

IMPLEMENTATION AND BENCHMARKS

CHAPTER 17

THIS PLAN IS IN BETA, AND ALWAYS WILL BE.

Like the Internet itself, this plan will always be changing—adjusting to new developments in technologies and markets, reflecting new realities and evolving to realize previously unforeseen opportunities.

The plan is both a “noun” and a “verb.”¹ Of course, the “noun”—the March 2010 version of this plan—will be forever available, preserved deep in caches and crawled by search engines. The “verb,” though, will be forever alive—updated regularly and driven by new data, analysis and scenarios that the “noun” could not foresee.²

Implementation of this National Broadband Plan requires a long-term commitment to measuring progress and adjusting programs and policies to improve performance. It requires periodic assessments of where the country stands in broadband deployment, adoption and utilization; in competition across networks, devices and applications; and in how effectively national priorities embrace the power of broadband.

But evaluation is not an excuse for paralysis. Actions and their results matter most to capturing the opportunities broadband presents.

This plan recommends significant action by the Federal Communications Commission (FCC), the Executive Branch and Congress and a strong partnership among all broadband stakeholders. Federal action is necessary, but state, local and Tribal governments, corporations and community-based organizations must all do their part to build a high-performance America.

RECOMMENDATIONS

- ▶ The Executive Branch should create a Broadband Strategy Council to coordinate the implementation of National Broadband Plan recommendations.
- ▶ The FCC should quickly publish a timetable of proceedings to implement plan recommendations within its authority, publish an evaluation of plan progress and effectiveness as part of the annual Section 706 Advanced Services Inquiry, create a Broadband Data Depository and continue to utilize Broadband.gov as a public resource for broadband information.
- ▶ The FCC should publish a Broadband Performance Dashboard with metrics designed to track broadband plan goals.

17.1 IMPLEMENTATION

More than 20 other nations have published national broadband plans. Their implementation efforts highlight the importance of a long-term commitment and coordination across multiple institutions.

International Lessons

Many countries have depended on long-term and high-level coordination and collaboration efforts across government to implement their broadband plans. For example, in the mid-1990s South Korea created a durable structure for long-term broadband policy planning by passing a law requiring publication of a national broadband strategy every five years (along with annual implementation plans).³ Since then, South Korea has published three master plans, some with multiple versions.⁴ The statutory obligation to produce new plans every five years has ensured that successive political administrations have made broadband a national priority.

South Korea's Prime Minister chairs the Informatization Promotion Committee (IPC), the entity responsible for implementing South Korea's broadband plans.⁵ The IPC's membership includes 24 ministerial-level representatives, thereby fostering intragovernmental coordination.⁶ Member ministries submit annual implementation plans to the IPC for approval.⁷

Japan provides another example of successful long-term implementation. Japan created an IT Strategy Headquarters to oversee the execution of its broadband strategies, beginning with the e-Japan Strategy of 2001.⁸ Japan's Prime Minister chairs the IT Strategy Headquarters. It also is composed of ministers across agencies with responsibility for broadband policy.⁹ The IT Strategy Headquarters conducts an annual review of broadband policy priorities and directs the implementation of plan recommendations by government agencies, local governments and independent institutions.¹⁰

The United Kingdom has also established a high-level coordinating body to implement broadband strategy. In June 2009, the U.K. government published *Digital Britain*, its first broadband plan.¹¹ Soon after *Digital Britain* was published, the U.K. government published an implementation plan providing for a cross-agency coordination staff and a dedicated legislative

affairs group.¹² The implementation plan also created a Programme Board, responsible for policy proposals, monitoring progress and ensuring value for the public's financial investment.¹³ Recognizing the importance of keeping stakeholders and the public informed of plan progress, the U.K. government also periodically releases implementation updates.¹⁴

RECOMMENDATION 17.1: The Executive Branch should create a Broadband Strategy Council to coordinate the implementation of National Broadband Plan recommendations.

The FCC is the focus of approximately half of the plan's recommendations and the National Telecommunications and Information Administration (NTIA) the President's advisor for telecommunications policy, has responsibility for many actions in the plan. Most of the remaining proposals are directed at other Executive Branch agencies. The Executive Branch should create an entity accountable to ensure implementation across, and foster effective coordination among the multiple agencies targeted by specific recommendations and engage senior-level officials in these efforts.

This proposed Broadband Strategy Council (BSC) could include senior officials from the White House Office of Science and Technology Policy, the National Economic Council and the Office of Management and Budget. The BSC's membership could also include high-level personnel drawn from the FCC, NTIA and other agencies with key roles in implementing plan recommendations.¹⁵ The BSC could also rely on the President's Council of Advisors on Science and Technology for external input and support.

Charter of the Broadband Strategy Council

This plan contains recommendations directed at more than 20 agencies. To ensure timely and effective implementation, the BSC should be given direct responsibility for managing the execution of the plan's recommendations to the Executive Branch.

