

Chapter 6

TOWARD A NATIONAL BROADBAND POLICY:

**SOLVING AMERICA'S
BROADBAND PROBLEM**

NEW ADMINISTRATION, NEW POLICY

At noon on January 20, 2009, Barack Obama became the 44th president of the United States. One minute later, his administration was already delivering on his promise of change. Visitors to Whitehouse.gov were greeted with a completely overhauled interface, designed to facilitate the new administration's priorities of "communication, transparency and participation."³⁰⁸ It was an appropriate first action by a president who reached the highest office in the land in large part due to his campaign's successful use of the Internet.

And this historic day for the country was also an historic day for the Internet. More people watched coverage of the day's events online than watched on television.³⁰⁹ But though millions of Americans used the Internet to take part in this historic campaign and its culmination, millions more were unable to participate in this digital revolution. Twenty-five million rural Americans couldn't follow the campaign online and were thus unable to seek out detailed information on the policy positions of Obama or his opponent. The 50 million low-income Americans on the wrong side of the digital divide were unable to use the Internet as a platform for voicing their priorities for the new administration. Half of all Americans over the age of 55 were offline. Two-thirds of all African-Americans lacked the basic connectivity needed to track the historic events on the Web. And millions more Americans fortunate enough to have broadband were unable even to stream low-quality video of the inauguration because their connections were too slow. The consequences and costs for those disconnected or stuck using yesterday's technology grow exponentially as the Internet becomes more deeply intertwined in the fabric of American life.³¹⁰

The blame for the failure to bring the benefits of the Internet to all Americans falls squarely on the shoulders of the Federal Communications Commission. With the 1996 Telecommunications Act, Congress gave the FCC a blueprint for achieving universal access, openness and competition. But the FCC quickly abandoned

³⁰⁸ "Change has Come to Whitehouse.gov," *The White House Blog*, Jan. 20, 2009.

³⁰⁹ Lisa de Moraes, "With the Right Math, Inauguration is Second to None," *Washington Post*, Jan. 22, 2009.

³¹⁰ See Rahul Tongia and Ernest J. Wilson, III, "Turning Metcalfe on His Head: The Multiple Costs of Network Exclusion," Paper presented at the Telecommunications Policy Research Conference, September 2007.

this path. It chose to follow the wishes of the industries it regulates rather than the deliberative judgment of our elected representatives. It declared “mission accomplished” on the goal of competition before the mission had even begun. It dismantled the basic legal framework responsible for creating the open Internet and left nothing in its place but thin assurances that what once was would always be. And as the digital divide grew wider, the FCC sat idle.

America’s broadband failures are the result of policy failures. They are the predictable outcome of a regulatory agency that always places private interests above the public interest. Over the past decade, while other countries developed and properly implemented national broadband policies, America’s policy was just to cross our fingers and hope for the best. Hope that new platforms would emerge and compete with the duopoly phone and cable providers. Hope that providers wouldn’t abuse their market power to raise barriers to entry for new competitors.

These hopes were based on the belief that the invisible hand would work its magic if the agency got out of the way. But our broadband policies have actually stifled, not freed, the forces of the free market. What our regulators forgot was that market forces do not work properly when markets are highly concentrated. They failed to grasp the basic idea that failed markets just won’t fix themselves without any intervention. They watched as America fell further and further behind the rest of the world. They ignored history.

It is time to try a new approach. It is time for real change.

Policies For Success: Developing a National Broadband Plan

Recognizing the need for a new direction, early this year Congress directed the FCC to develop a national broadband plan.³¹¹ This plan has been described as “the most important public policy initiative affecting broadband since the landmark Telecommunications Act of 1996.”³¹² Congress specifically ordered the Commission to submit plans for achieving universal deployment, affordability and maximum utilization of infrastructure. This will be no easy task.

³¹¹ See 47 U.S.C. 1305(k). “The national broadband plan ... shall seek to ensure that all people of the United States have access to broadband capability and shall establish benchmarks for meeting that goal. The plan shall also include ... an analysis of the most effective and efficient mechanisms for ensuring broadband access by all people of the United States ... a detailed strategy for achieving affordability of such service and maximum utilization of broadband infrastructure and service by the public ... an evaluation of the status of deployment of broadband service ... and 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.”

³¹² See Statement of Commissioner Robert M. McDowell, In the Matter of *A National Broadband Plan for Our Future*, GN Docket No. 09-51, FCC 09-31 (2008).

Policymaking is a process. It begins with identifying problems, formulating solutions, and then taking action. But the process does not end there. The final step involves evaluating the policies put in place to determine if they are effective. A large part of the policy formulation process involves predictions of outcomes, so it is quite reasonable to constantly ask if those predictions were correct. As FCC Commissioner Michael Copps stated in 2005: “We have to be always open to new facts and always follow up on the real-world consequences of our actions. ... We need to put as much or more effort and resources into monitoring the consequences of our actions as we do in bringing them forward for a vote.”³¹³

But the FCC’s legacy since 1996 has been to never look back. In proceeding after proceeding — be they mergers or forbearances, implementation of the 1996 Act or responses to court remands — the Commission has made predictions about the development of marketplace competition and the likely industry behaviors that would result from its actions. Yet none of these predictions has ever been evaluated to see if they were correct.

The Commission has not only refused to look back, it has taken steps to compound the errors in its predictive judgment. In numerous cases, the FCC has justified its deregulatory actions based on a specific level of existing competition, but then proceeded to make decisions that undermine that competition. The Commission has a track record of simply stitching together what limited evidence is available to justify tearing down consumer protections, while predicting nothing but consumer benefits. But there is enough evidence to suggest that this blind deregulatory approach has been nothing but an utter and complete failure.

