

The National Telecommunications and Information Administration (NTIA): An Overview of Programs and Funding

(name redacted)

Specialist in Telecommunications Policy

June 19, 2015

Congressional Research Service

7-....

www.crs.gov

R43866

Summary

The National Telecommunications and Information Administration (NTIA), a bureau of the Department of Commerce, is the executive branch's principal advisory office on domestic and international telecommunications and information policies. Its mandate is to provide greater access for all Americans to telecommunications services; support U.S. efforts to open foreign markets; advise on international telecommunications negotiations; and fund research for new technologies and their applications. It is also responsible for managing spectrum use by federal agencies and, as part of this responsibility, identifying federal radio frequency spectrum that can be transferred to commercial use through the auction of spectrum licenses, conducted by the Federal Communications Commission.

The NTIA plays an important role in representing U.S. interests in the Internet internationally, including an active role in the Internet Corporation for Assigned Names and Numbers (ICANN). ICANN is an international entity that develops policies to support the Internet worldwide. NTIA actively participates in ICANN as a member of the Governmental Advisory Committee, which provides advice to ICANN. NTIA also currently contracts with ICANN to manage the Internet Assigned Numbers Authority (IANA) and to perform other duties. In March 2014, the NTIA announced its intention to relinquish its authority over ICANN to a multi-stakeholder community when its current contract expires in September 2015.

Title VI of the Middle Class Tax Relief and Job Creation Act of 2012 (P.L. 112-96) gives the NTIA responsibilities for improving public safety communications. It is required to assist the development of the First Responder Network Authority (FirstNet), created by Congress to deploy a nationwide public safety broadband network. It is also required to assist in planning for Next Generation 9-1-1 (NG 9-1-1) services, which refers to the transition to digital, Internet-based systems to replace existing analog systems, the 9-1-1 technology currently prevalent throughout the United States.

Between FY2010 and FY2011, the NTIA's budget for administration, salaries, and expenses more than doubled from \$20 million to \$41.6 million. This increase was largely attributed to its responsibilities in administering grants for broadband network deployment, as required by the American Recovery and Reinvestment Act (ARRA, P.L. 111-5). The enacted budget for FY2014 was \$46.0 million. As the broadband grants program comes to a close, the NTIA has transferred its requests for appropriations to new programs. For example, the FY2015 budget request included \$7.5 million for a new Internet Policy Center.

The Administration's budget request for FY2015 was \$51.0 million. The enacted amount for FY2015 is \$38.2 million. This amount was supplemented by \$4.7 million in unobligated balances carried forward from the previous year, allowing for a FY2015 budget of nearly \$42.9 million.

For FY2016, the Administration budget request for the NTIA is \$49.2 million. The House-approved appropriations amount is \$32.5 million; the committee-reported amount in the Senate is \$38.2 million.

Contents

Overview.....	1
Broadband Deployment.....	1
Internet Leadership.....	2
Spectrum Management and Advanced Communications Research	2
Grants and Public Safety	4
Appropriations and Budget Request History	5
NTIA Programs and Policies	7
Termination of the Public Telecommunications Facilities Program.....	8
Spectrum Act	8
Public Safety.....	9
Spectrum Reallocation.....	10
Oversight Request by FirstNet.....	10
Funding for Oversight.....	11
Administrative Expenses for FirstNet.....	12
Issues for the 114 th Congress	12

Tables

Table 1. NTIA Fiscal Year Appropriations 2010-2015	6
--	---

Contacts

Author Contact Information.....	13
---------------------------------	----

Overview

The National Telecommunications and Information Administration (NTIA) is a bureau in the U.S. Department of Commerce (DOC). The NTIA frequently works with other executive branch agencies to develop and present the Administration's position on key policy matters. It represents the executive branch in both domestic and international telecommunications and information policy activities. Policy areas in which the NTIA acts as a representative of the Administration include international negotiations regarding global agreements on the Internet and spectrum management, and domestic use of spectrum resources by federal agencies.

NTIA is headed by the Assistant Secretary of Commerce for Communications and Information, who is appointed by the President and acts as a principal advisor to the President on telecommunications and information policy matters; is the principal executive branch spokesman to Congress, the industry, state and local governments, and the public on such matters; is the key coordinator of the federal government's own communication systems; and is responsible for the formulation of the nation's overall telecommunications and information policy.¹

Broadband Deployment

Managing broadband programs and grants required by the American Recovery and Reinvestment Act (ARRA, P.L. 111-5) has been a major thrust of the NTIA's broadband deployment programs since the law was enacted in 2009.² ARRA grants must be closed out and uncommitted funds returned to the U.S. Department of the Treasury by September 30, 2015. Ongoing program features include outreach to improve digital literacy; maintaining a map of broadband availability nationwide (Broadband Map); research; and the development of case studies for deploying broadband in communities.