The President could require that Executive Branch departments and agencies submit project plans to the BSC on proposed steps to implement plan recommendations. Additionally, the BSC could track recommendations requiring congressional action with the FCC and legislative affairs offices in the Executive Branch.

Today, the responsibility for broadband-related government policy and programs is spread across many federal agencies as well as state, Tribal and local governments. Successful implementation of the recommendations in this plan will intensify the need for coordination among these actors. The BSC should create a forum for relevant agencies to discuss broadband policy, assign responsibility for joint duties, share best practices and coordinate broadband funding so that broadband-related government spending has maximum economies of scale and maximum impact.¹⁶

RECOMMENDATION 17.2: The FCC should quickly publish a timetable of proceedings to implement plan recommendations within its authority, publish an evaluation of plan progress and effectiveness as part of the annual Section 706 Advanced Services Inquiry, create a Broadband Data Depository, and continue to utilize Broadband.gov as a public resource for broadband information.

The FCC is responsible for implementing approximately half of the plan's recommendations. It should quickly publish a timetable of proceedings for implementing broadband plan recommendations directed to the FCC.

Additionally, given the evolving nature of the broadband ecosystem, the National Broadband Plan should be periodically reviewed and revised to reflect new realities. The FCC should conduct a National Broadband Plan strategy review as part of its annual Section 706 Advanced Services Inquiry. The review should analyze plan progress and effectiveness, and, if necessary, recommend strategic and tactical adjustments that will help America meet plan goals. This review should also track the implementation of plan recommendations.

FCC data collection and analysis efforts are essential to understanding the effectiveness of plan policies and the progress being made toward plan goals. The plan includes recommendations to improve the quality and transparency of this process.

The FCC should also create a Broadband Data Depository on the Internet to give researchers and the public better access to the FCC's data. This will help the FCC serve its essential role as a source of independent data on broadband deployment, adoption and usage in America. The FCC should have a general policy of making the data it collects available to the public, ideally over the Internet, except in certain circumstances such as when the data are competitively sensitive, protected by copyright or classified. Additionally, the FCC should have a separate process for allowing researchers access to non-public data, subject to certain restrictions.¹⁷

The FCC should also continue to utilize Broadband.gov, which has been a successful Web portal for communicating with the public in an open and interactive fashion about the development of the National Broadband Plan. Going forward, this website should serve as a source for tracking the implementation of the plan. It should also serve as a consumer resource for information about broadband. In addition to hosting the Broadband Performance Dashboard (see Recommendation 17.3), Broadband.gov should contain updates on the progress made in implementing each recommendation, links to the National Broadband Map, access to broadband quality tests and surveys, details on how to obtain computer literacy education, and links to third-party resources from which consumers can purchase broadband.

17.2 BENCHMARKING

Measuring the effects of a broadband plan over time is a critical challenge. This plan recommends that the FCC track and report several important broadband indicators: how many people and businesses have access to broadband, how many subscribe, what speeds they get, how much they pay and what they do with it.¹⁸

In the same spirit as these recommendations, other countries have expanded their broadband data compilation and dissemination efforts to provide more information to policymakers and consumers. These efforts include collecting and publishing richer information about the extent of broadband deployment, utilization and pricing through broadband mapping,¹⁹ usage surveys,²⁰ pricing portals²¹ and broadband quality of service measurements.²²

In preparing the National Broadband Plan, the FCC used existing resources such as data from Broadband Deployment Form 477, which was recently updated to include census tract-level data. The FCC created a broadband deployment model, conducted surveys of residential and business broadband consumers and performed a detailed consumer preference analysis of consumers' willingness to pay for broadband services. The FCC has also developed tools and mobile applications to collect address level and location-based data on actual delivered speed over fixed and mobile broadband networks.

Nevertheless, as recommended in Chapter 4, the FCC needs to collect more detailed and accurate data on actual broadband availability, penetration, pricing and network performance in order to accurately benchmark progress toward plan goals.²³ Only with these data inputs can the FCC publish a Broadband Performance Dashboard.

RECOMMENDATION 17.3: The FCC should publish a Broadband Performance Dashboard with metrics designed to track broadband plan goals.

The FCC should publish a Broadband Performance Dashboard to supplement the improved data collection process recommended in the plan. This dashboard should display key progress indicators aligned with plan goals, enable the public to understand important broadband performance metrics and clearly communicate plan progress and effectiveness. The dashboard should be updated regularly and provide data metrics that track the broadband performance goals detailed in Chapter 2. The sample dashboard (see Exhibit 17-A) details the metrics that the FCC should collect and analyze in order to track progress towards plan goals.

While these fundamental broadband indicators are important, it is equally important to know how broadband affects the very core of the economy: innovation, productivity and the way people live and work. Measures like broadband availability and adoption, while enormously important, cannot provide that kind of information.