So the new FCC needs to begin its development of the national broadband plan by taking a deep and honest look at every Commission action in this area since 1996. The commissioners should start with this question: Were our assumptions about market outcomes correct? If the answer is no, then those actions should be revisited. In many cases, the Commission made decisions it was formally committed to reviewing and revising after a period of years — and the agency simply failed to do so.

We offer a variety of recommendations for how the Commission and the Congress should proceed based on the analysis presented in this book:

- The FCC should begin its inquiry into a national broadband plan by reviewing every major regulatory decision since the 1996 Act to determine whether or not its predictions for market competition and deployment have come true. If not, those decisions should be revisited and revised

³¹³ See Statement of Commissioner Michael J. Copps, In the Matter of *SBC Communications, Inc. and AT&T Corp. Applications for Approval of Transfer of Control*, WC Docket No. 05-65, Memorandum Opinion and Order, 20 FCC Rcd 18290 (2005).

with a new set of assumptions and expectations. Congress should aid this process with a series of oversight hearings.

- The FCC should conduct a rule-making to establish nondiscrimination protections, or Network Neutrality, for consumers on the Internet. This can be done by expanding and codifying the *Internet Policy Statement* into permanent Network Neutrality rules. Congress should concurrently pass a law to place these nondiscrimination protections in the Communications Act.
- The FCC should implement rule-makings to transition the Universal Service Fund programs from supporting telephone service to supporting broadband. This shift — which could be conducted over a 10 year period — would build a fiber-optic network throughout rural America, reform the fund's administration to reduce waste, fraud and abuse, and gradually reduce the size of the fund to less than a third of its current size. Congress should support these changes through oversight and legislation to provide a clear path for FCC action.
- The FCC should develop a set of common standards for competition analysis. The Commission's decisions on competition policy have been plagued by inconsistencies, false assumptions, and incorrect projections. Once a standard has been set, a review should be conducted of rulings made using an incorrect competition analysis — and those decisions should be reversed.
- The FCC should reverse the foundational mistake of its broadband policy framework by reclassifying broadband as a telecommunications service. This will rationalize broadband policy and give the Commission the tools required to promote competition through the reinstatement of network-sharing rules if a competition analysis indicates this is needed.
- The FCC should make an honest assessment of broadband deployment in its congressionally mandated annual review (Section 706 reports) on the state of the market. A clear finding that advanced broadband networks are not being deployed to all Americans in a timely fashion will trigger expansive authority to establish more rigorous competition policy.
- The FCC should conduct a thorough review of its policies governing competition and pricing in the "special access" and "middle-mile" or "enterprise" markets — the broadband lines that connect cell phone towers and local area networks to the Internet. Deregulation in this area has produced monopolistic practices that have resulted in higher prices for consumers and stunted the deployment of competitive networks.

- The FCC should explore opportunities to open more of the public airwaves to unlicensed use as well as build on earlier decisions to promote shared spectrum for both low-power urban uses and high-power uses in rural areas. Congress should instruct the FCC and the NTIA to conduct a thorough review of commercial and government spectrum holdings to identify bands that could be opened.

Policymakers should structure the national broadband plan around the key areas of openness, access and competition. To achieve the goal of universal, affordable access and maximum adoption of the Internet in American homes, we will need to address all of these areas. We will need to use a combination of market incentives and regulatory oversight to trigger investment in higher-quality networks; to promote competition between ISPs; to make public investments in infrastructure in places otherwise left unserved; and to keep open the market for online content, applications and services that drives innovation.

Getting the Act Back on Track: Protecting the Internet as an Open Platform for Innovation

Jettisoning all of the legal nondiscrimination protections governing the Internet and reversing course on one of the most successful communications policy frameworks in history — all in the name of deregulation — would make no sense *even* in a market subject to perfect competition. The fact that the FCC did this in a duopoly market is the height of irresponsibility and shows a reckless disregard for the public interest. In formulating a new national broadband strategy, the Commission must do everything in its power to protect the open Internet of content, applications and services, regardless of marketplace conditions or technology. Network Neutrality and nondiscrimination should be the cornerstone of America's broadband policy. It is the Commission's fundamental duty to protect an open market for speech and commerce on the Internet for consumers, citizens and businesses alike.

To do this, the Commission should begin by immediately affirming that the 2005 *Internet Policy Statement* applies to all Internet Protocol technology platforms — including wireless. It should then issue a declaratory ruling adding a fifth principle of nondiscrimination to the *Internet Policy Statement*. The record in the 2007 *Broadband Industry Practices NOI*, which includes the debate surrounding the Comcast-BitTorrent case, provides the FCC with a sufficient basis to move directly to add the fifth principle.³¹⁴ In this declaratory ruling, the Commission should simultaneously open a Notice of Proposed Rulemaking to codify the *Policy Statement* into formal rules.

³¹⁴ See *Broadband Industry Practices*, WC Docket No. 07-52, Notice of Inquiry, 22 FCC Rcd 7894 (2007) (*Broadband Industry Practices NOI*).

The *Policy Statement* already protects consumers' right to use any computing device of their choosing with their broadband connection. If the *Policy Statement* does apply to all broadband platforms — as both Commissioners Michael Copps and Jonathan Adelstein indicate it does — then every 3G mobile broadband provider is currently violating the third principle that guarantees all consumers the right to attach any device of their choosing to the network. This is an unacceptable restriction of consumer freedom and consumer choice. In declaring the *Policy Statement* to be technology-neutral, the Commission must forcefully remind the mobile industry that the “Carterphone” device-freedom rules apply to the wireless broadband platform.³¹⁵ The walled garden of the mobile telephony world should not be permitted to cripple the potential of mobile wireless broadband. All devices, applications and services that do not harm the network should be permitted access. Allowing for the physical differences between wired and wireless platforms, the rules must be guided by a common set of principles that respect the fact that however people get access to the Internet, they should be guarded by the same consumer protections.

