

## **Analysis of Public Safety Wireless Broadband Title in the Payroll Tax Extension Package, as Approved by Congress**

This document provides an analysis of “Title VI—Public Safety Communications and Electromagnetic Spectrum Auction” of the “Middle Class Tax Relief and Job Creation Act of 2012” as approved by Congress (“Title VI”). The final language, approved on Friday, February 17, 2012, is available at <http://docs.house.gov/billsthisweek/20120213/CRPT-112hrpt-HR3630.pdf>. This document replaces an earlier analysis of the pre-final Discussion Draft of the legislation; the final language differs in a few areas from that of the Discussion Draft.

This analysis focuses on the implications of the bill language for state and local jurisdictions conducting or planning 700 MHz public safety wireless broadband deployments. There are other provisions in Title IV that will interest state and local emergency response officials (particularly the NG-911 provisions) that are not analyzed here.

### **Spectrum**

Title VI includes the main requirement of the public safety legislative effort: allocation of the D Block to public safety. In exchange, public safety will relinquish T-band spectrum. The degree of reliance on the T-Band depends on the jurisdiction, but at least the costs of relocation will be covered and the transition is nine years away.

- D Block spectrum allocated to public safety (§ 601(a)).
- Public Safety 700 MHz narrowband spectrum is not taken back, but the FCC is permitted to allow its use “in a flexible manner, including usage for public safety broadband communications,” if appropriate (§ 6102).
- Current public safety T-Band (470-512 MHz band) reallocated to commercial and auctioned no later than 9 years from enactment; incumbent users relocated within two years of auction, using auction proceeds to cover relocation costs (§ 6103).

### **Funding**

For construction and operation of a public safety-grade, nationwide network, \$7 billion is less than public safety had hoped for.

- All funds listed here are available until Sept. 30, 2022, after which they revert to the Treasury general fund and are used for deficit reduction (§ 6413 (a)).
- \$7 billion for Network Construction Fund, from commercial spectrum auction proceeds. Use is not limited to construction, however—also for operations, maintenance, upgrades, etc. (though not the administrative expenses of FirstNet) (§ 6206(e)).

- NTIA may borrow up to \$2 billion from the Treasury in order to fund FirstNet’s initial activities, but the amount borrowed will be deducted from the \$7 billion for the Network Construction Fund (§§ 6207, 6413(b)(3)).
- \$135 million to the State and Local Implementation Fund (§ 6413(b)), for NTIA grants to “state, regional, tribal and local jurisdictions to identify, plan and implement the most efficient and effective way for such jurisdictions to utilize and integrate the infrastructure, equipment, and other architecture associated with the nationwide public safety broadband network to satisfy the wireless communications and data services needs of that jurisdiction, including with regards to coverage, siting, and other needs.”
  - 20 percent match required, unless waived by NTIA. (§ 6302)
  - These grants must be coordinated through a single, state-certified officer or governmental body (§ 6302(d)).
- \$20.4 billion to deficit reduction (§ 6413(b)).
- \$115 million to 911, E911, and NG911 (§ 6413(b)).
- \$300 million to NIST for public safety wireless communications research and development (§ 6413(b)).

## Governance

Title VI describes two new governance entities: a fairly short-lived FCC advisory board called the Technical Advisory Board for First Responder Interoperability (“Interoperability Board”), and the First Responder Network Authority (“FirstNet”), an independent authority within NTIA. FirstNet is the central player in constructing and operating the network.

The Interoperability Board (§ 6203). The Interoperability Board submits recommended minimum interoperability requirements to the FCC, and the FCC revises them and approves them, sending “such recommendations” on to FirstNet. Fifteen days later, the Interoperability Board terminates. The “recommendations” submitted by the FCC are important: FirstNet must “use without materially changing” the “recommendations” in the requests for proposals (RFPs) FirstNet must issue to build and operate the network (§ 6206(b)(1)(B)), and states opting out of the FirstNet plan (described below) must also meet them. (§ 6302(e)(3)(C)(i)(I)). Provisions relating to the Interoperability Board:

- Advisory board to the FCC, selected by the FCC Chairman
- 14 voting members, all with relevant expertise: 4 from wireless providers, 3 from equipment manufacturers, 4 from public safety entities, 3 unspecified. NTIA selects the single non-voting member.
- Develops recommended minimum technical requirements (in consultation with NTIA, NIST and OEC) for nationwide interoperability, based on LTE.
- Submits recommended requirements to FCC for any revisions and approval.