The problem is that it is difficult, if not impossible, to know how new technologies, like broadband, will ultimately integrate themselves into the economy. Measurement bias against new technologies by conventional indices makes this even more challenging.²⁴ Nobel Laureate Robert Solow famously quipped more than a decade ago that “you can see the computer age everywhere but in the productivity statistics.”²⁵ Indeed, it was not until well after companies began using computers that it was possible to statistically attribute any productivity effects to computers or information technology.

If this broadband plan is effective, we will see rapid progress in terms of increased adoption, especially by currently disadvantaged groups; faster speeds; transitions to electronic medical health records and Smart Grids; and better incorporation of broadband into education and government. But none of those are ends in themselves. Broadband access by more people opens up new opportunities for them, helping them to unleash their potential. Faster broadband speeds and better broadband quality improve incentives for entrepreneurs to innovate. And savings realized by incorporating broadband into existing areas like education and health care represent resources that can be newly invested elsewhere.

Thus, if we succeed, not only will the indicators that we currently measure improve, but we will also see improvement in other areas of the economy and will need to derive new indicators to measure changes in industries and activities that do not yet exist.

*Exhibit 17-A:
Broadband Goals
and Performance
Dashboard Sample*

Goals for 2020 (see Chapter 2)	Metrics	Sources
At least 100 million U.S. homes should have affordable access to world-class actual download speeds of at least 100 megabits per second and actual upload speeds of at least 50 megabits per second.	The nationwide, and per provider, average actual upload and download speeds of broadband networks	FCC network performance measurements and provider disclosures (See Recs. 4.4-4.6.)
	Number of households with access to broadband networks with sufficient speed	Future revisions to Form 477 data (See Rec. 4.2.)
	The nationwide, and per provider, minimum price for a broadband subscription with sufficient speed	Future revisions to Form 477 data (See Rec. 4.2.)
The United States should lead the world in mobile innovation, with the fastest and most extensive wireless networks of any nation.	MHz of spectrum released since 2010	FCC self-reporting
	The nationwide, and per provider, average actual upload and download speeds of mobile broadband networks, by geographic area	FCC network performance measurements and provider disclosures (See Recs. 4.4-4.6.)
	Percentage of population covered by 3G and 4G services	Future revisions to Form 477 data (See Rec. 4.2)
	Percentage of Americans that subscribe to mobile broadband services, both overall and per socio-economic and demographic groups	FCC consumer surveys (Broadband Data Improvement Act (BDIA) mandated survey)
Every American should have affordable access to robust broadband service and the means and skills to subscribe if they so choose.	Percentage of households with access to broadband networks with sufficient speed	Future revisions to Form 477 data (See Rec. 4.2.)
	The nationwide, and per provider, minimum price for a broadband subscription with sufficient speeds	Future revisions to Form 477 data (See Rec. 4.2.)
	Percentage of Americans that subscribe to broadband services, both overall and by socio-economic and demographic group	Future revisions to Form 477 data, FCC Consumer Surveys (See Rec. 4.2), and mandated survey ²⁶
	Percentage of Americans with sufficient digital literacy skills	FCC consumer surveys (BDIA mandated survey)
Every American community should have affordable access to service of at least 1 gigabit per second to anchor institutions such as schools, hospitals and government buildings.	Average actual upload and download speeds of broadband networks	FCC network performance measurements and provider disclosures (See Recs. 4.4-4.6.)
	Deployment of networks with sufficient speed	Future revisions to Form 477 data (See Rec. 4.2.)
	Percentage of communities with sufficient access to broadband	Future revisions to Form 477 data (See Rec. 4.2.)
	The nationwide, and per provider, minimum price for an institutional broadband subscription with sufficient speeds	Future revisions to Form 477 data (See Rec. 4.2.)
To ensure the safety of the American people, every first responder should have access to a nationwide, wireless, interoperable broadband public safety network.	Percentage of first responders using the nationwide public safety network	Federal Emergency Management Agency survey (See Rec. 16.1)
To ensure that America leads in the clean energy economy, every American should be able to use broadband to track and manage their real-time energy consumption.	Percentage of American homes that have smart electric meters capable of communicating real-time energy information to consumers	Federal Energy Regulatory Commission metering assessment and the Department of Energy Smart Grid Systems Report ²⁷

17.3 THE LEGAL FRAMEWORK FOR THE FCC'S IMPLEMENTATION OF THE PLAN

The plan sets out a strategic vision for America, establishing national goals regarding broadband and recommending specific policies to achieve those goals. It does not reach conclusions about or explore in detail the many legal issues that will be relevant to the FCC's implementation of the plan. These will be addressed through notice-and-comment rulemakings the FCC will conduct following the plan. A variety of parties have, however, offered thoughts on the proper legal framework for the FCC's plan implementation. The following section provides the relevant background and summarizes these comments.

