allocated under the Spectrum Act for the nationwide network. This is especially true as only \$2 billion of the allocated \$7 billion will be available to FirstNet and NTIA until revenues are generated from the Commission’s auction process – a process that, by some estimates, could take approximately five years in the case of an auction of television broadcast spectrum. Rescinding or suspending construction of the networks authorized by waiver will jeopardize the availability of these additional funds.

¹¹ Spectrum Act, § 6206(c)(3).

E. Not Allowing Early Deployment Networks To Go Forward Will Have Adverse Impacts on Local Economies and Public Safety.

Finally, the Commission also should not turn a blind eye to the adverse economic and public safety consequences of a decision to rescind or suspend the waiver authority previously granted to the state and local jurisdictions. These entities are spending hundreds of millions of dollars in connection with their network deployments, which translate into real jobs for those who have been selected to construct the networks and provide the infrastructure that will be part of these networks. At a time of high unemployment when the United States can ill afford to lose any additional jobs, the Commission should refrain from taking action – such as rescinding or suspending state and local jurisdictions' waiver authority – that would have precisely that effect.

Delaying the deployment of these public safety broadband networks would also serve as a detriment to security and emergency preparedness planning in the waiver jurisdictions. Public safety officials have sought waivers to support early deployment of broadband networks because there was an identified need for enhanced public safety broadband services. In addition, innovative applications, such as telemedicine communications, are being planned for near-term deployment.¹² In short, the public safety communications infrastructure that will be constructed pursuant to the waivers will be used immediately to protect life and property and any regulatory or programmatic delays in the networks' initialization of service jeopardizes these goals. The Commission and FirstNet should move quickly and deliberately to facilitate the construction of a

¹² See e.g., Mississippi Department of Information Technology Services, RFP No. 3679 available at <https://www.its.ms.gov/rfps/3679.shtml> (last visited Apr. 19, 2012). The goal of this feature being developed by the Mississippi Department of Information Technology Services and the University of Mississippi Medical Center is to reduce the time to deliver care to patients by equipping responders with ruggedized 700 MHz mobile devices capable of supporting video, audio, data, and Internet access as well as connecting to other medical equipment to provide telemetry information, all over a secure, statewide network infrastructure.

nationwide, interoperable public safety network, but in doing so they should not delay the deployment of much-needed services to local communities.

III. The Waiver Deployments Will be Fully Interoperable with the Nationwide Public Safety Broadband Network.

As a function of the terms of the waivers, other public commitments made by the parties, and the intent of the network architects, the waiver deployments will be interoperable with the nationwide public safety broadband network that FirstNet has been directed to design, construct and operate. The Commission's decision should take these commitments into account. It would be wasteful and counterproductive to the goal of rapidly constructing a robust, interoperable public safety broadband network to forfeit the years of work and millions of dollars that have already been invested in developing and procuring these public safety broadband deployments, which have been designed from the ground up to be fully interoperable with the nationwide network.

One of the fundamental conditions imposed on all 700 MHz public safety broadband waivers is the commitment of the waiver recipients to design, develop, and deploy a network that is fully interoperable with the ultimate nationwide deployment.¹³ In the initial order granting the first twenty-one 700 MHz public safety broadband waivers, the Commission noted that the jurisdictions accepted waivers subject to specific technical requirements for interoperability set in the *Waiver Order* as well as “integration into a nationwide network and compliance with

¹³ See Requests for Waiver of Various Petitioners to Allow the Establishment of 700 MHz Interoperable Public Safety Wireless Broadband Networks, PS Docket 06-229, Order, 25 FCC Rcd 5145 (2010) (*Waiver Order*).

future technical requirements adopted by ERIC or the Commission.”¹⁴ A conforming condition was imposed on the waiver granted to the State of Texas.¹⁵

On top of this baseline obligation, some jurisdictions and their selected vendors have made additional specific commitments to construct networks that are consistent with any interoperability requirements. For example, as the Commission specifically recognized in the *Texas Waiver Order*, MSI and Harris County have expressly incorporated into their contract compliance with future interoperability determinations by the Commission.¹⁶

The Commission should value these commitments. As the Commission is aware, substantial work has been underway for years both within the Commission and the larger public safety community to identify and specify the core requirements for interoperability. Over the years, this has included a Statement of Requirements developed by the National Public Safety Telecommunications Council (“NPTSC”) Broadband Working Group,¹⁷ reports by the NPTSC Broadband Task Force and the Public Safety Spectrum Trust (“PSST”),¹⁸ work done by the

¹⁴ *Waiver Order*, ¶¶ 36, 62.

¹⁵ *Texas Waiver Order*, ¶¶ 14-15.

¹⁶ *See Texas Waiver Order*, ¶ 13. *See also* Letter from Robert L. Pettit, Counsel to Motorola Solutions, Inc., to Marlene H. Dortch, Secretary, Federal Communications Commission, PS Docket No. 06-229 (filed Apr. 8, 2011).

¹⁷ *See* National Public Safety Telecommunications Council Broadband Working Group, *700 MHz Statement of Requirements for Public Safety*, ver. 0.6 (Nov. 8, 2007) available at <http://www.npstc.org/documents/Public%20Safety%20700MHz%20Broadband%20SoR%20v0.6.pdf>.

¹⁸ *See* Letter from Harlin R. McEwen, Chairman, Public Safety Spectrum Trust to Julius Genachowski, Chairman, Federal Communications Commission, PS Docket No. 06-229 (filed Dec. 15, 2009) (entering into the record Public Safety Spectrum Trust, *PSST Recommendations Minimum Requirements for Local/Regional Public Safety Buildout* (2009) and National Public Safety Telecommunications Council, *700 MHz Public Safety Broadband Task Force Report and Recommendations* (2009)).

