

**THE PRESIDENT'S
NATIONAL SECURITY TELECOMMUNICATIONS
ADVISORY COMMITTEE**



***NSTAC Nationwide Public Safety Broadband Network
Scoping Report***

May 15, 2012

NSTAC NATIONWIDE PUBLIC SAFETY BROADBAND NETWORK SCOPING RECOMMENDATIONS DOCUMENT

I. Overview and Background:

The Federal Government and public safety community are harnessing advanced communications technologies to deploy a nationwide public safety broadband network (NPSBN) to enhance emergency communications. The vision and need for the NPSBN has been referenced by multiple critical national security reports, including the 9/11 Commission Report, the Federal Communications Commission's (FCC) 2006 Independent Advisory Committee's *Report on the Federal Response to Hurricane Katrina: Lessons Learned*, and the 2007 NSTAC *Report to the President on Emergency Communications and Interoperability*. The FCC's 2010 *National Broadband Plan* also called for the need of an NPSBN and in February 2011, the Federal Government released the *Wireless Innovation and Infrastructure Initiative*, which emphasized the Administration's commitment to creating such a network by calling for a \$10.7 billion investment for the NPSBN.

In June 2011, the Executive Office of the President (EOP) requested that the President's National Security Telecommunications Advisory Committee (NSTAC) examine the proposed NPSBN to assist the Government's planning efforts. After some initial scoping activities, the NSTAC's Designated Federal Official (DFO) and Department of Homeland Security leadership determined there were specific security and policy aspects related to the network's deployment and operations for the NSTAC to investigate. In November 2011, the DFO appointed an NPSBN Scoping Subcommittee to examine the **national security and emergency preparedness (NS/EP) implications** of an NPSBN. From January through April 2012, the scoping subcommittee received briefings from organizations across the public safety community to help scope and focus its examination.

On February 22, 2012, President Obama signed P.L. 112-96, *Middle Class Tax Relief and Job Creation Act of 2012*. This bill included *Title VI—Public Safety Communications and Electromagnetic Spectrum Auctions*, which authorized funding and established a governance structure for the NPSBN. Specifically, the bill established the First Responder Network Authority (FirstNet) as an independent entity within the Department of Commerce's National Telecommunications and Information Administration and as the authority for the NPSBN; granted a 10-year license for the D-Block spectrum to FirstNet for use by the NPSBN; created the Public Safety Interoperability Board (Interoperability Board) within the FCC to develop and recommend technical requirements to ensure the NPSBN's nationwide interoperability; allocated over \$7 billion in funds for NPSBN-related capital expenditures; established a grant program to help State and local jurisdictions plan for and integrate their networks with the NPSBN; funded NPSBN research and development activities; and facilitated the advancement of other NPSBN-related initiatives. The legislation did not, however, address any NS/EP implications for the NPSBN, including how the NPSBN may impact the current NS/EP communications environment.

P.L. 112-96 included a timeline for the establishment of the Interoperability Board and FirstNet. Key deadlines included in the legislation are:

- Establishment of the Interoperability Board within **30 days** of the signing of P.L. 112-96 (The FCC established the Interoperability Board on March 23, 2012);
- Submission of technical recommendations to the FCC by the Interoperability Board

within **90 days** of the signing of P.L. 112-96 (by May 22, 2012);

- Approval of the Interoperability Board’s technical recommendations by the FCC and submission of the recommendations to FirstNet within **30 days** of the FCC’s receipt of the recommendations (by June 21, 2012);
- Termination of the Interoperability Board no more than **15 days** after the FCC submits the approved technical recommendations to FirstNet (by July 6, 2012);
- Appointment of members to FirstNet within **180 days** of the signing of P.L. 112-96 (by August 20, 2012); and
- Establishment of the NPSBN State and Local Implementation Grant Program within **180 days** of the signing of P.L. 112-96 (by August 20, 2012).

II. Proposal to NSTAC:

The NSTAC should vote to create a research subcommittee for the NPSBN, which would study the subject within the guidelines outlined here. The development and implementation of the NPSBN is an issue of rapidly-growing importance to the public safety community and the Nation as a whole. The NSTAC should investigate what, if any, NS/EP policy changes at the Federal level might be needed to help facilitate the NPSBN’s deployment and operations, and examine the NS/EP implications of the NPSBN.

III. Estimated Time Frame and Priority:

High Priority.

This is a high priority issue given the passage of P.L. 112-96 and the Department of Commerce’s work to establish FirstNet. Therefore, the NSTAC plans close coordination with the EOP on the identified issues and will develop a phased report schedule to address issues in a timely manner. The estimated time frame for a subcommittee to perform work as scoped herein can be found in Section VI.