Historically, the FCC treated broadband transmission as a common carrier service subject to the statutory requirements set forth by Title II of the Communications Act.²⁸ Facilities-based carriers that provided “enhanced” or “information” services—remote computer applications that allow subscribers to access, modify, or interact with information—were required to offer on a common carrier basis the underlying transmission function known as a “basic” service.²⁹

Beginning in 2002, the FCC adopted a series of orders classifying broadband Internet access services as information services subject to the FCC's general jurisdiction under Title I of the Communications Act.³⁰ Although the Act does not establish specific rules for providers of information services, the Supreme Court has held that the Communications Act gives the FCC “ancillary authority” to regulate matters that fall within its general jurisdiction but are not directly addressed by the substantive provisions of the Act.³¹ In *NCTA v. Brand X*, the United States Supreme Court held that the FCC's conclusion that cable modem service providers offer only an information service was a reasonable interpretation of an ambiguous statute.³² The Commission then applied a similar analysis to Internet access provided via Digital Subscriber Line (DSL),³³ broadband over power line,³⁴ and wireless broadband technologies,³⁵ classifying all of these as information services. These broadband services are not subject to the requirements Congress established for common carrier services, unless the provider chooses to offer broadband transmission as a stand-alone telecommunications service.³⁶

Comments in the record include competing views on the appropriate legal framework for implementing plan recommendations that involve broadband Internet access services. One approach would involve Congress enacting legislation to direct or enable the FCC to implement specific plan recommendations. Absent Congressional action, however, parties discuss two alternative approaches to plan implementation.

The first suggested approach is to rely on ancillary authority under Title I when promulgating most of the recommended rules and regulations regarding broadband. Some parties believe that Title I and the doctrine of ancillary authority, together with various other provisions of the Act addressing such matters as spectrum, cable television, and universal service, provide the FCC sufficient authority to advance broadband deployment and adoption, including to establish direct support for broadband under the Universal Service Fund's High Cost, Lifeline and Link-Up programs;³⁷ to ensure privacy protections regarding sharing of consumers' personal information;³⁸ and to promote accessibility for people with disabilities.³⁹ Others have expressed doubts about the adequacy of Title I to support FCC efforts to advance broadband goals.⁴⁰

Some commenters have suggested a second approach, in which the FCC would implement certain plan recommendations under its Title II authority, after classifying broadband services as telecommunications services. These commenters believe such an approach would provide a sounder legal basis for establishing direct support for rural broadband under the Universal Service Fund's High Cost program and broadband access under the Lifeline and Link-Up programs;⁴¹ requiring enhanced disclosures of broadband speed, performance and pricing;⁴² and other plan recommendations, including ensuring privacy protections regarding sharing of consumers' personal information.⁴³ Commenters further note that classifying broadband services as telecommunications services would not require the application of all requirements of Title II to broadband.⁴⁴ Congress gave the FCC “forbearance authority” in section 10 of the Act. Consistent with the comments, this forbearance authority would permit the FCC to narrowly tailor its use of Title II to advance the policies described above without imposing additional regulatory burdens. To the degree that wireless-based broadband is a common carrier service, section 332 of the Act grants similar authority to forbear.⁴⁵ Other parties, however, believe that reverting to Title II to implement the plan would be unwise policy, contending that Title II is an ill-fitting, over-regulatory legal framework for broadband Internet access services.⁴⁶

The FCC will consider these and related questions as it moves forward to implement the plan.

17.4 CONCLUSION

This plan is premised on the potential of broadband to improve lives today and for generations.

But broadband alone will not solve America's problems. It cannot guarantee that the United States will lead the world in the 21st century. It cannot promise that the U.S. and other nations will conquer crippling inequality. It cannot ensure that the U.S. bestows the best job, education, health care, public safety and government services on every American.

Broadband is a critical prerequisite, though, to solutions to many of America's problems. It can open up ways for American innovators and entrepreneurs to reassert U.S. leadership in some areas and extend it in others. It can unlock doors of opportunity long closed by geography, income and race. It can enable education beyond the classroom, health care beyond the clinic and participation beyond the town square.

In 1938, President Roosevelt travelled to Gordon Military College in Barnesville, Georgia, to speak at the dedication of a local utility. "Electricity is a modern necessity of life, not a luxury," the President told the audience, "That necessity ought to be found in every village, in every home and on every farm in every part of the wide United States."⁴⁷

He added, "Six years ago, in 1932, there was such talk about the more widespread and the cheaper use of electricity." But words did not matter until the country, "reduced that talk to practical results."⁴⁸

Broadband, too, is a modern necessity of life, not a luxury. It ought to be found in every village, in every home and on every farm in every part of the United States.