- Total lifespan of 135 days: recommendations submitted to FCC within 90 days of enactment; FCC approves and submits recommendations to FirstNet within 30 days of receipt; Interoperability Board terminates 15 days later.
- FCC action to revise and approve the Interoperability Board’s recommendations “shall not be reviewable as final agency action.”
- The Interoperability Board is exempt from the Federal Advisory Committee Act.

Three months for appointment of members, development of the recommended requirements, and submission to the FCC seems a very short period for a big job. Though the FCC has been working on such requirements, it is unclear that the Interoperability Board will have the benefit of the FCC’s progress. The FCC will receive the advisory work from the Interoperability Board and may revise the recommendation to better reflect its own views—there is no requirement that the FCC accept any part of the recommendation. As a result, the submission to FirstNet may in the end be an FCC-created product.

Perhaps most importantly, the deliberations of the Interoperability Board are not subject to the Federal Advisory Committee Act (*i.e.* not required to be open to the public), and the FCC’s decision to revise, approve and transmit to FirstNet the recommendations is not reviewable and so is insulated from challenge. Recall that these “recommendations” will be “us[ed] without materially changing” in FirstNet’s RFPs.

FirstNet (§§ 6201-4, 6206). FirstNet, an independent authority within NTIA, is the central creator, manager, operator, and governor of the nationwide network. Its Board includes representation of a range of interests and areas of expertise, and its authority and duties are extensive. Provisions regarding FirstNet:

- FirstNet Board has 15 members (§ 6204(b)):
  - DHS, DOJ, and OMB
  - 12 US citizens appointed by Secretary of Commerce for 3-year terms, paid for days when they perform a function for the Board (§ 6204(g)(1)):
    - at least 3 representing state/local/tribal jurisdictions
    - at least 3 public safety professionals
    - remaining 6 are unspecified, but should help provide geographic and rural/urban representation.
    - each of the 12 must have at least public safety, technical, commercial network, or financial expertise
- FirstNet can set up advisory committees, hire staff, hold hearings, obtain and spend funding, and take other actions as appropriate to accomplish its purposes (§ 6205).
- FirstNet is exempt from the Administrative Procedures Act and the Regulatory Flexibility Act (§ 6206(c)).
- FirstNet loses its authority 15 years after enactment (§ 6206(c)).

- FirstNet holds single nationwide license for all PS 700 MHz broadband spectrum (including D Block) for 10 years, renewable for another 10 years. Title VI does not specify a deadline by which the FCC must grant FirstNet the license. (§ 6201)
- FirstNet administrative expenses (excluding oversight and audit activities) must be no more than \$100 million during the 10 years beginning on the date of enactment (§ 6207(b)), and must be fully covered by fees collected by FirstNet (§ 6208(b)) (except for initial amounts provided by NTIA using funds borrowed from the Treasury and deducted from the \$7 billion Network Construction Fund (§ 6207)).
- Broad authority: FirstNet shall “take all actions necessary to ensure the building, deployment, and operation of the nationwide public safety broadband network, in consultation with Federal, State, tribal, and local public safety entities...”. (§ 6206(b))
  - Network must have national and regional data centers and includes a radio access network that “consists of all cell site equipment, antennas and backhaul equipment ... required to enable wireless communication ...”. (§ 6202)
  - FirstNet will issue RFPs to private sector to build, operate and maintain the network; such RFPs must “use without materially changing the minimum technical requirements developed” by the Interoperability Board and revised/approved by the FCC (§ 6206(b)).
  - RFPs should leverage commercial infrastructure (§ 6206(b)).
  - FirstNet will “manag[e] and oversee[] the implementation and execution of contracts or agreements with non-Federal entities to build, operate, and maintain the network.” (§ 6206(b)).
  - FirstNet must consult with regional, State, tribal and local jurisdictions regarding core and radio access network (“RAN”) build-out, tower placement, coverage, security and reliability, local user and entity priority. (§ 6206(c)).
  - FirstNet must require that network equipment be “capable of being used by ... multiple vendors across all public safety broadband networks operating in the 700 MHz band.” (§ 6206(b)).
  - FirstNet can charge and receive fees, subject to NTIA approval, which must be sufficient for FirstNet to meet its responsibilities (*i.e.* permanently self-funding) (§ 6208):
    - User or subscription fees to public safety and secondary users (§ 6208)
    - Fees for use of spectrum or network capacity, including for non-public safety services, though not offering service directly to consumers (§§ 6206(b), 6208, 6212)
    - Fees for use of network infrastructure (§ 6208)
  - FirstNet shall, as it determines appropriate, negotiate and enter into commercial roaming agreements (§ 6206(c)). Note: FCC may require carriers to allow public