In January 2015, the NTIA announced that it will consolidate its efforts to assist community broadband deployment under a new program, BroadbandUSA.³ This supports new initiatives for expanding and improving broadband deployment, announced by the White House on January 13, 2015.⁴ Among other steps, the NTIA also released a public-private partnership primer, which provides a basic introduction to a variety of partnership models for communities considering new broadband projects.⁵

The FY2016 budget recommendation for broadband programs is \$12,962 million for salaries and expenses and 36 Full Time Equivalent (FTE) employees. Key activities include offering technical

¹ As described in a job posting for Executive Director of FirstNet on USAJobs, <https://www.usajobs.gov/GetJob/ViewDetails/389363200>.

² For a discussion of grant programs and broadband deployment, see CRS Report R41775, *Background and Issues for Congressional Oversight of ARRA Broadband Awards*, by (name redacted).

³ NTIA Blog, "NTIA Announces BroadbandUSA Effort to Assist Communities with Broadband Plans," January 13, 2015, <http://www.ntia.doc.gov/blog/2015/ntia-announces-broadbandusa-effort-assist-communities-broadband-plans>.

⁴ The White House, Office of the Press Secretary, *Fact Sheet: Broadband That Works: Promoting Competition & Local Choice in Next-Generation Connectivity*, January 13, 2015, <http://www.whitehouse.gov/the-press-office/2015/01/13/fact-sheet-broadband-works-promoting-competition-local-choice-next-gener>.

⁵ Broadband USA: An Introduction to Effective Public-Private Partnerships for Broadband Investments, January 2015, http://www.ntia.doc.gov/files/ntia/publications/ntia_ppp_010515.pdf.

assistance to communities, including regional workshops, and guides and toolkits to encourage broadband access and adoption.

Internet Leadership

Since 1998, the NTIA has played a key oversight role in the Internet Corporation for Assigned Names and Numbers (ICANN). ICANN is an international, not-for-profit entity that develops policies to support the Internet worldwide, notably through its coordination of the Internet naming system: the Domain Name System (DNS). ICANN is currently under contract to NTIA to manage the Internet Assigned Numbers Authority (IANA) for DNS and to perform other duties. In March 2014, the NTIA announced its intention to relinquish its existing authority over ICANN.⁶ The current contract will expire in September 2015, although NTIA has the option of extending the contract through 2019.⁷

Along with the Executive Office of the President, the Office of the Secretary of Commerce, the National Institute for Standards and Technology (NIST), and the International Trade Administration (ITA), the NTIA participates in the Internet Policy Task Force, created in 2010 by the Secretary of Commerce.⁸

The FY2016 budget recommendation for Domestic and International Planning, which includes Internet policy, is \$15,227 million for salaries and expenses and 44 FTE employees. This compares to \$8,255 million and 33 FTE employees budgeted for FY2015. In addition to international negotiations regarding the future of ICANN and the formulation of Internet policy, the NTIA plans to devote resources to facilitate the transition of federal communications networks to technologies using the Internet Protocol (IP).

Spectrum Management and Advanced Communications Research

As part of President Obama's Wireless Initiative, the NTIA is charged with identifying electromagnetic spectrum that might be transferred from the federal sector to commercial wireless use.⁹ This spectrum might be auctioned as licenses for exclusive commercial use, made available for sharing between federal and commercial users, or repurposed in some other way that meets the stated goal of the Wireless Initiative to add 500 MHz of spectrum for wireless broadband.¹⁰

⁶ NTIA, Newsroom, "NTIA Announces Intent to Transition Key Internet Domain Name Functions," March 14, 2014, <http://www.ntia.doc.gov/press-release/2014/ntia-announces-intent-transition-key-internet-domain-name-functions>.

⁷ For a discussion of ICANN and related issues, see CRS Report 97-868, *Internet Domain Names: Background and Policy Issues*, by (name redacted).

⁸ See the Department of Commerce, Internet Policy Task Force, *Commercial Data Privacy and Innovation in the Internet Economy: A Dynamic Policy Framework*, <http://www.commerce.gov/sites/default/files/documents/2010/december/iptf-privacy-green-paper.pdf>.

⁹ The White House, Office of the Press Secretary, "Presidential Memorandum: Unleashing the Wireless Broadband Revolution," June 28, 2010, <http://www.whitehouse.gov/the-press-office/presidential-memorandum-unleashing-wireless-broadband-revolution>; and "President Obama Details Plan to Win the Future Through Expanded Wireless Access," Fact Sheet, February 10, 2011, <http://www.whitehouse.gov/the-press-office/2011/02/10/president-obama-details-plan-win-future-through-expanded-wireless-access>.

¹⁰ Spectrum is segmented into bands of radio frequencies and typically measured in cycles per second, or hertz. Standard abbreviations for measuring frequencies include kHz—kilohertz or thousands of hertz; MHz—megahertz, or millions of hertz; and GHz—gigahertz, or billions of hertz.

