

# An Analysis of the FCC's National Broadband Plan

## **Executive Summary**

03.16.10

## By Robert G. Scott, Jr., and James M. Smith

On March 16, 2010, the Federal Communications Commission (FCC) presented to Congress its long-anticipated National Broadband Plan, as mandated by the American Recovery and Reinvestment Act of 2009 (the "Recovery Act"). Thirteen months in the making and weighing in at nearly 400 pages, "Connecting America: The National Broadband Plan" (the "Plan") has occupied a disproportionate share of the FCC's time and energy for the last year and, given the breadth and sheer quantity of its analysis and proposals, it will continue to be the single greatest focus of the agency for years to come. For all providers of wired and wireless communications services in the United States, its findings, recommendations and myriad implementing proceedings will be of tremendous consequence.

This executive summary provides a short overview of the highlights of the Plan and next steps, and provides links to more detailed analysis of each primary issue for communications providers.

#### **Background**

Section 6001 of the Recovery Act, signed into law by President Obama on Feb. 17, 2009, less than a month after his inauguration, mandated the dispersal of \$7.2 billion through grant and loan programs to expand broadband deployment to, and adoption by, unserved and underserved areas and vulnerable populations. Those programs—the Broadband Technology Opportunities Program (BTOP) administered by the Department of Commerce and the Broadband Initiatives Program (BIP) administered by the Department of Agriculture—are underway, and by law, all of these grants must be awarded by September 30, and the projects completed within three years thereafter.

But Subsection 6001(k) of the Recovery Act also directed the FCC to submit to Congress a National Broadband Plan for the longer term, to pick up where these broadband deployment and other short-term projects leave off "to ensure that all people of the United States have access to broadband capability and [to] establish benchmarks for meeting that goal."

Congress ordered the FCC to include (1) "analysis of the most effective and efficient mechanisms for ensuring broadband access" by all Americans, (2) "a detailed strategy for achieving affordability of such service and maximum utilization of broadband infrastructure" by the public, (3) "an evaluation of the status of deployment of broadband service, including progress of projects supported by the [BTOP and BIP] grants," and (4) "a plan for use of broadband infrastructure and services in advancing consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, worker training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes."

# Analysis of the Plan

The Plan purports to fulfill these directives and indeed aspires "to ensure that the entire broadband ecosystem—networks, devices, content, and applications—is healthy" through recommendations to itself, the executive branch, Congress and state and local governments, including these goals:

- Connect 100 million households to affordable 100-megabits-per-second service, building the world's largest market of high-speed broadband users and ensuring that new jobs and businesses are created in America.
- Provide affordable access in every American community to ultra-high-speed broadband of at least 1 gigabit per second at anchor institutions such as schools, hospitals and military installations, so that America is hosting the experiments that produce tomorrow's ideas and industries.



- Ensure that the United States is leading the world in mobile innovation by making 500 megahertz of spectrum newly available for licensed and unlicensed use.
- Move broadband adoption rates from roughly 65 percent to more than 90 percent and make sure that every child in America is digitally literate by the time he or she leaves high school.
- Bring affordable broadband to rural communities, schools, libraries and vulnerable populations by transitioning existing Universal Service Fund support from yesterday's analog technologies to tomorrow's digital infrastructure.
- Promote competition across the broadband ecosystem by ensuring greater transparency, removing barriers to entry and conducting market-based analysis with quality data on price, speed and availability.
- Enhance the safety of the American people by providing every first responder with access to a nationwide, wireless interoperable public safety network.

Given these wide-ranging aspirations, a great deal of the Plan's text describes the potential benefits of universal availability and use of broadband, but many of the most important details on how the FCC would achieve these goals are left to future FCC proceedings or other government authorities. Thus, some of these proposals may never become reality. One suggested change that may or may not become "reality" concerns the legal framework for adopting the Plan. The FCC recounts suggestions from some advocates that it change broadband service classification from its current designation as an information service (a classification upheld by the Supreme Court) to a common carrier telecommunications service regulated under Title II, with possible forbearance. While this may dovetail with the Plan's mention of requiring broadband service providers to support generic "gateway" devices for Internet access, the debate over reclassifying broadband has been covered in existing proceedings, including the Commission's Rulemaking on Net Neutrality, as discussed in our advisory dated October 22, 2009. Many commenters who filed in the National Broadband Plan proceeding, and apparently at least two Commissioners, believe such a reclassification would create an impediment to adoption, use and deployment of broadband technology and infrastructure.

The Commission promises to quickly establish a timetable to conduct proceedings on matters within its authority over the coming 12 to 18 months. The Commission staff estimates that the Plan will result in perhaps 40 different FCC proceedings during that period. The FCC will be releasing a series of notices to launch these proceedings, and Davis Wright Tremaine will participate in them on behalf of our clients.

Our analysis of the Plan emphasizes concrete proposals and practical implications for communications service providers and other entities directly affected by the more definite elements of the Plan. The summary of specific issues, and links to more detailed analysis, follow below:

## **Broadband Deployment**

The Plan proposes to increase and enhance broadband deployment across the United States through a combination of policy changes, incentives to private industry to invest in broadband deployment wherever it can be profitable, and direct public investment to serve areas where no commercially viable business case can be made and to serve other public needs such as health care, education and public safety. [MORE]

## **Overhauling High-Cost Universal Service**

The FCC proposes to replace the high-cost subsidy portion of the Universal Service Fund (USF) with two new funds supporting broadband and mobile broadband in certain unserved areas of the country, while keeping total subsidies close to the current level of funding. Most legacy support would not be phased out until the second stage of a transition from 2012 to 2016, meaning that disbursements for broadband subsidies would not begin until then. The Plan lacks detail on potential reform of the USF contribution system, leaving that critical issue to future proceedings. [MORE]



## **Intercarrier Compensation**

The Commission proposes to reform, and then ultimately eliminate, the existing intercarrier compensation (ICC) regime, which it views as an impediment to investment in broadband infrastructure. [MORE]

## **Mobile Broadband and Spectrum Initiatives**

The Plan recognizes that no area of the broadband ecosystem holds more promise for transformational innovation than mobile services. In order to accommodate this significant growth and develop mobile broadband services, the Plan recommends:

- 1. Increasing spectrum availability and modifying spectrum policy;
- 2. Reducing obstacles that may slow facility deployment or increase investment costs;
- 3. Increasing access to mobile broadband for all Americans; and
- 4. Improving mobile communications for public safety.

There are a number of other critical issues in the Plan for wireless stakeholders, including how wireless broadband service is technically defined and disclosed to consumers and whether universal service reforms will level the playing field for wireless ETCs. [MORE]

## Infrastructure Deployment: Utility Poles, Conduit and Rights of Way

The Plan recommends a number of actions to promote broadband deployment and adoption for wired and wireless networks, including lowering pole access and rental costs and establishing more timely access to poles, conduits and public rights of ways. Recommendations include:

- Lowering the telecommunications pole rent formula close to the cable television pole formula rate
- Creating timelines to govern every step of the pole attachment process
- Lowering right-of-way fees to cost-based level
- Creating a federal, state, Tribal and local task force to identify right-of-way best practices to speed deployment

## [MORE]

#### **Navigation Devices**

The Plan recommends that all MVPDs install (still undefined) gateway devices or functional equivalents in all new subscriber homes and in all home requiring replacement set-tops by Dec. 31, 2012. It appears that the Commission will first move forward with a Notice of Inquiry to collect more information, rather than launch a rulemaking proceeding as gateway advocates had urged. However, the authors' vision of a gateway device is taken directly from some of the more extreme positions of advocates who seek to restructure cable architecture and business, such as stripping out any MVPD functionality other than delivery of standardized video and service feeds, with no recognition of the complexities involved in interactive cable services. The Broadband Plan makes a second recommendation targeted exclusively at cable operators. While declaring the CableCARD to be a failure, it proposes that the FCC adopt rules by the fall of 2010 requiring cable operators to redesign switched digital technology (SDV), restructure the prices of set-tops and bundled cable packages, change the CableCARD installation process, and possibly limit device certification to preventing harm to the network. [MORE]



## **Privacy in Broadband**

The Plan adopts a relatively balanced approach to online data collection, advanced advertising and consumer privacy, recognizing that online data collection and digital profiling can enhance consumer value in gaining access to more relevant advertising and subsidized or free services. It calls for "transparency" regarding what broadband providers and purveyors of online goods/services do or wish to do with consumers' personal data, "informed consent" for such uses, and continuing consumer "control" over the uses (particularly the disclosure) of such data, as well as enforcement mechanisms. But it does not make any explicit call for "opt-in" consents for the use of personal data. It recommends that Congress, the Federal Trade Commission and the FCC collaborate to clarify the relative control users have over their online profiles and personal data, and for the development of private sector companies that can help consumers manage their personal data, and that more resources be devoted to combating identity theft.

[MORE]

## **Cybersecurity**

The Plan makes a number of recommendations to promote and strengthen cybersecurity and to protect critical broadband infrastructure, in an effort to increase consumer confidence, trust and broadband adoption. The Plan first recommends an active federal role in creating public-private cybersecurity partnerships, development of machine-readable repositories with actionable real-time information on cybersecurity threats, expansion of cybersecurity educational and training programs, coordinated cybersecurity assistance to help foreign countries develop expertise in this area, and increased Federal Communications Commission (FCC) participation in domestic and international fora addressing cybersecurity. With respect to other FCC-specific steps, the Plan sets out for the FCC several key tasks to foster cybersecurity, including:

- Working with the executive branch to issue within 180 days of the Plan a cybersecurity "roadmap" identifying the five most critical cybersecurity threats and establishing a two-year plan for addressing the threats
- Working with Internet service providers (ISPs) to build robust cybersecurity protection and defenses into networks used by businesses and individuals who lack access to cybersecurity resources
- Initiating FCC proceedings to (a) extend FCC Part 4 outage reporting rules to broadband ISPs and interconnected voice over Internet protocol (VoIP) providers, (b) inquire into the resilience, reliability and preparedness of broadband networks, and (c) explore whether and how to encourage voluntary efforts by broadband providers to improve cybersecurity
- Establishing a IP network cybersecurity information reporting system
- Jointly creating with the National Communications System (NCS) priority network access and routing for broadband communications to protect time-sensitive, safety-of-life information needed by public safety providers
- Funding a wireless test bed for evaluating network security

#### [MORE]

## **E-rate Upgrade**

The Plan proposes to modify the Universal Service Schools & Libraries (E-rate) program, which was created in 1996 to subsidize telecommunications, Internet access and related services provided to K-12 schools and libraries. The FCC seeks to expand the range and permitted uses of subsidized E-rate services, such as: permitting schools to allow public use of services, supporting off-campus wireless access by students, expanding funding of on-premise equipment, and increasing flexibility to use lower-cost solutions including equipment needed to light dark fiber.



The Plan also seeks to encourage innovation by funding "best ideas" projects that help to integrate broadband services into education. Of particular interest to current E-rate participants are proposals to streamline the application process for smaller projects, fund "Priority 1" services on a multi-year basis, and increase the annual \$2.25 billion cap on E-rate funding by indexing it to inflation. Finally, the Plan seeks to expand federal funding—whether through the E-rate program or another federal mechanism—to community colleges, as well as settle eligibility issues for tribal libraries. [MORE]

#### **Broadband Adoption**

The Plan proposes to increase overall adoption levels from 65 percent to 90 percent over the next 10 years by focusing in on removing barriers to adoption affecting the 35 percent (representing 80 million adults) of nonadopters who are more likely than not to be: low income, African American or Hispanic, senior citizens, from a rural household, or disabled. The primary barriers to adoption experienced by these citizens are: 1) cost/affordability, 2) digital literacy, and 3) relevance, with issues for people with disabilities cutting across and beyond all three barriers. In addition to making recommendations as to how to overcome the top three barriers to adoption, the Plan also addresses measurement, best practices and coordination of Tribal, state, and local initiatives, all in an effort to increase broadband adoption. [MORE]

#### **Broadband Access for Persons with Disabilities**

The Plan includes a series of recommendations to improve and enhance access to broadband services by persons with disabilities. The Plan recommends that all branches of the federal government update existing laws to apply to Internet protocol equipment and services, and apply current law to require accessibility to certain commercial Web sites. The Plan further recommends that both the Executive Branch and the FCC establish working groups to ensure compliance with applicable laws and to encourage and fund development of new and efficient technologies to make broadband more accessible to the disabled. [MORE]

#### **Smart Grid**

The deployment of Smart Grid technology is vitally important to America's energy future, but limitations in existing commercial and private electric utility networks threaten to delay Smart Grid implementation. The Plan proposes to remedy this situation by recommending that commercial broadband networks be enhanced for greater reliability and that electric utilities be permitted and encouraged to use these networks, or to use the proposed public safety network or construct their own broadband networks where appropriate, to deploy Smart Grid applications. The Plan further recommends that States (or Congress in the absence of state action within 18 months) should require electric utilities to provide consumers with access to, and control of, their own energy use information. The Plan also proposes that the FCC start a proceeding to improve the energy efficiency and environmental impact of the communications industry. [MORE]

## **Consumer Disclosure Requirements**

The Plan recommends the standardization of technical measurements of broadband performance (e.g., actual speeds), and the establishment of specific performance and service contract disclosure requirements by broadband providers. With regard to mobile broadband, the Plan acknowledges that there are unique disclosure issues relating to speed, performance, coverage and reliability and will work with the wireless industry toward appropriate performance standards and consumer disclosures. The Plan also proposes that the FCC investigate improving transparency relating to broadband performance standards in multiple dwelling units (MDUs) and commercial buildings. [MORE]



## **Broadband Availability in Tribal Communities**

The Plan points to a significant lack of broadband facilities serving Tribal lands as well as an astonishingly low broadband usage rate by Tribal land residents. To rectify this deficiency, the Plan proposes to prioritize Tribal needs and Tribal government input in its efforts to reform USF, requires the FCC to consider Tribal lands' unique spectrum needs in its implementation of the Plan's proposal to reform spectrum policy, recommends that Congress establish a new Tribal Broadband Fund to provide capital for broadband deployment and adoption, and seeks to improve coordination and consultation with Tribes on a government to government basis on broadband related issues, including through the recommended creation of an Executive level initiative, a new FCC Office of Tribal Affairs, an FCC task force devoted to consideration of Tribal concerns in all broadband proceedings, as well as a joint right-of-way task force comprised of State, Tribal and local policymakers, and expanded opportunities for Tribal member participation in FCC training programs. [MORE]

#### **Electronic Health Records**

The Plan follows the recent overhaul of the Federal Health IT Strategic Plan in the Health Information Technology for Economic and Clinical Health Act (HITECH) Act. The HITECH Act was part of the American Recovery and Reinvestment Act of 2009, the stimulus law adopted in February of last year. Recommendations in the Plan include new payment incentives, the removal of regulatory barriers to technology use, and ways to make health information more easily available for research and outcome evaluation. [MORE]

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# **National Broadband Plan: Focus on Deployment**

03.16.10

## By James M. Smith

The National Broadband Plan (the "Plan") proposes to increase and enhance broadband deployment across the United States through a combination of policy changes, incentives to private industry to invest in broadband deployment wherever it can be profitable, and direct public investment to serve areas where no commercially viable business case can be made and to serve other public needs such as health care, education and public safety.

