

ONE HUNDRED ELEVENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
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MEMORANDUM

March 22, 2010

To: Members of the Subcommittee on Communications, Technology, and the Internet

Fr: Democratic Committee Staff

Re: Hearing on the National Broadband Plan

On Thursday, March 25, 2010, at 10:00 a.m. in room 2123 of the Rayburn House Office Building, the Subcommittee on Communications, Technology, and the Internet will hold a hearing entitled “Oversight of the Federal Communications Commission: The National Broadband Plan.” The hearing will explore details of the Federal Communications Commission’s recently released National Broadband Plan.

I. BACKGROUND

At its January 22, 2009, markup of the broadband provisions contained in the American Recovery and Reinvestment Act (ARRA), the Committee on Energy and Commerce adopted an amendment to require the Federal Communications Commission (FCC) to submit to Congress a National Broadband Plan (NBP). The statute requires that the NBP “shall seek to ensure that all people of the United States have access to broadband capability and shall establish benchmarks for meeting that goal.”¹ The statute also requires that the NPB include:

- An analysis of the most effective mechanisms for ensuring broadband access;
- A strategy to achieve affordability for broadband access;
- An evaluation of the status of broadband deployment; and
- A plan for advancing broadband use in relation to a variety of national purposes, such as public safety, health care delivery, energy independence and education.

¹ The American Recovery and Reinvestment Act, Pub. L. No. 111-5 (2009).

On March 16, 2010, after an intensive effort during which the FCC held dozens of public workshops, issued 31 public notices and received comments from more than 700 parties, the agency released the NBP. In general, the NBP presents a thorough analysis of the state of broadband deployment and adoption in the United States, and puts forth numerous recommendations for action by the FCC, the executive branch, and Congress. The FCC's website devoted to the plan (www.broadband.gov/plan/) provides a comprehensive tool to navigate the contents of the NBP. What follows is a general overview of the NBP and a discussion of some, but not all, of its recommendations.

II. POLICY RECOMMENDATIONS

A. Broad Goals

The NBP set out six long-term goals to help guide future policy discussions. These include the following recommendations: (1) At least 100 million homes in the United States should have affordable access to broadband with actual download speeds of at least 100 megabits per second and actual upload speeds of 50 megabits per second; (2) the United States should have the most robust and innovative wireless networks in the world; (3) every American should have affordable access to robust broadband service and the means and skills to subscribe to if they choose; (4) every community should have affordable access to one gigabit per second broadband service at community institutions such as schools, hospitals and government buildings; (5) every first responder should have access to a nationwide interoperable wireless broadband public safety network; and (6) every American should be able to use broadband to manage their home energy consumption.²

In addition to these long-term goals, the NBP contains a number of key recommendations, touching on such topics as public safety interoperability, spectrum policy, universal service, broadband competition, and national purposes.

B. Public Safety

Chapter 16 of the NBP attempts to address the lack of adequate interoperability between first responders. Specifically, the NBP proposes a path to fund the construction and maintenance of an interoperable wireless broadband network for use by public safety entities nationwide.

By way of background, as part of the digital television transition, Congress allocated 24 megahertz (MHz) of spectrum (TV channels 63, 64, 68, and 69) to public safety, 12 of which is currently allocated for voice communications, often referred to as "narrowband," and 10 for broadband services.³ In addition to allocating 24 MHz to public safety, the DTV transition directed the FCC to auction additional spectrum in the 700 MHz band to commercial providers. In conjunction with that auction, the FCC attempted to create a nationwide interoperable broadband public safety network through an innovative public-private partnership that sought to

² Federal Communications Commission, *National Broadband Plan*, (2010) Chapter 2.

³ Because of the necessity of having paired 1 MHz buffer zones to protect against interference, the usable broadband block is 10 MHz.

pair additional spectrum (the 10 MHz “D Block”) with the already-allocated public safety broadband spectrum. By allowing the commercial winner of the D Block access to an additional 10 MHz of public safety spectrum, the FCC hoped that the commercial licensee would have an incentive to fund and construct a nationwide interoperable broadband network to which public safety would have access.