The Commission should also take action to prevent providers from using the “reasonable network management” exception as a get-out-of-jail-free card. Carriers are constantly in the press bemoaning the burdens of increasing amounts of Internet traffic and using this to justify their questionable if not illegal network management practices. However, the carriers never offer any data to support their draconian actions, nor do they offer any financial data to support their increasing flirtation with anti-growth pricing practices such as Time Warner Cable's recent efforts to impose limitation-pricing or “metering.”³¹⁶ The Commission therefore should begin research into network traffic and data management practices and costs. The dearth of information about what is happening on the Internet cripples the FCC's efforts to effectively encourage the continual growth of this important economic sector.

Ultimately, the Commission has the responsibility to ensure that market power in network ownership doesn't distort the market for Internet content. This is the successful legacy of the *Computer Inquiries* that the Commission must uphold. Protecting the open Internet is a key element of achieving the goals of the 1996 Act. Preserving the Internet as an open platform will maximize innovation in the content market and increase the likelihood that the next “killer app” will attract more Americans to subscribe to broadband. Indeed, this virtuous cycle of greater demand for advanced applications leading to greater uptake of broadband, leading

³¹⁵ Before this landmark decision, users were forced to rent phones from AT&T, even though there was no technical reason for this requirement. Once it was eliminated, the consumer electronics market for telephones, cordless telephones and integrated answering machines exploded. See *Hush-A-Phone Corp. v. United States*, 238 F.2d 266, 269 (D.C. Cir. 1956); *Use of the Carterfone Device in Message Toll Telephone Service*, 13 FCC 2d 420 (1968).

³¹⁶ For a discussion of the shortsightedness of this pricing approach, see S. Derek Turner, “Free Press Policy Brief: Blocking or Metering: A False Choice,” Free Press, August 2008.

again to greater demand for advanced applications, seems to be completely missing in the Commission's current policy framework.

This space at the "edge" of the network architecture has been a remarkable engine of economic growth in the past decade. This is also the space where network technologies meet democratic discourse and open cultural expression. Because of the open marketplace at the edge of the network, an open sphere for public speech has developed that rivals the printing press as the most important development in modern communications. Policies aimed at the application layer should recognize its centrality to the economic and democratic health of the nation. In the absence of any other meaningful reform to communications law, the absolute necessity of protecting the existing market for speech and commerce online should be paramount. Without a strong policy protecting the open Internet, all of the Commission's other concerns such as promoting universal access and competition are meaningless.

Getting the Act Back on Track: Achieving Universal Service

When the current universal service regime was created in 1996, the Internet was an application that rode on top of the telephone infrastructure. Today, it's the opposite. Telephony is just one of many applications riding on top of broadband infrastructure. With this convergence comes the opportunity to ensure universal affordable broadband access. The Commission must use the national broadband plan to take advantage of this opportunity and end the stalemate in the debate over reforming the Universal Service Fund. It was with great fanfare that the American Reinvestment and Recovery Act put a one-time injection of nearly \$7 billion into broadband infrastructure grants. Yet little is said about the nearly \$5 billion per year we pour into rural telephone networks with little obvious result to justify that massive investment.

The public and their elected representatives clearly support the goals of universal service. Everyone benefits when rural and low-income consumers have access to affordable high-quality communications services. But the majority of Americans who pay into the fund without receiving any direct benefits deserve a universal service system that is fair, efficient and modernized. Consumers in the 21st-century marketplace should not be forced to subsidize a 20th-century technology. Thus, the national broadband plan must embrace a bold and transformative shift in USF policy. Done properly, the Commission can ensure universal access to affordable broadband while also substantially reducing the size of the USF over the long term.

The path to universal broadband and ending the over-reliance on subsidies begins with recognizing how convergence has changed the business of telecommunications. Before broadband, carriers were only able to earn perhaps \$20 per customer each month selling phone service. In today's converged world, a carrier can earn more than \$100 on that same line by offering phone, TV and

Internet services. Unfortunately, our current regulatory structure does not account for this potential — ignoring that many carriers may be able to operate profitably without ongoing subsidies. Instead, it tries to clumsily separate out regulated from unregulated costs and revenues, resulting in overpayments and anti-competitive subsidies.

As an alternative to this broken process, the FCC should base ongoing support on total revenue-earning potential and forward-looking infrastructure costs, calculated for each carrier on a granular, disaggregated basis. This modernized regulatory structure will reduce the need for ongoing support, as many carriers will be able to recoup network costs and earn healthy profits from “triple-play” services. For some carriers, the upfront cost for deploying broadband into currently unserved areas is just too high. In these instances, the USF should be used to pay these upfront costs, and then to provide only ongoing support where it is truly needed.

We suggest the FCC, as a part of the national broadband plan, implement a 10-year transition, where the new “total cost/potential revenue” support model is phased in, and the resulting cost-savings are used to fund the buildout of open access broadband infrastructure into unserved areas. We estimate that after this transition, the total size of the “High-Cost Fund” could be reduced by two-thirds, to less than \$1.5 billion per year.

