2003

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Recommended Citation

Philip J. Weiser, *Toward a Next Generation Regulatory Strategy*, 35 Loy. U. Chi. L. J. 41 (2003).

Available at: <http://lawcommons.luc.edu/lucj/vol35/iss1/4>

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Toward a Next Generation Regulatory Strategy

Philip J. Weiser*

I. INTRODUCTION

The next generation of telecommunications regulation will differ from the twentieth century model in both substance and institutional strategy. In short, the advent of digital, packet-switched broadband networks that carry all forms of communication will restructure traditional telecommunications markets, requiring a new regulatory strategy. At present, the Federal Communications Commission (“FCC” or “the Commission”) and commentators have only just begun to consider the alternatives for an Internet-centric, next generation regulatory strategy.

In the Internet era, the substantive focus of the FCC will increasingly shift to consider the challenges of technological convergence and the implications of digital technology—be it for the delivery of video, data, or voice.¹ Over time, the FCC will thus need to shift its focus from specific regulatory approaches based on the particular technology platform—say, a distinct regime for satellite, wireless, cable, or telephone networks—to a “layered model” of telecommunications regulation that regulates functionally similar services in the same way regardless of the underlying platform.² In its ongoing efforts to reform

* Associate Professor of Law and Telecommunications, University of Colorado School of Law. Thanks to Barbara Esbin, Ray Gifford, Dale Hatfield, Randy May, and Jon Nuechterlein for their helpful comments and encouragement. Special thanks to Evan Rothstein for first-rate research assistance and Jane Thompson for terrific library assistance.

1. See Daniel F. Spulber & Christopher S. Yoo, *Access to Networks: Economic and Constitutional Connections*, 88 CORNELL L. REV. 885, 889 (2003) (noting that technological convergence “has begun to put pressure on the historical regulatory distinction among voice, video, and data communications, in which each type of service was governed by a separate regulatory regime”).

2. For discussions of the benefits of this approach, see Kevin Werbach, *A Layered Model for Internet Policy*, 1 J. ON TELECOMM. & HIGH TECH. L. 37 (2002), and Douglas C. Sicker & Joshua L. Mindel, *Refinements of a Layered Model for Telecommunications Policy*, 1 J. ON TELECOMM. & HIGH TECH. L. 69 (2002). See also Philip J. Weiser, *Law and Information Platforms*, 1 J. ON TELECOMM. & HIGH TECH. L. 1, 4–15 (2002) [hereinafter Weiser, *Law and Information Platforms*] (discussing layering and “information platforms” concepts). The European Union has already begun to move in this direction. See Scott J. Marcus, *The Emerging*

inter-carrier compensation arrangements, to modernize its spectrum policy, and to develop a new framework for broadband policy, the FCC is moving in exactly this direction.³

The rise of the Internet and the pro-competitive, deregulatory direction called for by the Telecommunications Act of 1996 ("Telecom Act")⁴ have transformed the role and structure of regulation in the telecommunications industry. Traditionally, the FCC relied on a proactive command and control regime that limited the freedom of telecommunications carriers to act as they chose.⁵ In general, the limitations imposed on telecommunications carriers reflected their status as regulated monopoly providers. Notably, under "Baxter's Law,"⁶ the imposition of price regulation on such carriers created an incentive for them to engage in anticompetitive and anticonsumer practices, such as shifting costs from competitive services to regulated monopoly ones and shifting profits in the other direction.⁷ In the new Internet-centric environment, where almost none of the relevant services are subject to price regulation, the FCC has the opportunity—and indeed the responsibility—to consider alternative regulatory strategies.

The traditions of Internet governance and telecommunications regulation view the role of government in very different terms, but these two regimes may well converge on a set of regulatory strategies for the next generation, Internet-centric network. Notably, both academic and policy commentators, who once touted self-regulation as an alternative to public regulation in the Internet context,⁸ continue to move toward a

EU Regulatory Framework: An Innovative Response to Convergence, 2 J. ON TELECOMM. & HIGH TECH. L. (forthcoming 2003) (manuscript on file with author).

3. See, e.g., Spectrum Policy Task Force Report, ET Docket 02-135 (November 2002), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-228542A1.pdf (last visited Sept. 15, 2003); Inquiry Concerning High-speed Access to Internet over Cable and Other Facilities, 17 F.C.C.R. 4798 (2002) [hereinafter Cable Modem Order]; Appropriate Framework for Broadband Access to Internet over Wireline Facilities, 17 F.C.C.R. 3019 (2002) [hereinafter Wireline Broadband NPRM]; Developing a Unified Intercarrier Compensation Regime, Notice of Proposed Rulemaking, 16 F.C.C.R. 9610, para. 122 (2001).

4. Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified in scattered sections of 47 U.S.C.).

5. Joseph D. Kearney & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUM. L. REV. 1323 (1998) (describing old model of regulation).

6. See *infra* notes 129-33 and accompanying text (defining Baxter's Law).

7. See Joseph Farrell & Philip J. Weiser, *Modularity, Vertical Integration, and Open Access Policies: Towards a Convergence of Antitrust and Regulation in the Internet Age*, 17 HARV. J.L. & TECH. (forthcoming December 2003).

8. See, e.g., Llewellyn Joseph Gibbons, *No Regulation, Government Regulation, or Self-Regulation: Social Enforcement or Social Contracting for Governance in Cyberspace*, 6 CORNELL J.L. & PUB. POL'Y 475, 501 (1997).

greater appreciation of the value of governmental oversight.⁹ As for the FCC, it is beginning to realize that its traditional reliance on proactive command and control regulation should give way as it regulates fast-moving markets that are not price-regulated or, at present anyway, dominated by an entrenched monopoly.¹⁰ An important test of this awareness will be how it addresses the demands for access to and the regulation of broadband platforms such as cable modems and DSL.¹¹

This Article proceeds in four parts. Part II outlines the issue of what, if any, access requirements might be imposed on broadband platforms, such as DSL or cable modem services. Part III explains how the Telecom Act provides ample authority, under its ancillary jurisdiction framework, for the FCC to regulate Internet and equipment markets that it must monitor to carry out its central regulatory mission. Part IV examines the FCC's legal authority to address the broadband policy issue. Finally, Part V addresses the substance of how the FCC should regulate broadband platforms, arguing that an "antitrust-like" approach to regulation can provide an effective alternative to the FCC's traditional model of proactive regulation.

II. THE INTERNET ERA, ITS REGULATORY CHALLENGES, AND THE BROADBAND ACCESS ISSUE

The Internet era presents a number of challenges that relate to the FCC's regulation of the physical platforms that support the Internet and

9. See, e.g., Zoe Baird, *Governing the Internet: Engaging Government, Business, and Nonprofits*, 81 FOREIGN AFFAIRS 15, 15 (2002) (arguing that "[a] reliance on markets and self-policing has failed to address adequately important interests of Internet users such as privacy protection, security and access to diverse content" and that it is time for governments to play a role on key Internet policy issues), available at http://www.markle.org/news/06_Baird_15_20.pdf (last visited Sept. 15, 2003). But see Charles Cooper, *Do Gooders Will Wreck the Internet*, CNET NEWS.COM, at <http://news.com.com/2010-1071-978983.html> (Jan. 3, 2003) (criticizing the Baird article). As Baird acknowledges, the evolution in thinking on the role for government in Internet regulation is indebted to Lawrence Lessig's seminal discussion of the issue in LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* (1999).

10. See Review of Regulatory Requirements for Incumbent LEC Broadband Services, 16 F.C.C.R. 22,745, para. 5 (2001) ("[T]he one-wire world for customer access appears no longer to be the norm in the broadband services market as the result of the development of intermodal competition among multiple platforms, including DSL, cable modem service, satellite broadband service, and terrestrial and mobile wireless services.").