- safety to roam onto commercial networks with priority, but only with adequate compensation and no degradation of existing sessions (no pre-emption) (§ 6211).
- FirstNet shall ensure the development of a list of certified devices and components (§ 6206(c)).
- FirstNet shall represent public safety users of the network in international standards bodies (§ 6206(c)).

Though the breadth of its authority is substantial, FirstNet is constrained in a few key design and operational matters. For example, FirstNet must collect fees (including user fees and partnership fees) sufficient to recoup its total expenses for carrying out its duties, which include operating and maintaining the network (§§ 6208(b), 6206(b)). The impact on public safety users—the affordability of the user fee—will depend largely on the network’s operating costs and FirstNet’s success in securing partnerships (“covered leasing agreements”) to offset those operating costs.

One further note on sustainability: Title VI does not substantially alter the fairly vague definition of “public safety services” currently codified at 47 U.S.C. § 337(f). Public safety groups had advocated for a clarified and expanded definition to allow a broader base of customers to support the network. The need for that revised definition may have been obviated in Title VI by enabling FirstNet (and opt-out states) to enter into public-private partnerships with providers of non-public safety services.

### **State Options**

States have two alternative roles in the Title VI: either participate in the FirstNet plan, or take responsibility for constructing and operating the radio access network, interoperable with the nationwide network, to serve the state (*i.e.* “opt-out”). There is no provision allowing a state to construct and rely upon its own core, even using its own funds.

The state opt-out alternative is probably best viewed as a fallback option in the event that FirstNet’s plan for building out in the state is unacceptable to a state or group of states. Indeed, there is no provision for opting out until FirstNet has already completed its RFP process. Though Title VI specifically allows opt-out states to apply for grant funding to build the radio access network (“RAN”), there is no provision for grant funds for a state-owned core, and Title VI specifically requires that opt-out states pay any user fee charged by FirstNet for use of core network elements.

Any state that wishes to retain the ability of opting out probably should prepare well in advance of the opt-out decision window: not only does that window not open until FirstNet has completed its RFP process and its plan for deploying in the state, but the window is open for only 90 days, after which the state will have only 180 days to complete an RFP process to build and operate its own RAN. That is not much time to put together a solid program that will meet with FCC approval, and options for challenging an FCC disapproval are greatly restricted. In order to use the spectrum (and apply for a construction grant), the state will also need to show NTIA that it has the technical capability and funding to operate the RAN and maintain interoperability with the nationwide network, and also that the state plan is cost-

effective. The state must also show that it has security, coverage, and quality of service comparable to that of the nationwide network.

Though Title VI clearly provides FirstNet broad authority to build the network in each participating state, states electing not to opt-out do have some ability to participate in and impact the deployment of the nationwide network in the state. In addition to the general requirement that it consult with states in executing its duties (§ 6206(b)), FirstNet also must enter into agreements to use commercial and jurisdictional infrastructure as much as economically desirable (§ 6206(c)). Though states' ability to leverage this requirement into greater influence over FirstNet's plans remains to be seen, it is one of the very few provisions in Title VI that come close to requiring FirstNet to obtain state agreement. In addition, there is a provision that suggests FirstNet may be able to contract with a state or consortium of states to help effectuate deployment and operation, pursuant to the requirement that FirstNet "manag[e] and oversee[] the implementation and execution of contracts or agreements with non-Federal entities to build, operate, and maintain the network." (§6 206(b)(1)(D)).