## **Background**

Building on the broadband deployment projects at the heart of the American Recovery and Reinvestment Act's Broadband Technology Opportunities Program (BTOP) and Broadband Initiatives Program (BIP), which are now underway (and slated to end by late 2013), a key threshold issue in the Plan has been how to continue these programs' progress toward maximum and efficient broadband deployment across the nation, and equally important, how to finance broadband deployment over the longer term, so that these deployment projects and countless others remain economically viable rather than becoming unused "white elephants" that fail to serve the public in the future.

The BTOP program in particular has seen a change in emphasis from a preference for "last mile" projects to households and business to a view that the most cost-effective way to deploy broadband to underserved populations is by building "middle mile" connectivity to libraries, community colleges, healthcare institutions and other "community anchors" from which the public can gain access to high-speed broadband.

#### **Analysis**

Fundamentally, the Plan does not call for massive new broadband network deployment projects. Rather, it declares: "Instead of choosing a specific path for broadband in America, this plan describes actions government should take to encourage more private innovation and investment." These include most notably:

- **Spectrum reform.** The Plan essentially takes an "If you make it available, they will come" approach, with respect to both competition and speed, by proposing to reallocate 500 MHz of spectrum (including at least 120 MHz from broadcast uses) to wireless broadband applications, "on a flexible basis, including for unlicensed and opportunistic uses." The Plan envisions the wide use of spectrum auctions to promote wireless broadband services. It also proposes the auctioning of spectrum for a "free or very low-cost" advertiser-supported wireless broadband service, to close the "affordability barrier" to broadband adoption.
- Infrastructure. Again, the Plan looks first to private industry: "Government should take steps to improve utilization of existing infrastructure to ensure that network providers have easier access to poles, conduits, ducts and rights-of-way." Finding that these access costs inflate the costs of broadband deployment by about 20 percent, the Plan recommends that in order to promote broadband deployment, the FCC should adopt rules to set pole attachment rates as low and as close to uniform as possible, consistent with section 224 of the Communications Act, and to lower the cost of the pole attachment "make-ready" process. (For more on this, see our separate advisory, "Focus on Infrastructure Deployment: Utility Poles, Conduit and Rights of Way.") Further, it recommends that the Department of Transportation make federal financing of highway, road and bridge projects contingent on states and localities allowing joint deployment of conduits by qualified parties.



The Plan asserts, however, that some more direct federal intervention in broadband deployment is necessary, stating these proposals "will not finish the job of connecting people to broadband, since many areas of the country are just too expensive to serve without government support." Accordingly, the Plan proposes several major governmental initiatives to deploy broadband in areas where private sector investment would be inadequate to achieve the Plan's objectives:

- Universal service for broadband. The Plan declares: "Ensuring all people have access to broadband requires the Federal Communications Commission (FCC) to set a national broadband availability target to guide public funding. An initial universalization target of 4 Mbps of actual download speed and 1 Mbps of actual upload speed, with an acceptable quality of service for interactive applications, would ensure universal access." To achieve this objective, the Plan proposes to transition the current, telephony-centric federal Universal Service Fund (USF) over the next 10 years into a "Connect America Fund" and a wireless "Mobility Fund." (For more on this, see our separate advisory, "Focus on Overhauling High-Cost Universal Service.")
- Health Care Broadband Infrastructure Fund. The Plan recommends that, building upon its Rural Healthcare Pilot Program, the FCC establish a Health Care Broadband Infrastructure Fund to subsidize network deployment to health care delivery locations where existing networks are insufficient. The Fund would replace the Rural Health Care component of the current USF program.
- Community colleges and other community anchor institutions. The Plan proposes that "Congress should consider providing additional public funds to connect all public community colleges with high-speed broadband and maintain that connectivity." In addition, the Plan suggests that the federal and state governments create a nonprofit coordinating entity, the "Unified Community Anchor Network" (UCAN), that would support and assist community anchor institutions in obtaining and utilizing broadband connectivity, training, applications and services. The UCAN also could be a platform for interconnected networks to share resources and applications.
- Public safety broadband network. The Plan proposes the creation of a nationwide 700 MHz interoperable public safety wireless broadband communications network, with a funding mechanism to ensure the network is deployed throughout the United States and has necessary coverage, resiliency and redundancy. The Plan estimates the cost of such a network at \$12 billion to \$16 billion, to be funded jointly by the federal government and state and local governments.

The FCC will be releasing a series of notices to launch each of its future proceedings. Davis Wright Tremaine will be participating in those proceedings on behalf of our clients.

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# National Broadband Plan: Focus on Overhauling High-Cost Universal Service

03.16.10

#### By Michael C. Sloan and Paul B. Hudson

The Federal Communications Commission (FCC) proposes to replace the high-cost subsidy portion of the Universal Service Fund (USF) with two new funds supporting broadband and mobile broadband in certain unserved areas of the country, while keeping total subsidies close to the current level of funding. Most legacy support would not be phased out until the second stage of a transition from 2012 to 2016, meaning that disbursements for broadband subsidies would not begin until then. The Plan lacks detail on potential reform of the USF contribution system, leaving that critical issue to future proceedings.

## **Background**

The largest single portion of the roughly \$9 billion federal USF is a set of "high-cost" subsidy programs that provide approximately \$4.6 billion to carriers for providing traditional telephone service in "high-cost" areas (approximately \$2 billion to small, rate-regulated incumbent carriers; \$1 billion to larger incumbents; and more than \$1 billion to "competitive" (mostly wireless) carriers serving the area of a subsidized incumbent). The source of these funds is an assessment on interstate telecommunications and voice over Internet protocol (VoIP) services (essentially a tax) that has recently rocketed to 15.3 percent. With this rate already seen as too high, for the Plan to expand to subsidize construction of broadband facilities in unserved areas, many commenters urged the Commission to make cuts to the existing program.

#### Analysis

That is exactly what the Plan proposes. Over a 10-year transition period, the Commission proposes the total replacement of its existing high-cost support programs with a ConnectAmerica Fund (CAF) to support broadband in areas that would otherwise be unserved, and a Mobility Fund for the 2 percent of the country that it estimates lacks 3G coverage.

CAF support would be provided only "in geographic areas where there is no private sector business case to provide broadband and high-quality voice-grade service." This significant change effectively adopts the cable industry proposal that no subsidy should be provided where an unsubsidized competitor provides service, and should greatly reduce the number of areas where subsidies are provided. The Plan also adopts the cable proposal to make such determinations based upon "neutral" census areas, rather than on the existing incumbent telephone company's "study area."

Funding would be provided both to construct new broadband facilities in unserved areas and to support existing broadband that was previously constructed based upon universal service support. The FCC will consider making such awards based upon market-based approaches, such as a competitive grant process similar to the broadband stimulus program model, and/or "reverse auctions," in which existing and potential service providers bid for the lowest subsidy that they would be willing to accept to serve an area (which in many markets could be zero). In all cases, funding would be limited to one wireline and one wireless service provider in each area.

The Plan intends to implement these changes while keeping total spending "close" to the current \$4.6 billion (in 2010 dollars) in annual high-cost support. At a macro level, the type of recipients might not change significantly. Just as today, approximately \$3.5 billion would be spent on wireline subsidies and \$1 billion on wireless, but the funding would be more targeted for a smaller number of areas and likely to a smaller number of recipients.



Most legacy support would not be phased out until the second stage of a transition from 2012 to 2016, meaning that disbursements for broadband subsidies would not begin until then either. The Plan suggests that Congress could provide one-time temporary bridge funding to allow broadband spending sooner than the expected reductions in the spending occurring under existing programs, rather than increasing the size of the fund and further increasing the already high contribution rate. All legacy high-cost programs would be eliminated by 2020.

A significant omission from the Plan is any proposal for reforming the USF contribution system, which is notoriously confusing and which has had to rise precipitously as the USF fund has ballooned during a period of shrinking interstate telecommunications revenue. The Plan calls for a new proceeding to consider proposals to replace the revenues-based contribution with an assessment on telephone numbers and/or connections, which has been supported by most industry groups. However, it also calls for "broaden[ing] the universal service contribution base," which could mean USF assessments on broadband or other Internet services.

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# **National Broadband Plan: Focus on Intercarrier Compensation**

03.16.10

## By Michael C. Sloan

The Commission proposes to reform, and then ultimately eliminate, the existing intercarrier compensation (ICC) regime, which it views as an impediment to investment in broadband infrastructure.

## Background

Prior to 1996, "universal service" was paid for largely through inflated access charges that long-distance providers (i.e., interexchange carriers (IXCs)) paid to local exchange carriers (LECs). By creating the universal service fund (USF) program as part of the 1996 Telecommunications Act, Congress and the FCC hoped that explicit USF payments would allow for the eventual phasing out of the implicit subsidies represented by the above-cost access charge regime.

This did not happen. While the USF program now distributes more than \$8 billion, collected from assessments on various telecommunications and interconnected VoIP service providers, access charges remain above cost. Moreover, the FCC did not anticipate the market-distorting effects that variation within the intercarrier compensation regime would have. Disparate intercarrier compensation rates for functionally identical traffic—local, long distance, interstate and intrastate traffic are all subject to different rates—has created arbitrage incentives and complaints from competitive carriers, ILECs, IXCs and regulators alike. Even worse, from the Plan's perspective, the current system deters investment in broadband infrastructure.

## **Analysis**

The Plan proposes reform in three steps. First, carriers' intrastate terminating switched access rates, currently overseen by state commissions, would be lowered to the interstate rates, currently subject to oversight by the FCC. This would occur incrementally over the next two to four years, to be completed by 2014. To offset the lost revenue, the Plan calls for the "rebalancing" (i.e., raising) of local telephone rates and increasing the fixed per-line subscriber line charge (SLC) that carriers charge their customers.

In phase two (2012 to 2016), ICC rates would continue to be reduced. The Plan suggests that terminating switched access rates would be lowered to reciprocal compensation rate levels and that a uniform rate for all ICC eventually would be established.

Finally, in the third phase (2017 to 2020), per-minute ICC would be phased out entirely. The Plan contemplates that ICC will not be necessary in a broadband-only world. IP networks exchange traffic through peering arrangements, with settlement payments from one provider to another made based on traffic imbalances. In the future, when voice traffic represents only a small portion of the traffic carried on providers' IP networks, the FCC assumes that per-minute intercarrier compensation payments will not be required. The Plan recognizes that a few consumers will remain tied to voice-only networks, but puts off dealing with that problem to another day.

ICC reform has been a rallying cry of every FCC chairman since Reed Hunt, and none of the proposals in the Plan are new. The FCC recognizes that it may lack the legal authority to impose some of them. For example, there are questions about the agency's ability to regulate intrastate terminating access rates. Also, Section 251(b)(5), which requires all LECs to pay reciprocal compensation to one another "for the transport and termination of telecommunications" may prevent the agency from abolishing all per-minute ICC

Many carrier segments have a lot to lose under these proposals and opposition will be strong. We expect the FCC to release a series of notices launching this proceeding and other elements of the Plan in rapid succession. DWT will be participating in those proceedings on behalf of our clients.



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# National Broadband Plan: Focus on Mobile Broadband Services and Spectrum Initiatives

03.16.10

#### By Suzanne K. Toller

The National Broadband Plan (the "Plan") recognizes that no area of the broadband ecosystem holds more promise for transformational innovation than mobile services. In order to accommodate this significant growth and develop mobile broadband services, the Plan recommends:

- 1. Increasing spectrum availability and modifying spectrum policy;
- 2. Reducing obstacles that may slow facility deployment or increase investment costs;
- 3. Increasing access to mobile broadband for all Americans; and
- 4. Improving mobile communications for public safety.

There are a number of other critical issues in the Plan for wireless stakeholders, including how wireless broadband service is technically defined and disclosed to consumers and whether universal service reforms will level the playing field for wireless eligible telecommunications carriers (ETCs). (For more on these subjects, see our separate advisories, "Focus on Consumer Disclosure Requirements" and "Focus on Adoption.")