11. This Article's discussion of the appropriate regulatory framework for broadband platforms focuses on competition policy issues, putting to one side other matters addressed by common carrier regulation. See, e.g., 47 U.S.C. § 1001 (2000) (requirements to facilitate access to information needed by law enforcement); 47 U.S.C. § 214 (2000) (regulation of exits from the market); 47 U.S.C. § 222(a) (2000) (regulation of privacy related to customer proprietary network information); 47 U.S.C. § 254 (2000 & West Supp. 2003) (universal service); 47 U.S.C. § 255(c) (2000) (access to telecommunications service for disabled persons); 47 U.S.C. § 256 (2000) (network reliability).

other forms of content delivery. Significantly, the “physical layer” is part of the information industries’ ecosystem that includes not just the “content layer,” but also the “applications” and “logical” layers that facilitate the viewing and usage of content.¹² Used in this sense, content is a broad concept that includes, among other things, video games, interactive video, and text messaging. To work effectively, all forms of content delivered over the Internet rely on an application—such as a web browser, media player, or instant messaging system—as well as the Internet’s logical layer, which is comprised of software standards such as the Transmission Control Protocol/Internet Protocol (“TCP/IP”).

The FCC’s main responsibilities related to the Internet involve the regulation of the physical layer. The physical communications facilities, along with the open standards at the logical layer and applications like web browsers, constitute “information platforms,” in that each of them support and depend on the development of products or services that will work in conjunction with them.¹³ Thus, the FCC must remain aware of the entire Internet and information industries’ ecosystem, as its treatment of the physical layer will have important ripple effects in the other layers.¹⁴

As to broadband policy, a critical issue facing the FCC is whether it should regulate access to broadband transmission facilities.¹⁵ The initial debate on this score focused on the question of whether multiple Internet Service Providers (“ISPs”) should be afforded “open access” to cable broadband transmission facilities, but the issue goes beyond both

12. Philip J. Weiser, *The Internet, Innovation, and Intellectual Property Policy*, 103 COLUM. L. REV. 534, 541–45 (2003) [hereinafter Weiser, *The Internet*] (explaining the four layers).

13. For an explanation and discussion of the significance of information platforms, see Weiser, *Law and Information Platforms*, *supra* note 2, at 1, 3–8, and see also Philip J. Weiser, *Internet Governance, Standard Setting, and Self-Regulation*, 28 N. KY. L. REV. 822, 832–42 (2001) [hereinafter Weiser, *Internet Governance*] for an explanation of the significance of concept and an outline of a strategy for regulation.

14. At least in the context of the digital TV transition, the FCC is acutely aware of the “chicken and egg” relationship between the development of content, the deployment of physical transmission facilities, and the adoption of customer premises equipment. See W. Kenneth Ferree, Copyright Piracy Prevention and the Broadcast Flag, Statement Before the Subcommittee on Courts, the Internet, and Intellectual Property (Mar. 6, 2003) (“One of the key pieces of the puzzle—perhaps the key piece of the puzzle—is content. Consumers need a reason to invest in the digital transition.”), available at 2003 FCC LEXIS 1152; see also Digital Broadcast Copy Protection, Notice of Proposed Rulemaking, 17 F.C.C.R. 16,027 (Aug. 8, 2002) (seeking comment on whether a regulatory copy protection regime is needed to support quality digital programming).

15. For purposes of this Article, I will use the term “broadband transmission facilities” to refer to all “last mile” broadband access platforms, including cable modems, DSL services, high speed wireless services, or any other means of providing high speed connectivity.

the treatment of cable facilities and the treatment of ISPs. In short, the concern that motivates proponents of FCC action in this area is that, left unchecked by some form of regulation, the physical layer providers of broadband transmission will leverage their market power into the logical, applications, and content layers.

The broadband access issue first arose as independent ISPs challenged AT&T's merger with TCI, requesting that the FCC and local franchising authorities impose an open access mandate that would allow multiple-ISP access to cable facilities.¹⁶ The FCC declined to address this issue, arguing that "unregulation" avoided making quick and potentially deleterious decisions about how to categorize a new technology.¹⁷ In refusing to make any decisions about how to characterize the facilities used to carry Internet traffic, the FCC abdicated its responsibility to set telecommunications policy, leaving it to the courts to interpret the relevant statutory language and determine what regulatory regime should govern broadband infrastructure.¹⁸ Consequently, even the FCC's de facto policy of imposing no obligations on cable providers failed when courts waded into the vacuum with varying decisions.¹⁹ Thus, when the Supreme Court

16. See *AT&T Corp. v. City of Portland*, 43 F. Supp. 2d 1146 (D. Or. 1999), *rev'd*, 216 F.3d 871 (9th Cir. 2000).

17. Former Chairman Kennard explained that this model of unregulation reflected "advice as old as Western civilization itself: First do no harm—a high-tech Hippocratic Oath." William E. Kennard, *How To End the World Wide Wait*, WALL ST. J., Aug. 24, 1999, at A18 (emphasizing the uncertain future development of the broadband market and stating that "[w]e cannot regulate against problems that have yet to materialize in a market that has yet to develop"), available at 1999 WL-WSJ 24911090; cf. *Denver Area Educ. Telecomms. Consortium, Inc. v. FCC*, 518 U.S. 727, 778 (1996) (Souter, J., concurring) (suggesting that, in the fast-changing world of telecommunications, judges should heed the admonition, "First, do no harm" (quoting the Hippocratic oath)).

18. See *Wireline Broadband NPRM*, *supra* note 3, at 3066 (separate statement of Michael K. Powell) ("The F.C.C. has stood back long enough, up until now making pronouncements in this area in a piecemeal fashion."); Barbara S. Esbin & Gary S. Lutzker, *Poles, Holes, and Cable Open Access: Where the Global Information Superhighway Meets the Local Right-of-Way*, 10 COMM'LAW CONSP'CTUS 23, 55 (2001) ("Ironically, had the F.C.C. chosen to implement its 'hands off' policy through formal regulatory action, rather than through oblique pronouncements, it might have avoided the series of conflicting judicial open access decisions that eventually threatened the agency's ability to set broadband policy on a national basis."); cf. *Denver Area Educ. Telecomms. Consortium*, 518 U.S. at 787 (Kennedy, J., concurring in part and dissenting in part) ("Justice Souter recommends to the Court the precept, 'First do no harm.' The question, though, is whether the harm is in sustaining the law or striking it down." (citation omitted)).

19. See *GTE.Net LLC v. Cox Communications, Inc.*, 185 F. Supp. 2d 1141, 1145 (S.D. Cal. 2002) ("There has been widespread and frustrating disagreement over the proper classification of cable Internet service."). Compare, e.g., *AT&T Corp. v. City of Portland*, 216 F.3d 871, 878 (9th Cir. 2000) (ruling that cable broadband Internet transport service is a "telecommunications," not "cable" service), with *MediaOne Group, Inc. v. County of Henrico*, 257 F.3d 356, 365 (4th Cir.

addressed a related issue, Justice Thomas condemned the FCC's refusal to classify cable broadband infrastructure, explaining that its responsibility to administer the statute "does not permit the FCC to avoid this question."²⁰ More significantly, the Ninth Circuit later concluded that its own precedent—and not the ultimate FCC determination—provides the authoritative interpretation of the statute, thereby impeding the FCC's ability to implement its preferred regulatory solution.²¹

In 2002, the FCC finally commenced a set of proceedings to develop a coherent and unified regulatory framework for the broadband era.²² Even discounting for the overly optimistic hype, it seems clear that the advent of broadband Internet access will change the Internet significantly, facilitating a new series of applications for Internet users.²³ The early results and conventional wisdom suggest that the cable and telephone providers will dominate this market, with fixed wireless and satellite offerings coming from behind.²⁴ Nonetheless, we are still in the dawn of the broadband era,²⁵ as even though broadband

2001) (holding that cable broadband Internet transport involved "telecommunications facilities," but declining to classify service).

20. *Nat'l Cable & Telecomm. Ass'n v. Gulf Power Co.*, 534 U.S. 327, 348–49 (2002) (Thomas, J., concurring in part and dissenting in part).

21. *See Brand X Internet Servs. v. FCC*, 345 F.3d 1120, 1132 (9th Cir. 2003) (per curiam) (following a judicial interpretation of the Communications Act that differed from the FCC's interpretation).

22. *See, e.g., Cable Modem Order*, *supra* note 3; *Wireline Broadband NPRM*, *supra* note 3; *see also* Michael K. Powell, Remarks at the Broadband Technology Summit (Apr. 30, 2002) ("In the last six months we have initiated several major broadband proceeding [sic] designed to clarify the regulatory environment for new services and lower the costs and risks associated with deployment of new infrastructure."), *available at* 2002 FCC LEXIS 2126.