But getting universal service policy right isn’t the only thing the Commission needs to do to ensure universal service. For rural carriers, the viability of the self-supporting triple-play business model depends on getting fair rates and terms for transport and special access services, as well as getting fair access to video programming. Many of the reforms for the special access and enterprise markets suggested above will benefit rural carriers. However, it may be that some rural carriers will require ongoing subsidies for backhaul transport services. Before the Commission commits to such a subsidy, it should first explore funding the upfront deployment costs of transport or adopting innovative policies like using white spaces for rural backhaul. However, if ongoing subsidies are warranted, the FCC must absolutely ensure that these transport expenses are cost-based. Ratepayer subsidies should not be used to further enrich monopolists in another market.

Finally, the Commission should explore extending the Lifeline/Linkup low-income program to broadband. It should also start an “e-rate@home” pilot project, to ensure American students receive the benefits of broadband both in school and at home. However, closing this aspect of the digital divide will require the application of a broad mix of policies that lie outside of the Commission’s jurisdiction and will require action from Congress and other agencies.

Getting the Act Back on Track: Developing a Meaningful Competition Standard

Even though the 1996 Act has been put through the wringer by the courts and the FCC, it is still the governing document for our nation's communications policies. Moreover, its goals and guiding principles are as relevant and important today as they were more than a decade ago. Achieving the vision of competition espoused in the 1996 Act should be the top priority for President Obama's FCC.

The stated purpose of the 1996 Act is "to promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies."³¹⁷ The Commission has been singularly focused on the "reduce regulation" aspect of the Act to the detriment of the "promote competition" directive. The result has been higher prices and lower-quality services for American consumers.

The FCC must begin the development of a national broadband plan by focusing on the issue of competition. It must do so with the pro-competitive framework of the 1996 Act as a guide. This process should start with an empirically focused evaluation of past predictions about the development and impact of competition. This evaluation should look to establish which analyses of market power were successful, and which types were widely off the mark. Through this evaluation, the FCC should be able to develop and build a new empirical standard for evaluating competition and the potential impacts of deregulation.

The Commission's new standard for assessing competition and market power should be targeted at the appropriate and competitively relevant geographic market boundary. This is the first order of business in developing all of the components of the broader national broadband plan. Without having a relatively common unit of analysis to evaluate past policies and predict the outcome of new ones, it will be impossible to develop a coherent framework for change with standards that are empirically verifiable and evolving to meet the needs of the public and the market over time.

The Commission's approach in the past has been too scattershot and incoherent. In its "enterprise broadband"³¹⁸ forbearance orders, the FCC considered the market

³¹⁷ 104 P.L. 104.

³¹⁸ The enterprise broadband market consists of all the high-capacity dedicated broadband technologies such as Gigabit Ethernet, Frame Relay, OCn fiber optic loops, Asynchronous Transfer Mode service (ATM), LAN services and other packet-switched services. It does not include the so-called TDM-based "special access" services, which are high-capacity dedicated lines that are traditionally used to carry voice traffic but are capable of carrying data traffic at rates up to 45 Mbps symmetrically. The enterprise market includes all broadband services that are not marketed to residential and small-business users but are critical inputs for other ISPs and end-user businesses that transmit large amounts of data (such as a stock exchange).

to be national, while the Commission's special access *Pricing Flexibility* rubric considers market competition at the Metropolitan Statistical Area-level. And the impairment standard developed in the *Triennial Review* for determining when high-capacity transport lines no longer are subject to "unbundling" looks at the market from a wire-center level.³¹⁹ Given that in all three of these cases the underlying technology at issue is essentially the same — high-capacity dedicated broadband transmission lines — the rationale for choosing wildly different market boundaries makes little sense.

Broadband deployment is a hyper-local phenomenon. A premise is either served or unserved. And a premise that is served may have one available provider, or it may have a dozen. But the existence of adequate competition at one location does not ensure adequate competition at a similar location 20 miles away. If the Commission chooses a large market boundary, it will always overstate competitive market conditions. This overstatement in turn will lead to overly optimistic forecasts about the emergence of future competition.

If the Commission wishes to conduct meaningful market power evaluations, then it must focus on very narrow geographic market boundaries. Clearly the FCC's national approach in the enterprise broadband markets is flawed. Just because there are multiple providers of Gigabit Ethernet services in Manhattan does not mean the market for such services is competitive in Manhattan, Kansas. Similarly, the MSA boundary also leads to flawed results, as these markets often lump in dense city centers with distant rural exurbs. For example, the Atlanta MSA includes downtown Fulton County, home to giant enterprise customers such as CNN, Cox Communications, AT&T Mobility and Delta Airlines. But this MSA also includes the rural areas of Heard County, an area 70 miles away from downtown Atlanta. It makes little sense to assume that the market for high-capacity data transport services is as competitive in rural Heard County as it is in the area surrounding the skyscrapers of Atlanta.

Instead, the Commission must develop an evaluative framework that operates at a very granular level. For the enterprise and special access markets, this should be the wire-center level (i.e., the local neighborhood level). However, the wire-center level is too telco-centric for meaningful evaluation of competition in the residential broadband market. A better approach here would be to look at the level of competition at the Census Block level — small geographic units that typically include areas with approximately 1,500 inhabitants.

With the appropriate market boundaries defined, the FCC should then proceed to test past assumptions about competition and deregulation. Did past regulatory relief lead to "substantial and sustained" price increases?³²⁰ How was market

³¹⁹ See *supra* note 102.

³²⁰ See *supra* page 79.

entry shaped by these decisions? Were barriers to entry increased or decreased? What other marketplace conditions such as consumer price sensitivity affected market pricing? If some markets remained under regulation, how did competition, deployment and pricing differ among deregulated and regulated markets?