Congress also has required the NTIA to take actions to release spectrum from federal to commercial use and to ensure the efficient use of federal spectrum.¹¹

To meet growing demand for wireless connectivity, the Administration and Congress have taken steps to increase the amount of radio frequency spectrum available for mobile services such as access to the Internet.¹² Proposals from policymakers to use federal spectrum to provide commercial mobile broadband services include

- Clearing federal users from designated frequencies for transfer to the commercial sector through a competitive bidding system.
- Sharing federal frequencies with specific commercial users.¹³
- Improving the efficiency of federal spectrum use and management.¹⁴
- Using emerging technologies that allow multiple users to share spectrum as needed.¹⁵

To support spectrum clearing, the NTIA, with input from the Policy and Plans Steering Group (PPSG),¹⁶ has produced a 10-year plan and timetable that identifies bands of spectrum that might be available for commercial wireless broadband service. As part of its planning efforts, the NTIA prepared a “Fast Track Evaluation” of spectrum that might be made available in the near future.¹⁷

NIST and the NTIA have jointly established a Center for Advanced Communications, in Boulder, CO. A key focus of the center is to promote interdisciplinary research, development, and testing in wireless technology and spectrum sharing for public safety and commercial broadband communications. The Center will also provide test beds for advanced communications technologies.

The Institute for Telecommunication Sciences (ITS), located in Boulder, CO, is the research and engineering arm of the NTIA. ITS provides core telecommunications research and engineering services to promote enhanced domestic competition and new technology deployment; advanced

¹¹ P.L. 112-96, Title VI (Spectrum Act), Sections 6401, 6410, and 6701.

¹² For a discussion of spectrum demand, technology, innovation, and competition, see CRS Report R43595, *Mobile Technology and Spectrum Policy: Innovation and Competition*, by (name redacted).

¹³ The Government Accountability Office (GAO) provided testimony on the topic of sharing: *Spectrum Management: Federal Government’s Use of Spectrum and Preliminary Information on Sharing*, September 13, 2012, GAO-12-1018T; and a report: *Spectrum Management: Incentives, Opportunities, and Testing Needed to Enhance Spectrum Sharing*, November 14, 2012, GAO-13-7.

¹⁴ The Government Accountability Office (GAO) issued a report: *Spectrum Management: NTIA Planning and Processes Need Strengthening to Promote the Efficient Use of Spectrum by Federal Agencies*, April 2011, GAO-11-352.

¹⁵ The NTIA has made the development of spectrum-sharing methods a priority. Information on specific actions is at NTIA, “Spectrum Sharing,” <http://www.ntia.doc.gov/category/spectrum-sharing>.

¹⁶ Created in response to Department of Commerce recommendations to improve spectrum efficiency through better management, see http://www.ntia.doc.gov/legacy/reports/specpolini/factsheetspecpolini_06242004.htm.

¹⁷ NTIA, “An Assessment of Near-Term Viability of Accommodating Wireless Broadband Systems in the 1675-1710 MHz, 1755-1780 MHz, 3500-3650 MHz, and 4200-4220 MHz, 4380-4400 MHz Bands (President’s Spectrum Plan Report),” November 15, 2010, <http://www.ntia.doc.gov/report/2010/assessment-near-term-viability-accommodating-wireless-broadband-systems-1675-1710-mhz-17>. See also NTIA, “Fourth Interim Progress Report on the Ten-Year Plan and Timetable and Plan for Quantitative Assessments of Spectrum Usage,” June 2014, http://www.ntia.doc.gov/files/ntia/publications/fourth_interim_progress_report_final.pdf.

telecommunications and information services; foreign trade opportunities for American telecommunication firms; and more efficient use of spectrum.

Many decisions regarding the use of federal spectrum are made with the participation of the Interdepartmental Radio Access Committee, IRAC.¹⁸ IRAC membership comprises representatives of all branches of the U.S. military and a number of federal department agencies affected by spectrum management decisions.¹⁹ The NTIA is also advised by the Commerce Spectrum Management Advisory Committee (CSMAC). The committee was created by the Department of Commerce in 2004 and is composed of experts from outside the federal government.²⁰ Both IRAC and CSMAC address spectrum-clearing and shared-spectrum solutions, and technology research through their committees. The Office of Management and Budget also influences agency spectrum management through budget planning and recommendations.

The FY2016 budget recommendation for Advanced Communications Research is \$12,555 million and 50 FTE employees. This includes an increase of \$4,828 million and 8 FTE employees for the Center for Advanced Communications Research. The recommended budget for spectrum management programs is \$8,488 million and 39 FTE employees. This compares to \$9,398 million for the same number of employees in FY2015. Other staff is assigned to manage federal spectrum resources for which the NTIA receives fee income from the agencies based on their spectrum holdings.

Grants and Public Safety

The NTIA administers some grant programs created by Congress, including the Broadband Technology Opportunities Program (BTOP). BTOP grant projects are in the final stages of completion. The NTIA also administers a \$135 million grant program to help states plan for participation in a new, nationwide public safety broadband network required by Title VI of the Middle Class Tax Relief and Job Creation Act of 2012 (P.L. 112-96). To deploy the new network, the act established the First Responder Network Authority, or FirstNet, as an independent authority within the NTIA and assigned to the agency various responsibilities to support FirstNet.²¹ \$7 billion in funding is authorized for expenses primarily related to the operation of FirstNet and deployment of its network. Some of the \$7 billion in funding may be used for grant programs to assist states in building radio access networks, to be determined once plans for FirstNet are finalized. FirstNet is funded through the Public Safety Trust Fund, established by Congress to receive revenues from auctions of certain spectrum licenses. Funding amounts were met by auctions conducted in 2014.²²

¹⁸ See <http://www.ntia.doc.gov/category/irac>.