23. For one such account, *see* Charles Platt, *The Future Will Be Fast but Not Free*, *WIRED* (May 2001), *available at* http://www.wired.com/wired/archive/9.05/broadband_pr.html (last visited Sept. 16, 2003).

24. Stephanie N. Mehta, *How To Get Broadband Moving Again*, *FORTUNE*, Dec. 10, 2001, at 207 (suggesting that, in the broadband market, cable modems account for 70%, DSL for 28%, and satellite about 1%), *available at* 2001 WL 26752947.

25. William P. Rogerson, *The Regulation of Broadband Telecommunications, The Principle of Regulating Narrowly Defined Input Bottlenecks, and Incentives for Investment and Innovation*, 2000 U. CHI. LEGAL F. 119, 119 (noting that "most industry participants and observers would agree that there is still more potential for enormous and rapid technological" advances in broadband over the next decade); Jonathan R. Laing, *Get Wired: Why Cable Will Beat the Bells in the Race To Wire Your Home*, *BARRON'S*, Aug. 20, 2001, at 23 (noting current usage).

The FCC offered the following observation on the deployment of broadband technologies:

It is widely believed that ubiquitous broadband deployment will bring valuable new services to consumers, stimulate economic activity, improve national productivity, and advance economic opportunity for the American public. The promise of broadband generally, and the proliferation of broadband Internet access specifically, are fostering

platforms are increasingly available, only a relatively small number of all households subscribe to this technology (mostly through cable modems or DSL).²⁶ Particularly given its early stage of development, the stakes of the FCC's decisions in this area are considerable, as they will bear on the development of the markets for ISPs, Internet services or applications, Internet content, and equipment that could work in conjunction with broadband facilities (such as Wi-Fi enabled devices).

The difficulty in determining the proper regulatory treatment for broadband reflects, at least in part, the fundamental difference in technical architecture between broadband and narrowband Internet access. In the narrowband ("dial-up") world, a user would make a regular analog telephone call to an ISP, which would transform the analog signals into digital and Internet-ready form.²⁷ The ISP would then pass on the packets of data to an Internet Backbone Provider, which would carry the data at high speeds toward its destination. In this environment, the connection from the user to the ISP constituted plain old telephone service, and the ISP constituted an unregulated information service provider.²⁸ As such, the telephone companies could

the creation, adoption, and use of multimedia applications that can meet consumers' broad communications, information, entertainment, and commercial needs and desires.

Wireline Broadband NPRM, *supra* note 3, para. 1; *see also* Cable Modem Order, *supra* note 3, para. 30 ("[W]e are mindful that the broadband market in general and cable modem services in particular are still evolving and that regulatory decisions will affect their development.").

26. Cable Modem Order, *supra* note 3, para. 9 (citing, among other sources, Info. Tech. Ass'n of Am., Building a Positive, Competitive Broadband Agenda: Positively Broadband, White Paper (Oct. 2001), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/F.C.C.-02-77A1.txt (last visited Dec. 20, 2001)); *see also* 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, Third Report, 17 F.C.C.R. 2844, para. 7 (2002) (finding that 7.8 million households subscribed to high-speed services). The Commission noted that "industry analysts estimate[] that approximately 68% of residential broadband subscribers today use cable modem service," 29% use DSL, and 3% use satellite or fixed wireless service. Cable Modem Order, *supra* note 3, para. 9.

27. In particular, the FCC defined "Internet access services" as services that "alter the format of information through computer processing applications such as protocol conversion and interaction with stored data." Federal-State Joint Board on Universal Service, 13 F.C.C.R. 11,501, para. 33 (1998) [hereinafter Universal Service Report] (internal quotations omitted); *see also* Jason Oxman, *The F.C.C. and the Unregulation of the Internet*, 584 ANN. INST. ON TELECOMM. POL'Y & REG. 231 (1999) (analogizing the role of the ISP in a narrowband world to the role of an oil refinery: the telephone call came in an analog format, but the ISP's modem banks would translate the call into a digital form that would then be passed on to the Internet).

28. For the FCC's explanation of this conclusion, see Universal Service Report, *supra* note 27, para. 33. During the course of the AT&T consent decree, the FCC used the term "enhanced services" and the district court administering the decree used the term "information services"; in enacting the Telecom Act, Congress both displaced the role of the consent decree court and instituted the "information services" term. *See id.* para. 39. Thus, except where referring to a

not discriminate against ISPs or even differentiate calls to ISPs from voice telephone calls. In the broadband world, however, the connection from the user to the ISP is digital, Internet-ready, and high-speed from the outset; moreover, this connection, in the case of cable providers at least, often comes bundled with ISP service. This service, which did not fall easily under any existing regulatory category, provided the FCC with an opportunity to reconsider its regulatory strategy for the Internet era.²⁹

Aside from the issue of mandated access to broadband facilities for independent ISPs, there is another set of access issues related to Internet services, content, and equipment.³⁰ Perhaps recognizing that mandating multiple-ISP access to broadband facilities involves considerable regulatory efforts that may not ultimately be worth the candle, some advocacy groups and commentators have shifted their focus to these other issues, grouping them collectively as “network neutrality” issues.³¹ Put in the context of the layered model of regulation, this network neutrality model would insist on a nondiscrimination mandate at the logical layer of the network, allowing proprietary firms to maintain control over pricing and service offerings at the physical layer, but not allowing them to use their control of the physical layer to distort competition in the other layers.³²

III. THE USES AND ABUSES OF REGULATORY COMMON LAW: UNDERSTANDING THE FCC’S ANCILLARY JURISDICTION AUTHORITY

To deal with the Internet-related issues discussed above, the FCC will most likely rely on its ancillary jurisdiction authority. Unfortunately,

historical approach, this Article uses the modern “information services” and “information service provider” terms in lieu of the “enhanced services” concept.

29. *Id.* para. 69 (leaving open whether broadband Internet access constitutes an “information service”).

30. See Tim Wu, *Broadband Discrimination, Open Access and Network Neutrality*, 2 J. ON TELECOMM. & HIGH TECH. L. (forthcoming 2003) (manuscript on file with author).

31. Tim Wu has explained effectively why, to the extent that multiple ISP access is a proxy for broader concerns, the FCC is better off addressing those broader concerns—i.e., access to Internet content and services—directly. See *id.*; see also Ex Parte Letter of Professors Tim Wu and Lawrence Lessig, *In re Inquiry Concerning High-speed Access to the Internet over Cable and Other Facilities* (Aug. 22, 2003) (outlining the case for such regulations), available at http://faculty.virginia.edu/timewu/wu_lessig_fcc.pdf (last visited Oct. 23, 2003). Advocating a similar course, the High Tech Broadband Coalition’s comments to the FCC suggest a focus not on multiple ISP access, but on “network neutrality.” Comments of the High Tech Broadband Coalition, *In re Appropriate Regulatory Treatment for Broadband Access to the Internet over Cable Facilities* (No. 02-52), at <http://www.unibex.com/ibx/users/GetCom1/CIAJ1/website/index.cfm> (last visited Oct. 30, 2003).

32. See Philip J. Weiser, *Regulatory Challenges and Models of Regulation*, 2 J. ON TELECOMM. & HIGH TECH. L. 1, 10-11 (2003) [hereinafter Weiser, *Regulatory Models*].

the FCC's conception of this authority is hardly a model of clarity or consistency. The FCC, for example, argued that it could go beyond the specific regulations authorized by Congress regarding closed captioning requirements, that it should not regulate Internet access markets, and that it should regulate instant messaging.³³ In the case of Internet access regulation, the FCC's lack of any decision over the course of four years left the development of the appropriate regulatory regime to the courts, thereby reversing the roles of the two institutions—i.e., leaving it to the FCC to review and act in the wake of judicial decisions. In large part, the FCC's actions reflected its lack of any self-conscious vision for its institutional role in the lawmaking system. Thus, before explaining how the FCC should conceive of its ancillary jurisdiction authority (particularly with respect to the Internet), this Part first explains the legal framework for the FCC's development of the Telecom Act's statutory policies.