By conducting this *ex post* analysis, the Commission will be able to exercise better predictive judgment. It will also lead to the identification of markets that lack effective competition and require further FCC attention. We believe this exercise will lead to the conclusion that many of the actions taken by the Commission in the past decade were too broad and should be scaled back.

Specifically, the FCC should reverse all of the enterprise broadband forbearance orders and apply a more narrow market analysis. This will allow the RBOCs and other price-cap carriers that were granted nationwide relief from dominant carrier regulations to maintain that regulatory relief in the truly competitive markets, but it will allow for the proper monopoly-constraining regulations in the markets with little or no enterprise competition.

Similarly, the Commission should also re-evaluate the markets where price-cap carriers were given special access pricing flexibility relief. We suspect that an honest market power evaluation will lead the Commission to conclude that none of these markets should have been granted MSA-wide regulatory relief. Using a wire-center-level analysis (i.e., neighborhood-level analysis) the Commission will be able to determine those specific locations where relief is warranted, and those areas where carriers have abused their market power in the absence of pricing constraints.

Getting the Act Back on Track: Properly Classifying Broadband

The FCC got it wrong when it classified broadband Internet access as a pure “information service” in 2002.³²¹ By doing so, the FCC clearly flaunted the will of Congress and exceeded its authority. The new Commission must right this wrong by accurately redefining broadband as an information service with a

³²¹ The enterprise and special access broadband markets remain classified as telecommunications services, and thus the Commission retains clear authority under Title II to promote meaningful competition through Sections 201, 202, and 203-style non-discriminatory economic regulation, or through Section 251 interconnection and unbundling regulation. The residential broadband access market is another story. The Commission’s actions in the *Cable Modem Declaratory Ruling*, the *Wireline Broadband Order*, and the *Wireless Broadband Order* to remove these services completely from the reach of Title II greatly hamstring the new FCC’s efforts to promote competition and protect consumers. See *Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks*, WT Docket No. 07-53, Declaratory Ruling, 22 FCC Rcd 5190 (2007) (*Wireless Broadband Order*). In this declaratory ruling, the Commission classified wireless broadband Internet access as an information service that uses telecommunications as a transport component, but as a part of a functionally integrated offering that does not constitute “telecommunications service” under Section 3 of the Act. The Commission also declared Broadband Over Powerline to be an information service. See *Power Line Council’s Petition for Declaratory Ruling Regarding the Classification of Broadband over Power Line Internet Access Service as an Information Service*, WC Docket No. 06-10, Memorandum Opinion and Order, 21 FCC Rcd 13281 (2006) (*BPL Order*).

telecommunications service transport component. This declaration will restore logical consistency to the Commission's prior actions dating all the way back to the original *Computer Inquiry*.³²² It will harmonize the Commission's ongoing broadband policymaking activities with the directives of Section 706 of the 1996 Act, which instructs the FCC to encourage the universal deployment of "broadband telecommunications" (emphasis added).³²³

Reversing the most fundamental mistake of the past 10 years of telecommunications will generate vigorous political opposition from the incumbents that have so richly benefited from it. But as a purely legal matter, properly classifying broadband should not be a heavy lift for the Commission. The record is there to support the change; and the agency has the tools to bring it about. Once the definitional change is made, the practical business of applying new regulations can proceed carefully on a market-by-market basis. That analysis should begin by recognizing the differences between broadband markets in the huge population centers on the coasts versus the small- and mid-size markets in the bulk of the country. The economics are different; the existing infrastructure is different; and the needs of these communities are varied.

With all broadband services classified appropriately back under Title II of the Communications Act, the FCC can then proceed to determine if any economic or access regulations are needed in specific geographic markets. This could lead cable modem or DSL providers in some areas to be subject to certain open access regulations — including line sharing³²⁴ — or could lead to no Commission intervention, other than obliging carriers to offer reasonable and nondiscriminatory pricing to wholesalers. The Commission is well within its authority under Section 10 of the Act to forbear from applying any Title II regulations (other than Sections 201 and 202) that it feels are unnecessary to promote the public interest.³²⁵ The Commission must not hesitate to use all the tools made available by the law to promote competition.

³²² See discussion beginning *supra* page 46.

³²³ See *supra* note 46.

³²⁴ We strongly recommend that the Commission revisit the decision made in the *Triennial Review* ending line sharing. The court in *USTA I* never declared the practice itself to be an overreach of Commission authority under the Act, only the Commission's specific impairment analysis. With a new hyper-local geographic approach to market power analysis, line sharing will certainly be a justifiable policy under Section 251 authority.

³²⁵ See *supra* note 178. Also, in the *Cable Modem Declaratory Ruling* (*supra* note 115), the Commission acknowledged that it could on its own motion waive other requirements such as *Computer II*. The 9th Circuit in the *Portland* case also ruled that the Commission could use Section 10 to waive Title II requirements on cable modem services. See *Portland*, 216 F.3d at 879.

Getting the Act Back on Track: Using Section 706 to Promote Competition

Section 706 of the 1996 Act directs the Commission to “determine whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion.” The Act specifically defines the term advanced telecommunications capability “as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.” If the Commission determines this deployment is not reasonable and timely, it is to “take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market.”

The Commission has issued five Section 706 reports, all stating that the deployment of *advanced telecommunications capability* was being deployed to *all* Americans in a reasonable and timely fashion.³²⁶ However, each of these reports ignored the statutory language of the Act and the intent of Congress by focusing on the deployment of *non-dial-up* Internet services, and not *advanced telecommunications* services.³²⁷ A proper analysis of deployment based upon the actual language of Section 706 could only reasonably conclude that deployment of advanced telecommunications capability to all Americans is neither reasonable nor timely.