¹⁹ Members are listed at <http://www.ntia.doc.gov/page/irac-functions-and-responsibilities>.

²⁰ See <http://www.ntia.doc.gov/category/csmac>.

²¹ For a discussion of FirstNet requirements, see CRS Report R42543, *The First Responder Network (FirstNet) and Next-Generation Communications for Public Safety: Issues for Congress*, by (name redacted).

²² Auctions 96 and 97 (concluded January 2015); information at http://wireless.fcc.gov/auctions/default.htm?job=auctions_home.

The act also provides for a grant program of \$115 million to fund improvements in 9-1-1 networks. The program is to be administered by the NTIA and the National Highway Traffic Safety Administration through an E-911 Implementation Coordination Office (ICO).

Appropriations and Budget Request History

For FY2015, Congress appropriated \$38.2 million for NTIA salaries and expenses. The Administration had proposed \$51.0 million. This would have been an increase of \$5 million (10.9%) over the enacted FY2014 budget amount of \$46 million. The increase was attributed by the NTIA to an increased focus on policy oversight in two key areas: formulating domestic and international policies and expanding the availability of broadband communications.²³ New programs identified in the budget request included a Center for Advanced Communications, a cooperative effort with NIST to advance spectrum sharing and innovation. Further, the NTIA proposed \$7.5 million to fund an Internet Policy Center to provide analysis and recommendations related to all aspects of the Internet.²⁴ The enacted amount for FY2015 was supplemented by \$4.7 million in unobligated balances carried forward from the previous year, allowing for a FY2015 budget of nearly \$42.9 million.

In FY2010, the Public Telecommunications Facilities Program (PTFP) represented half of the NTIA's budget appropriations. In FY2011, funding for the PTFP was eliminated, but the total enacted budget appropriations amount for the NTIA increased by 4% to \$41.6 million, entirely for administrative expenses and salaries.

According to the NTIA, the increase of \$21.6 million from FY2010 to FY2011 in funding for salaries and expenses was largely attributable to the costs of administration of a \$4.7 billion program for broadband deployment, as required by the American Recovery and Reinvestment Act of 2009 (P.L. 111-5).²⁵ In FY2012 requests for funding to administer grant programs totaled \$32.3 million, 70% of the fiscal year budget request.²⁶ For FY2013, \$25.8 million in funding was designated to administer the remaining broadband grant programs, primarily BTOP. The FY2014 request for broadband grant program oversight was for \$24.7 million, roughly 40% of the total budget request.

The enacted budget for FY2015 eliminated \$12.3 million associated with the conclusion of the BTOP grant award program but included up to \$3 million to provide broadband technical assistance to communities. The FY2015 budget agreement requires the NTIA to provide at least 45 days' notice to the appropriate congressional committees regarding actions taken related to its role in ICANN or IANA, among other reporting requirements, and places constraints on spending.²⁷ Specifically, the NTIA is required

²³ U.S. Department of Commerce, National Telecommunications and Information Administration, *FY 2015 Budget as Presented to Congress*, March 2014, executive summary.

²⁴ *Ibid.*, p. 63.

²⁵ This amount was later reduced by Congress to \$4.4 billion.

²⁶ U.S. Department of Commerce, National Telecommunications and Information Administration, *FY 2013 Budget as Presented to Congress*, February 2012.

²⁷ For additional information see CRS Report R42351, *Internet Governance and the Domain Name System: Issues for Congress*, by (name redacted).

“to inform appropriate Congressional committees not less than 45 days in advance of any such proposed successor contract or any other decision related to changing NTIA’s role with respect to ICANN or IANA activities. In addition, NTIA shall submit a report to the Committees on Appropriations within 45 days of enactment of this Act regarding any recourse that would be available to the United States if the decision is made to transition to a new contract and any subsequent decisions made following such transfer of Internet governance.”²⁸

Table 1. NTIA Fiscal Year Appropriations 2010-2015

(in millions of dollars)

	FY2010	FY2011	FY2012	FY2013 ^a	FY2014	FY2015
NTIA total	\$40.0	\$41.6	\$45.6	\$42.8	\$46.0	\$38.2
Administration, salaries and expenses	\$20.0	\$41.6	\$45.6	\$42.8	\$46.0	\$38.2
PTFP	\$20.0	0	0	0	0	0

Source: Annual Reports, Department of Commerce and Congressional Appropriations, as enacted.

a. Total budget authority.

In addition to appropriations, the NTIA also receives funding from sources such as fees charged to federal agencies for spectrum management services and reimbursable projects in telecommunications technology research, as well as management fees from FirstNet. Reimbursable funding for FY2013 was \$36.3 million, of which spectrum management fees from federal agencies were \$28.1 million. The fees for FY2014 were reported as \$59.4 million and \$42.0 million, respectively. The estimate for FY2015 is \$40.6 million and \$32.0 million.²⁹ FY2016 projections for reimbursable funding total \$42.6 million (155 FTE employees) with almost \$34 million (109 FTE’s) expected from spectrum management fees.