Commission's Emergency Response Interoperability Center ("ERIC"),¹⁹ the core requirements adopted by the Commission in the *Interoperability Waiver Order*,²⁰ the record developed in response to the Commission's *Third Report and Order and Fourth Further Notice*,²¹ the interoperability showings submitted by the waiver jurisdictions,²² and the countless hours and millions of dollars expended by industry and local, tribal, state, and regional public safety organizations examining these issues. Based on this substantial body of work, there is already a broad understanding of what the ultimate requirements for interoperability will look like, and this understanding has been integrated from the start into the development of the waiver recipients' networks.

¹⁹ Federal Communications Commission, "Emergency Response Interoperability Center (ERIC)" <http://transition.fcc.gov/pshs/eric.html> (last visited Apr. 15, 2012); *see also* Federal Communications Commission Announces Agenda for Interoperability Forum to Garner Input on Technical Framework for the Nationwide Interoperable Public Safety Mobile Broadband Network, *Public Notice*, PS Docket No. 06-229 (rel. Feb. 18, 2011).

²⁰ Requests for Waiver of Various Petitioners to Allow the Establishment of 700 MHz Interoperable Public Safety Wireless Broadband Networks, PS Docket No. 06-229, 25 FCC Rcd 17156 (PSHSB 2010) (*Interoperability Waiver Order*).

²¹ *See* Service Rules for the 698-746, 747-762 and 777-792 Bands; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, WT Docket No. 06-150, PS Docket No. 06-229, *Third Report and Order and Fourth Further Notice*, 26 FCC Rcd 733 (2011).

²² *See, e.g.*, Letter from Michael Simpson, Assistant Director for Law Enforcement Support, Texas Department of Public Safety to Marlene H. Dortch, Secretary Federal Communications Commission, PS Docket No. 06-229 (filed June 17, 2011) (submitting into the record the Draft Interoperability Showing Technical and Operational Response of State of Texas); Texas Department of Public Safety Communications Bureau, *State of Texas Interoperability Showing*, ver. 9, PS Docket No. 06-229, (Jan. 13, 2012); Letter from Todd M. Early, Deputy Assistant Director, Law Enforcement Support Division, Public Safety Communications Service, Texas Department of Public Safety to Jennifer Manner, Deputy Bureau Chief, Public Safety Homeland Security Bureau, PS Docket No. 06-229 (filed Feb. 9, 2012); Letter from Elizabeth R. Sachs, Counsel for the City of Charlotte, North Carolina, to Jennifer Manner, Deputy Chief, Public Safety and Homeland Security Bureau, Federal Communications Commission, PS Docket No. 06-229 (filed Mar. 1, 2012).

The final interoperability requirements adopted by FirstNet likely will also be consistent with this established, detailed understanding developed under the Commission's guidance. Under the terms of the Spectrum Act, FirstNet is required to adopt the interoperability requirements set by the Technical Advisory Board for First Responder Interoperability "without material[] chang[e]."²³ Thanks in part to the comprehensive background on interoperability issues provided to the Board by the Bureau,²⁴ and the significant expertise and experience held by the members of that Board,²⁵ the recommendations of the Technical Advisory Board likely will implement and build upon the work that has come before. However, even if the recommendations of the Technical Advisory Board depart substantially from the previous understanding of interoperability, as discussed above, the waiver jurisdictions will still be obligated to comply with these interoperability decisions, and the Commission retains full authority to monitor and enforce this compliance.

In light of the work that has already been done, the substantial investments made at various levels of government and industry, and the broadly applicable, enforceable commitment to interoperability on behalf of the waiver recipients, the Commission and FirstNet should not forfeit the benefits of incorporating the deployments of the waiver recipients into the nationwide public safety broadband network. These networks are being designed with a fundamental precondition of interoperability with the nationwide network and will provide an invaluable head start on the nationwide deployment. Moreover, sacrificing these interoperable deployments

²³ Spectrum Act, § 6206(b)(1)(B).

²⁴ Federal Communications Commission Public Safety and Homeland Security Bureau, *FCC Staff Assessment of Public Safety Interoperability Requirements for the Public Safety Broadband Spectrum in the 700 MHz Band*, PS Docket No. 12-74 (filed Apr. 6, 2012).

²⁵ See FCC Announces Membership of Technical Advisory Board for First Responder Interoperability, *Public Notice*, DA 12-455 (rel. Mar. 22, 2012).

would be counterproductive, both in terms of the waste of local, tribal, state, regional, and Federal resources that would be affected, and also the unacceptable setback to the deployment of much-needed public safety broadband resources in the waiver jurisdictions pending completion of the nationwide network.

IV. Conclusion.

The Spectrum Act creates an historic opportunity for the deployment of an advanced, nationwide, interoperable public safety wireless broadband network. Congress gave the Commission a central role in the realization of this vision as the regulatory authority with responsibility for the public safety broadband spectrum, and in this role the Commission has ample authority to preserve and extend the public safety broadband waivers. Allowing state and local jurisdictions that have the funding and the incentives to now proceed with deployment will benefit the nationwide deployment in numerous ways, including by providing an invaluable demonstration for the nationwide network, supplying necessary network infrastructure and backhaul, and easing funding challenges. These networks have been designed and, in some cases, constructed to be consistent with the minimum interoperability standards that have been under development for the past several years.

Because of the significant public interest benefits that will result, the Commission should exercise its authority to allow those jurisdictions that have received waivers for early deployment of public safety systems to continue with their network construction efforts, to grant additional public safety broadband early deployment waivers, and to facilitate the transition of these waiver deployments to FirstNet.

Respectfully Submitted,

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