The FCC, like other regulatory agencies, enjoys a privileged role in the modern administrative state. Under *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*,³⁴ regulatory agencies—and not courts—are entrusted to determine the meaning of statutory terms susceptible to more than one interpretation.³⁵ For courts accustomed to the latitude that existed in the pre-*Chevron* era, this adjustment has not always been an easy one.³⁶ In short, the Supreme Court's *Chevron* decision reflects a judgment that, at least in most cases, agencies enjoy a superior institutional competence to develop the principles embodied in

33. See Implementation of Video Description of Video Programming, 15 F.C.C.R. 15,230, para. 67 (2000) (mandating regulation of closed captioning above that prescribed by Congress), *rev'd*, Motion Pictures Ass'n of Am. v. FCC, 309 F.3d 796 (D.C. Cir. 2002); Applications for Consent to the Transfer of Licenses and Section 214 Authorizations by Time Warner Inc. and American Online, Inc., Transferors, to AOL Time Warner, Inc., Transferee, 16 F.C.C.R. 6547, para. 169 (2001) [hereinafter AOL Order] (regulating instant messaging); Kennard, *supra* note 17 (discussing the rationale for not regulating cable broadband access).

34. *Chevron U.S.A., Inc. v. Natural Res. Def. Council*, 467 U.S. 837, 866 (1984) (holding that the Environmental Protection Agency reasonably construed the term "stationary source" as used in the Clean Air Act).

35. See *id.* at 844 (concluding that courts are not permitted to substitute their own statutory constructions for an agency's reasonable interpretation); *Smiley v. Citibank*, 517 U.S. 735, 740–41 (1996) (commenting that the agency is assigned to interpret statutory provisions "first and foremost").

36. See Philip J. Weiser, *Federal Common Law, Cooperative Federalism, and the Enforcement of the Telecom Act*, 76 N.Y.U. L. REV. 1692, 1715–18 (2001) [hereinafter Weiser, *Federal Common Law*] (analogizing *Chevron's* limit on judicially made federal common law to that effected by *Erie R.R. v. Tompkins*, 304 U.S. 64, 74–79 (1938)).

regulatory statutes.³⁷ In *Chevron* itself, as well as in subsequent cases and commentary, this judgment rests on some combination of political sensitivity, subject matter expertise, or institutional competence.

Just recently, in *Mead v. United States*, the Supreme Court clarified *Chevron*'s rule of deference by explaining that it only applies when Congress authorizes an agency to make rules "with the force of law."³⁸ Quite sensibly, *Mead* concluded that Congress envisions only that a duly authorized agency action, whether through rulemaking or adjudication, warrants judicial deference.³⁹ Put differently, *Mead* reminds courts that Congress defines the scope of agency authority and that courts reviewing agency decisions—unlike common law courts—do not possess the authority to make policy decisions.⁴⁰

To appreciate the importance of the *Chevron* regime, consider the FCC's situation. As Justice Scalia recently underscored in *AT&T Corp. v. Iowa Utilities Board*, the FCC enjoys broad authority to implement each of the titles of its regulatory statute.⁴¹ In particular, Justice Scalia explained that the FCC's broad enabling authority allows it to develop rules to serve the basic purposes of the Telecom Act, provided that those rules are not inconsistent with any specific statutory provision.⁴² In short, this explanation emphasized how agency-enabling statutes

37. See Cass Sunstein & Adrian Vermule, *Interpretation and Institutions*, 101 MICH. L. REV. 885, 926 (2003) ("We think that the best defenses of *Chevron* attempt to read ambiguous congressional instructions in a way that is well-attuned to institutional considerations.").

38. *United States v. Mead Corp.*, 533 U.S. 218, 237 (2001) (holding "that *Chevron* left *Skidmore* [*v. Swift*, 323 U.S. 134 (1944),] intact and applicable where statutory circumstances indicate no intent to delegate general authority to make rules with force of law, or where such authority was not invoked").

39. The Supreme Court long ago made clear that the FCC, like other agencies, can choose to make regulatory policy through adjudication or rulemaking, provided that it conforms to basic due process norms (i.e., an opportunity for notice and comment). See *FCC v. Pottsville Broad. Co.*, 309 U.S. 134, 138 (1940); see also *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council*, 435 U.S. 519, 543 (1978) ("[A]dministrative agencies 'should be free to fashion their own rules of procedure and to pursue methods of inquiry capable of permitting them to discharge their multitudinous duties.'" (citations omitted)). The exception to this rule is that section 205 of the Communications Act requires a formal adjudication process for rate-setting decisions, although not for any decision that can affect rates. See 47 U.S.C. § 205(a) (2000); *W. Union Tel. Co. v. FCC*, 665 F.2d 1126, 1151 (D.C. Cir. 1981) (noting limits of requirement); *Am. Tel. & Tel. Co. v. FCC*, 487 F.2d 865, 872 (2d Cir. 1973) (explaining requirement).

40. *Mead*, 533 U.S. at 226–27.

41. *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366, 377–78 (1999). In the Title II context, for example, the FCC is authorized to "prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this Provision." 47 U.S.C. § 201(b) (2000); see also 47 U.S.C. § 303(r) (2000) (authorizing the FCC, in the Title III context, to "[m]ake such rules and regulations and prescribe such restrictions and conditions not inconsistent with law, as may be necessary to carry out the provisions of this Chapter").

42. *Iowa Utils. Bd.*, 525 U.S. at 381.

confer a “Necessary and Proper Clause”-like authority upon those agencies.⁴³

To regulate outside of its direct mandate, the FCC must rely on its “Title I” or “ancillary jurisdiction” authority. The justification for this form of FCC action stems from a catch-all provision—contained in Title I of the Communications Act—that authorizes the agency to “perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this Act as may be necessary in the execution of its functions.”⁴⁴ In *United States v. Southwestern Cable Co.*, the Supreme Court interpreted this provision in particular and Title I of the Communications Act (which sets forth the Act’s basic mission) in general as providing a broad scope of authority to the FCC.⁴⁵ Consequently, the *Southwestern Cable* case upheld the FCC’s regulation of the cable television industry, even without any specific statutory charge to do so, on the ground that its regulations were “reasonably ancillary” to its assigned responsibilities to regulate broadcasting.⁴⁶

The best conception of the FCC’s Title I authority is as a cousin to the interstitial authority of the federal courts to develop the basic principles embodied in common law-like statutes such as the Sherman Antitrust Act or the Copyright Act.⁴⁷ This common law-like authority

43. See Weiser, *Federal Common Law*, *supra* note 36, at 1753–54.

44. 47 U.S.C. § 154(i) (2000); see also Cable Modem Order, *supra* note 3, para. 44; Implementation of Video Description of Video Programming, *supra* note 33, at 15,276 (separate statement of Commissioner Michael K. Powell) (“It is important to emphasize that section 4(i) is not a stand-alone basis of authority and cannot be read in isolation. It is more akin to a ‘necessary and proper’ clause. Section 4(i)’s authority must be ‘reasonably ancillary’ to other express provisions.”); Rosemary C. Harold, *Cable Open Access: Exorcising the Ghosts of ‘Legacy’ Regulation*, 28 N. KY. L. REV. 721, 783 (2001) (discussing the issue). To be sure, there are some dissenters to the view that the Communications Act provides a broad grant of authority to the FCC. See Thomas W. Merrill & Kathryn Tongue Watts, *Agency Rules with the Force of Law: The Original Convention*, 116 HARV. L. REV. 467, 517–519 (2002) (arguing that Title I’s provisions were mere “housekeeping measures” that should not be given substantive effect); cf. *Iowa Utils. Bd.*, 525 U.S. at 408 (Thomas, J., concurring in part and dissenting in part) (suggesting that this broad authority-granting language in the Communications Act must be limited by its context).

45. *United States v. Southwestern Cable Co.*, 392 U.S. 157, 172 (1968) (“Nothing in the language of [Title I’s description of the FCC’s broad mission], in the surrounding language, or in the Act’s history or purposes limits the Commission’s authority to those activities and forms of communication that are specifically described by the Act’s other provisions.”).

46. *Id.* at 178.