For FY2016, the Administration requests \$49.2 million for salaries and expenses, reflecting a proposed increase in Full Time Equivalent employees from 150 to 169, for programs covered by appropriations. The projected number of employees for programs that are reimbursable remains stable at 155. Categories established for directed obligations in FY2016 are budgeted (in millions) for: Domestic and International Policies (\$15.2); Spectrum Management (\$8.5); Advanced Communications Research (\$12.6) and Broadband Programs (\$13).³⁰

The House-reported bill (H.R. 2578) for FY2016 is \$35.2 million. Referring to language included with appropriations for FY2015, the Committee Report states:

“The Committee remains concerned by NTIA’s announcement of its intent to transition certain Internet domain name functions to the global multistakeholder community. Any such transition represents a significant public policy change and should be preceded by an open

²⁸ *Congressional Record*, December 11, 2014, Vol. 160, No. 151, Book II, p. H9342.

²⁹ U.S. Department of Commerce, National Telecommunications and Information Administration, *FY 2015 Budget as Presented to Congress*, March 2014, p. 43.

³⁰ U.S. Department of Commerce, National Telecommunications and Information Administration, *FY 2016 Budget as Presented to Congress*, February 2015, at http://www.ntia.doc.gov/files/ntia/publications/ntia_2016_cj_final_2-5-15-508_checked.pdf.

and transparent process. In order for this issue to be considered more fully by the Congress, the Committee maintains section 536 prohibiting funding for the transition.”

NTIA Programs and Policies

The NTIA fulfills many responsibilities for different constituencies. As the agency responsible for managing spectrum used by federal agencies, the NTIA often works in consultation with the Federal Communications Commission (FCC) on matters concerning spectrum access, technology, and policy. The FCC regulates private sector, state, local, and tribal spectrum use. Because many spectrum issues are international in scope and negotiated through treaty-making, the NTIA and the FCC collaborate with the Department of State in representing American interests. The NTIA also participates in interagency efforts to develop Internet policy and to ensure that Internet-focused initiatives across the government are coordinated. The NTIA and NIST have adjoining facilities on the Department of Commerce campus in Boulder, CO, where they collaborate on research projects with each other and with other federal agencies, such as the FCC.

The NTIA worked with the Rural Utilities Service in coordinating grants made through BTOP. The NTIA collaborates with NIST, the FCC, and the Department of Homeland Security (DHS) in providing expertise and guidance to grant recipients using BTOP funds to build new wireless networks for broadband communications.

As described by the NTIA,³¹ its policies and programs are administered through

- The Office of Spectrum Management (OSM), which formulates and establishes plans and policies that ensure the effective, efficient, and equitable use of the spectrum both nationally and internationally. Through the development of long-range spectrum plans, the OSM works to address future federal government spectrum requirements, including public safety operations and the coordination and registration of federal government satellite networks. The OSM also handles the frequency assignment needs of the federal agencies and provides spectrum certification for new federal agency radio communication systems.
- The Office of Policy Analysis and Development (OPAD), which is the domestic policy division of the NTIA. OPAD supports the NTIA’s role as principal adviser to the executive branch and the Secretary of Commerce on telecommunications and information policies by conducting research and analysis and preparing policy recommendations.
- The Office of International Affairs (OIA), which develops and implements policies to enhance U.S. companies’ ability to compete globally in the information technology and communications (ICT) sectors. In consultation with other U.S. agencies and the U.S. private sector, OIA participates in international and regional fora to promote policies that open ICT markets and encourage competition.
- The Institute for Telecommunication Sciences (ITS), which is the research and engineering laboratory of the NTIA. ITS provides technical support to the NTIA

³¹ See <http://www.ntia.doc.gov/about>.

in advancing telecommunications and information infrastructure development, enhancing domestic competition, improving U.S. telecommunications trade opportunities, and promoting more efficient and effective use of the radio spectrum.

- The Office of Telecommunications and Information Applications (OTIA), which administers grant programs that further the deployment and use of technology in America, and the advancement of other national priorities. In the past, the OTIA has awarded grants from the Public Telecommunications Facilities Program, which was terminated by Congress in FY2011. The OTIA has administered BTOP grants since 2009.
- The Office of Public Safety Communications, which was created by the NTIA at the end of 2012 to administer some provisions of the Middle Class Tax Relief and Job Creation Act of 2012, Title VI, also known as the Spectrum Act.

For budget purposes, the category of salaries and expenses is organized into five sub-activities: Domestic and International Policies; Spectrum Management; Telecommunication Sciences Research; Broadband Programs; and Spectrum Sharing and Monitoring.³²

Termination of the Public Telecommunications Facilities Program

Effective FY2011, Congress terminated grant funding for the Public Telecommunications Facilities Program (PTFP). In FY2010, the program received \$20 million in funding to support broadcast and non-broadcast projects. Approximately half of the grant monies went to public radio and television stations to replace equipment. Another 25% of grant funds were awarded to bring radio and television services to unserved or underserved communities. Other awards included grants to 16 public television and radio stations to cover costs of converting from analog to digital broadcasting. These grants helped the Public Broadcasting Service to maintain and improve its critical role in the current Emergency Alert System (EAS) and new initiatives for Wireless Emergency Alerts (also known as commercial mobile alerts).³³ For example, the satellite communications network that supports EAS is operated by the National Public Radio, public television stations provide backup for Wireless Emergency Alerts to mobile devices, and public television and radio stations provide emergency alerts and information to otherwise unserved communities.