## **Background**

The progression to 4G mobile technologies will require additional spectrum allocation and the review of outdated spectrum management policies. Given current trends, virtually all of the major players in the wireless industry have stated that there is a need for more spectrum to be allocated for wireless broadband services. Estimates range from 40 to 150 MHz per operator; CTIA has estimated there to be an industrywide need of approximately 800 MHz of additional spectrum.

The need for additional spectrum will also require reconsideration of outdated spectrum management policies to allow for more innovative uses of existing spectrum. However, access to more spectrum is not sufficient. In order to encourage the deployment of broadband infrastructure, consideration must also be given to methods for reducing obstacles that may slow facility deployment and improving utilization of existing utility infrastructure and including access to utility poles and public rights-of-way.

Wireless broadband services offer potential for important public benefits in the areas of public access and safety. The Plan proposes that the Federal Communications Commission (FCC) should consider subsidizing certain aspects of mobile broadband to increase access. The Plan also recommends that the current public safety and 911 programs can be improved upon by ensuring consistent interoperable broadband network access to all first responders and the development of a next generation nationwide emergency notification system.

#### **Analysis**

Increasing Spectrum Availability and Modifying Spectrum Policy

The Plan sets a goal of re-purposing 500 MHz of spectrum for broadband use by the year 2010. The Plan also recommends modifications to the nation's current spectrum management policies to promote more efficient and flexible use of spectrum on a going-forward basis.

The Plan specifically identifies 300 MHz of spectrum (between 225 MHz and 3.7 GHz) for mobile flexible use by 2015:

- a) The 2.3GHz Wireless Communications Service (WCS)—20 MHz of spectrum;
- b) The Upper 700 MHz D Block—10 MHz of spectrum for auction;



- c) The Advanced Wireless Services (AWS) bands—60 MHz from auctions and possibly an additional 20 MHz from federal allocations;
- d) The Mobile Satellite Spectrum (MSS)—up to 90 MHz of spectrum; and
- e) The broadcast television (TV) band—120 MHz of spectrum for broadband use through reallocation efforts.

Although some of this spectrum will be allocated using traditional auctions, the Plan also proposes to increase spectrum availability by applying a flexible approach to certain frequency bands, where existing technical rules may currently restrict the use for other services. For example, the Plan proposes providing MSS licensees increased flexibility aimed at encouraging terrestrial build-out of mobile broadband in that spectrum. The Plan also proposes that the FCC use "incentive auctions" (pending congressional approval) to allocate some spectrum. In an incentive auction a current licensees would receive a share of the auction proceeds for voluntarily contributing their spectrum to an auction. The prime candidate for such an incentive auction identified in the Plan is the broadcast television spectrum because it "has excellent propagation characteristics that make it well-suited to the provision of mobile broadband services, in both urban and rural areas." The Plan proposes that the FCC conclude the pending broadcast "white spaces proceeding" and initiate a rulemaking to ensure efficient use of the TV spectrum by considering service areas and distance separations, revising the Table of Allotments, and establishing a licensing framework that permits two or more stations to share a 6 MHz channel. The rulemaking will also consider rules for auctions of broadcast spectrum that may be reclaimed through "repacking" spectrum and voluntary channel sharing.

Other proposed policy modifications include: (1) creating and launching a new "spectrum dashboard" that allows greater public transparency concerning spectrum allocation and utilization; (2) expanding the FCC's authority to conduct incentive auctions in which incumbent licensees relinquish rights to spectrum assignments in exchange for a portion of the proceeds; (3) increasing Commercial Spectrum Enhancement Act (CSEA) funding to provide federal agencies adequate incentive and assistance to relocate off federal spectrum, including reimbursement for the use of replacement commercial telecommunications service; (4) granting the FCC and NTIA authority to impose spectrum fees on spectrum that is not licensed for exclusive flexible use; (5) directing the FCC to conduct a review of the effectiveness of its secondary markets policies and rules to promote access to unused and underutilized spectrum; (6) promoting within the International Telecommunication Union (ITU) innovative and flexible approaches to global spectrum allocation that take into consideration convergence of various radio communication services and enable global development of broadband services; and (7) directing the FCC to consider the unique spectrum needs of U.S. Tribal communities when implementing the recommendations for spectrum allocation.

The Plan also calls for FCC rule modifications to promote point- to-point wireless backhaul services and the expansion of opportunities for innovative spectrum access models. The Plan cites the unlicensed band as an excellent example of innovative development of spectrum where Bluetooth and Wi-Fi technologies have blossomed in spectrum that was previously underutilized. The Plan also reaffirms the FCC's faith in the ability of advanced spectrum management technologies such as cognitive radio to increase efficiency of spectrum utilization by enabling radios to share available spectrum dynamically.

#### Reducing obstacles to use of poles, conduits and rights of way

The Plan recognizes the significant hurdles associated with the deployment of new broadband facilities, estimating that "collectively, the expense of obtaining permits and leasing pole attachments and rights-of-way can amount to 20 percent of the cost of fiber optic deployment." In order to reduce those hurdles, the Plan proposes that the government take certain actions to improve utilization of existing utility infrastructure and rights-of-way. The Plan also recommends the federal government foster broadband deployment by facilitating the placement of communications infrastructure on federally managed property and enacting "dig once" legislation.



In order to promote utilization of existing infrastructure, the Plan makes several suggestions to improve the current pole attachment process under Section 224 of the Act. Namely, the Plan recommends that the FCC:

Establish rental rates for pole attachments that are low and as close to uniform as possible for all types of industry players (e.g., cable providers, CLECs and ILECs);

Implement rules that will lower the cost of the pole attachment "make-ready" process;

Establish comprehensive timelines for each step of the Section 224 access process and reform the process for resolving disputes regarding infrastructure access; and

Improve the collection and availability of data regarding the existing location and availability of poles, ducts, conduits and rights-of-way.

The Plan also recommends Congress amend Section 224 to establish a "harmonized access policy" for all poles, ducts, conduits and rights-of-way applicable to all types of pole owners and carriers as a simple, minimum national standard.

With regard to promoting the use of government rights-of-way, buildings and facilities, the Plan generally recommends that the federal government improve the process for locating broadband facilities on federal buildings and property. In order to facilitate improving access to federal properties, the Plan recommends making Department of Transportation (DOT) projects (e.g., bridges and roads) contingent on states and localities allowing joint deployment of conduit by qualified parties deploying broadband infrastructure at the same time the DOT project is constructed. The Plan also recommends that Congress consider enacting "dig once" legislation applying to construction in the rights-of-way of all future federally funded projects (e.g., sewers, power transmission facilities, rail, pipelines, bridges, tunnels and roads). Finally, the Plan recommends Congress consider expressly authorizing federal agencies to set the fees for access to federal rights-of-way on a management and cost recovery basis, and that the executive branch develop one or more master contracts to expedite the placement of wireless towers on federal government property and buildings.

(For more information regarding proposed recommendations that would impact pole attachments and facility deployment, see our separate advisory, "Focus on Infrastructure Deployment—Poles, Conduits and Rights of Way.")

## Increasing access to mobile broadband

To close the "adoption gap" the Plan proposes the creation of a Mobility Fund as part of broader universal service fund reform. Without increasing the overall size of the universal service fund, the Plan seeks to provide "one-time support for deployment of infrastructure" intended to enable all states to bring a minimum level of mobile broadband to residents.

Another recommendation proposes that the FCC consider requiring free or very low cost wireless broadband in certain spectrum bands as a condition of service providers' use of the band. This would act as a complement to the Lifeline Program, and may only provide consumers with limited broadband access.

The Plan also proposes initiating a rulemaking to fund wireless connectivity to portable learning devices that can be used off-campus, which currently is not supported with E-rate funds. The Plan cites to a rapid increase in the demand for wireless services in education, and notes that students without off-campus access to online educational tools will be increasingly left behind. It suggests establishing a pilot program to determine the level of demand as well as cost-effectiveness of expanding the program to support such services.

(For more information regarding the impact of universal services proposals in the Plan on wireless broadband, see our separate advisory, "Focus on Adoption.")

#### Improving mobile communications for public safety



The Plan proposes working recommendations to improve public safety communications both for first responders and agencies that issue homeland security and other emergency alerts.

In order to improve mobile communications for first responders, the Plan proposes developing the 700 MHz public safety broadband network to achieve "long overdue interoperability" and ensure access to sufficient capacity for first responders. The Plan proposes to develop this public safety broadband network through public-private partnerships between public safety and 700 MHz commercial providers, including—but not limited to—a commercial licensee of the "D block."

The Plan also recommends the establishment and funding for an Emergency Response Interoperability Center (ERIC) within the FCC to develop common technical standards for interoperability on the public safety broadband network, and to maintain responsibility for updating these standards periodically as broadband technology evolves. The Plan promotes innovation in the development and deployment of Next Generation 911 (NG911) networks and emergency alert systems. The NG911 networks will replace the current E911 system while retaining some of its core functions such as automatic location information and automatic number identification. The Plan identifies the lack of coordinated funding as a significant roadblock for NG911 deployment. It calls for the preparation of a report by the National Highway Traffic Safety Administration to identify the costs of deploying a nationwide NG911 and recommends Congress enact a federal NG911 regulatory framework that includes a transition from legacy 911 to NG911 networks. This new NG911 network would utilize broadband to support 911 access in multiple formats (e.g., texting, photos, video, TTY and e-mail) for all types of originating service providers, application developers and device manufacturers. Broadband would enable PSAPs to push and pull video, images, medical information, environmental sensor transmissions and a host of other data through shared databases and networks.

Finally, the Plan calls for the FCC to immediately launch a comprehensive next-generation alert system inquiry to consider Emergency Alert System (EAS) and Commercial Mobile Alert Service (CMAS) developments, as well as FEMA's development of the Integrated Public Alert and Warning System (IPAWS). The recommendation calls for the FCC to determine how best to ensure all Americans can receive timely and accurate alerts, warnings and critical information about emergencies, regardless of the communications technology used. Moreover, the Plan calls for the executive branch to clarify agency roles in the implementation and maintenance of next generation alert and warning systems.

The FCC will be releasing a series of notices to launch each of its future proceedings. Davis Wright Tremaine will be participating in those proceedings on behalf of our clients.

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#### **Disclaimer**



# National Broadband Plan: Focus on Infrastructure Deployment—Poles, Conduits and Rights of Way

03.16.10

#### By T. Scott Thompson and James F. Ireland

The National Broadband Plan (the "Plan") recommends a number of actions to promote broadband deployment and adoption for wired and wireless networks, including lowering pole access and rental costs and establishing more timely access to poles, conduits and public rights of ways. Recommendations include:

- Lowering the telecommunications pole rent formula close to the cable television pole formula rate
- Creating timelines to govern every step of the pole attachment process
- Lowering right-of-way fees to cost-based level
- Creating a federal, state, Tribal and local task force to identify right-of-way best practices to speed deployment

## **Background**

Many of the pole attachment related proposals in the Plan have been the subject of discussion in an FCC rulemaking and a related proceeding. (For complete discussion see Davis Wright Tremaine advisories dated 11/21/07 and 8/18/09). On Nov. 20, 2007, the Federal Communications Commission (FCC) released a Notice of Proposed Rulemaking (NPRM) addressing pole attachment rental rates, certain terms and conditions of pole access, and whether Incumbent Local Exchange Carriers (ILECs) are entitled to the protections of Section 224 of the Communications Act (Pole Act). The NPRM raised a host of questions. As reflected in the Plan, one issue was whether to create a single "broadband rate" for pole attachments, and if so, whether that broadband rate should be based on the FCC's "cable" or "telecom" formula, or some other formula. In addition, the FCC is considering a separate petition filed by a utility seeking to increase the rate for cable operator attachments used to provide VoIP from the cable rate to the telecommunications rate.

The rulemaking also asks whether the FCC should adopt specific rules regarding a number of "terms and conditions" affecting pole attachments. In particular, significant emphasis has been placed on the need for timelines for the completion of make ready, the use of specific construction practices such as boxing and extension arms, the use of contractors to perform make-ready work, access by wireless attachers and other issues pertaining to the process of obtaining access to utility poles.

Access to public rights-of-way and the fees charged by local governments was a subject of much attention at the FCC under Section 253 of the Communications Act in the first few years following the adoption of the 1996 Telecommunications Act. During that time, the FCC issued a few key orders that have been widely followed regarding the scope of local "management" of the public rights-of-way, and the Commission had several public hearings for the vetting of public rights-of-way access issues. More recently, the issue has not been a front burner topic for the Commission. Indeed, the Plan notes that disputes under Section 253 and public rights-of-way cases have languished at the FCC. However, perhaps in the wake of recent court decisions that have narrowed the impact of Section 253, the Commission received comments in the Broadband Plan NOI from providers detailing the delays and expenses that they have faced in trying to access public rights-of-way.

#### **Analysis: pole attachments**

To spur broadband deployment, the Plan recommends that the Commission establish rates for all pole attachments by broadband service providers that are as low and as uniform as possible under Section 224 of the Communications Act, and facilitate the timely and efficient access to poles, conduits and rights-of-way by such providers.



#### Rates

The Plan acknowledges that the amount of pole attachment rent plays a significant role in broadband deployment decisions and that broadband deployment can be encouraged by directly cutting such costs. In addition, the Plan posits that with the convergence of video, voice and data services over shared networks, charging different rates for similar pole attachments based on regulatory classifications (i.e., cable vs. telecommunications), is outdated and has led to significant litigation and uncertainty, which could deter broadband deployment and investment.