47. See, e.g., *State Oil Co. v. Khan*, 522 U.S. 3, 20–21 (1997) (discussing the common law nature of Sherman Act decisions); *Nat’l Soc’y of Prof’l Eng’rs v. United States*, 435 U.S. 679, 688 (1978) (“The legislative history makes it perfectly clear that [Congress] expected the courts to give shape to the [Sherman Act’s] broad mandate by drawing on its common-law tradition.”); *Lotus Dev. Corp. v. Borland Int’l, Inc.*, 49 F.3d 807, 820 (1st Cir. 1995) (Boudin, J., concurring)

is not absolute with respect to both the FCC's regulatory responsibilities and the judicial development of statutory regimes, but each provides considerable room for policymaking discretion and creativity. In both telecommunications regulation and copyright policy, for example, Congress often chooses to defer action until seeing how the regulatory or judicial approaches to cutting-edge issues work in practice.⁴⁸ The key difference between these areas is that, with respect to telecommunications regulation, Congress has concluded that regulatory agencies—and not courts—are better situated to address the relevant issues.⁴⁹ Nevertheless, in both cases, Congress can often produce better results by refraining from legislating and letting common law decisions govern the area because once Congress institutes its own legal regime, it will be unlikely to change it even if it is erroneous.⁵⁰

In the thirty-five years since the Supreme Court decided *Southwestern Cable*, the FCC has yet to develop a clear vision for its common law-like authority.⁵¹ In the case of cable regulation, the FCC proceeded to develop a regulatory regime of its own making.⁵² Consequently, Congress did not specify its own regime of regulation until 1984, when it finally added a cable-specific title, Title VI, to the

(explaining that “the heart of copyright doctrine—what may be protected and with what limitations and exceptions—has been developed by the courts through experience with individual cases”), *aff'd*, 516 U.S. 233 (1996). In the case of the antitrust laws, the development of the law reflects not only judicial creativity, but also the influence of the Federal Trade Commission and the antitrust division of the Department of Justice. See William F. Baxter, *Separation of Powers, Prosecutorial Discretion, and the “Common Law” Nature of Antitrust Law*, 60 TEX. L. REV. 661, 663 (1982) (“By adopting a common-law approach, Congress in effect delegated [much] of its lawmaking power to the judicial branch,” which, in turn, is influenced by Department of Justice policy.).

48. See Weiser, *Regulatory Models*, *supra* note 32, at 11.

49. For a classic articulation of this view by one of the notable proponents of the administrative state, see JAMES LANDIS, *THE ADMINISTRATIVE PROCESS* (1974). For a recent dissent by a proponent of judicial lawmaking and critic of agency lawmaking, see PETER HUBER, *LAW AND DISORDER IN CYBERSPACE: ABOLISH THE F.C.C. AND LET COMMON LAW RULE THE TELECOM* (1997).

50. See Glen O. Robinson, *The Federal Communications Act: An Essay on Origins and Regulatory Purposes* (commenting, with respect to the FCC's role, that “with each passing era [the FCC's statutory charter] is beginning to look more like a ‘living constitution’ than a fixed statutory mandate”), in *A LEGISLATIVE HISTORY OF THE COMMUNICATIONS ACT OF 1934*, at 24 (Max D. Paglin ed., 1989); Suzanna Sherry, *Haste Makes Waste: Congress and the Common Law in Cyberspace*, 55 VAND. L. REV. 309, 310–12 (2002) (making this argument for judicial decisions).

51. See *supra* note 33 and accompanying text (highlighting the FCC's inconsistent positions).

52. See *supra* notes 44–46 (commenting on the breadth of authority granted to the FCC by the Communications Act).

Communications Act.⁵³ Aside from developing regulations for cable television, the FCC has employed its Title I authority on rare occasions, leaving unanswered a series of questions about its scope.⁵⁴ More generally, administrative law scholars have not focused on how to analyze agency efforts to resolve policy issues that are addressed by common law-like approaches.⁵⁵ Thus, the FCC's current understanding of its Title I authority comes largely from its regulation of cable television before the enactment of Title VI, where the courts upheld the Commission's rules when they related to the Commission's charge to regulate broadcasting, but invalidated them when they strayed from that role.⁵⁶

Unfortunately, the FCC sometimes looks at its Title I authority as a set of suspenders to use in addition to its belt when justifying actions contemplated by specific statutory mandates. A notorious recent example of this approach is *Motion Picture Association of America v. FCC*,⁵⁷ in which the D.C. Circuit rejected the FCC's reliance on its Title

53. See Cable Communications Policy Act of 1984, Pub. L. No. 98-549, 98 Stat. 2279 (codified as amended in scattered sections of 47 U.S.C.).

54. See, e.g., *Rural Tel. Coalition v. FCC*, 838 F.2d 1307 (D.C. Cir. 1988) (upholding the FCC's pre-statutory version of the universal service fund as part of its ancillary jurisdiction); *N. Am. Telecomm. Ass'n v. FCC*, 772 F.2d 1282, 1292-93 (7th Cir. 1985) ("Section 4(i) empowers the Commission to deal with the unforeseen—even if . . . that means straying a little way beyond the apparent boundaries of the Act—to the extent necessary to regulate effectively those matters already within the boundaries."); *Lincoln Tel. & Tel. Co. v. FCC*, 659 F.2d 1092, 1109 (D.C. Cir. 1981) (stating that the FCC properly "exercise[d] the residual authority contained in Section 154(i) to require a tariff filing" because it "properly perceived the need for close supervision" with respect to interconnection).

55. For a treatment of this issue, see Weiser, *Federal Common Law*, *supra* note 36, at 1753-60; John F. Duffy, *Administrative Common Law in Judicial Review*, 77 TEX. L. REV. 113, 199 (1998) (discussing the role of enabling legislation in *Chevron* doctrine); see also *Nat'l Cable Telecomm. Ass'n v. Gulf Power Co.*, 534 U.S. 327, 328 (2002) ("[T]he subject matter here is technical, complex, and dynamic; and, as a general rule, agencies have authority to fill gaps where statutes are silent." (citing *Chevron U.S.A., Inc. v. Natural Res. Def. Council*, 467 U.S. 837, 843-44 (1984))); *Gen. Tel. Co. of Cal. v. FCC*, 413 F.2d 390, 398 (1969) (stating that not to give the FCC latitude in meeting new problems in communications markets "would place an intolerable regulatory burden on the Congress—one which it sought to escape by delegating administrative functions to the Commission").

56. See *United States v. Midwest Video Corp.*, 406 U.S. 649, 676 (1972) (Burger, C.J., concurring) (concluding that rules requiring cable companies to produce original programming "strain outer limits" of "open-ended and pervasive jurisdiction"). Compare *United States v. Southwestern Cable Co.*, 392 U.S. 157, 181 (1968) (upholding the FCC's authority to regulate cable television), and *United Video, Inc. v. FCC*, 890 F.2d 1173, 1183 (D.C. Cir. 1989) (upholding FCC's authority to reinstate syndicated exclusivity rules for cable television companies as ancillary to the Commission's authority to regulate television broadcasting), with *FCC v. Midwest Video Corp.*, 440 U.S. 689, 700-09 (1979) (invalidating public access mandates on cable systems as a form of common carriage regulation unrelated to the Commission's mission or authority to regulate broadcasting).

57. *Motion Picture Ass'n of Am. v. FCC*, 309 F.3d 796 (D.C. Cir. 2002).

I authority to justify going further in its own regulations than contemplated by the specific directive crafted by Congress.⁵⁸ In so doing, the FCC failed to appreciate that its broad common law-like authority applies only where it can take an action that is consistent with the regime specified by Congress and reasonably ancillary to the goals set forth in the statute.⁵⁹ Or, as the Supreme Court put it, this authority only enables the Commission to act when "necessary to ensure the achievement of [its] statutory responsibilities."⁶⁰

IV. BROADBAND POLICY AND ANCILLARY JURISDICTION

In order to rationalize the regulatory structure governing broadband transmission, the FCC faces a series of difficult questions. At the outset, it confronts the basic legal question of what regulatory framework should authorize and guide its oversight of broadband Internet transmission. More generally, the FCC's challenge is to develop a principled, legally sustainable framework that governs all modes of broadband transmission (e.g., cable modems, telephone lines, wireless, etc.).