Spectrum Act

The most recent legislative action to provide more spectrum for commercial services was included in provisions of Title VI of the Middle Class Tax Relief and Job Creation Act of 2012 (P.L. 112-96).³⁴ Title VI is generally referred to as the Spectrum Act, or the Public Safety and Spectrum Act.

³² U.S. Department of Commerce, National Telecommunications and Information Administration, *FY 2015 Budget as Presented to Congress*, March 2014, pp. 49-50.

³³ Background information on FEMA and FCC websites, such as <http://www.fema.gov/emergency-alert-system-eas>.

³⁴ Provisions in Title VI of the act are discussed in CRS Report R43256, *Spectrum Policy: Provisions in the 2012 Spectrum Act*, by (name redacted).

Public Safety

The Spectrum Act gives the NTIA responsibilities to support the First Responder Network Authority (FirstNet) in planning, building, and managing a new, nationwide, broadband network for public safety communications.³⁵ Among the act's provisions for FirstNet in planning and deploying the new network is a requirement "to promote integration of the network" with 9-1-1 call centers (usually known as Public Safety Answering Points, or PSAPS).³⁶

Some of the auction revenues designated for the Public Safety Trust Fund are placed in the Network Construction Fund, established as an account in the Department of the Treasury. The fund is to be used by FirstNet for expenditures on construction, maintenance, and related expenses to build the nationwide network required in the act, and by the NTIA for grants to those states that qualify to build their own radio access network links to FirstNet. The NTIA is also to facilitate payments to states that participate in the deployment of the network.

The act establishes a State and Local Implementation Fund and requires the NTIA, in consultation with FirstNet, to establish grant program requirements. Grants from this fund are available to all 56 states and territories to support planning, consultation, data collection, education, and outreach activities. Grants totaling over \$116 million were awarded to 54 states and territories in FY2013, to be distributed in two phases.³⁷

The NTIA has created an Office of Public Safety Communications to oversee the State and Local Implementation Fund grant process. It also has been assigned other statutory responsibilities such as developing and administering the state opt-out program. The Office will manage service-level agreements for the agency to supply administrative, technical, staffing, and other resources, as requested, to FirstNet.

The act reestablishes the federal 9-1-1 Implementation Coordination Office (ICO) to plan for next-generation 9-1-1 systems (NG 9-1-1) and to administer a grant program of \$115 million.³⁸ Funds for the grant program will likely be available in 2015, following the successful auction of spectrum licenses intended to provide the funding. ICO is to be jointly administered by the NTIA and the National Highway Traffic Safety Administration (NHTSA). Other responsibilities of ICO include preparing a report on costs for requirements and specifications of Next Generation 9-1-1 (NG 9-1-1) services, including an analysis of costs, and assessments and analyses of technical uses. The act requires the report be prepared and submitted within one year of enactment.³⁹

³⁵ Actions taken by the NTIA in establishing and assisting FirstNet are documented in the U.S. Department of Commerce, National Telecommunications and Information Administration, *FY 2014 Budget as Presented to Congress*, April 2013, http://www.osec.doc.gov/bmi/budget/FY14CJ/NTIA_FY_2014_CJ_Final_508_Compliant.pdf.

³⁶ P.L. 112-96, §6206 (b) (2) (c).

³⁷ NTIA press release, "More Than \$116 Million Awarded to Assist States in FirstNet Planning," September 26, 2013, <http://www.ntia.doc.gov/press-release/2013/more-116-million-awarded-assist-states-firstnet-planning>. See also NTIA Blog, "NTIA Grant Program Ensuring States are Planning for FirstNet," by Mike Dame, Program Director, State and Local Implementation Grant Program (SGLIP), December 23, 2014, <http://www.ntia.doc.gov/blog/2014/ntia-grant-program-ensuring-states-are-planning-firstnet>.

³⁸ Previous legislation for NG 9-1-1 is discussed in CRS Report R41208, *Emergency Communications: Broadband and the Future of 911*, by (name redacted).

³⁹ P.L. 112-96, §6508.

Spectrum Reallocation

The Spectrum Act updates existing and specifies new procedures for spectrum to be reallocated from federal government to commercial use. Under the act, the NTIA is required to work with the FCC to identify radio frequency bands for release to commercial use.

The act also addresses how spectrum resources might be repurposed from federal to commercial use through auction or sharing, and how the cost of such reassignment would be defined and compensated, among other provisions. Although spectrum sharing to facilitate the transition from federal to commercial use is supported in the act's provisions, the NTIA is required to give priority to reallocation options that assign spectrum for exclusive, non-federal uses through competitive bidding.