The 2008 auction of the D Block failed to attract a bidder and as a result the D Block and the 10 MHz allocated to public safety for broadband purposes remain unused. Several large cities have petitioned the FCC for permission to begin using the idle 10 MHz of public safety broadband spectrum.⁴

In light of the experience with the public-private partnership, the FCC now recommends abandoning this approach and focuses its recommendations on funding and technical coordination as well as the creation of incentives for public safety to leverage commercial resources.

Specifically, the NBP recommends:

- Auctioning the D Block for commercial use, while imposing minimal requirements on the D Block licensee to facilitate opportunities for partnerships with public safety.
- Promoting flexible spectrum spectrum-sharing partnerships between public safety and commercial wireless providers to help lower the cost of building a nationwide, interoperable public safety broadband network.
- Developing rules to provide public safety roaming and priority access to commercial networks in the 700 MHz band and potentially other bands on just and reasonable terms.
- Establishing a targeted grant program to help cover a portion of the estimated \$6.5 billion initial build-out cost of such a network and.
- Providing funding for the ongoing maintenance and operational costs of the network.

The NBP also outlines the role the FCC will play in ensuring that the public safety broadband network that emerges from this effort is truly interoperable. The NBP recommends establishing within the FCC’s Public Safety and Homeland Security Bureau a coordinating body known as Emergency Response Interoperability Center (ERIC). ERIC would be responsible for establishing common standards, including technical, operational, and security standards that promote the development of an interoperable public safety network. Finally, the NBP also discusses efforts the FCC should take to promote cybersecurity and protection of critical infrastructure.

⁴ See e.g., Federal Communications Commission, *Public Safety and Homeland Security Bureau Seek Comment on Petitions for Waiver to Deploy 700 MHz Public Safety Broadband Networks*, DA 09-1819 (Aug. 14, 2009)..

C. Spectrum Policy

The NBP makes a series of sweeping recommendations designed to ensure that the United States continues to be a leader in wireless broadband innovation.⁵ These changes are necessary, the NBP concludes, because “[w]ireless broadband is poised to become a key platform for innovation in the United States over the next decade,” and that wireless data networks in North America may see a 35-fold increase in traffic by the year 2014. Indeed, the NBP notes that some industry analysts predict that in five years more people will access the internet via a mobile device than traditional desktop computers.⁶

The recommendations are designed to overhaul the manner in which the FCC manages spectrum by moving to a more transparent regime, by encouraging more sharing, by facilitating more unlicensed use, and by permitting more flexible use by licensees. The NBP also recommends that, to satisfy consumer demand, the FCC make 500 MHz of new spectrum available for broadband use within the next 10 years, including the 120 MHz currently allocated to over-the-air broadcast television, through a voluntary surrender mechanism or, if that mechanism proves inadequate, through other means.

Additional recommendations include:

- The NTIA and the FCC should work to develop a more comprehensive spectrum management system, and should develop tools to measure spectrum utilization by existing licensees.
- Congress should consider expanding the FCC’s authority to conduct incentive auctions, in which incumbent licensees may receive a portion of the auction proceeds in exchange for surrendering a portion of the spectrum in which they are licensed to operate.
- The FCC should take steps to spur the development of wireless backhaul services, and free up a new, contiguous nationwide band for unlicensed use.

D. Universal Service Reform: Universal Connectivity

As mentioned above, the ARRA requires that the NPB “shall seek to ensure that all people of the United States have access to broadband capability”.⁷ The NPB recognizes that communications networks are increasingly and inevitably utilized for broadband and therefore proposes to reform the existing federal subsidy systems for communications networks (the Universal Service Fund, or USF), as well as the complicated scheme governing the payments carriers make to each other to compensate each other for originating and terminating telephone calls (inter-carrier compensation, or ICC). More specifically, the NBP proposes the following over a ten-year period:

⁵ Federal Communications Commission, *National Broadband Plan*, (2010) Chapter 5.