IV. Value in Researching Issue:

The Federal Government is making a significant investment to improve public safety communications and build a foundation for which first responders can have access to a robust, nationwide broadband network. Given the role of Federal, State, local, and tribal responders and intersections with Federal NS/EP issues, the NSTAC proposes to examine NS/EP-related issues to provide insight and support to the deployment and operations of the NPSBN.

Schedule requirements in this case make it necessary to select specific, key questions for focused attention, while possibly leaving others to be addressed later. The goal must be to create a broad understanding to support identification of the full scope of interest and to inform follow-on studies by the NSTAC or perhaps other entities in the future. Within that context, the NSTAC should examine and provide possible recommendations on a short list of the most immediate and pressing issues related to NPSBN and the implications for NS/EP.

In light of the nationwide purpose and focus of the NPSBN and the enactment of the “Middle Class Tax Relief and Job Creation Act of 2012,” the questions for examination are intended to be inclusive of the following considerations:

- *Primary users of the NPSBN will be multi-jurisdictional (Federal, State, local, and tribal) and multi-disciplinary (e.g., police, fire, emergency medical services) public safety organizations. The issues below also consider potential secondary users.*
- *NPSBN users will include small and large community public safety organizations, representing rural, suburban, and urban communities.*
- *For the purposes of this scoping effort, the NPSBN is defined as being inclusive of radio access networks, core networks, user devices, and user applications.*
- *There may be additional features required for the NPSBN that are not typically provided through commercial deployment and operations.*
- *Issues proposed to be examined may include short-, medium-, and long-term considerations, and may include opportunities for leveraging commercial research and development and market innovations for the infusion of new, emerging technologies and business models into the NPSBN.*
- *First responders will operate on both the NPSBN for data capabilities and legacy Land Mobile Radio networks for voice capabilities for the near future.*
- *The proposed examination will leverage existing technical work and examinations performed by public safety, industry, and standards groups where possible.*

Specific questions the subcommittee should focus on are:

- 1) What NS/EP policy changes should be considered to:
 - a. Facilitate priority access that may be required across the diverse community of potential NPSBN users (Federal, State, local, tribal, and secondary users), particularly during NS/EP situations (e.g., emergencies and special events);
 - b. Support NPSBN access, interoperability, security, reliability, and resiliency; and
 - c. Help ensure the deployment and evolution of the NPSBN in a manner that accounts for jurisdictions' diverse capabilities, while helping to ensure scalability to the national level?
- 2) What policy changes should be considered that encourage the innovative evolution of NS/EP functions by or through the NPSBN?

V. Approach:

- 1) Receive briefings from key authorities in Government and elsewhere that apply to the issues raised in Section IV, including extant policies, jurisdictional regulations, technical issues, practices, lessons learned, research, and other sources that may be applicable. The NSTAC will not interfere with or impact the ongoing NPSBN-related examinations of other organizations and will continuously seek updates on these examinations to inform its work.
- 2) Develop answers to questions in Section IV above. The NPSBN Scoping Subcommittee is recommending a **two-phased approach**, in order to effectively address the scope of the questions and make timely recommendations to the President. **The initial report** would focus on how policies may need to be updated to enable priority access on and

innovation through the NPSBN (Questions 1a and 2) and **the second report** would provide additional recommendations that support use of the NPSBN for NS/EP purposes (Questions 1b and 1c).

3) Use those findings to inform and develop recommendations to the President.

VI. Schedule:¹

- Government agreement to create an NSTAC Research Subcommittee for the NPSBN – May 2012
- Appointment of subcommittee chair and members by the NSTAC DFO – June 2012
- Hold first meeting – June 2012
- Identify and invite relevant outside briefers and subject matter experts – June 2012, including:
 - Organizations from within the public safety community;
 - Organizations from sectors that support the public safety community; and
 - Other examples of organizations and projects engaged with the NPSBN, in Government, industry, and the public sector (e.g. NIST, FCC, National Academies, SAFECOM, Google, RAND)
- Complete development of the first phased report (Questions 1a and 2) – November 2012
- Discuss report’s findings, conclusions, and recommendations – November 2012
- Present draft report to NSTAC members – December 2012
- Finalize report and deliver to President – December 2012
- Complete development of the second phased report (Questions 1b and 1c) – April 2013
- Discuss report’s findings, conclusions, and recommendations – April 2013
- Present draft report to NSTAC members – May 2013
- Finalize report and deliver to President – May 2013

¹ This timeline is designed with an understanding of the work and timelines for the Interoperability Board and FirstNet, and may require adjustments after these bodies are established and progress with their work.