Consequently, the Plan recommends that the FCC establish pole attachment rates as low and as close to uniform as possible, in light of statutory limitations. Specifically, the Plan notes that the cable formula "has been in place for 31 years and is 'just and reasonable' and fully compensatory to utilities." The Plan urges the FCC to modify its rules to lower the telecommunications pole formula to yield an attachment rate as close to the cable rate as possible. If implemented, the cable television rate would continue to apply as it has historically to eligible cable system attachments, while attachments by telecommunications carriers (both wireless and wireline) would be subject to an attachment rate that is much closer, if not identical, to the cable pole attachment rate.

The Plan also recognizes that a significant percentage of utility poles are not subject to FCC jurisdiction either because states regulate them (20 have certified to do so) or because the poles are owned by cooperative or municipal utilities that are exempt from the federal Pole Attachment Act. Many of these coop and municipal poles are not subject to any government oversight and as a result, these utilities often charge pole rents far above what investor owned utilities charge. To remedy this, the Plan recommends that Congress revisit the Pole Attachment Act, to eliminate exemptions, to require state rules to meet minimum standards, to "harmonize access policy for all poles, ducts conduits and rights-of-way," and to ensure that all "broadband service providers" have the same rights to access poles on reasonable rates, terms and conditions.

#### Terms and conditions

In addition to pole attachment rates, the Plan specifically addresses a number of pole attachment "terms and conditions." The Plan recognizes that absent regulation, pole owners "have few incentives to change their behavior." As noted above, the Plan recommends that the FCC adopt a comprehensive timeline for make-ready and all the steps in the pole attachment process. Although the Plan does not specify the timelines, it notes that several states, including Connecticut and New York have established firm timelines for the entire process, which facilitates the deployment of broadband. The Plan states that the timeline should be comprehensive and applicable to all forms of communications attachments, including wireless. Indeed, the Plan notes that the FCC should impose a limit on the time utilities take to "certify" wireless equipment for attachment.

Among the methods for promoting swifter and less costly make ready, the Plan identifies several proposals currently pending in the existing pole attachment Rulemaking. For example, the Plan suggests the FCC establish a schedule of charges for the most common categories of work, codify the requirement giving attachers the right to use space- and cost-saving techniques such as boxing or extension arms where practical, and allow attachers to use independent, utility approved and certified contractors to perform all engineering assessments and communications make ready. The Plan also recommends that the FCC ensure existing attachers take action within a specified period to accommodate new attachers, and link the payment schedule for make-ready work to the actual performance of that work, rather than up front payments.



The Plan also takes issue with the FCC's own treatment of pole attachment disputes, recommending that the FCC "institute a better process for resolving access disputes." In particular, the Plan recognizes that the FCC's formal process can take years, despite time being of the essence, and it notes "significant flaws" in the FCC's attempts to informally resolve attachment disputes through mediation. The Plan recommends that the FCC speed the process and also provide future guidelines for the industry on what constitutes "just and reasonable" practices. In addition, the Plan suggests that the FCC could use its authority to require pole owners to post standards and adopt procedures for resolving safety and engineering disagreements. It even suggests that the FCC award compensation from the date of the denial of access to stimulate swifter resolution of disputes. The Plan also promotes greater availability of information regarding the location and availability of poles and conduits.

All of these issues have been strongly supported by wireless and wireline providers and opposed by pole owners. The Plan's recommendations stand as a stark rejection of the utilities' arguments.

## **Analysis: rights-of-way**

The Plan also focuses on improving rights-of-way management and costs. On this topic, the Plan presents primarily recommendations for cooperation among different levels of government and for the adoption of policies that focus on facilitating the deployment of broadband infrastructure over parochial concerns. The Plan recommends initially that the FCC establish a joint task force with state, Tribal and local policymakers to craft guidelines for rates, terms and conditions for access to public rights-of-way. The Plan focuses on the fact that despite past efforts by the National Telecommunications and Information Administration (NTIA) and the National Association of Regulatory Utility Commissioners (NARUC), a coordinated approach to rights-of-way policies has not taken hold. The Plan notes that while Section 253 of the Communications Act prohibits state and local policies that impede the provision of telecommunications services, disputes under Section 253 have "lingered for years," both before the FCC and the courts.

The Plan is critical of federal, state and local governments that seek to impose "market value" fees. It points out that such approaches fail to consider the benefits that the public as a whole receive from increased broadband deployment, particularly in underserved areas. The Plan concludes that the social value of broadband can cut across political boundaries and as a result, rights-of-way policies and best practices must reach across those boundaries and be developed with the "broader public interest in mind."

Based on its conclusions, the Plan makes several specific recommended undertakings for a joint task force of state, local and Tribal authorities:

- Investigate and catalog current state and local rights-of-way practices and fee structures;
- Identify public rights-of-way and infrastructure policies and fees that are consistent with the
  national public policy goal of broadband deployment and those that are inconsistent with that
  goal;
- Identify rights-of-way construction and maintenance practices that reduce costs for both government and users and that avoid unnecessary delays and costs;
- Recommend appropriate guidelines for what constitutes "competitively neutral," "nondiscriminatory," and "fair and reasonable" rights-of-way practices and fees; and
- Recommend an expedited process for the FCC to resolve rights-of-way disputes.

The Plan recommends that the task force be required to make its recommendations within six months, to be used by the FCC in a proceeding seeking industry-wide comment.

Analysis: access to federal resources



The final point of the Infrastructure chapter of the Plan addresses "maximizing impact of federal resources." Recognizing that federal government infrastructure can also play an important role in lowering the costs and speed of infrastructure deployment, the Plan makes four recommendations for action by the federal government. The Plan emphasizes that unlike past permissive policies, the next step should be to require certain changes.

The first two recommendations focus on the Plan's belief that coordination of infrastructure projects will lead to substantial cost reductions. Specifically, the Plan recommends that the U.S. Department of Transportation (DOT) condition federal financing of highway, road and bridge projects on allowing joint deployment of conduits by qualified parties, and it suggests that Congress consider enacting "dig once" legislation to extend joint trenching requirements to all rights-of-way projects receiving federal funding. The focus of these two recommendations appears to be giving notice to potential parties of upcoming projects to allow for joint trenching and installation of conduits. While the general proposition of allowing joint trenching is probably not controversial, the "dig once" proposal may be problematic. To the extent that "dig once" legislation means that no new installations can be made for some number of years after a new road project, it threatens to exclude new entrants from the market. Indeed, at the same time that it makes the recommendation, the Plan recognizes this risk in a footnote.

The other two recommendations in this last part focus on access to federal rights-of-way and properties. The Plan recommends that Congress consider authorizing federal agencies to set fees for access to federal rights-of-way on a management and cost recovery basis. It also recommends that the executive branch develop master contracts to expedite placement of wireless equipment on federal property and buildings.

We expect the FCC to release a series of notices launching this proceeding and others in rapid succession, and will be monitoring and participating in those proceedings on behalf of our clients.

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#### Disclaimer



# **National Broadband Plan: Focus on Navigation Devices**

03.16.10

## By Paul Glist and Paul B. Hudson

The Broadband Plan recommends that all MVPDs install (still undefined) gateway devices or functional equivalents in all new subscriber homes and in all home requiring replacement set-tops by Dec. 31, 2012. It appears that the Commission will first move forward with a Notice of Inquiry to collect more information, rather than launch a rulemaking proceeding as gateway advocates had urged. However, the authors' vision of a gateway device is taken directly from some of the more extreme positions of advocates who seek to restructure cable architecture and business, such as stripping out any MVPD functionality other than delivery of standardized video and service feeds, with no recognition of the complexities involved in interactive cable services. The Broadband Plan makes a second recommendation targeted exclusively at cable operators. While declaring the CableCARD to be a failure, it proposes that the FCC adopt rules by the fall of 2010 requiring cable operators to redesign switched digital technology (SDV), restructure the prices of set-tops and bundled cable packages, change the CableCARD installation process, and possibly limit device certification to preventing harm to the network.

## **Background**

Congress adopted Section 629 of the Communications Act in 1996 with an instruction to the FCC to "adopt regulations to assure the commercial availability" of navigation devices (such as set-top boxes) from manufacturers and retailers not affiliated with any cable or satellite television service provider. The provision arose as retail consumer electronics manufacturers sought to increase their presence in the cable television set-top box arena. Cable operators traditionally purchased customer premise set-top boxes from Scientific-Atlanta and Motorola because the headends supplied by those vendors protected cable channels with conditional access at the headend in ways that could only be decrypted by set-tops containing the manufacturer's specific conditional access technology. The FCC implemented Section 629 by requiring cable to separate the conditional access element into a removable module known today as the CableCARD, so that retail devices containing other set-top circuitry could operate with cable systems when paired with a CableCARD specific to that system, as supplied by the Multiple System Operator (MSO). The satellite providers were effectively excused from this new requirement on the grounds that they were new market entrants that already supported retail options.

The cable industry developed a suite of required specifications for retailers to build set-top functionality into retail devices, but consumer electronics (CE) manufacturers did not adopt them. In a 2002 "one-way MOU," the cable and consumer electronics industries took the first of two steps to resolve this impasse. The one-way MOU presented to the FCC a set of proposed rules under which retail equipment could pair with CableCARDs and receive "one-way" linear programming under relaxed requirements. At the time, most CE manufacturers dismissed Video-on-Demand (VOD), the cable electronic programming guide (EPG) and interactive services as uninteresting to consumers. The FCC adopted the proposal, but by the time retail devices using the one-way standard came to market, consumers wanted the interactive features and few manufacturers were willing to invest in their own guides. Most consumers ended up not using the CableCARD features and continued to rely instead on set-tops to receive the full panoply of new cable services.

The cable and CE industries spent several years trying to negotiate the second step: establishing a system under which retail equipment could pair with CableCARDs and receive "two-way" VOD, the cable program guide and other interactive services, in addition to linear programming.



An impasse in negotiations boiled over into a rulemaking at the FCC, but eventually the industries entered into a negotiated industry agreement using the Java-based "tru2way" middleware. The terms of the agreement are embodied in a binding Memorandum of Understanding (the "two-way MOU") among the six largest cable companies—Comcast, Time Warner Cable, Cox, Charter, Cablevision and Bright House Networks—which serve more than 82 percent of all U.S. cable subscribers; some of the largest digital television manufacturers—Sony, Panasonic, Samsung, LG and Funai (which trades under the brand names Philips, Magnavox, Sylvania and Emerson); set-top makers ADB and Digeo; and chip manufacturer Intel. Tru2way serves as a buffer between a wide variety of hardware platforms and the many different headends and applications that cable operators use. In a way, middleware works on set-tops as a PC operating system works on computers to allow developers to write interactive applications once to the operating system with confidence that it will run on many varieties of computers.

Under this approach, retail two-way digital TVs and other devices that connect to digital cable can enjoy easy access to high-definition television services offered by cable operators, plus Video-on-Demand, interactive programming guides, other two-way services, plus future interactive innovations, without a set-top box. Retail tru2way DTVs are operating in Chicago, Denver, and Atlanta, participating MSOs have upgraded headends to support tru2way in systems passing millions of homes, and have deployed millions of their own tru2way set-tops. More detail on this approach is available <a href="here">here</a>.

Throughout this time, the cable industry and others grew increasingly vocal about the Commission's disparate regulation of cable and non-cable MVPDs to adopt retail solutions—an issue that grew in importance as nearly 4 in 10 MVPD customers took service from satellite and telephone competitors.

## Broadband plan inquiry

In late 2009, the Broadband Task Force posed questions to the affected industries about whether Broadband Adoption could be increased if leased set-top boxes were engineered to also include Internet browsing capabilities. That inquiry triggered many suggestions for how MVPD services might be delivered to households, how non-cable MVPDs should make their services available to retail devices, and ideas about economic and other barriers to the development of a retail market in set-top boxes and other navigation devices. Some parties urged consideration of a "gateway" device which could deliver MVPD services into home networks for use on a variety of networked devices. But details were scant, and the "gateway" meant different things to different people. Even the key proponent acknowledged that the suggestion was only a "framework for conceptualizing," a "starting point," and that "it would be premature for [it] to suggest what the precise standards should be." Cable, satellite, and telephone companies informed the Commission of myriad efforts (in standards and other inter-industry bodies) to develop similar innovative solutions, and of the need for comprehensive inquiry into complex technology, business, and economic issues on which any new approach would be dependent. Others saw such views as mere delay, arguing that the FCC should immediately launch a rulemaking whether or not it had specific rules to propose. For its part, the cable industry submitted a broad vision statement to the FCC, inviting multiple, innovative approaches for providing video content to consumers where and when they want it, on devices that can offer MVPD and Internet video sources, for those devices to be innovative platforms for new applications, and for consumers to be able to buy video devices at retail and to know that cable content can be among their video sources.

#### **Broadband plan**

The Broadband Plan recommends that the Commission initiate a proceeding focused on requiring all MVPDs to install (still undefined) gateway devices or functional equivalents in all new subscriber homes and in all homes requiring replacement set-tops by Dec. 31, 2012. The Plan is significantly silent on the FCC process to be followed, but it appears that the Commission will first move forward with a Notice of Inquiry to collect more information and comments about gateway and other approaches, rather than launch a rulemaking proceeding as gateway advocates had urged. It is noteworthy that the Plan agrees that a solution should apply to all MVPDs for a retail market to succeed, so the gateway requirement would apply to satellite and telephone company MVPDs as well as cable.



The specific vision reflected in the Broadband Plan is taken directly from some of the more extreme positions of advocates who seek to restructure cable architecture and business. The gateway would be stripped of any functionality other than delivery of standardized video and service feeds, with no recognition of the complexities involved in interactive cable services. "Network neutral" retail devices would then be able to receive services from any MVPD, and integrate those offerings with other services and functionality in a user interface without restriction. Licensing of necessary intellectual property could not be "restrictive," and MVPDs would be required to offer rights at "low cost" and on RAND principles. Content protection "flags" could be passed through, but there is no apparent recognition of systems in place to enforce content protection rules or applicable business models.

