



## FREQUENTLY ASKED QUESTIONS (FAQ)

### **Broadband Technology Opportunities Program (BTOP) 700 MHz Public Safety Projects: Conforming Existing State and Local BTOP Projects with the Nationwide Public Safety Network Envisioned by the Middle Class Tax Relief and Job Creation Act**

#### **Summary**

Through its Broadband Technology Opportunities Program (BTOP), the National Telecommunications and Information Administration (NTIA) is overseeing approximately 120 investments to expand broadband infrastructure in communities nationwide. Seven of these grants, awarded in 2010, are for projects to deploy public safety wireless broadband networks. NTIA awarded these grants after the Federal Communications Commission (FCC) permitted the jurisdictions, on a conditional basis, to use 700 MHz spectrum to deploy public safety broadband systems.

In February, Congress enacted [The Middle Class Tax Relief and Job Creation Act of 2012](#) (the Act), containing landmark provisions to create a much-needed nationwide interoperable public safety broadband network. The Act created the First Responder Network Authority (FirstNet), charging it with taking "all actions necessary to ensure the building, deployment and operation" of the nationwide network in consultation with Federal, State, tribal, and local public safety entities, and other key stakeholders. The network is to be based on a single, national network architecture. FirstNet will hold the 700 MHz spectrum license for the network.

Due to this significant development, NTIA is taking action to partially suspend the seven BTOP-funded 700 MHz public safety projects to ensure that they proceed in a manner that supports development of the nationwide, interoperable network that will help police, firefighters, emergency medical service professionals and other public safety officials stay safe and do their jobs more effectively.

#### **FAQs**

##### **How much BTOP money was awarded to 700 MHz public safety grants?**

NTIA awarded a total of \$382.5 million to the seven public safety projects. As of May 1, 2012, approximately \$341 million of this amount remains unspent.

##### **Who are the recipients and where are the projects located?**

- Adams County Communications Center, Inc. (Colorado)
- City of Charlotte (North Carolina)
- Executive Office of the State of Mississippi (Mississippi)
- Los Angeles Regional Interoperable Communications System Authority (California)
- Motorola Solutions, Inc. (San Francisco Bay Area, California)
- New Jersey Department of Treasury (Northern New Jersey)
- New Mexico Department of Information Technology (Albuquerque and Santa Fe, New Mexico)

##### **What was the purpose of these public safety broadband projects? What has changed since these initial awards?**

The seven awards were for pilot projects representing different models of how public safety broadband projects might be designed, owned, operated, and maintained. Each jurisdiction -- whether it was a locality, joint powers of authority (JPA), or State -- proposed different project models. Some projects used existing public safety infrastructure, some used commercial infrastructure, and some proposed a shared private/public infrastructure. These funded projects also differed in their approaches to the evolved packet core (EPC): some grant recipients would own the EPC, while others would use a "hosted" EPC solution. Finally, some projects are more traditional in that the awardees would





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develop a request for proposal and own, operate, and maintain their Long Term Evolution (LTE) systems, while other awardees would use private/public partnerships to deploy their LTE public safety facilities.

In the two years since these grant awards, however, the landscape for public safety broadband has changed. Under BTOP, these public safety projects were developing seven distinct networks. Although each jurisdiction agreed as a condition of its FCC waiver and BTOP award to interoperate with one another, these projects were approved when the concept of public safety broadband was a “network-of-networks” model. The new law adopted a very different vision for the network’s architecture and governance. In addition, as a condition of receiving a grant, BTOP awardees were required to obtain a license from the FCC to use the 700 MHz spectrum. The current spectrum leases expire in September 2012. The Act requires the FCC to reallocate and grant a single license to FirstNet for the use of the 700 MHz D block spectrum and existing public safety broadband spectrum. The decision to partially suspend these grants is to ensure that any further activities will be consistent with the mandates of the new law. NTIA’s goal is to ensure that Congress’s vision of a nationwide interoperable public safety broadband network can be realized.

### What is wrong with moving forward?

While the Act allocates \$7 billion for the nationwide network, additional funding is likely to be needed to deploy and operate the network. However, if BTOP funds continue to be invested without pausing to reassess project activities in light of the Act, then spending may result in stranded investments (that is, facilities that cannot be integrated into the nationwide network because they are incompatible with the new network architecture). Indeed, the resulting facilities may require the diversion of even more funding to integrate them into the nationwide architecture. Given these uncertainties and the need for public funds to be prudently managed, the best approach is for NTIA to limit the activities of these awards and to work with the grantees to help them avoid potential activities that may lead to added costs in the future or stranded investments.