The act requires the establishment of a Technical Panel within the NTIA to review transition plans that each federal agency must prepare in accordance with provisions in the act. The Technical Panel is required to have three members qualified as a radio engineer or technical expert. The Director of the Office of Management and Budget, the Assistant Secretary of Commerce for Communications and Information, and the Chairman of the FCC have been required to appoint one member each. A discussion and interpretation of provisions of the act as regards the technical panel and related procedural requirements such as dispute resolution have been published by the NTIA as part of the rulemaking process.⁴⁰

Oversight Request by FirstNet

Criticism by a member of the board of FirstNet, in April 2013—regarding a lack of transparency in information provided to the board, and other issues—led to a review of practices by the OIG. The primary focus of the review had two main objectives, to determine whether the Department of Commerce (DOC)

- Had adequate processes in place to ensure that FirstNet Board members properly filed financial disclosures and identified potential conflicts of interest.
- Used appropriate contracting processes and requirements.

The overall finding is that some monitoring procedures were inadequate, including, for example, a finding that “FirstNet contracting practices lacked transparent award competition, sufficient oversight of hiring, adequate monitoring, and procedures to prevent erroneous costs....”⁴¹

In its review, the OIG looked at the roles of the NTIA, the DOC Office of General Counsel, and two agencies within DOC that were assigned direct responsibilities to assist FirstNet; the Bureau of Census and NIST were asked to award and manage contracts with outside entities to provide assistance to FirstNet. The OIG did not specifically review activities of the NTIA Office of Public Safety Communications, created to assist FirstNet with administrative tasks, including staffing.

⁴⁰ NTIA, Notice of Proposed Rulemaking, July 17, 2012, and replies, docket no. 110627357-2209-03 at <http://www.ntia.doc.gov/federal-register-notice/2012/technical-panel-and-dispute-resolution-board-nprm>.

⁴¹ Ibid., cover memorandum.

The OIG review determined that nearly \$11 million had been inappropriately spent, much of it going for consulting work that did not meet contractual definitions of deliverables. The OIG referred to this consulting work as “work products” and questioned the expenditures. The DOC responded that it conducted relevant contracting activities in accordance with federal procurement laws and regulations and monitored performance, and that the contracts produced “first-rate feasibility research, technical analysis, strategic planning, and outreach services from highly specialized consultants, whose work product has laid the groundwork for executing FirstNet’s mission.”⁴²

The OIG made recommendations to the Secretary, the General Counsel, the Chair of FirstNet, and the DOC’s Senior Procurement Official regarding various procedures and responsibilities. A joint response from FirstNet, the NTIA, and the General Counsel concurred with the specific recommendations from the OIG, although not all the findings. In general, they defended their actions in the context of unique requirements and time constraints in setting up FirstNet.

The OIG review covered a limited range of issues linked to oversight procedures. Although it did not go into detail, the OIG noted “inconsistent administration”⁴³ and several instances of significant time lags in the performance of DOC officials. For example, “6 months after the Board began regular meetings, senior NTIA and Office of General Counsel officials were still debating [the monitoring] of potential conflicts of interest.”⁴⁴ OIG found that most of the lapses occurred in the year after the FirstNet board held its first official meeting in September 2012. The review observed that “neither a business plan nor a network plan were completed or delivered to FirstNet during the 1-year performance period of the contracts....”⁴⁵

Funding for Oversight

The Department of Commerce, Office of Inspector General has requested \$1.4 million in FY2016 to provide oversight of FirstNet.⁴⁶ The FY2015 budget requested \$2.2 million for this purpose. According to the FY2015 budget request document,

The Secretary’s allowance for OIG did not provide funding for FirstNet oversight, stating that the Department is working to identify a funding solution for oversight. OIG had previously requested \$1.9 million for FY 2014 for oversight of FirstNet, which the Department also did not support. The Department deferred a funding decision for FirstNet, and it is our understanding that an agreement in principle between the Department and FirstNet was reached where FirstNet would provide a transfer to OIG to fund FirstNet oversight. However, no agreement has been reached between OIG and FirstNet for FY 2014 or FY 2015 oversight of FirstNet and no funds have been transferred⁴⁷

⁴² Ibid., p. 36.

⁴³ Ibid., p. 5.

⁴⁴ Ibid., p. 6.

⁴⁵ Ibid., p. 12.

⁴⁶ U.S. Department of Commerce, *FY 2016 Budget in Brief*, Office of the Inspector General, p. 21.

⁴⁷ U.S. Department of Commerce, Office of the Inspector General, *FY 2015 Congressional Submission*, p. 58.

Testimony by a Department of Commerce official at a Senate hearing on March 11, 2015, confirmed that the Department prefers that FirstNet provide the funding for oversight.⁴⁸ The issue of whether funds will be available for oversight during key years of FirstNet activity remains unclear. Oversight tasks would include an audit of NTIA grant programs for FirstNet participants and the federal procurement practices of FirstNet in awarding contracts to deploy and manage the network. OIG received \$10 million in no-year funding for BTOP oversight from American Recovery and Reinvestment Act funds.