With no serious support, the Plan states that such a solution should be simple and not require significant investment. The Plan claims that this proposal and its 2012 deadline are reasonable because of the supposed "extensive public record established in this subject area and the relatively simple architectures proposed to date," when in fact the record reveals numerous unresolved significant complications and enormous costs. In lieu of evidence, the Plan observes that because broadband modems use "truly open, widely used and standard protocols," "PC manufacturers do not need to sign non-disclosure agreements with broadband service providers, license any intellectual property selected or favored by broadband service providers or get approval from any broadband service providers or any non-regulatory certification bodies," and presumes that the same can and should be true of video devices. As a consequence, it suggests that any rules adopted should carry significant enforcement penalties for failure to meet deadline, such as fines, sunsetting the recently granted waivers for digital transport adaptors (DTAs) used by cable systems to go all digital, or requiring free set-top boxes. In this form, the Plan's recommendation is radical. However, if subjected to informed debate within an Inquiry, there are elements of the vision that could be harmonized with a suite of more practical market-based approaches that can deliver similar consumer benefits.

The Broadband Plan makes a second set of recommendations targeted exclusively at cable operators. Although the Plan essentially declares CableCARDs to be a failure and tries to redirect industry development away from that solution, it simultaneously proposes that the FCC adopt rules by the fall of 2010 with a short-term CableCARD "fix" having significant business consequence. It proposes that cable operators redesign switched digital technology (SDV) so that one-way CableCARD devices can control SDV channel selection by using an upstream Internet Protocol path, rather than the tuning adaptor that was invented specifically for the purpose. It proposes that the prices of set-tops and bundled cable packages be revised so that box rental charges will be stated separately for the set-top and the CableCARD, and so that customers who "bring their own box" can see that they pay less than those who do not. It proposes to reduce "hassles" incident to CableCARD installation by requiring operators to offer self-installation options or other ways to eliminate material differences in the experience between lease of a set-top and installation of a CableCARD in a retail device. Finally, it calls for streamlining device certification and possibly limiting certification to preventing harm to the network. It does not even acknowledge the economic issues and choices by consumer electronics manufacturers which have frustrated the development of a retail market to date.

Both of these recommendations reflect an extraordinarily broad reach for a report that is supposed to be focusing on broadband. Its theory is that the only way to ensure Internet development is to also address the devices that connect to the Internet; and that if those devices require "seamless" access to MVPD programming to succeed, then MVPDs should restructure their services and applications accordingly.

The FCC will be releasing a series of notices to launch many of these proceedings. Davis Wright Tremaine will be participating in those proceedings on behalf of our clients.

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#### Disclaimer



# **National Broadband Plan: Focus on Privacy**

03.16.10

## By Ronald G. London, John D. Seiver and Paul Glist

The National Broadband Plan (the "Plan") adopts a relatively balanced approach to online data collection, advanced advertising and consumer privacy, recognizing that online data collection and digital profiling can enhance consumer value in gaining access to more relevant advertising and subsidized or free services. It calls for "transparency" regarding what broadband providers and purveyors of online goods/services do or wish to do with consumers' personal data, "informed consent" for such uses, and continuing consumer "control" over the uses (particularly the disclosure) of such data, as well as enforcement mechanisms. But it does not make any explicit call for "opt-in" consents for the use of personal data. It recommends that Congress, the Federal Trade Commission (FTC) and the Federal Trade Commission (FCC) collaborate to clarify the relative control users have over their online profiles and personal data, and for the development of private sector companies that can help consumers manage their personal data, and that more resources be devoted to combating identity theft.

## Background

Recent privacy debates have been fueled by concerns over the growing ability to capture and process digital data about consumers in connection with Web searching, transactions, targeted advertising, location-based services, "smartphone" applications and other services in which consumer data may be in use. Although data collection is highly developed in the offline world, such practices in the online world have spawned vigorous debates. The Notice recapitulates concerns voiced over behavioral advertising and deep packet inspection, which have been at the center of the FTC's development of <a href="Self-Regulatory-Principles For Online Behavioral Advertising">Self-Regulatory-Principles For Online Behavioral Advertising</a> and various industry self-regulatory efforts, such as recent 4A guidelines. (Please see our <a href="July 2009 advisory">July 2009 advisory</a>.)

Under a new Democratic Chair, the FTC has grown increasingly disenchanted with current privacy rules and impatient with the pace and adequacy of self-regulation. Recent settlements and press statements have even indicated a willingness to employ current FTC rules against unfair and deceptive practices to business practices that the FTC considers insufficiently protective of consumer privacy expectations, without awaiting passage of any new privacy bill long promised by Congressmen Boucher and Stearns. A series of <u>public roundtables</u> now underway at the FTC is exploring privacy challenges posed by evolving technologies and business practices that collect and use consumer data.

## **Analysis**

The Plan builds on this debate, but in a relatively balanced manner. It recognizes the business of traditional offline data collection, profiling, and market segmentation to tailor products, services, and advertisements, and the consumer value that broadband equivalents can bring. The Plan recognizes that consumer "data and profiles are often so valuable for firms that they increasingly offer their products and services free of any monetary charges. Consumers gain access to a valuable service, and businesses gain valuable information." But the Plan identifies the "challenge" of "enabl[ing] consumers to take advantage of [these benefits] while ensuring [] they can retain control of their personal data, protect their privacy and manage how the information collected on them is used."



The Plan follows a balanced approach that is part of the ongoing privacy debate. It calls for "transparency" so that consumer's consent is properly "informed," and leaves "control" over the uses of such data with the consumer. But its avoids undermining advanced advertising models by avoiding any explicit call for "opt-in" consents. The Plan starts from the belief that consumers currently may have limited (or no) knowledge about how personal data are collected and used online, and that the responsibilities of those engaged in collection and use also are unclear. The Plan posits that existing legal protections—such as FTC unfair trade practice authority, privacy protections in the Communications Act applicable to video and telephony services (e.g., CPNI and cable privacy protections), Gramm-Leach-Bliley financial data safeguards, health privacy regulations, and the Electronic Communications Privacy Act's wiretap, stored communication and computer fraud/abuse provisions—provide "only a partial solution." In addition, as the FTC staff did last year, the Plan does not limit its vision of appropriate protections to data that is technically "personally identifiable information" or "PII," but seeks protection for a broader set of data—such as data sets that may not be explicitly "identifiable" but can be subject to individual re-identification.

The Plan proposes that the FCC take a more active role in this arena, collaborating with the FTC, to develop such tools as Self-Regulatory Principles and joint privacy principles that require "informed consent" before broadband service providers share certain data with third parties. This would include customers' account and usage information such as patterns of Internet access use and other PII. Under the Plan approach, consent could not be a prerequisite to receiving service.

The Plan also recommends that Congress, the FTC and the FCC consider clarifying the relationship between users and their online profiles, and in particular, the obligations firms that collect, analyze or monetize personal data have to consumers in terms of data sharing, collection, storage, safeguarding and accountability of the information. This includes recommending consideration of what, if any, new obligations firms should have to transparently disclose their use of, access to and retention of personal data, and how informed consent principles should apply in this context. However, the Plan offers no significant detail on how these questions should be answered, beyond emphasizing the transparency, control, and other precepts set forth above, though it does suggest Congress consider revising the current Privacy Act to increase consumer control over personal data and confidence in the security thereof (although the Plan does not indicate what revisions to the Act would accomplish this). It also does not, as do other facets of the Plan, propose specific FCC proceedings to answer these questions.

To assist consumers in managing their data in a manner that maximizes their desired privacy and security of the information, the Plan recommends that Congress consider helping spur development of trusted "identity providers," and creating a regime to provide insurance to them (á la the Federal Deposit Insurance Corporation, FDIC), noting that standard safe harbor provisions could allow entities to be acknowledged as trusted intermediaries that properly safeguard information. The Plan further recommends that the federal government, led by the FTC, direct additional resources toward combating identity theft and fraud, help consumers to access and utilize those resources (e.g., bolstering the FTC's "OnGuard Online" program), and expand consumer education efforts in this area.

In other privacy-related areas, the Plan recommends that the FCC's own consumer online security efforts should support broader national online security policy, in coordination with the FTC, the White House Cyber Office and the Department of Homeland Security, and other federal agencies, all of which (including all those just named and all others) should connect their existing Web sites to OnGuard Online. The Plan supports federal government creation of an interagency working group to coordinate child online safety and literacy, and launching a national educational and outreach campaign involving governments, schools and caregivers. Finally, consumer privacy issues are also raised in our related advisory that focuses on Health Care and the Smart Grid.

The FCC will be releasing a series of notices to launch each of its future proceedings. Davis Wright Tremaine will be participating in those proceedings on behalf of our clients.

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#### Disclaimer



# **National Broadband Plan: Focus on Cybersecurity**

03.16.10

## By Ronald G. London and John D. Seiver

The National Broadband Plan (the "Plan") makes a number of recommendations to promote and strengthen cybersecurity and to protect critical broadband infrastructure, in an effort to increase consumer confidence, trust and broadband adoption. The Plan first recommends an active federal role in creating public-private cybersecurity partnerships, development of machine-readable repositories with actionable real-time information on cybersecurity threats, expansion of cybersecurity educational and training programs, coordinated cybersecurity assistance to help foreign countries develop expertise in this area, and increased Federal Communications Commission (FCC) participation in domestic and international fora addressing cybersecurity. With respect to other FCC-specific steps, the Plan sets out for the FCC several key tasks to foster cybersecurity, including:

- Working with the executive branch to issue within 180 days of the Plan a cybersecurity "roadmap" identifying the five most critical cybersecurity threats and establishing a two-year plan for addressing the threats
- Working with Internet service providers (ISPs) to build robust cybersecurity protection and defenses into networks used by businesses and individuals who lack access to cybersecurity resources
- Initiating FCC proceedings to (a) extend FCC Part 4 outage reporting rules to broadband ISPs and interconnected voice over Internet protocol (VoIP) providers, (b) inquire into the resilience, reliability and preparedness of broadband networks, and (c) explore whether and how to encourage voluntary efforts by broadband providers to improve cybersecurity
- Establishing a IP network cybersecurity information reporting system
- Jointly creating with the National Communications System (NCS) priority network access and routing for broadband communications to protect time-sensitive, safety-of-life information needed by public safety providers
- Funding a wireless test bed for evaluating network security

## **Background**

The Plan seeks to secure the most vulnerable broadband facilities and data transfers from cyber threats, such as espionage, disruption and denial of service attacks. Noting that the proliferation of IP-based communications requires stronger cybersecurity, and that disasters and pandemics can cause sudden disruptions of normal IP traffic flow, the Plan recognizes that broadband networks must be held to high standards of reliability, resiliency and security.

Cybersecurity also is critical to consumer online security (preventing viruses, spam and malware) especially given the extent to which spam can often contain threats such as password-stealing malware directed at,e.g., banking and financial accounts. The global, borderless nature of the Internet has lead to the emergence of new categories of threats that can come from anyone, anywhere in the world, at any time. The Plan seeks to protect the Internet and provide cybersecurity as both an economic and national security priority.



Currently, the Department of Homeland Security (DHS), the Department of Justice (DOJ) and the executive branch take the lead in promoting cybersecurity, while other agencies like the National Security Agency (NSA), the Department of Defense (DoD), the National Institute of Science and Technology (NIST), the National Science Foundation (NSF) and the FCC have all had active roles. DHS leads federal cybersecurity activities in particular, supported by numerous efforts such as the OnGuard Online program and DOJ legal actions. Many of the Plan's recommendations in this area focus on leveraging these existing roles, expanding their focus, and public-private cybersecurity partnerships, while others set forth specific steps the FCC can take to facilitate these efforts.

## Recommendations for federal agencies

The Plan urges an active federal government role in developing public-private cybersecurity partnerships by having the executive branch develop protocols with major industry sectors for the sharing of cybersecurity information, threats and incidents in a non-attributable manner, while also working with the Small Business Administration (SBA) to develop a cybersecurity resource program in conjunction with state and local governments to develop partnerships for small and medium enterprises as well.

The Plan also seeks to enlist the public and private sectors to ensure the security of Internet Information Sharing and Analysis Centers (ISACs) and to expand them beyond the financial services sector (FS-ISAC), information technology sector (IT-ISAC), and state and local governments (the Multi-State ISAC, or MS-ISAC).

Next, the Plan recommends that the executive branch develop, in collaboration with relevant regulatory authorities via a process led by the White House Cybersecurity Coordinator, machine-readable repositories containing actionable real-time information on cybersecurity threats (including viruses, spam, IP address blacklists and other indicators). It also suggests that the executive branch expand educational and training programs and career paths—including increasing current funding—to build workforce capability in cybersecurity.

Further, noting that it will be crucial to engage international counterparts, the Plan recommends that the executive branch develop a coordinated foreign cybersecurity assistance program to assist foreign countries to develop legal and technical expertise to address cybersecurity, similar to assistance provided in the areas of counternarcotics and human trafficking, and that other federal agencies with relevant expertise work collaboratively with foreign counterparts. At the same time the Plan indicates the FCC will increase its participation in domestic and international fora addressing international cybersecurity.

Finally, the Plan suggests that Office of Management and Budget build on its Federal Desktop Core Configuration and Trusted Internet Connections initiatives by accelerating technical actions to secure federal government networks, including speeding implementation of Internet Protocol Version 6 throughout the federal government, and efforts to secure the Internet's routing system.