### Could any of the current BTOP projects be used in the nationwide public safety broadband network?

It very well may be possible for the BTOP-funded projects to be integrated into the nationwide public safety broadband network. Until the nationwide design and architecture for this network are developed under the framework and process established by the Act, however, no one can be certain that further spending on the projects as originally proposed and approved will be sound investments. Thus, the only prudent approach for NTIA and the grantees is to partially suspend the awards.

### Why are there interoperability concerns with the BTOP-funded projects? All vendors indicate that their equipment is 3GPP compliant and interoperable.

It is impossible to provide adequate assurances on public safety equipment interoperability or compliance at this point in the implementation of the new Act. For example, while the Act calls for the FCC, via its Interoperability Board, to recommend “minimum technical requirements” for interoperability, this work has not yet been finalized, nor have the Act’s other extensive collaboration and consultation steps that are required to contribute to the development of the network’s architecture and design.

Furthermore, current vendor self-certification of compliance with 3GPP standards does not ensure interoperability with equipment from other manufacturers. Each component of the network will need to go through suitable conformance and interoperability testing to ensure that it conforms directly to the standard and is interoperating with all other components as designed by FirstNet. The more vendors that the nationwide network has for each of the component parts, the more interfaces will exist that will require conformance and interoperability testing, which drives up complexity and the cost of the network. Further, without a user device testing process established for public safety, BTOP recipients could purchase user devices that may not operate on the nationwide network or with any chosen commercial roaming partner.





Finally, the ongoing maintenance and support of multiple and different networks will be complex and costly. 3GPP standards are left to interpretation, which means that the same requirement can be developed differently by different vendors. In addition, 3GPP has several releases and sub-releases, which means that each company or vendor has its own version of software and hardware. At any given time, companies are at various release versions, which can lead to problems with how features are supported across different vendors. All of these technical factors need to be considered in light of the new Act with respect to the BTOP-funded projects.

#### **Is NTIA discounting the value of these early public safety broadband deployments?**

No. NTIA recognizes that much hard work has gone into procurement and deployment of the BTOP public safety projects, and that these projects were conceived as “test beds” for the early deployment of broadband facilities. Already, many lessons have been learned that will benefit FirstNet. At the same time, each of these jurisdictions accepted its FCC waiver and its BTOP funds subject to conditions, including the requirement that its network be interoperable and its operations comply with any future regulatory changes. Partially suspending these projects allows NTIA and the BTOP awardees to take steps to ensure any further investments of these federal funds are in alignment with the changes brought about by the Act.

#### **Why is NTIA only suspending a portion of these grants? Given all the ways in which the new law changed the public safety broadband landscape, what aspects of these projects could be allowed to continue?**

Recipients will be asked to submit a revised statement of work and budget to determine which non-LTE aspects of their project may continue. Aspects of each project that are not contingent on the use of the 700 MHz spectrum may be allowed to continue. Recipients will be asked to work with their Federal Program Officer to determine how to proceed.

#### **How long will NTIA partially suspend these projects?**

NTIA is moving forward on a limited basis with these grant awards to ensure these projects will be compatible with the nationwide interoperable public safety broadband network. Specifically, the projects will be able to move forward with broadband activities related to non-LTE expenditures. Recipients will have the opportunity to re-scope their projects and will submit a revised budget in Grants Online within 45 days, clearly indicating changes related to non-LTE activities.

#### **Won't this action cause these jurisdictions' public safety users or other local and State officials to lose momentum?**

Many BTOP-funded activities in these jurisdictions can continue without delay consistent with the goals and provisions of the new Act. NTIA is committed to working individually with its grantees to help ensure that any ongoing operations do not put public dollars at unnecessary risk and are consistent with the deployment of a nationwide public safety broadband network, based on single, nationwide network architecture, and other requirements established by the Act. NTIA's focus will be to work with its grantees on the development of a network that is usable and interoperable for all first responders on a nationwide basis.

#### **What if grantees have invoices from vendors related to LTE activities that are not yet paid?**

Grant recipients should work with their Federal Program Officer and Grants Office on their specific situation to determine the best path forward.

#### **BTOP grantees are quickly approaching their project completion deadlines. Will NTIA extend those deadlines?**

NTIA is seeking an extension of the 700 MHz public safety grant deadlines from the Office of Management and Budget (OMB), because of the unique circumstances related to these seven public safety grant projects.