58. *Id.* at 805 ("The F.C.C.'s position seems to be that the adoption of rules mandating video description is permissible because Congress did not expressly foreclose the possibility. This is an entirely untenable position."). To underscore its point, the D.C. Circuit quoted from then-Commissioner Michael Powell's dissenting position on why section 4(i), without more, does not "give the agency authority to promulgate the disputed rules cannot withstand scrutiny":

It is important to emphasize that section 4(i) is not a stand-alone basis of authority and cannot be read in isolation. It is more akin to a "necessary and proper" clause. Section 4(i)'s authority must be "reasonably ancillary" to other express provisions. And, by its express terms, our exercise of that authority cannot be "inconsistent" with other provisions of the Act. The reason for these limitations is plain: Were an agency afforded *carte blanche* under such a broad provision, irrespective of subsequent congressional acts that did not squarely prohibit action, it would be able to expand greatly its regulatory reach.

Id. at 806 (quoting Implementation of Video Description of Video Programming, *supra* note 31, at 15,276 (separate statement of Michael K. Powell)). Then-Commissioner Powell offered a similar criticism of the FCC's rationale for imposing rules governing handicapped accessibility to telecommunications services based on a Title I that called for regulations above and beyond those deemed mandated by the specific statutory provision. See Implementing Sections 255 and 251(A)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996, 16 F.C.C.R. 6417, 6545 (1999) (separate statement of Michael K. Powell) (explaining that such "an unrestrained application of ancillary jurisdiction authority has [not] been sanctioned by the courts" or FCC precedents).

59. *Motion Picture Ass'n of Am.*, 309 F.3d at 806.

60. *Midwest Video Corp.*, 440 U.S. at 706.

*A. Classification of Broadband Transmission as a Title II
or Title I Service*

Simplifying matters considerably, the basic legal structure of the Telecom Act presents the FCC with the question of whether Internet broadband transmission should be regulated under Title II or Title I of the Act.⁶¹ To follow the Title II route, the FCC would (1) classify broadband transmission as a “telecommunications service”;⁶² and (2) regulate broadband transmission bundled with Internet access by requiring providers to “strip out” the “telecommunications service” component and provide it on an unbundled basis as a regulated Title II service. This course is essentially the one that the FCC took with respect to incumbent telephone providers under the *Computer Inquiries*.⁶³ To pursue the Title I route, the FCC would regulate broadband transmission as (1) an “information service”⁶⁴ (when

61. Another option, which the FCC declined to consider, would be to regulate broadband as an “advanced telecommunications capability” under Section 706 of the Telecom Act. See Cable Modem Order, *supra* note 3, paras. 70–71 (“Because we have found that cable modem service fits within the statutory definition of an information service, we need not consider whether we have the authority to create a new category of service.”); see also Jim Chen, *The Authority To Regulate Broadband Internet Access over Cable*, 16 BERKELEY TECH. L.J. 677, 711–12 (2001) (urging this approach). But see Ass’n of Communications Enters. v. FCC, 235 F.3d 662, 664 (D.C. Cir. 2001) (noting that the FCC determined that “advanced services are telecommunications like any others”). Finally, the FCC could have treated broadband transport over cable as a “cable service,” but this approach would have stretched greatly the concept of cable service. See Cable Modem Order, *supra* note 3, paras. 60–68; see also AT&T Corp. v. City of Portland, 216 F.3d 871, 877 (9th Cir. 2000) (“[A]pplying the carefully tailored scheme of cable television regulation to cable broadband Internet access would lead to absurd results . . .”).

62. The Act defines “telecommunications service” as “the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.” 47 U.S.C. § 153(46) (2000). Because the definition envisions an offering held out to the public, such offerings are labeled as common carrier—as opposed to private carrier—offerings. See Cable and Wireless, PLC, Application for a License to Land and Operate in the United States a Private Submarine Fiber Optic Cable, 12 F.C.C.R. 8516, paras. 12–14 (1997) (“The legislative history of the 1996 Act indicates that the definition of telecommunications services is intended to clarify that telecommunications services are common carrier services.”).

63. See Robert Cannon, *The Legacy of the Federal Communication Commission’s Computer Inquiries*, 55 FED. COMM. L.J. 167, 194 (2003); see also *infra* notes 113–16 and accompanying text (discussing the *Computer Inquiries*).

64. See 47 U.S.C. § 153(20) (2000) (defining “information service” as “the offering of a capacity for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications”). To the extent that the statute left the issue open to dispute, the FCC clarified that a service must be classified as either a “telecommunications service” or an “information service,” but that it cannot be both. See Universal Service Report, *supra* note 27, para. 39. The Ninth Circuit, however, appears to have concluded differently. See Brand X Internet Servs. v. FCC, 345 F.3d 1120, 1132 (9th Cir. 2003).

bundled with Internet access) and (2) "private carriage"—as opposed to "common carriage"—when provided to ISPs.⁶⁵

The practical difference between the Title I and the Title II route is that the latter implicates a set of legacy regulations. Thus, unlike Title II's basic premise that legacy regulations of telephone service would apply, a Title I-based regime begins from the premise that no regulation applies and that the FCC can develop any reasonable regulations that are ancillary to its statutory mandate. But because the FCC can forbear from applying inappropriate Title II regulations,⁶⁶ the relevant difference between the two regimes can be understood as beginning

65. There is a long line of authority that governs when the provision of "telecommunications" must be classified as a "telecommunications service"—as opposed to "private carriage"—and subject to "common carrier" regulation. See *Virgin Is. Tel. Co. v. FCC*, 198 F.3d 921, 926 (D.C. Cir. 1999) (upholding ruling that "telecommunications services" equates with "common carriage"); *Nat'l Assoc. of Reg. Util. Comm'rs v. FCC*, 525 F.2d 630, 642 (D.C. Cir. 1976) (stating that the test focuses on whether the "operator offer[s] service to whatever public its service may legally and practically be of use"); see also *Southwestern Bell Tel. Co. v. FCC*, 19 F.3d 1475, 1481 (D.C. Cir. 1994) (explaining consequences of classification decision). Insofar as broadband providers sell broadband transport to ISPs and not to the public, the FCC has suggested that such transactions are to be treated as private carriage. See *Cable Modem Order*, *supra* note 3, para. 54 (concluding that "to the extent AOL Time Warner is providing a stand-alone telecommunications offering to EarthLink or other ISPs, we conclude that the offering would be a private carrier service and not a common carrier service"); see also *Wireless Broadband NPRM*, *supra* note 3, para. 25 (suggesting that classification of the telecommunications—and not "telecommunications service" (i.e., common carriage)—component of information service is a "logical extension" of the conclusion that bundled offering is "information service").

66. In recognizing the possibility of this course of action, the Commission asked for comment on the issue. See *Cable Modem Order*, *supra* note 3, para. 50. Under the Telecom Act, the FCC may forbear from regulation if it determines that:

(1) enforcement of such regulation or provision is not necessary to ensure that the charges, practices, classifications, or regulations by, for, or in connection with that telecommunications carrier or that telecommunications, service are just and reasonable and are not unjustly or unreasonably discriminatory;

(2) enforcement of such regulation or provision is not necessary for the protection of consumers; and

(3) forbearance from applying such provision or regulation is consistent with the public interest.

47 U.S.C. § 160(a) (2000). Under related authority, the Commission has decided to forbear from imposing a number of otherwise applicable regulations governing wireless carriers. See Implementation of Sections 3(n) and 332 of the Communications Act, GN Docket No. 93-252, Second Report and Order, 9 F.C.C.R. 1411, paras. 123-219 (1994) (relieving wireless providers from tariff and entry and exit requirements), *recon. dismissed in part and denied in part*, 15 F.C.C.R. 5231 (Mar. 10, 2000). Indeed, the Ninth Circuit, in its *AT&T v. City of Portland* decision, suggested that the FCC would need to consider whether forbearance would be proper in the wake of its conclusion that cable modems constitute a telecommunications service. See *City of Portland*, 216 F.3d at 879-80; see also *Cable Modem Order*, *supra* note 3, para. 34 n.219 ("Although we do not forbear from Title II regulation (to the extent other jurisdictions seek to apply it) on this record, we do tentatively conclude that such regulation would not be appropriate and that we should forbear from it."); *id.* paras. 94-95 (inquiring about forbearance).

with an open field and building upwards or beginning with a structure in place and renovating it downwards.