Changes to the law made under the Broadband Data Improvement Act now require that Section 706 reports be issued annually, as opposed to periodically. As a part of its formulation of a national broadband strategy, the Commission should rule that the Section 706 test is not being met. This declaration will confer upon the FCC

³²⁶ *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, CC Docket No. 98-146, Report, 14 FCC Rcd 2398 (1999) (*First 706 Report*); CC Docket No. 98-146, Second Report, 15 FCC Rcd 20913 (2000) (*Second 706 Report*); CC Docket No. 98-146, Report, 17 FCC Rcd 2844 (2002) (*Third 706 Report*); *Availability of Advanced Telecommunications Capability in the United States*, GN Docket No. 04-54, Fourth Report to Congress, 19 FCC Rcd 20540 (2004) (*Fourth 706 Report*); GN Docket No. 07-45, Fifth Report to Congress, 23 FCC Rcd 9615 (2008) (*Fifth Report*). It’s worth noting that the last Section 706 report issued under Chairman Powell (*Fourth Report*) is a glossy brochure, departing from the normal legal format of the other reports.

³²⁷ We use the term “non-dial-up Internet access” to mean any “always-on” means of connecting to the Internet that does not involve the use of a “dial-up” modem (a form of connection that involves the use of a telephone line and a modem, in which the user creates a link with an ISP via a “handshake,” and which has a maximum symmetrical connection speed of 56 kbps); or does not involve the use of BRI ISDN technology (Basic Rate Interface Integrated Services Digital Network), which is also conducted over traditional copper telephone networks, with two 64 kbps channels, capable of carrying voice or data packets over the public switched telephone network (PSTN). In general, non-dial-up technologies include traditional wireline (T1, T3, DS-1, DS-3, OC-n, Ethernet), DSL, cable modem, fiber-to-the-home, third generation wireless (3G), Wi-Fi, Wi-Max, satellite (in some cases), and broadband over powerline (BPL).

broad authority to promote competition in the broadband market, without having to reclassify broadband Internet access service.³²⁸

The Commission's focus for the national broadband plan should be on promoting competition where it is lacking, by any means necessary. This means promoting both inter-modal and intra-modal platform competition — that is, competition between different technologies, and competition within certain technologies from the incumbent provider and wholesale providers. Reclassifying broadband as an information service with a telecommunications service transmission component will enable the FCC to surgically apply regulatory competition tools such as open access policies. Similarly, the FCC's Title I ancillary authority and authority under Section 706 empowers the Commission to impose such pro-competitive rules even without regulatory reclassification. The Commission should also consider other mechanisms to promote competition, such as cable modem ISP leased access pursuant to Section 612 of the Act. Though the FCC ruled in 1999 that this section did not apply to ISP services, we believe that the explosion in online video and the emergence of the Internet as a horizontal video distribution platform warrant a rethinking of this decision.

The Commission's national broadband plan must end the long practice of sweeping reality under the rug. There is now so little competition in American broadband markets that network operators have no incentive to build high-capacity lines throughout the country. Consequently, most U.S. consumers are stuck using the same slow and expensive broadband connections, while users in other countries enjoy connections that are far faster and cheaper than those deployed here. There are some encouraging signs in some markets of fiber and DOCSIS 3.0 deployments. But these markets are few and far between, and these incremental developments may be too little, too late.

The Commission's national broadband plan needs to be aggressive in its pursuit of market competition. At the same time, it has to be practical. The 1996 Act was written for a monopoly world. Perhaps not all of its provisions are appropriate for today's duopoly world. In some cases, the benefits of fostering intra-modal competition may not be worth the costs (mostly in terms of the inevitable litigious push back from industry). However, the Commission should not abdicate its responsibility under the law to promote intra-modal competition in the local markets where new entrants are "impaired" under the standard of Section 251 of the 1996 Act.³²⁹ Some markets may warrant heavy regulatory intervention, while others will not. But this is an empirical question, not a question of political

³²⁸ Even as it declared cable modem and wireline broadband to be pure information services, the Commission also implied that these services are governed by Section 706. See e.g. *Cable Modem Declaratory Ruling*, *supra* note 115, at 70, stating, "Most cable modem service fits within our definition of advanced telecommunications capability because it affords the user the ability to send and receive information at speeds higher than 200 kbps."

³²⁹ See *supra* note 81.

feasibility. Now is not the time to make artificial declarations that some ideas are off the table and narrowly focus on particular proposals.

Getting the Act Back on Track: Promoting Platform Competition

The “faith-based” broadband policy of the past eight years relied heavily on the prediction that a third-platform competitive alternative would eventually appear to tame the anti-competitive instincts of the phone and cable duopoly. It’s clear that this hope has yet to be realized. Currently, mobile wireless has the most potential. Yet horizontal integration in this market, increasing consolidation, and the fact that consumers don’t see mobile as a substitute for fixed broadband services make it highly unlikely that this platform will be the market savior.³³⁰ Third-party, last-mile deployment of fixed wireline services (i.e., “overbuilding”) like cable modem or fiber optics is an uneconomical prospect in almost all markets. Residential CLEC copper-based facilities competition simply does not exist; and where incumbents are deploying fiber, they are often simultaneously removing the existing copper wire, eliminating this as a possible future competitive platform.³³¹ Satellite is a niche solution for remote rural areas; it is not a serious platform alternative to the much faster cable modem and fiber-optic wireline services. And broadband over powerline, which never had more than 5,000 customers, may soon fade away and be a historical footnote.³³²