There has long been talk of the widespread and affordable use of broadband. This plan is a transition from simple chatter to the difficult but achievable reality of implementation. It is a call to action for governments, businesses and non-profits to replace rhetoric with targeted, challenging actions.

It is time again to reduce talk to practical results.

CHAPTER 17 ENDNOTES

- 1 See Plan | Define Plan at Dictionary.com, <http://dictionary.reference.com/browse/plan> (last visited Mar. 1, 2010).
- 2 See generally Letter from Andrew Blau et al., Monitor Group, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 09-51 (Feb. 19, 2010) Attach.
- 3 Baljit Singh Grewal, *Neoliberalism and Discourse: Case Studies of Knowledge Policies in the Asia-Pacific* 130–33 (2008) (unpublished Ph.D. thesis, Auckland University of Technology), available at <http://aut.researchgateway.ac.nz/bitstream/10292/407/4/GrewalB.pdf>.
- 4 REPUBLIC OF KOREA NAT'L INFO. SOC'Y AGENCY, KOREA INFORMATIZED 1–3 (2007), available at http://old.nia.or.kr/open_content/board/fileDownload.jsp?tn=PU_0000100&id=53923&seq=1&f=7.
- 5 Jong Sung Hwang & Sang-Hyun Park, Digital Review of Asia Pacific 2009–2010: .kr Korea, Republic of, http://www.idrc.ca/pan/ev-140957-201-1-DO_TOPIC.html (last visited Feb. 19, 2010).
- 6 Jong Sung Hwang & Sang-Hyun Park, Digital Review of Asia Pacific 2009–2010: .kr Korea, Republic of, http://www.idrc.ca/pan/ev-140957-201-1-DO_TOPIC.html (last visited Feb. 19, 2010).
- 7 Letter from Young Kyu Noh, Minister Counselor of Broadcasting and ICT, Embassy of the Republic of Korea, to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 09-47, 09-51, 09-137 (filed Dec. 15, 2009) at 1.
- 8 The full name of the IT Strategy Headquarters is the Strategic Headquarters for the Promotion of an Advanced Information and Telecommunications Network Society.
- 9 Prime Minister of Japan, Basic Law on the Formation of an Advanced Information and Telecommunications Network Society, http://www.kantei.go.jp/foreign/it/it_basiclaw/it_basiclaw.html (last visited Mar. 1, 2010).
- 10 Letter from Masaru Fujino, Counselor for Communications Policy, Embassy of Japan, to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 09-47, 09-51, 09-137 (filed Dec. 15, 2009) App. A (National Broadband Strategies in Japan (2001–09)).
- 11 DEPARTMENT FOR CULTURE, MEDIA AND SPORT AND DEPARTMENT FOR BUSINESS, INNOVATION AND SKILLS, DIGITAL BRITAIN: FINAL REPORT (2009), available at <http://www.culture.gov.uk/images/publications/digitalbritain-finalreport-jun09.pdf>.
- 12 DEPARTMENT FOR CULTURE, MEDIA AND SPORT AND DEPARTMENT FOR BUSINESS, INNOVATION AND SKILLS, DIGITAL BRITAIN: IMPLEMENTATION PLAN 1–4 (2009) (DIGITAL BRITAIN: IMPLEMENTATION PLAN), available at http://www.culture.gov.uk/images/publications/DB_ImplementationPlanv6_Aug09.pdf.
- 13 DIGITAL BRITAIN: IMPLEMENTATION PLAN 1–4.
- 14 DEPARTMENT FOR CULTURE, MEDIA AND SPORT AND DEPARTMENT FOR BUSINESS, INNOVATION AND SKILLS, DIGITAL BRITAIN: IMPLEMENTATION UPDATE—DECEMBER 2009 (2009), available at http://www.culture.gov.uk/images/publications/DB_Implementationplan_Dec09.pdf.
- 15 At a minimum, membership should include representatives from the Federal Communications Commission, the Department of Commerce and the National Telecommunications and Information Administration, the Department of Homeland Security, the Department of Education, the Department of Energy, the Department of Health and Human Services, the Department of Housing and Urban Development, the Department of Agriculture, the Small Business Administration, and other agencies who may be responsible for implementing recommendations set forth in the plan.
- 16 See also Ch. 14, Recommendation 14.3, *supra* (recommending that federal agencies coordinate grants that have a broadband connectivity requirement).
- 17 For example, certain U.S. Census data are made available to researchers in a controlled fashion at the U.S. Census Bureau's Center for Economic Studies and Research data center. See U.S. Census Bureau Center for Economic Studies, Research Program Overview, <http://www.ces.census.gov/index.php/ces/researchprogram> (last visited Feb. 14, 2009).
- 18 See Ch. 4, *supra* (recommending more detailed and accurate broadband data collection).