The FCC's initial regime for regulating broadband transmission provided by telephone networks (i.e., DSL connections) adopted the Title II strategy.⁶⁷ In particular, the FCC applied the *Computer Inquiry* rules to require the telephone companies to unbundle DSL from Internet access and provide ISPs with access to broadband transmission. By contrast, as noted earlier, the FCC's strategy as to cable broadband networks initially involved making no decision, thereby triggering a set of inconsistent judicial rulings.⁶⁸ In its *Cable Modem Order*, however, the FCC finally adopted the Title I strategy for cable modem services based on two basic judgments: first, that broadband Internet access is an "information service;" and second, that cable providers should not be subject to the unbundling demands of the *Computer Inquiries*.⁶⁹

In a recent Notice of Proposed Rulemaking that envisions a reform of broadband policy, the FCC suggested that it intends to regulate all broadband platforms similarly⁷⁰ and to regulate broadband transmission over telephone lines under Title I.⁷¹ This approach, however, envisions treating broadband platforms differently from other information services, such as voicemail, because the FCC indicated its willingness to consider regulating access to them.⁷² To implement this approach, which would depart from its past decisions, the FCC will need to

67. See In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability, Second Report & Order, 14 F.C.C.R. 19,237, para. 21 (1999) (deeming bulk DSL services sold to an ISP to be subject to common carriage regulation); GTE Telephone Operating Cos., Memorandum Opinion and Order, 13 F.C.C.R. 22,466, para. 16 (1998) (accepting filing of DSL tariff as an interstate telecommunications service); see also Independent Data Communications Manufacturers Association., Inc., Petition for Declaratory Ruling That AT&T's InterSpan Frame Relay Service Is a Basic Service, 10 F.C.C.R. 13,717, para. 40 (1995) (deeming AT&T's frame relay service to be within Title II).

68. See *supra* notes 16-21 and accompanying text (discussing the FCC's initial policy of "unregulation" regarding broadband access).

69. Cable Modem Order, *supra* note 3, para. 95 (classifying cable modem service as an "information service" under Title I).

70. See Wireline Broadband NPRM, *supra* note 3, para. 4 ("[T]he Commission's regulatory framework will conceptualize broadband to include any and all platforms capable of fusing communications power, computing power, high-bandwidth intensive content, and access to the Internet.").

71. *Id.* paras. 19-20.

72. See *id.* paras. 43-49. The FCC considered classic information services, such as voicemail, as "an incremental extension of the existing narrowband telecommunications network" in that they built upon the existing network. *Id.* para. 13; see also Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services, Report and Order, 12 F.C.C.R. 4289, para. 7 n.11 (1999) (describing information services as employing the "existing telephone network to deliver services that provide more than a basic transmission offering").

explain how competition in the broadband marketplace—or other factors not considered in its earlier decisions—call for a different regulatory strategy.⁷³

B. Ancillary Jurisdiction Issues Posed by Classifying Broadband as a Title I Service

In commencing its broadband rulemaking proceedings, the Commission signaled its preference for the Title I strategy of developing a new regulatory regime for the broadband environment. This approach offers the Commission more leeway and opportunity for creativity and precision, as it would not begin with the legacy legal requirements that are traditionally imposed on telecommunications carriers. Nonetheless, the Title I strategy, which enables the FCC to evaluate what requirements would be appropriate to impose under its ancillary jurisdiction authority,⁷⁴ comes with a series of risks and challenges associated with blazing a new trail. In particular, the FCC's approach requires it to establish that (1) its classification decision is legally sustainable; and (2) under Title I, it is authorized to develop substantive regulations for broadband platforms.

Under usual circumstances, the decision by the FCC to classify broadband Internet access as an "information service" would be a close call that rests within its discretion to make. In evaluating the issue in the cable modem context, the FCC concluded that because cable companies typically do not sell to the public unaltered broadband transmission, broadband Internet access constitutes an "information service" and does not contain a "telecommunications service." To challenge the "information service" classification, some parties argued that this approach threatens to eviscerate Title II and is akin to allowing a telephone company which sells plain old telephone service bundled with an integrated voicemail product to avoid the strictures of Title II.⁷⁵ Stated differently, the "broadband as 'telecommunications services'

73. See *AT&T Corp. v. FCC*, 236 F.3d 729, 736–37 (D.C. Cir. 2001) (stating that the FCC must explain changes in regulatory policy). Indeed, past FCC decisions have changed the regulatory treatment of certain services—based on market conditions—from a Title II to a Title I approach. See *Pub. Serv. Comm. of Md. v. FCC*, 909 F.2d 1510, 1512 (D.C. Cir. 1990) (discussing change in regulatory treatment of billing and collection services); Policies and Rules Concerning Local Exchange Carrier Validation and Billing Information for Joint Use Calling Cards, 7 F.C.C.R. 3528, para. 26 n.50 (1992) (discussing regulatory treatment of billing and collection services).

74. See *Southwestern Bell Tel. Co. v. FCC*, 19 F.3d 1475, 1481 (D.C. Cir. 1994).

75. Cf. *In re Indep. Data Communications Mfrs. Ass'n*, 10 F.C.C.R. 13,717 (Oct. 18, 1995) (ruling that AT&T's frame relay service, which relied on protocol processing to enhance the service, constituted a common carrier service).

argument” rejects the position that a “telecommunications” component can exist outside “telecommunications services.”⁷⁶ In the *Cable Modem Order*, the FCC rejected that position, concluding that the regulatory separation of bundled services—as the *Computer Inquiry* rules mandate where applicable—would involve an intrusive oversight of technologically advanced services that might well stall innovation and mire the agency in administrative challenges.⁷⁷

Because the FCC’s determination followed a lengthy period of indecision, its classification decision faced a number of unique hurdles. As noted earlier, the Ninth Circuit initially addressed the issue before the FCC did, classifying broadband transmission as a telecommunications service.⁷⁸ Consequently, upon reviewing the FCC’s classification of cable modem services in *Brand X Internet Services v. FCC*, the Ninth Circuit rejected the FCC’s decision and explained that its earlier ruling meant that, under the *Chevron* doctrine, it does not accord deference to the later FCC ruling—concluding, in effect, that the agency waived its deference by allowing the court to address the issue first.⁷⁹ Assuming that the FCC overcomes this ruling (either upon an en banc or Supreme Court review of the matter), it must also establish that the relevant statutory terms are ambiguous and that its interpretation of them is reasonable. Although those hurdles present significant challenges (as suggested by the fact that Judge Thomas’ concurrence maintains that there is no room for FCC discretion on this issue),⁸⁰ the thorny classification issue presented by broadband platforms would appear to be just the sort of difficult judgment call that *Chevron* reserves for agencies and not courts. To be sure, the FCC could simply retreat from its earlier Title I strategy and opt for a Title II

76. See *Brand X Internet Servs. v. FCC*, 345 F.3d 1120, 1139 (9th Cir. 2003) (Thomas, J., concurring) (“[N]othing suggests that telecommunications services ceased to be so when offered to the public along with an information service.”). The one exception to this principle would be for a company’s private network, as all agree that it cannot be deemed a “telecommunications service” within the scope of Title II. *Id.*

77. See *Cable Modem Order*, *supra* note 3, para. 43 (rejecting invitation “to find a telecommunications service inside every information service, extract it, and make it a stand-alone offering to be regulated under Title II of the Act.”); see also *In re SBC Communications, Inc.*, 16 F.C.C.R. 20,719, 20,888 (2001) (statement of Commissioner Abernathy) (“The mere fact that such services are offered ‘via telecommunications’ cannot suffice to render such services ‘telecommunications services.’”).

78. *AT&T Corp. v. City of Portland*, 216 F.3d 871, 878 (9th Cir. 2000).

79. *Brand X*, 345 F.3d at 1132.