Thus, the only viable new competitive platform alternative is fixed wireless. Yet we’ve not seen widespread deployment of residential fixed Wi-Fi or Wi-Max services. Clearwire, a joint venture between Sprint, Google, Comcast and other companies, has promised to deploy fixed and mobile Wi-Max services capable of delivering 6 to 10 Mbps downstream to half of the U.S. population by 2010.³³³ However, the company has slowed down the pace of its deployment, and its future viability as a legitimate competitor to the telco-cable juggernaut is uncertain.³³⁴

³³⁰ See e.g. *Applications of Cellco Partnership d/b/a Verizon Wireless and Atlantis Holdings LLC For Consent to Transfer Control of Licenses*, WT Docket No. 08-95, Memorandum Opinion and Order, 23 FCC Rcd 17444 (2008) (*Verizon-Alltel Merger Order*). See also e.g. *In the matter of Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation, et al.*, WT Docket No. 04-70, Memorandum Opinion and Order, 19 FCC Rcd 21522 (2004) (*Cingular-AT&T Wireless Acquisition Order*).

³³¹ For example, in 2006, Verizon issued one FCC-mandated copper retirement notice. In the first quarter of 2008, it issued 98 such notices. See Kelly M. Teal, “Copper Retirement Notices Stack Up - CLECs Ask FCC for Formal Review,” *XChange Magazine*, June 29, 2007.

³³² See e.g. Jennifer Buske, “Manassas Preserves Broadband Program — Funds to Continue While Service Is Studied,” *Washington Post*, April 16, 2009.

³³³ Current Clearwire service only offers up to 2 Mbps downstream, 256 kbps upstream. However, the company has claimed its 4G Wi-Max product will be able to burst up to 10 Mbps in fixed settings, and up to 6 Mbps in mobile settings. See e.g. “Clearwire Shows Off Mobile Wi-Max In San Fran,” *DSL Reports*, Sept. 11, 2008. See also Ray Le Maistre, “Sprint, Clearwire Create \$14.5B WiMax Giant,” *Light Reading*, May 7, 2008.

³³⁴ See Amy Thompson, “Clearwire Funding Gap May Put Backers’ Plans on Hold,” *Bloomberg*, Feb. 11, 2009.

One challenge facing the company, and, indeed, facing any company wishing to get into the ISP business, is the cost of data transport, or “backhaul.”³³⁵ “It’s what I call the elephant in the room that nobody talks about,” said Clearwire CTO John Saw. “The backhaul is probably the highest cost of deploying the network.”³³⁶

If the Commission is going to make inter-modal competition a centerpiece of its national broadband plan, then it is going to have to be aggressive about helping new providers build viable businesses. New entrants can put up wireless antennas, but they have to be able to carry traffic back-and-forth to the Internet. In many cases, the only available transport option is high-capacity lines offered by the local incumbent phone company. First and foremost, this means the Commission must take a close look at the special access, middle-mile and enterprise transport markets. As discussed above, the Commission’s past deregulatory actions in these markets have been disastrous for competition. Special access rates of return are above 700 percent in some markets, and there is little data to suggest competition is any more effective in the enterprise market. This is akin to a small businessman trying to open a grocery store, and the only supplier of beef, dairy, poultry and produce for this new grocery store is Safeway. In such a world, it would be hard to imagine Safeway doing anything to help out the little guy.

Recent technology advances have enabled carriers to use microwave technologies to transport backhaul data. These advances are important, because not having to buy expensive transport services from the local monopoly phone company, and not having to lay fiber optic cables for transport can bring considerable cost savings. However, these high-frequency transmissions require licensed spectrum and are point-to-point and thus subject to geographic constraints and environmental interference. In the cases where unlicensed spectrum is used for backhaul (such as the 5.8 GHz band), the potential for interference limits the reliability of these links. The Commission should promote the availability of spectrum for high-capacity backhaul but also recognize its limitations.

Ultimately, turning the dream of platform competition into a reality will require aggressive FCC action to lower barriers to entry for new technologies. This will

³³⁵ To understand the importance of the “backhaul” (or “enterprise” or “middle-mile” or “special access”) markets, think of starting an ISP business as opening a bar. When you open your bar, you incur considerable startup costs, from leasing the commercial space, to buying shelving, signs, freezers and other equipment. But you still need a “supply chain” of liquor and beer. Fortunately, if you are opening a bar, you have many suppliers to choose from for any given product. But if you are starting an ISP, you can build your “store” (i.e., your local network running to your customers’ homes), but you still need a supplier of the “product” that you are going to sell to the public (i.e., bandwidth connected to the Internet backbone). For the startup ISP, there is often just one single supplier of the “product” — the local monopoly phone company — and in most cases, it is completely unrestrained by regulations in what they can charge. So it’s like wanting to open a bar, but the only place you could open it was right next to a competing bar owned by the only company that manufactures and supplies liquor.

³³⁶ Dan Jones, “Clearwire’s Backhaul Bet,” *Unstrung*, May 16, 2008.

require the Commission tackling the problem on multiple fronts. The FCC first should reverse all of the enterprise broadband forbearance orders and apply a narrower market analysis. It should also revisit and re-engineer its special access pricing flexibility regime and impose some pricing discipline in this monopoly market.

The Commission must expand the availability of unlicensed spectrum to encourage deployment by small-business ISPs. The greatest success of recent broadband policies is Wi-Fi operating on unlicensed spectrum. The Commission's recent move to expand the availability of unlicensed spectrum by opening up the unassigned television channels (also known as "white spaces") for wireless broadband is a great step forward.³³⁷ But the new FCC must ensure that this effort is seen through to the end and not derailed by the self-serving actions of incumbent providers or broadcasters.