⁶ *Id.*, at p. 77.

⁷ The American Recovery and Reinvestment Act, Pub. L. No. 111-5 (2009).

- Transform the existing “high-cost” USF fund that supports wireline and wireless telephone networks to a “Connect America Fund” (CAF) that supports only broadband networks.
- Limit CAF support to areas where private investment is not enough to provide service, and only subsidize one carrier in such areas.
- Broaden the contribution base for CAF to include broadband-centric service offerings and bundled service offerings.
- Slowly reduce and ultimately eliminate per-minute rates for ICC.
- Create a new “Mobility Fund” to provide one-time support for the construction of 3G wireless networks where existing networks are inadequate or below national standards.

E. Broadband Innovation and Competition

The NBP identifies competition policy as a way for the government to ensure robust competition that maximizes consumer welfare, innovation and investment.⁸ Accordingly, the NBP conducts a thorough review of the state of broadband competition in this country and makes a series of recommendations designed to sustain and promote further competition and choice for consumers.⁹ These recommendations include:

- The federal government should collect more and better data on broadband deployment and adoption to inform policy discussions.
- The FCC should promote transparency in the residential broadband market by establishing measurement standards and ensuring consumers have access to meaningful broadband performance data.
- The FCC should review its wholesale broadband competition policies to ensure that broadband networks are deployed as efficiently as possible.
- The FCC should take steps to promote competition for equipment that connects consumers’ televisions to cable or broadband networks (*e.g.*, set-top boxes).
- The FCC, Federal Trade Commission and Congress should clarify consumers’ online privacy rights.

⁸ Federal Communications Commission, *National Broadband Plan*, (2010) Executive Summary.

⁹ *Id.*, at Chapter 5.

- The FCC should begin proceedings to consider a transition from the old, circuit-switched telephone network to a new IP-based regime.

F. National Purposes: Energy Efficiency and Health Care Delivery

As required by statute, the plan also examines the intersection of broadband deployment and adoption and other so-called national priorities, including health care and energy.

Health Care Delivery.¹⁰ The FCC currently oversees a universal service program aimed at rural health care providers. This program subsidizes the rates providers pay for services, and includes a pilot program aimed at funding the deployment of broadband connections to rural health care facilities. The NBP finds that, in spite of these and other programs, many health care facilities have inadequate access to broadband. Therefore, the plan recommends that:

- The FCC should make the pilot program permanent and establish a Health Care Broadband Infrastructure Fund to subsidize network deployment to facilities where existing infrastructure is inadequate.
- The FCC should make other changes to subsidize the subscription costs health care providers pay for broadband.
- Congress should amend the statute to permit for-profit entities that serve particularly vulnerable populations to be eligible for universal service support.

Energy: Smart Grid.¹¹ The NBP examines the intersection of broadband and energy consumption, and makes a series of recommendations on how broadband can help further energy consumption and sustainability goals, and to help realize the adoption of smart grid technologies. These include:

- States should ensure that consumers have access to their own energy consumption data, including, perhaps, access to real-time consumption data.
- Congress should consider amending the Communications Act to enable utilities to use – on a subordinated basis – the proposed nationwide, interoperable public safety broadband network.
- The NTIA and the FCC should continue their efforts to find new uses of federal spectrum aimed at facilitating smart grid technologies.

¹⁰ *Id.*, at Chapter 10.

¹¹ *Id.*, at Chapter 12.

III. WITNESSES

The Honorable Julius Genachowski
Chairman
Federal Communications Commission

The Honorable Michael J. Copps
Commissioner
Federal Communications Commission

The Honorable Robert M. McDowell
Commissioner
Federal Communications Commission

The Honorable Mignon Clyburn
Commissioner
Federal Communications Commission

The Honorable Meredith Attwell Baker
Commissioner
Federal Communications Commission