## **Recommendations for FCC action**

The Plan recommends that the FCC issue within 180 days a cybersecurity "roadmap" that identifies the five most critical cybersecurity threats to communications infrastructure and its end users, and establishes a two-year, milestone-aided plan to address those threats. The Plan also states the FCC's intent to work with ISPs to build robust cybersecurity protection and defenses into networks offered to businesses and individuals who lack access to cybersecurity resources, with the expectation that the federal government will provide technical assistance to ISPs participating in the program. In addition, the Plan states that there is a critical need for more consumer education on what threats they face, how to protect their connections and where to turn in case of emergency.



The Plan contemplates other FCC proceedings as well. They include commencing a proceeding to expand the FCC's Part 4 outage reporting rules to include broadband ISPs and VoIP providers, begin an inquiry into the resilience and preparedness of broadband networks under a set of physical failures (both malicious or non-malicious) and under severe overload, including extraordinary events such as bioterrorism attacks or pandemics. Another proceeding would involve commencement of an FCC inquiry on the reliability and resiliency standards being applied to broadband networks, and to explore what actions it should take to bolster reliability.

The FCC also proposes to create a voluntary cybersecurity certification system that provides market incentives for upgrades and education, including "all measures that will promote confidence in the safety and reliability of broadband communications."

To respond effectively to cyber attacks, the Plan recommends that the FCC and DHS create an IP network cybersecurity information reporting system (CIRS) to mirror the existing Disaster Information Reporting System, for monitoring system cyber events affecting communications infrastructure, with the FCC to facilitate sharing but maintain ISP proprietary information as confidential. In addition, the NBP also suggests the FCC and NCS leverage their Government Emergency Telecommunications Service (GETS) and the Wireless Priority Service (WPS) experience to jointly create priority network access and routing for broadband communications to protect time-sensitive, safety-of-life information needed by public safety providers.

Finally, cybersecurity also factored into the Plan's recommendation that NSF, in consultation with the FCC, fund a wireless test bed for evaluating the network security needed to provide a secure broadband infrastructure to permit empirical assessment of radio systems and the complex interactions of spectrum users, and that a request for proposal (RFPs) be made to build and assess a network test bed that is sufficiently secure.

The FCC will be releasing a series of notices to launch each of its future proceedings. Davis Wright Tremaine will be participating in those proceedings on behalf of our clients.

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#### **Disclaimer**



# National Broadband Plan: Focus on E-rate Upgrade

03.16.10

## By Danielle Frappier

The National Broadband Plan (the "Plan") proposes to modify the Universal Service Schools & Libraries (E-rate) program, which was created in 1996 to subsidize telecommunications, Internet access and related services provided to K-12 schools and libraries. The Federal Communications Commission (FCC) seeks to expand the range and permitted uses of subsidized E-rate services, such as: permitting schools to allow public use of services, supporting off-campus wireless access by students, expanding funding of on-premise equipment, and increasing flexibility to use lower-cost solutions including equipment needed to light dark fiber.

The Plan also seeks to encourage innovation by funding "best ideas" projects that help to integrate broadband services into education. Of particular interest to current E-rate participants are proposals to streamline the application process for smaller projects, fund "Priority 1" services on a multi-year basis, and increase the annual \$2.25 billion cap on E-rate funding by indexing it to inflation. Finally, the Plan seeks to expand federal funding—whether through the E-rate program or another federal mechanism—to community colleges, as well as settle eligibility issues for tribal libraries.

## **Background**

Contributions to the federal universal service fund support four programs: Schools and Libraries (also known as "E-rate"), Rural Health Care, High Cost, and Low Income. Only E-rate and the Rural Healthcare program, however, currently provide direct support for broadband services. (For more on this, see our advisory, "Focus on Overhauling High-Cost Universal Service.") The \$2.25 billion annual E-rate program has been widely credited with having increased broadband connectivity at the nation's schools and libraries, but the Plan recommends multiple reforms to upgrade the program consistent with the goal of expanding broadband services.

#### **Analysis**

The Plan seeks to encourage further expansion of broadband to schools, libraries, as well as the general public. These reforms center on revising program eligibility criteria and disbursement rules. To that end the FCC identified the following needed reforms:

1. Broadband service goals: The Plan recommends that the FCC set "goals for minimum broadband connectivity" for E-rate funding recipients, which are to be based on speed and quality, but also other factors such as the number of users at peak times. The Plan does not specify a particular throughput goal for E-rate recipients, which gives the FCC flexibility in managing funding resources or funding particular types of projects. The goals are to be adjusted every three to five years.



- 2. Increase program flexibility: The Plan seeks to introduce more flexibility regarding the use and types of funded facilities and equipment. For example, in an already-pending proceeding, the FCC is poised to permanently authorize general community use of E-rate funded services at school facilities during off-hours (which was recently permitted on a temporary basis). The FCC suggested that the public could use these services for purposes such as job search/application, digital literacy programs, and access to online government services; it is unclear whether it would try to restrict community use to those purposes. The Plan suggests that community use of E-rate funded services and facilities should be free of charge, but under the temporary rules, the FCC allowed schools to recover overhead costs (such as increased electricity costs). (Comments in that proceeding are due April 5, and replies on April 19.) The Plan also urges the FCC to expand support for "internal connections," which are facilities and equipment located on school/library premises establishing links to individual locations (such as individual classrooms). Due to today's funding limitations, only the applicants with the most dire financial need typically receive funding for internal connections. Finally, the Plan advocates program changes to seek lowest-cost broadband solutions, such as permitting funding for equipment used to light dark fiber and establishing state, regional, Tribal and local networks to "increase school and library purchasing power."
- 3. **Wireless home access for students:** The Plan supports wireless broadband access through "portable learning devices" that can be used off campus, which is prohibited under existing E-rate rules. It suggests establishing a pilot program to determine the level of demand as well as cost-effectiveness of expanding the program to support such services.
- 4. "Best ideas" funding: FCC presentations had indicated a second possible pilot program to fund "best ideas" that combine network functionality with educational value. The Plan itself does not mention a pilot program, but rather, focuses on funding innovative projects that encourage strategic integration of broadband into education and spread best practices.
- 5. **E-rate or other funding for community colleges:** Under current law, community colleges are ineligible for E-rate funding. The Plan recommends that Congress expand federal financial support to community colleges for broadband, whether that means revising the universal service statute or Congress creating another funding mechanism. This is similar to one of the pilot programs recently proposed in the "E-rate 2.0" bill introduced by Rep. Edward Markey, which would revise the statute to provide E-rate funding for five years.
- 6. **Improve efficiency:** The E-rate application process can be time-consuming and frustrating. The Plan seeks to somewhat simplify this process by introducing a streamlined application process for requests involving "small amounts" and moving to a multi-year approval process for "Priority 1" services (e.g., telecommunications services, Internet access) to reduce the annual flurry of paperwork.
- 7. **Funding cap indexed to inflation:** The Plan also seeks to increase the \$2.25 billion annual cap on the E-rate program by indexing it to the rate of inflation. (The cap does not include funds rolled over from prior years.)
- 8. **Collect/publish better data on use of funds:** The Plan recommends that the FCC collect and publish data on how schools and libraries connect to the Internet, precise levels of connectivity and the ways in which they use broadband services.
- 9. Clarify status of tribal libraries: In certain states, tribal libraries are not eligible for E-rate funding due to state law restrictions. The Plan recommends that Congress consider amending the federal Communications Act to ensure that all tribal libraries are eligible.

The Plan will likely influence E-rate proceedings currently pending before the FCC, and many of the recommendations to upgrade the E-rate program will require separate rulemaking proceedings. The FCC will be releasing a series of notices to launch each of its future proceedings. Davis Wright Tremaine will be participating in those proceedings on behalf of our clients.

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#### Disclaimer



# **National Broadband Plan: Focus on Adoption**

03.16.10

## By Robert G. Scott, Jr.

The National Broadband Plan (the "Plan") proposes to increase overall adoption levels from 65 percent to 90 percent over the next 10 years by focusing in on removing barriers to adoption affecting the 35 percent (representing 80 million adults) of non-adopters who are more likely than not to be: low income, African American or Hispanic, senior citizens, from a rural household, or disabled. The primary barriers to adoption experienced by these citizens are: 1) cost/affordability, 2) digital literacy, and 3) relevance, with issues for people with disabilities cutting across and beyond all three barriers. In addition to making recommendations as to how to overcome the top three barriers to adoption, the Plan also addresses measurement, best practices, and coordination of Tribal, state, and local initiatives, all in an effort to increase broadband adoption.

#### **Background**

The Federal Communications Commission's comprehensive Broadband Consumer Survey (FCC Survey) on broadband adoption concluded that fully one-third of all Americans—representing approximately 80 million people—do not use, i.e., have not "adopted" broadband. The FCC Survey, unique in that it is one of the first adoption surveys to oversample non-adopters, found that the key barriers to adoption and utilization include the cost of computers or connections, lack of online skills, and lack of understanding about the relevance of broadband applications (with independent and cross-cutting issues for people with disabilities).

Previous federal efforts to support Internet adoption include the Rural Utilities Service's "Community Connect" program, and the National Telecommunications and Information Administration's (NTIA) Technology Opportunity Program (TOP), both of which were part of broader programs. The Recovery Act in addition to funding deployment, represented the first large-scale federal broadband adoption effort, setting aside a minimum of \$450 million of NTIA's Broadband Technology Opportunity Program (BTOP) funds for "sustainable broadband adoption" and "public computing centers."

#### **Analysis**

It was not surprising that the Plan focused on the fact that non-adoption statistics ran "on socio-economic and racial and ethnic lines" because of the number of other reports (cited in endnotes to Ch. 9 of the Plan) that previously had identified these as key non-adoption factors.

Concluding that, without some kind of government action, citizens from these segments are likely to be "left behind" in terms of home broadband adoption and use, and deeming these statistics to be unacceptable, the Plan identifies the top three barriers to adoption and utilization as being: 1) cost, 2) digital literacy, and 3) relevance. The Plan proposes a series of recommendations designed to eliminate the three main barriers, to address the specific concerns affecting persons with disabilities, and to take several other initiatives designed to increase adoption and utilization

#### **Key recommendations for adoption**

The recommendations require actions by the FCC, Congress and other branches of government, and the private and non-profit sectors as follows:

#### Address cost barriers

o The Plan proposes to make broadband more affordable for low income people using the Lifeline/Link-Up funds available under the Universal Service Fund (USF).



- Only 40 percent of Americans with household incomes of less than \$20,000 have broadband in their home, in contrast to the 93 percent of Americans with household incomes greater than \$75,000 that do have broadband in their home. The Plan proposes to expand the Lifeline and Link-Up assistance programs which were established in the 1980s to ensure that low-income Americans could afford local telephone service, to cover broadband. Lifeline lowers the costs of monthly service for eligible consumers by providing direct subsidies, while Link-Up provides a one-time discount on the initial installation fee for telephone service (with enhanced support for Tribal lands).
- The Plan proposes that the FCC should require eligible telecommunications carriers (ETCs) to allow Lifeline customers to apply Lifeline discounts to any service or package that includes basic voice service, data service as well as broadband.
- The Plan further proposes that the FCC should integrate the expanded Lifeline and Link-Up programs with other state and local e-government consumer outreach efforts, such as having state social service agencies become more actively involved by, for example, assisting eligible end-users with Lifeline and Link-Up applications, and coordinating with other low-income support programs to streamline enrollment (such as the successful automatic enrollment process used in Florida).
- o The low-income consumer should be able to apply the Lifeline/Link-Up subsidy to any eligible broadband provider of choice—be it wired, wireless, fixed, mobile, terrestrial or satellite.
- o The Plan recommends that the FCC begin the expansion of the Lifeline program to broadband through the use of "pilot programs" to determine how best to increase adoption among low income consumers (e.g., using different levels of subsidy vs. minimum payment requirements, using subsidies for installations equivalent to the Link-Up model, using subsidies for equipment such as aircards, modems, and computers, providing refurbished computers and digital literacy courses when a consumer signs up for a subsidy, etc.). Similar pilot programs should be used to consider the unique needs of residents on Tribal lands. The pilots should be conducted through a competitive process designed to encourage providers to test alternative pricing and marketing strategies targeted toward increasing adoption in low income communities.

## The Commission should consider use of spectrum for a free or very low-cost wireless broadband service

Separate from USF funds, the Plan recommends that the FCC look to identify spectrum to license for "free" (i.e., advertising-supported) or low-cost broadband service similar to the model used for over-the-air television broadband service. The spectrum would be reallocated from existing spectrum over the next 10 years. However, the Plan says the FCC should exercise caution, taking into consideration the benefits, as well as the costs, of such a model (i.e., reduction of the U.S. contributions needed to support a Lifeline broadband service resulting from lower auction revenues for the spectrum as a result of conditions placed on the spectrum).

## · Address digital literacy barriers

Digital literacy involves educating and training consumers on how to use the Internet and computers. The plan recommends that the federal government should launch a National Digital Literacy Program that:

- o Creates a "Digital Literacy Corps to conduct skills training and outreach in communities with low rates of adoption, while building workforce skills for Corps members
- Increases the capacity and knowledge in libraries and community centers to provide digital literacy training



o Creates an "Online Digital Literacy Portal," containing free, age-appropriate lessons from the technology and education sectors that users can access and use at their own pace

#### Address relevance barriers

Eliminating relevance barriers involves educating consumers on the relevance of broadband to their lives. In this regard, the Plan recommends:

- o Public funding for the National Telecommunications and Information Administration (NTIA) to explore public-private partnerships to improve broadband adoption
- o Public and private partners engage in targeted efforts to increase the relevance of broadband for older Americans
- The federal government "meet people where they are" by exploring the potential of mobile broadband access as a gateway to inclusion of non-adopters
- The creation of private-sector and nonprofit partnerships in national outreach and awareness campaigns

In addition, the Plan contains extensive recommendations to promote broadband access by persons with disabilities (for more on this, see our separate advisory "Focus on Broadband Access for Persons with Disabilities"), and for improving broadband access on Tribal Lands (see our separate advisory, "Focus on Broadband Availability in Tribal Communities").