The Commission will also need to continue its innovative hybrid "license-lite" approach adopted in the 3.65 GHz spectrum orders.³³⁸ And it will need to explore innovative alternatives to auctions for licensed spectrum, such as revenue-sharing models, to ensure that new entrants are able to effectively compete with today's mobile giants. Any new spectrum policy would benefit from opening new bands for licensed commercial use or opportunistic sharing. In particular, the NTIA should perform a thorough analysis of government spectrum holdings to determine if any of those frequencies can be made available for broadband deployment.³³⁹

No single policy will bring the appropriate level of competition needed to make our broadband market all that it should be. It will require many different initiatives aimed at different levels of the broadband market to accomplish the goals as set forth in Section 706. To deliver consumers the types of 100 Mbps connections that are commonplace in Japan, the U.S. market will need vigorous, multi-modal competition — that is, competition between delivery platforms (e.g., DSL, cable and wireless) as well as competition within delivery platforms.

³³⁷ See *Unlicensed Operation in the TV Broadcast Bands, Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band*, ET Docket Nos. 04-186, 02-380, Second Report and Order and Memorandum Opinion and Order, 23 FCC Rcd 16807 (2008) (*Whitespaces Order*).

³³⁸ In the 3.65 GHz band, the Commission established a "licensing-lite" or non-exclusive licensing approach for Wi-Max providers. This process essentially consists of users registering with the Commission for non-exclusive use of the spectrum. See *Wireless Operations in the 3650-3700 MHz Band; Rules for Wireless Broadband Services in the 3650-3700 MHz Band*, ET Docket No. 04-151, Report and Order and Memorandum Opinion and Order, 20 FCC Rcd 6502 (2005) (*3.65GHz Order*); also *Wireless Operations in the 3650-3700 MHz Band; Rules for Wireless Broadband Services in the 3650-3700 MHz Band*, ET Docket No. 04-151 Memorandum Opinion and Order, 22 FCC Rcd 10421 (2007) (*3.65GHz Order on Reconsideration*).

³³⁹ Sen. John Kerry (D-Mass.), along with Sens. Olympia Snowe (R-Maine), Bill Nelson (D-Fla.) and Roger Wicker (R-Miss.) recently introduced legislation that would make this happen. See "Radio Spectrum Inventory Act," S.649, 111th Congress (2009). See also J.H. Snider, "The Art of Spectrum Lobbying: America's \$480 Billion Spectrum Giveaway, How it Happened, and How to Prevent it From Recurring," New America Foundation (2007).

The United States cannot and should not bet its digital future on one form of competition.

Not all of these changes will be supported by the incumbent industries. But it is essential that the FCC recognize that the short-term financial interests of dominant firms must not be permitted to overshadow the larger national interest in charting a successful path for our digital future.

Conclusion

Congress provided the FCC with a blueprint for competition, deployment, innovation and consumer protection in 1996. But over the past several years, the Commission has shown nothing but contempt for the public interest. It has shown an indifference to the plight of those on the wrong side of the digital divide and has completely abdicated its responsibility to protect consumers from the abuses of market power. The FCC has ignored the mountains of evidence that our broadband markets are concentrated, anti-competitive, and fundamentally broken. At every turn, the Commission has overreached — removing important consumer protections and leaving nothing in their place.

This record of abject failure must end now. The new FCC must use the opportunity of the national broadband plan to signal a new direction. No mistake is so catastrophic that it cannot be undone. We must look to salvage those policies that have yielded some benefit and reverse the rest. We must look to innovative and creative ideas to offer up new choices and alternatives.

The status quo is unacceptable. If we watch and wait, trusting that today's artificially constrained marketplace will magically solve the broadband problem, we will see America slip further behind the rest of the world and widen the digital divide. The data and evidence of our broadband problems are clear and irrefutable. We continue to have large gaps in broadband service across the nation. Worse still, the networks we do have are slower, more expensive, and less competitive than the global leaders in broadband performance.

The optimistic predictions about mobile wireless broadband do not appear to hold any real promise of a viable "third pipe." Indeed, competition in the special access and enterprise markets is even worse than in the residential duopoly broadband market. Meanwhile, network operators are following the demands of quarterly returns — investing in networks where costs are lowest and profits highest and leaving the rest of the market behind. Incumbents are also busy hatching plans to dismantle the open, neutral marketplace for commercial applications and political speech to squeeze out higher revenues. And carriers have only offered self-interested solutions to our universal service problems — none of which will help bring rural and low-income Americans robust next-generation broadband services.

So the task falls before the new Commission to solve these problems. This is no easy feat, as the actions of the past decade have left an indelible scar on our communications market. But instead of working around the edges, the new Commission must aggressively tackle the work of formulating a national broadband plan. This plan should be a broad platform of initiatives that addresses the complexity of the issues and maximizes the potential for both near- and long-term success. The plan should focus on enhancing both inter- and intra-modal competition. And the plan should make protecting competition and speech in the content and applications markets a top priority.

The national broadband plan should be designed around aspirations to particular social and economic outcomes, not the business models of the incumbent telecommunications carriers. The first goal should be the universal deployment of robust next-generation broadband services. The second goal should be the creation of a competitive marketplace that delivers affordable broadband. And the third goal should be enhancing the openness, speed, coverage and reliability of next-generation communications networks.

The vision for our national broadband plan must be bold, comprehensive and ambitious. The FCC needs to change course and turn away from the conventional political wisdom of complacent incrementalism and embrace a policy agenda that finally turns the promise of the Communications Act into a reality for all Americans.