Administrative Expenses for FirstNet

The FY2014 *Annual Report to Congress*,⁴⁹ from FirstNet shows operating expenses for the year of \$24.4 million, of which \$6.2 million was attributed to administrative expenses. The report notes that the Spectrum Act caps administrative expenditures at \$100 million for the first 10 years of operation and states the “cap has been identified as a future barrier for FirstNet progress because it is projected to limit administrative costs to impractical levels. Management estimates that to operate within this limitation, FirstNet and the public will have to accept risks to FirstNet operations....” The funding guidance for FY2015 allows for a budget of as much as \$120 million, of which up to \$21.4 million is anticipated for expenditures on organizational infrastructure, project support, and administrative functions. An additional \$22.3 million is projected for planning, consultation, and outreach activities.⁵⁰

The FY2016 budget proposal limit for all expenses is \$160 million, which includes funding for approximately 150 Full Time Equivalent employees as well as additional contracting and administrative support.⁵¹

Issues for the 114th Congress

The Assistant Secretary of Commerce for Communications and Information—the administrator of the NTIA—has set three major priorities for the agency for 2015.⁵²

⁴⁸ Hearing, Senate Committee on Commerce, Science, and Transportation, “Three Years Later: Are We Any Closer to a Nationwide Public Safety Network,” March 11, 2015, testimony of Bruce Andrews, Deputy Secretary, U.S. Department of Commerce.

⁴⁹ FirstNet, U.S. Department of Commerce, *FY2014: Annual Report to Congress*, at http://www.firstnet.gov/sites/default/files/Annual%20Report_FY2014_FINAL_3_3_15.pdf.

⁵⁰ FirstNet News, “FirstNet Finance Committee Gives Go-Ahead to Fund Key RFP, Consultation Activities in FY15,” November 17, 2015, at <http://www.firstnet.gov/news/firstnet-finance-committee-gives-go-ahead-fund-key-rfp-consultation-activities-fy15>.

⁵¹ Hearing, Senate Committee on Commerce, Science, and Transportation, “Three Years Later: Are We Any Closer to a Nationwide Public Safety Network,” March 11, 2015, testimony of the Honorable Todd J. Zinser, Inspector General, U.S. Department of Commerce, at http://www.commerce.senate.gov/public/index.cfm?p=Hearings&ContentRecord_id=25dedd7c-815b-4b3d-a420-4f4324d01041&Statement_id=ec8d2396-ecd6-4787-bcc6-6c0152203066&ContentType_id=14f995b9-dfa5-407a-9d35-56cc7152a7ed&Group_id=b06c39af-e033-4cba-9221-de668ca1978a&MonthDisplay=3&YearDisplay=2015.

⁵² NTIA, Newsroom, “Remarks by Lawrence E. Strickling, Assistant Secretary of Commerce for Communications and Information, PLI/FCBA,” Telecommunications Policy and Regulation Institute, Washington, DC, December 4, 2014, <http://www.ntia.doc.gov/speechtestimony/2014/remarks-assistant-secretary-strickling-plifcba-telecommunications-policy-regula>.

- Promote spectrum sharing as a key part of ongoing efforts to find more spectrum for commercial wireless broadband.
- Continue to expand broadband access and adoption to help close the digital divide.
- Support and strengthen the bottom-up, consensus-based approach to Internet governance through the multi-stakeholder process.

Congress, however, is likely to focus on NTIA leadership: leadership in Internet policy—specifically its role in ICANN and IANA—and leadership in support of public safety communications.

Members of Congress have taken some steps to gather information about the NTIA’s decision-making, planning, and performance. In response to separate requests from Congress, the Government Accountability Office preparing a report on the planning and implementation of FirstNet,⁵³ and is preparing a report on NTIA’s proposed transition of its authority over ICANN.

Introduced in the 114th Congress, the DOTCOM Act of 2015 (H.R. 805) would prohibit the NTIA from relinquishing responsibility for the Internet domain name system until the GAO submits its report on the proposed transition.

Author Contact Information

(name redacted)
Specialist in Telecommunications Policy
[redacted]@crs.loc.gov, 7-....

⁵³GAO, *Public-Safety Broadband Network: FirstNet Should Strengthen Internal Controls and Evaluate Lessons Learned*, GAO-15-407, April 2015, at <http://www.gao.gov/assets/670/669861.pdf>.

EveryCRSReport.com

The Congressional Research Service (CRS) is a federal legislative branch agency, housed inside the Library of Congress, charged with providing the United States Congress non-partisan advice on issues that may come before Congress.

EveryCRSReport.com republishes CRS reports that are available to all Congressional staff. The reports are not classified, and Members of Congress routinely make individual reports available to the public.

Prior to our republication, we redacted names, phone numbers and email addresses of analysts who produced the reports. We also added this page to the report. We have not intentionally made any other changes to any report published on EveryCRSReport.com.

CRS reports, as a work of the United States government, are not subject to copyright protection in the United States. Any CRS report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS report may include copyrighted images or material from a third party, you may need to obtain permission of the copyright holder if you wish to copy or otherwise use copyrighted material.

Information in a CRS report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to members of Congress in connection with CRS' institutional role.

EveryCRSReport.com is not a government website and is not affiliated with CRS. We do not claim copyright on any CRS report we have republished.