The FCC will be releasing a series of notices to launch each of its future proceedings. Davis Wright Tremaine will be participating in those proceedings on behalf of our clients.

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#### **Disclaimer**



# National Broadband Plan: Focus on Broadband Access for Persons With Disabilities

03.16.10

# By Gregory J. Kopta and Paul Glist

The Plan includes a series of recommendations to improve and enhance access to broadband services by persons with disabilities. The Plan recommends that all branches of the federal government update existing laws to apply to Internet protocol equipment and services, and apply current law to require accessibility to certain commercial Web sites. The Plan further recommends that both the Executive Branch and the FCC establish working groups to ensure compliance with applicable laws and to encourage and fund development of new and efficient technologies to make broadband more accessible to the disabled.

# **Background**

Many federal laws have been enacted to require greater access to telecommunications by persons with disabilities, but they often lag technological development. For example, Section 255 of the Act requires telecommunications products and services to be accessible to the disabled but does not apply to voice over Internet protocol (VoIP) or other IP-based equipment and services. Video programs delivered by Internet are under no requirement to be captioned, even if they were previously shown with captions on TV. Many 911 emergency call centers also cannot accept calls from people who communicate in video or via pagers. Application of existing disabilities laws to Web sites that blend Internet with "bricks and mortar" retailing has caused confusion and spawned litigation.

Representative Edward Markey (D-Mass.) regularly introduces bills to extend the reach of accessibility legislation. His bill in the current session is "The Twenty-first Century Communications and Video Accessibility Act of 2009" (H.R. 3101). This bill would ensure that new Internet-enabled voice and video products and services are accessible to persons with disabilities, and extend accessibility requirements through other amendments to telecommunications law. (Negotiated approaches outside of the legislation have also been considered.) The major provisions of this legislation are as follows:

#### **Communications access**

- Requires access to phone-type equipment and services used over the Internet (Section 255 currently requires only telecommunications products and services to be accessible)
- Adds improved accountability and enforcement measures, including a clearinghouse and reporting obligations by providers and manufacturers
- Requires telephone products used with the Internet to be hearing aid compatible (current law requires compatibility only on all wireline and many wireless phones)
- Allows use of Lifeline and Link-up universal service funds (USF) for broadband connection and service (USF currently funds only products and services on the PSTN)
- Allocates up to \$10 million/year for equipment used by people who are deaf-blind
- Clarifies the scope of relay services to include calls between and among people with disabilities
- Requires Internet-based service providers to contribute to the Interstate Relay Fund, and
- Requires the FCC to develop real-time text digital standard to replace TTY communications

# Video programming access

 Requires caption decoder circuitry or display capability in all video programming devices, including PDAs, computers, iPods, cell phones, DVD players, TiVo devices and battery-operated TVs (such circuitry currently is required only on 13-plus inch TVs)



- Extends closed captioning obligations to video programming provided by, or generally considered
  comparable to programming provided by, a television broadcast station, even when distributed
  over the Internet, but does not cover user-generated content (e.g., YouTube videos posted by
  individuals) (captioning currently is required only on most broadcast, cable and satellite TV
  shows)
- Requires easy access to closed captions via remote control and on-screen menus
- Requires easy access by blind people to television controls and on-screen menus
- Restores video description rules and requires access to televised emergency programming for people who are blind or have low vision
- Many of the substantive recommendations in the Plan derive from this proposed legislation.

# **Analysis**

The FCC observed in the Plan that broadband holds tremendous potential to enable people with disabilities to communicate and connect with others, but also found that the promise of broadband for the 54 million Americans with disabilities is falling short of the reality. The FCC's consumer survey showed that only 42 percent of people with disabilities use broadband at home (compared to 65 percent of people nationwide), and 39 percent of all non-adopters have a disability. Historically it has taken years for people with disabilities to gain anything close to equal access to communications, but the FCC is taking the opportunity with broadband to consider accessibility issues relatively early in the deployment process.

The Plan includes the following recommendations:

- The Executive Branch should form a Broadband Accessibility Working Group from members of all departments to maximize broadband adoption by people with disabilities. This working group will (1) coordinate government efforts to ensure that every agency is complying with accessibility requirements, (2) coordinate policies and develop funding priorities across agencies to promote new and efficient technologies for accessibility solutions, and (3) prepare biannual reports on the state of broadband accessibility in the United States.
- 2. The FCC should establish an ongoing Accessibility and Innovation Forum to promote the use of collaborative, problem solving processes among a diverse group of public, private, and non-profit stakeholders. The forum will hold regular workshops on a variety of topics, both in physical locations throughout the country and on the Web. This appears to formalize the negotiations that have been underway in parallel with H.R. 3101 between disability advocates and industry groups. (The FCC just appointed one of the negotiators for disability groups as its new deputy bureau chief in the Consumer and Governmental Affairs Bureau.).
- 3. The FCC, Congress, and the Justice Department should update accessibility laws and policies and ensure they are enforced. The FCC recommends that all of the major elements in H.B. 3101 be explored and/or implemented, including updating the telecom accessibility rules in Section 255 and the Commission's Hearing Aid Compatibility rules. The Plan also recommends that the Department of Justice amend its regulations to clarify the obligations of commercial establishments under the Americans with Disabilities Act with respect to commercial Web sites.
- 4. The FCC, with additional authority from Congress, should provide federal support for those who cannot afford assistive technologies and who do not have access to such technologies through existing programs. More specifically, the Plan recommends that Congress give the FCC authority under the Universal Service Fund to provide up to \$10 million annually to provide competitively based funding to developers of innovative devices, components, software applications, or other assistive technologies that promote accessibility. The FCC should also issue a Notice of Proposed Rulemaking on whether to establish a separate disability access subsidy program under the Telecommunications Relay Services program.



The FCC will be releasing a series of notices to launch this proceeding and others in rapid succession. Davis Wright Tremaine will be monitoring those proceedings on behalf of our clients.

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#### Disclaimer



# **National Broadband Plan: Focus on Smart Grid**

03.16.10

# By Gregory J. Kopta

The deployment of Smart Grid technology is vitally important to America's energy future, but limitations in existing commercial and private electric utility networks threaten to delay Smart Grid implementation. The Plan proposes to remedy this situation by recommending that commercial broadband networks be enhanced for greater reliability and that electric utilities be permitted and encouraged to use these networks, or to use the proposed public safety network or construct their own broadband networks where appropriate, to deploy Smart Grid applications. The Plan further recommends that States (or Congress in the absence of state action within 18 months) should require electric utilities to provide consumers with access to, and control of, their own energy use information. The Plan also proposes that the FCC start a proceeding to improve the energy efficiency and environmental impact of the communications industry.

### **Background**

"Smart Grid" refers to the application of computer intelligence and networking abilities to the electricity distribution system. The National Institute of Standards and Technology defines "Smart Grid" as the "two-way flow of electricity and information to create an automated, widely distributed energy delivery network." The objective of the Smart Grid is to automate and improve operations, maintenance, and usage of the electric power distribution system by enabling each component of that system to communicate with the other components.

Congress has already established the Smart Grid as a national priority, both in the Energy Independence and Security Act of 2007 and last year's Recovery Act, which devoted \$4.5 billion to accelerating standardization and deployment of the Smart Grid. The Smart Grid will increase the reliability and efficiency of the electricity distribution system as it reduces peak and overall demand for electricity. Greater intelligence in the grid is also critically important to efforts to meaningfully displace fossil fuel generation of power with solar, wind, and other renewable energy sources, both on the grid and in vehicles on the road.

#### **Analysis:**

#### **Broadband and the Smart Grid**

The FCC found multiple challenges in the deployment of Smart Grid technologies, including lack of broadband to the Smart Grid. Electric utilities use a variety of networks for communications purposes, but traditionally they build private networks to support applications with a high level of reliability, such as those for grid control and protection. These private networks, however, are generally narrowband and cannot support the growing numbers of endpoints requiring connectivity in the modern electric grid.

Commercial data networks, on the other hand, are not available in all areas where electric utilities provide service and generally are not constructed or used for mission-critical control applications. The FCC observed that commercial wireless data networks in particular can become congested or may fail completely because of a lack of power backup or path redundancy. The FCC concluded, "the lack of a mission-critical wide-area broadband network capable of meeting the requirements of the Smart Grid threatens to delay its implementation.

The Plan proposes pursuit of three parallel paths: (1) enhance existing commercial networks for the reliability required for Smart Grid applications; (2) permit electric utilities to share the FCC's proposed public safety mobile broadband network for mission-critical communications; and (3) empower utilities to construct their own broadband networks. The FCC recognizes that there is no one-size-fits-all solution and thus recommends pursuing multiple alternatives simultaneously to permit stakeholders to develop the path that works best for their particular circumstances.



The Plan includes the following recommendations to pursue these three alternative paths:

- 1. The FCC should initiate a proceeding to explore the reliability and resiliency of commercial broadband communications networks. More reliable networks not only will enable their use for Smart Grid applications but will benefit homeland security, public security, and consumers in general, who are increasingly dependent on broadband communications.
- 2. States should reduce impediments and financial disincentives to using commercial service providers for Smart Grid communications. In particular, state regulators in the rate-setting process should evaluate a utility's network requirements and the available commercial network alternatives before authorizing a rate of return on private communications systems. States should also work to reorient electric utility incentives toward energy conservation and efficiency and away from historic practices of deploying assets and selling more power as the way to generate revenues.
- 3. The North American Electric Reliability Corporation should revise its security requirements to provide utilities with more explicit guidance about the use of commercial and other shared networks for critical communications.
- 4. Congress should authorize utilities to use the public safety wireless broadband network the FCC is proposing. The FCC found that public safety and Smart Grid applications have similar reliability requirements, and constructing a network that can be used for both functions will have mutual benefits.
- 5. The FCC and the National Telecommunications and Information Administration should continue their joint efforts to identify new uses for federal wireless spectrum, including identifying a nationwide wireless spectrum band in which Smart Grid networks could operate.
- 6. The Department of Energy, in collaboration with the FCC, should study the communications requirements of electric utilities, including Smart Grid requirements.

# Unleashing innovation in smart homes and buildings

Energy efficiency in homes and businesses is a critical aspect of national energy policy, but consumers lack sufficient information to maximize energy and cost savings. Electricity users now know only what they are billed after the usage has occurred. They need access to real time data on the price and amount of electricity they are using when they are using it, as well as historical usage data. The FCC cited studies demonstrating reductions in both peak demand and total energy consumption when users have ready access to such information.

The FCC concluded that broadband is essential to realizing the full potential of smart homes and buildings, but broadband alone is insufficient. Standards are also critical to the Smart Grid, helping to ensure it is "plug and play," encouraging innovation, and protecting security and consumer privacy.

The Plan, therefore, recommends that states require electric utilities to provide consumers with access to, and control of, their own digital energy information in as close to real time as possible, including information from smart meters and historical consumption, price, and bill data. Regulators should also require regulated utilities to establish the methods by which consumers may authorize third parties to access this data. Congress should monitor the states' activities and step in with its own requirements if states fail to act within 18 months.

The Plan also recommends federal government action. The Federal Energy Regulatory Commission should adopt standards for consumer data access and control that states can use in their own rulemaking. The Department of Energy should consider consumer data accessibility policies when evaluating Smart Grid grant applications under the Recovery Act, as well as develop recommended best practices as guidance for the states and report on states' progress toward enacting appropriate standards. The Department of Agriculture's Rural Utilities Service also should make Smart Grid loans to rural electric cooperatives a priority, including integrated Smart Grid-broadband projects, and should favor projects from states and utilities with strong consumer data accessibility policies.

# Sustainable information and communications technology



The communications industry, including individual consumer devices, is a large power consumer, and the FCC believes it should be a leader in developing and implementing energy efficiencies. The Plan recommends that the FCC start a Notice of Inquiry to study how the industry could improve its energy efficiency and environmental impact. The Plan also recommends that the federal government seek opportunities to lead in data center and server energy efficiency and should set a goal of earning the government's ENERGY STAR for all eligible data centers it operates.

The FCC will be releasing a series of notices to launch this proceeding and others in rapid succession. Davis Wright Tremaine will be monitoring those proceedings on behalf of our clients.

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#### Disclaimer



# **National Broadband Plan: Focus on Consumer Disclosure Requirements**

#### 03.16.10

# By James F. Ireland and Robert G. Scott, Jr.

The National Broadband Plan (the "Plan") recommends the standardization of technical measurements of broadband performance (e.g., actual speeds), and the establishment of specific performance and service contract disclosure requirements by broadband providers. With regard to mobile broadband, the Plan acknowledges that there are unique disclosure issues relating to speed, performance, coverage and reliability and will work with the wireless industry toward appropriate performance standards and consumer disclosures. The Plan also proposes that the Federal Communications Commission investigate improving transparency relating to broadband performance standards in multiple dwelling units (MDUs) and commercial buildings.

# **Background**

A key objective of the Plan is to empower consumers with relevant information regarding the speed, performance and quality of broadband service offered by fixed and mobile broadband providers. The Plan notes that current disclosures of "up to" maximum speeds often do not reflect the "actual" speeds experienced and that this hinders consumer choice and competition.