- 19 See, e.g., GOV'T OF GERMANY, BUNDESMINISTERIUM FÜR WIRTSCHAFT UND TECHNOLOGIE, BREITBANDATLAS 2009_02 (2009) (detailing Germany's broadband mapping efforts), available at <http://www.zukunft-breitband.de/Dateien/BBA/PDF/breitbandatlas-bericht-2009-02,property=pdf,bereich=bba,sprache=de,rwb=true.pdf>; NAT'L IT AND TELECOM AGENCY, GOV'T OF DENMARK, MAPPING OF BROADBAND ACCESS SERVICES IN DENMARK (2004), available at <http://en.itst.dk/the-governments-it-and-telecommunications-policy/publications/mapping-of-broadband-access-services-in-denmark-status-by-mid-2004/Mapping%20of%20Broadband%20Access%20Services%20in%20Denmark%20-%20Status%20by%20mid-2004.pdf>; The National Broadband Map: New Zealand's Broadband Landscape, Home, www.broadbandmap.govt.nz/map (last visited Feb. 19, 2010).
- 20 See, e.g., Swedish Post and Telecom Agency, PTS Statistics Portal, http://www.statistics.pts.se/start_en/ (last visited Feb. 19, 2010); FINNISH COMM'NS REG. AUTH., GOV'T OF FINLAND, USE OF TELECOMMUNICATIONS SERVICES (2009), http://www.ficora.fi/attachments/suomiry/5n2kRC9zk/Tutkimusraportti_2009_Telepalveluiden_kayttotutkimus.pdf (in Finnish).
- 21 See, e.g., Startsidea, Telepriskollen, <http://www.telepriskollen.se/> (last visited Feb. 19, 2010) (Swedish site for comparing tariffed services); Finnish Communications Regulatory Authority, Surveys and Statistics: Market Information, <http://www.ficora.fi/en/index/tutkimukset/puhelinjalajaikaistapalvelut/markkinatieto.html> (last visited Mar. 7, 2010).
- 22 See, e.g., IT-Borger, Bredbåndsmåleren, <http://www.it-borger.dk/verktøjer/bredbaandsmaaleren> (last visited Feb. 19, 2010) (providing a broadband speed test in Danish); Nettimitari—etusivu, <http://nettimitari.ficora.fi/nettimitari/mainPage.aspx> (last visited Feb. 19, 2010) (Finland's broadband speed test).
- 23 See Ch. 4, *supra* (recommending more detailed and accurate broadband data collection).
- 24 Paul A. David, *The Dynamo and the Computer: An Historical Perspective on the Modern Productivity Paradox*, 80 AEA PAPERS & PROCEEDING, 355, 356–60 (1990), available at http://elsa.berkeley.edu/~bhall/e124/David90_dynamo.pdf.
- 25 Robert Solow, *We'd Better Watch Out*, N.Y. REV. OF BOOKS, July 12, 1987, at 36.
- 26 The Broadband Data Improvement Act (BDIA) mandates that the FCC conduct periodic surveys of national characteristics of the use of broadband services. See BDIA, Pub. L. No. 110-385, 122 Stat. 4096 (2008).
- 27 FED. ENERGY REG. COMM'N, ASSESSMENT OF DEMAND RESPONSE & ADVANCED METERING (2009), available at <http://www.ferc.gov/legal/staff-reports/sep-09-demand-response.pdf>; DEP'T OF ENERGY, SMART GRID SYSTEMS REPORT (2009), available at http://www.oe.energy.gov/DocumentsandMedia/SGSRMain_090707_lowres.pdf.
- 28 See 47 U.S.C. §§ 201–76.
- 29 *Amendment of Section 64.702 of the Comm'n's Rules & Regs., Second Computer Inquiry*, Docket No. 20828, Final Decision, 77 F.C.C. 2d 384, 417–35, 86–132, 461–75, paras. 201–31 (1980) (*Computer II Final Decision*), *aff'd sub nom. Computer & Comm'ns Indus. Ass'n v. FCC*, 693 F.2d 198 (D.C. Cir. 1982), *cert. denied*, 461 U.S. 938 (1983); *Amendment of Section 64.702 of the Comm'n's Rules & Regs. (Third Computer Inquiry)*, CC Docket No. 85-229, Phase I, Report and Order, 104 F.C.C. 2d 958, para. 4 (1986) (*Computer III Phase I Order*) (subsequent history omitted); see also 47 C.F.R. § 64.702 (defining “enhanced service”).
- 30 47 U.S.C. §§ 151–61.
- 31 *United States v. Southwestern Cable Co.*, 392 U.S. 157 (1968); *United States v. Midwest Video Corp.*, 406 U.S. 649 (1972). The Commission has ancillary authority when a matter falls within its jurisdiction over interstate communications by wire or radio and the proposed action is “reasonably ancillary to the effective performance of the Commission's various responsibilities.” See 47 U.S.C. § 152(a); *Southwestern Cable*, 392 U.S. at 172–73; *Midwest Video*, 406 U.S. at 667–68 (“[T]he critical question . . . is whether the Commission has reasonably determined that its [regulatory action] will further the achievement of long established regulatory goals.” (quotation marks omitted)); *United Video Inc. v. FCC*, 890 F.2d 1173 (D.C. Cir. 1989) (upholding ancillary authority where action was taken to further “a valid communications policy goal”).
- 32 *Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967, 986–87 (2005).
- 33 See *Framework for Broadband Access to the Internet over Wireline Facilities; Universal Service Obligations of Broadband Providers*, CC Docket Nos. 02-33, 01-337, 95-20, 98-10, WC Docket Nos. 04-242, 05-271, Report and Order and Notice of Proposed Rulemaking, 20 FCC Red 14853, 14864, 14909–11, para. 15, paras. 103–04 (2005) (*Wireline Broadband Report and Order and Broadband Consumer Protection Notice*), *aff'd sub nom. Time Warner Telecom, Inc. v. FCC*, 507 F.3d 205 (3d Cir. 2007).