Perhaps the greatest challenge is to jurisdictions that, through exercise of FCC waivers, deploy networks in advance of the nationwide network. There is no provision for protection of their investments or for efforts to efficiently meld them into the nationwide network. The technical requirements of the nationwide network will determine the extent to which early builders need to make further investment in their networks to achieve compliance, but Title VI does not require that the Interoperability Board include representation from or even consult with early builders. As noted above, the development of network requirements—first by the Interoperability Board and then revised and approved by the FCC—is exempted from key administrative process requirements, greatly complicating the ability of early builders to influence the requirements. The sole reference early builders in Title VI, indirect as it may be, is in Sec. 6201(c): "The Commission shall take all actions necessary to facilitate the transition of the existing public safety broadband spectrum to the First Responder Network Authority." Thus, Title VI leaves entirely to the Interoperability Board, the FCC, and FirstNet the fate of pre-existing deployments. Provisions regarding states:

- Regardless of whether they intend to opt-out, states may apply to NTIA for grants from the State and Local Implementation Fund to determine and implement the best way to integrate the elements of the nationwide network to satisfy the jurisdiction's needs. NTIA must set the requirements for the grant program within six months of enactment, including eligible costs and activities, and prioritizing grants to ensure both rural and urban coverage. (§ 6302).
- States may opt out of FirstNet's network. (§ 6302(e)).
  - FirstNet must provide each state notice of the completion of the nationwide construction and operation RFP process, details of its plan to build the nationwide network in the state, and the funding level NTIA determines for the state. (§ 6302(e)).
  - The state then has 90 days within which to inform FirstNet, NTIA and the FCC whether it will participate in the nationwide deployment via FirstNet or conduct its own deployment of the radio access network ("RAN"). (§ 6302(e)) (There is no suggestion

- that a state may opt for its own core network; section 6302(f) requires opt-out states to pay any user fee to FirstNet for use of elements of its core network.)
- The state then has 180 days to complete an RFP process for constructing and operating the RAN. (§ 6302(e)).
  - A state wishing to opt out shall submit an alternative plan for the construction and operation of the RAN to the FCC, demonstrating that it will meet the technical interoperability requirements approved by the FCC and submitted to FirstNet under § 6203, as well as provide interoperability with the nationwide network.
    - The FCC will either approve or disapprove the state’s alternative plan.
    - If FCC disapproves, the state must proceed in accordance with the FirstNet plan. (§ 6302(e)).
    - The FCC’s decision to disapprove may be challenged only in the US District Court for the District of Columbia and overturned only with a showing of corruption, fraud, or FCC misconduct. (§6302(h)).
  - If the FCC approves the state’s alternative plan, the state may apply to NTIA for a grant from the \$7 billion Network Construction Fund for construction of the RAN within the state (again, no indication of funds for core network).
    - In order to win such a grant, the state must show that it has the technical capability and funding necessary to operate the state RAN with ongoing interoperability with the nationwide network, and that it will complete its project on a timeline comparable to that of the nationwide network.
    - The state must also show the cost-effectiveness of its plan, as well as the comparability of its plan with the FirstNet plan with regard to security, coverage, and quality of service. (§ 6302(e)).
  - States opting out also must apply to NTIA to lease spectrum capacity from FirstNet and pay any user fee FirstNet charges for use of core network elements. (§ 6302(e)).
  - States opting out may enter into a “covered leasing agreement” with secondary users, but may use the proceeds only for the construction and operation of the RAN. (§ 6302(g)). [There is a conflict in the language here: “covered leasing agreement” is by definition an agreement between FirstNet (not a state) and a secondary user for construction and operation of the nationwide network. (§ 6208(a(2)).]
  - Opt-out states may offer services to consumers and provide wholesale network capacity, but only through public-private partnerships for the construction and operation of the network in the state. (§ 6302(g)).

#### **Other Provisions.**

- NIST shall conduct public safety wireless communications research and development on standards, technology, and applications. (§ 6303)
- Federally held spectrum is cleared and auctioned. (§ 6401)

- FCC receives authority for incentive auction of TV broadcast spectrum, with proceeds to the Public Safety Trust Fund, less \$1,750,000,000 to pay for relocation of broadcasters. (§ 6402). Such funds in the Public Safety Trust Fund revert to the general fund for deficit reduction after FY 2022 (§ 6403(d)(4)(B)).
- FCC general auction authority is extended to 2022 (§ 6405).
- FCC must allow unlicensed use of the 5 MHz band. (§ 6406).
- States and localities must approve a request for modification of existing towers as long as it doesn't change physical dimensions of the tower or base station. (§ 6409).
- The federal government must facilitate and grant requests for easements or rights of way on federal facilities for construction of wireless networks and backhaul. (§ 6409).
- The "Next Generation 9–1–1 Advancement Act of 2012" is appended as Subtitle E.
- Federal spectrum is relocated under Subtitle G.