# **Analysis**

The Plan makes three broad recommendations designed to improve transparency, and thus enable consumers to make better choices among competing fixed broadband providers. By establishing clearer performance standards and disclosures the Commission intends carriers to provide consumers with the necessary information to choose among fixed broadband providers, select the appropriate service plan, manage their service plan and switch providers. The disclosures are expected to both enhance competition and promote innovation among providers. The Plan includes a fourth recommendation focusing on performance standards and disclosures relevant to wireless broadband providers, MDUs and commercial buildings.

#### Fixed service recommendations

The Plan recommends that the Commission collaborate with the National Institute of Standards and Technology (NIST) to establish technical broadband performance standards and methods to measure performance for fixed broadband services. Industry and consumer groups will have an opportunity to participate in establishing these standards. The Commission and NIST would determine over what portion of a network to measure performance, when and how often to measure performance and what set of protocols to use to set the performance benchmarks. The Plan focuses on "actual" broadband speeds as a key element in providing consumers with useful information in comparing competing broadband services. Such measurements could include actual speeds during peak periods and the probability of experiencing a particular actual speed over a given period of time (e.g., one hour).

The Plan recommends a rulemaking to establish performance disclosure obligations for fixed broadband providers. These disclosures could consist of "simple and clear data" provided to typical consumers (similar perhaps to the "Schumer box" required in consumer credit disclosures), as well as more detailed disclosures for the benefit of tech-savvy parties interested in designing applications and products for the network. The objective of the disclosures is to promote competition by providing consumers with information relevant to choosing a broadband provider, selecting a specific plan from a provider, evaluating service invoices and switching broadband providers.



Central to this decision-making process is the speed, price and overall performance of each provider's service. In the rulemaking, the Commission proposes to explore ways in which these elements can be easily compared by consumers including the creation of online decision-making tools for choosing service and possibly the development of a "broadband digital label." The digital label would concisely identify download and upload speeds (maximum and average) and provide an aggregated quality of service rating similar to the multiple star system used by consumer publications. The Plan also recommends that rules be adopted to require each broadband provider to clearly disclose the prices (including fees and taxes) for different broadband plans offered to potential customers as well as the terms of broadband contracts entered into by consumers.

The Plan recommends that the Commission continue to measure and publish public data on the actual performance of fixed broadband services. The Commission recently made a speed test application available for download from the Commission's Web site. The Commission's application also has a feature for consumers to report broadband dead zones and the availability of competing broadband options by location. The Plan envisions making information available on a public Web site that will allow consumers to check on performance claims by broadband providers. In addition, the Commission may publish a "State of U.S. Broadband Performance" report that will allow consumers to compare actual performance of top broadband providers on a geographic basis.

#### Wireless recommendations

While the Plan recommends a coordinated collaboration between the Commission and the NIST to set performance standards and a rulemaking to establish disclosure requirements for fixed broadband service providers, a different approach is recommended for wireless broadband providers.

For wireless performance standards, the Plan recommends that the Commission develop recommended performance measurement standards by location, carrier and spectrum band to be used in a possible future rulemaking. The Plan also recommends that the Commission continue to gather user generated data on coverage, speeds and performance through the speed test tool available on the Commission's Web site. This information might be published by the Commission to report aggregate mobile broadband performance. The Plan encourages the industry to develop more standardized and transparent disclosures of coverage, speeds and performance for wireless networks and the Commission expects to be involved in this process. Wireless provider performance standard disclosures are expected to provide various levels of detail for different "audiences" (e.g., regulators, third party aggregators of coverage, and consumers). While the Plan does not explicitly call for a rulemaking on these disclosure standards, it is hard to see how these goals could be accomplished without formal Commission rules.

#### Broadband disclosures for MDUs and commercial buildings

The Plan suggests that the Commission investigate how to improve broadband performance information made available in residential MDUs, and potentially in commercial and industrial buildings. The goal is to promote the installation of more broadband in such buildings and to allow small and medium businesses to access broadband service with the appropriate performance metrics (speed, security and reliability) required for their individual needs.

The Commission will be releasing a series of notices to launch each of its future proceedings. Davis Wright Tremaine will be participating in those proceedings on behalf of our clients.

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# National Broadband Plan: Focus on Broadband Availability in Tribal Communities

03.16.10

# By Maria T. Browne and Robert Morgan

The Plan points to a significant lack of broadband facilities serving Tribal lands as well as an astonishingly low broadband usage rate by Tribal land residents. To rectify this deficiency, the Plan proposes to prioritize Tribal needs and Tribal government input in its efforts to reform USF, requires the FCC to consider Tribal lands' unique spectrum needs in its implementation of the Plan's proposal to reform spectrum policy, recommends that Congress establish a new Tribal Broadband Fund to provide capital for broadband deployment and adoption, and seeks to improve coordination and consultation with Tribes on a government to government basis on broadband related issues, including through the recommended creation of an Executive level initiative, a new FCC Office of Tribal Affairs, an FCC task force devoted to consideration of Tribal concerns in all broadband proceedings, as well as a joint right-of-way task force comprised of State, Tribal and local policymakers, and expanded opportunities for Tribal member participation in FCC training programs.

# **Background**

According to the FCC, fewer than 10 percent of Tribal land¹ residents have access to terrestrial broadband, and broadband penetration hovers around 5 percent. Even the data on which these penetration statistics are based is considered lacking. The Plan identifies a significant need to create funding for Tribal lands, which, because of their rural location and small populations, do not attract interest form private capital, and proposes measures intended to increase investment in infrastructure and improve broadband adoption.

The FCC's efforts in this regard are not unprecedented. Since 2000, the FCC has administered Tribal land bidding credits to incentivize wireless carriers to provide service to Tribal lands. In addition, the FCC long ago established a Tribal priority in AM and FM radio allotments. The Plan implies a historic lack of coordination with Tribal governments on communications policies matters and seeks to rectify this problem through the establishment of initiatives and task forces, as well as executing an FCC consultation policy, to ensure that Tribal concerns are considered in all broadband proceedings. The Plan also recommends that RUS's role in providing loan and grant funding to rural communities through Community Connect be expanded to include more responsibility for Tribal lands.

#### **Analysis**

In addition to recommending that Congress establish a Tribal Broadband Fund and expand the RUS funding role, the Plan proposes to fund broadband deployment on Tribal lands using funds made available through its USF reforms. Funding under USF would include (1) infrastructure investments from a new Connect America Fund (CAF) that would only fund projects in areas where there is no private sector business case for providing broadband, including such areas located on Tribal lands; and (2) Erate funding for more Tribal land libraries produced by amending the Communications Act and removing certain technical barriers. In addition, the Plan recommends that Congress amend the Communications Act to allow anchor institutions funded by E-rate or the Rural Health Care program to share network capacity with other community institutions designated by Tribal governments. More detail on the Plan's recommended USF reforms is available in our advisories that focus on Overhauling High-Cost Universal Service and the E-Rate Upgrade.



The FCC notes that wireless is well-suited for connecting many isolated Tribal communities, recommending a new preference for Tribes seeking wireless licenses to facilitate Tribes' use of spectrum for broadband. This preference could potentially include a new "geographic carve out license for areas covering Tribal lands." Additional recommendations include: (1) facilitating Tribes' access to information on available spectrum by including Tribal-land specific data in the spectrum dashboard that was launched concurrently with the Plan's release; (2) providing more flexibility and incentives for the build-out of facilities serving Tribal lands, which could include new mandates for re-licensing spectrum when licensees fail to provide service; (3) considering the use of higher-power fixed operations in rural areas; (4) identifying frequency bands that could be allocated to broadband, including in Tribal areas; and (5) expanding the Tribal Land Bidding Credit program.

Improved broadband adoption and utilization by Tribe members would be built on coordination between Tribal governments and the FCC. The Plan recommends improving communications and consulting on broadband between Tribes and government agencies by (1) establishing a Federal-Tribal Broadband Initiative to reduce redundancies across government broadband programs and policies; (2) establishing a FCC-Tribal Broadband Task Force composed of FCC staff and Tribal leaders to ensure Tribal concerns are considered in all broadband-related proceedings; (3) creating an Office of Tribal Affairs within the FCC to consult with Tribal leaders, develop the FCC's Tribal agenda, and manage the Task Force; and (4) and encouraging Tribal participation in a joint task force also composed of FCC, State and local representatives to develop a national rights-of-way policy.

The Plan also recommends that Congress provide additional flexibility to RUS' to enable it to expand its role in providing financing for broadband deployment on Tribal Lands, including through Recovery Act funding, RUS's Farm Bill Broadband Program and Distance Learning Program, and that Congress expand the Community Connect program (including the size and scope of its eligibility criteria) to better serve Tribal lands.

In addition, the FCC proposes to enhance coordination with Tribal governments by inviting Tribes to play a more prominent role in the USF reform process. Recommendations include creating a permanent Tribal seat on the Federal-State Joint Board on Universal Service and the USAC Board, and requiring the FCC to consult Tribes before designating broadband providers that may receive USF support for serving Tribes.

The Plan also proposes to facilitate adoption by expanding Tribal members' broadband skills, accomplishing that goal by expanding the Indian Telecommunications Initiative and allowing Tribe members to participate without charge in FCC University training programs. Expanding the Lifeline Assistance and Link-Up America programs would drive adoption by subsidizing low-income Tribal households' broadband subscription costs. Improved data on both adoption and deployment would be collected by making mapping grants available to Tribes.

Several of the Plan's non-Tribe specific recommendations could also impact Tribal lands and are not covered in this section of our summary. The FCC will be releasing a series of notices to launch each of its future proceedings. Davis Wright Tremaine will be participating in those proceedings on behalf of our clients.

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# FOOTNOTE

1 The Plan defines "Tribal lands" as "any federally recognized Tribe's reservation, pueblo, and colony, including former reservations in Oklahoma, Alaska Native Regions...and Indian allotments."



#### Disclaimer



# National Broadband Plan: Focus on Electronic Health Records

03.16.10

# By Paul T. Smith

The National Broadband Plan (the "Plan") follows the recent overhaul of the Federal Health IT Strategic Plan in the Health Information Technology for Economic and Clinical Health Act (HITECH) Act. The HITECH Act was part of the American Recovery and Reinvestment Act of 2009, the stimulus law adopted in February of last year. Recommendations in the Plan include new payment incentives, the removal of regulatory barriers to technology use, and ways to make health information more easily available for research and outcome evaluation.

# **Background**

The Federal Health IT Strategic Plan was first formulated in 2004, with the goal of an interoperable electronic health record for everyone in America by 2014. It recognizes the potential of electronic health records (EHRs) to transform health care delivery. EHRs will not just give clinicians access to the patient's complete history—they will check dosages and allergies, and provide electronic alerts about treatment procedures and guidelines. They will allow patients to manage their own wellness through personal health records. And they will carry broader benefits for population health by improving public health surveillance and response, accelerating research and adoption of best practices, allowing analysis and reporting of quality of care, and delivering health care to rural communities through telemedicine.

The plan has been beset by obstacles. Adoption by clinicians has been particularly slow, mainly because EHRs are expensive and do not show a clear economic return, at least in the short term. There are no federal standards for interoperability, and there are unresolved concerns about health information privacy and security and patient rights in shared electronic health record systems.

The HITECH Act gave the Health IT Strategic Plan a boost by setting up a framework for the development of standards and certification criteria for "qualified" electronic health records. These are EHRs that not only maintain health information, but also have the capacity to provide clinical decision support, to allow electronic physician order entry, to capture quality-related information, and to exchange electronic health information with other sources. The HITECH Act also allocated \$19 billion for investment in health care technology, including additional Medicare and Medicaid reimbursement for physicians and hospitals that meet federal standards for the adoption and use of electronic health records.

#### **Analysis**

The Plan observes that three gaps remain: adoption, information utilization and connectivity. The Federal Communications Commission (FCC) recognizes that the first two are largely beyond its purview, and it makes recommendations to Congress and the responsible federal agencies to move the plan forward on these fronts. The recommendations include new payment incentives, the removal of regulatory barriers to technology use, and ways to make health information more easily available for research and outcome evaluation. The FCC also makes the bold recommendation that Congress should consider providing consumers access to and control over their digital health care data. Access they have already, but obtaining it is cumbersome; control they do not have under current law.

The Plan makes several recommendations for filling the third gap, connectivity. First, the Plan recommends the FCC should replace the underutilized Internet Access Fund with a Health Care Broadband Access Fund, which would support bundled telecommunications and broadband services for health care providers. Participation would be based on need, with subsidy levels greater than those presently in place under the FCC's Internet Access Fund.



The Plan recommends that the FCC establish a Health Care Broadband Infrastructure Fund to subsidize network deployment to health care delivery locations where existing networks are insufficient. This program would have features in common with the FCC's Rural Health Care Pilot Program, in which the FCC says it experienced overwhelming interest. Funding would be based on demonstrated need, and participants would be required to pay a minimum percentage of project costs, such as the 15 percent payable under the Pilot Program.

The Plan would expand participation in the access and infrastructure funds by allowing funding for nursing homes, hospices, long-term care facilities, off-site administrative offices and data centers, and even some for-profit providers. These are not currently eligible for the Internet Access Fund. The Plan also calls for additional funding for Indian Health Service, because tribal lands have particularly low broadband penetration.

The Plan recommends that the FCC work with other agencies to align its health care program with other federal criteria for the use of health care information technology, such as the criteria being developed by the Department of Health & Human Services under the HITECH Act. Federal investment should be focused away from process and toward outcomes, to ensure that the program funds "not just wires, but health."

Finally, the Plan recommends that the FCC play a more prominent and sustained role in supporting the nation's health information, and should publish a Health Care Broadband Status Report every two years as part of a continuing effort to evaluate the impact of its programs and change direction when they do not meet expectations.

The FCC will be releasing a series of notices to launch each of its future proceedings. Davis Wright Tremaine will be participating in those proceedings on behalf of our clients.

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