CHAPTER 17 ENDNOTES

- 34 *United 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, 13286, 13288, paras. 9, 12 (2006) (*BPL-Enabled Broadband Order*).
- 35 *Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks*, WT Docket No. 07-53, Declaratory Ruling, 22 FCC Rcd 5901, 5909-10, 5912, paras. 22, 29 (2007) (*Wireless Broadband Order*).
- 36 *Wireline Broadband Report and Order*, 20 FCC Rcd at 14858, para. 5, 14900-03, paras. 89-95, 14909-10, para. 103; *BPL-Enabled Broadband Order*, 21 FCC Rcd at 13289, para. 15; *Wireless Broadband Order*, 22 FCC Rcd at 5913-14, para. 33. The Commission, however, has interpreted the *Wireline Broadband Order* to mean that rate-of-return ILECs are not entitled to offer broadband Internet access transmission on a non-common carrier basis until the Commission has addressed associated cost allocation issues. See *Petition of ACS of Anchorage, Inc. Pursuant to Section 10 of the Communications Act of 1934, as Amended (47 USC Section 160(c)), for Forbearance from Certain Dominant Carrier Regulation of Its Interstate Access Services, and for Forbearance from Title II Regulation of its Broadband Services, in the Anchorage, Alaska, Incumbent Local Exchange Carrier Study Area*, WC Docket No. 06-109, Memorandum Opinion and Order, 22 FCC Rcd 16304, 16339-40, paras. 75, 80 (2007).
- 37 See, e.g., Letter from Gary L. Phillips, General Attorney & Associate General Counsel, AT&T Services, Inc., to Marlene H. Dortch, Secretary, FCC (Jan. 29, 2010), GN Docket Nos. 09-51, 09-47, 09-137, WC Docket Nos. 05-337, 03-109, attach. at 6 ("[F]unding of universal service lies at the heart of the Commission's core statutory mission, and widespread deployment and subscribership of broadband Internet access is without question a high national priority. The Commission's jurisdictional analysis [for use of Title I authority] could stop here.").
- 38 See, e.g., Electronic Privacy Information Center Comments in re National Broadband Plan NOI (*A National Broadband Plan for Our Future*, GN Docket No. 09-41, Notice of Inquire, 24 FCC Rcd 4342 (2009) (*National Broadband Plan NOI*), filed June 8, 2009, at 3 (filed by Mark Rotenberg) ("[T]he Commission should exercise its ancillary jurisdiction to ensure that the national broadband plan includes robust privacy safeguards, lest consumers' critical broadband privacy interests go unaddressed.").
- 39 See, e.g., RERC on Telecom Access Comments in re NBP PN#4 (*Comment Sought on Broadband Accessibility for People with Disabilities Workshop II: Barriers, Opportunities, and Policy Recommendations—NBP Public Notice #4*, GN Docket Nos. 09-47, 09-51, 09-137, Public Notice, 24 FCC Rcd 11968 (GCB 2009) (*NBP PN#4*)), filed Oct. 6, 2009, at 11 ("In order to ensure that individuals who use hearing aids and cochlear implants are not left out again, it is critical for the FCC to use its ancillary jurisdiction to carry over the protections now afforded under existing [Hearing Aid Compatibility] laws to handsets used with broadband communication technologies.").
- 40 See, e.g., National Telecommunications Cooperative Association Reply in re National Broadband Plan NOI, filed July 21, 2009, at 5 ("[S]ome argue that [universal service funding to support broadband] should be allowed without a finding that broadband is a supported service. However, there is no rational, policy or legal arguments [sic] to support that position." (citation omitted)), 28 ("Defined under Title II, the FCC can look at broadband and determine what access regulations are appropriate and necessary, and refrain from regulations that are inappropriate and unnecessary. The FCC does not have this is harming consumers, education, public health and safety, and national security."); Public Knowledge Reply in re NBP PN#30 (*Reply Comments Sought in Support of the National Broadband Plan—NBP Public Notice #30*, GN Docket Nos. 09-47, 09-51, 09-137, Public Notice, 25 FCC Rcd 241 (WCB 2010)), filed Jan. 26, 2010, at 5 ("[R]eliance on Title I creates uncertainty for the Commission and imperils the goals of the National Broadband Plan." (citation omitted)).
- 41 See, e.g., The Nebraska Rural Independent Companies Comments in re NBP PN #19 (*Comment Sought on the Role of the Universal Service Fund and Intercarrier Compensation in the National Broadband Plan—NBP Public Notice #19*, GN Docket Nos. 09-47, 09-51, 09-137, Public Notice, 24 FCC Rcd 13757 (OSP 2009) (*NBP PN #19*)), filed Dec. 7, ("[N]ow is the time to fulfill the mandate of Section 254 and to expand USF support to broadband Internet access services by finding they are properly considered telecommunications services, or telecommunications at a minimum." (citation omitted)); National Telecommunications Cooperative Association Reply in re National Broadband Plan NOI, filed July 21, 2009, at 5, 26 ("By classifying all broadband Internet access service as a telecommunications service regulated under Title II, the base of USF contributors will expand to include all broadband service providers as required under section 254."); Public Knowledge Reply in re NBP PN #30, filed Jan. 26 2010. See generally 47 U.S.C. §§ 254(b)(3), (j); *Federal-State Joint Board on Universal Service*, Report and Order, 12 FCC Rcd 8776, 8956-57, paras. 332-40 (1997).
- 42 See, e.g., Metro PCS Communications Comments in re Consumer Information and Disclosure NOI (*Consumer Information and Disclosure; Truth-in-Billing and Billing Format; IP-Enabled Services*, CG Docket No. 09-158, CC Docket No. 98-170, WC Docket No. 04-36, Notice of Inquiry, 24 FCC Rcd 11380 (2009) (*Consumer Information and Disclosure NOI*)), filed Oct. 13, 2009, at 19 (noting that if the Commission proceeds with disclosure rules for communications services, "the better alternative, in the view of MetroPCS, is to find other statutory bases in addition to Title I to justify its actions or not impose regulation. One possible approach, which may go beyond this particular proceeding, is for the Commission to revisit its earlier determinations that high speed broadband Internet access services are not common carrier services."). But see Letter from Mark A. Stachiw, Executive Vice President, General Counsel & Secretary, MetroPCS Communications Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 09-47, 09-51, 09-137, 09-191, WC Docket No. 07-52 (Feb. 3, 2010) (opposing reclassification of broadband Internet access services on policy grounds). See generally 47 U.S.C. §§ 201(b), 258.
- 43 See, e.g., Letter from Michael Weinberg, Staff Attorney, Public Knowledge, to Marlene H. Dortch, Secretary, FCC GN Docket Nos. 09-51, 09-137, 09-157, 09-191, WC Docket Nos. 04-36, 07-52, CC Docket No. 98-170, CG Docket No. 09-158, WT Docket No. 09-66 (Feb. 19, 2010) at 1.
- 44 See, e.g., National Telecommunication Cooperative Association Reply in re National Broadband Plan NOI, filed July 21, 2009, at 28 ("Defined under Title II, the FCC can look at broadband and determine what access regulations are appropriate and necessary, and refrain from regulations that are inappropriate and unnecessary."); Public Knowledge Reply in re NBP PN #30, filed Jan. 26, 2010, at 6 (citing *Wireline Broadband Order*). See generally 47 U.S.C. § 160(a).
- 45 47 U.S.C. § 332(c)(1)(A). That provision does not grant the Commission the authority to forbear from sections 201, 202 or 208.
- 46 See, e.g., Verizon and Verizon Wireless Comments in re National Broadband Plan NOI, filed June 8, 2009, at 87-91 ("[T]he Commission's recommendations . . . should not move backward by supporting . . . ill-fitting common carrier or Title II regulation."); Alcatel-Lucent Reply in re National Broadband Plan NOI, filed July 21, 2009, at 2 ("The Commission must reject calls to repudiate the entire framework under which broadband services are regulated by re-classifying those offerings . . ."), 4-9.
- 47 Pres. Franklin Delano Roosevelt, Address at Barnesville, Georgia (Aug. 11, 1938) (Pres. F. D. Roosevelt 1938 Address at Barnesville, Georgia), available at <http://georgiainfo.galileo.usg.edu/FDRspeeches/FDRspeech38-6.htm>.
- 48 Pres. F. D. Roosevelt 1938 Address at Barnesville, Georgia.