80. Judge Thomas suggested that there is no possible ambiguity as to whether broadband constitutes a “telecommunications service.” *Id.* at 1134.

forbearance model, but Chairman Powell's pronouncement on the topic suggests that course is unlikely.⁸¹

Even assuming that the FCC prevails in its efforts to classify broadband transmission under Title I, it still will face serious questions as to whether Title I authorizes the FCC to regulate broadband platforms—even with a minimal regulatory touch. Unlike previous regulations based on its Title I authority, the FCC's potential regulation of access to broadband platforms does not neatly fit as "reasonably ancillary" to the Commission's traditional statutory responsibilities. In its rules governing cable television, for example, the FCC could explain easily how its regulations over the importation of distant broadcast stations via cable television into a local broadcaster's service area related to its mandate to regulate television broadcasting.⁸² By contrast, the FCC's conclusion that broadband Internet access does not contain a "telecommunications service" makes it more difficult to explain how any attendant regulations of this "information service" are ancillary to a regulatory category provided by the Act.⁸³ In its proposed rulemaking, the FCC suggests that its general mandate to oversee "advanced services" and pursue their rollout—as opposed to any specific authority over, say, voice telephone service—justifies its oversight of broadband

81. Statement of FCC Chairman Michael Powell on Ninth Circuit Cable Modem Decision (Oct. 6, 2003), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-239558A1.pdf (last visited Oct. 23, 2003).

82. *United States v. Southwestern Cable Co.*, 392 U.S. 157, 173–74 (1968) (concluding that regulatory authority over cable operators was imperative for the FCC's performance of its statutory mission over broadcasting, noting that "Congress has imposed upon the Commission the 'obligation of providing a widely dispersed radio and television service' with a 'fair, efficient, and equitable distribution' of services among the 'several states and communities.'" (quoting 47 U.S.C. § 307) (citation omitted)).

83. *See, e.g., id.* at 178 (holding that Title I authority is restricted to areas "reasonably ancillary to the effective performance of the Commission's various responsibilities"); *Southwestern Bell Tel. Co. v. FCC*, 198 F.3d 1475, 1479 (D.C. Cir. 1994) (Title I authority is "restricted to that reasonably ancillary to the effective performance of [the Commission's] various responsibilities under titles II and III of the Act"); *California v. FCC*, 905 F.2d 1217, 1240 n.35 (9th Cir. 1990) (explaining that Title I jurisdiction "confers on the FCC only such power as is ancillary to the Commission's specific statutory responsibilities" and that "[i]n the case of enhanced services, the specific responsibility to which the Commission's Title I authority is ancillary [is] to its Title II authority").

transmission.⁸⁴ This argument is both untested and quite novel, so it is unclear whether reviewing courts will accept it.⁸⁵

To justify its novel use of its Title I authority, the Commission needs to explain that the development of a broadband Internet presents a paradigm shift for communications regulation. The broadband Internet, like traditional communications technology such as the telephone network and cable television, will carry voice conversations (IP telephony) and video programming (video streaming). But the Internet's characteristics—most notably the TCP/IP standard's ability to facilitate voice and video communications on different physical platforms—may ultimately marginalize existing communications policies.⁸⁶ Rather than mapping and adjusting the scope of current policies onto the Internet, the development of a new regime pursuant to Title I can ensure that the Internet will prosper and compete with existing media without being encumbered by legacy regulations that may not be appropriate.⁸⁷

On this approach, the Commission would define its oversight of the Internet by reference to its need to regulate “information platforms” that can support the delivery of voice, video, and text applications. In the old communications environment, content—say, voice conversations or video programming—would be carried by the same company that provides the “wire” or “air” communications platform. By contrast, in

84. See Cable Modem Order, *supra* note 3, paras. 75–79; see also 47 U.S.C. § 157 (2000) (directing the FCC to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans . . . by utilizing . . . measures that promote competition in the local telecommunications market”); Promotion of Competitive Networks in Local Telecommunications Markets, 16 F.C.C.R. 7064, para. 103 (2000) (justifying Title I authority with reference to this section).

85. Commissioner Abernathy's separate statement implicitly recognized this point:

“I encourage commenters to provide detailed arguments on our statutory authority to impose a cable access requirement I note that while the Commission relied on that provision [section 4(i)] in adopting the *Computer Inquiry* requirements, there may be a greater nexus between those requirements and the provisions of Title II than exists between a cable access requirement and other affirmative grants of authority.”

Cable Modem Order, *supra* note 3, at 4868 n.2 (separate statement of Kathleen Q. Abernathy).

86. See, e.g., Brigitte Greenberg, *FCC Chooses To Watch and Wait as VOIP Slowly Moves Forward*, COMM. DAILY, Aug. 29, 2002 (noting “that industry analysts predict VoIP [Voice-over-IP] eventually will compete and perhaps overtake circuit-switched telephony delivered by CLECs”), available at LEXIS, News Group File.

87. See, e.g., Kathleen Q. Abernathy, *Bringing Regulatory Certainty to the Broadband Arena*, Remarks at the Alliance for Public Technology and High-Tech Broadband Coalition Policy Breakfast (June 28, 2002) (“[A] Title I approach has the benefit of allowing the Commission to adopt a flexible and narrowly targeted regulatory regime, rather than the heavy-handed approach associated with common carrier regulation under Title II.”), available at <http://www.fcc.gov/Speeches/Abernathy/2002/spkqa215.html> (last visited Sept. 16, 2003).

the Internet environment, content is not necessarily delivered by the provider of the physical facilities, but via applications offered by other companies—such as the software necessary to provide Internet telephony or instant messaging, for example—that depend on access to the Internet's logical and physical layers.⁸⁸

For this important reason, broadband Internet access differs from traditional information services (like voicemail) in that it is not merely the use of computing power to produce a service on a telecommunications platform.⁸⁹ Put in the context of the voicemail example, it is hard to imagine that any provider would press for “unbundled access” to a voicemail product to develop a complementary offering. In the context of broadband Internet access, however, “the capabilities made possible by broadband facilities enable the deployment of new, bandwidth-intensive, multimedia information services, which in turn drive the use and further development of broadband capable facilities.”⁹⁰ In short, the old forms of “information services” were the end products used by consumers; in the broadband world, new “information services”—such as broadband access itself, but also other applications (like instant messaging)—will constitute the platform upon which providers will rely to offer their Internet-delivered content and services.

The Commission's broadband proceedings suggest that it is interested in crafting a new regulatory regime for the Internet era based on its Title I authority.⁹¹ In so doing, it can develop a regulatory model that Congress can later endorse or reject, following the course that the Commission took in regulating cable television in the absence of an explicit statutory mandate.⁹² Indeed, given that the Telecom Act only

88. See *supra* notes 13–14 and accompanying text (noting the relationship between physical and logical layers).

89. See Wireline Broadband NPRM, *supra* note 3, para. 31 (stating that the *Computer Inquiries* regime “was constructed to accomplish certain goals in a world in which the services at issue were more akin to voicemail and other narrowband applications, rather than to broadband Internet access”).

90. *Id.* para. 13.

91. See Cable Modem Order, *supra* note 3, paras. 44–57; Wireline Broadband NPRM, *supra* note 3, para. 50 (asking whether reliance on voluntary market transactions would be sufficient or whether the Commission should mandate the sale of broadband transmission on a nondiscriminatory basis).

92. See Cable Modem Order, *supra* note 3, para. 70 (statement of Chairman Powell). For a discussion of this history, see Kathy L. Cooper, *The Cable Industry: Regulation Revisited in the Cable Television Consumer Protection and Competition Act of 1992*, 1 COMMLAW CONSPECTUS 109, 110–13 (1993).

faintly anticipated the rise of the Internet,⁹³ the need for such a strategy is not surprising.

*C. Limiting Principles for Broadband Regulation Under Title I
Ancillary Jurisdiction*

In order to withstand judicial scrutiny, the Commission must develop a limiting standard to contain the reach of its authority over the Internet. Historically, the “information services” classification signaled a policy of regulatory forbearance.⁹⁴ By contrast, using its Title I authority to regulate broadband Internet access as an information service would undermine this policy and raise the question of what principle would limit the expansion of the FCC’s regulatory jurisdiction in this area.⁹⁵ Thus, if the Commission fails to explain how information platforms play a crucial role in delivering the content heretofore delivered directly by cable and the telephone network, the courts may conclude that the Commission’s effort to regulate such platforms exceeds its jurisdiction. In *GTE Services Corp. v. FCC*, for example, the Second Circuit invalidated the FCC’s rule regarding the use of a common carrier’s name on its information services affiliate because this regulation did not relate to communications and thus constituted an impermissible extension of the FCC’s authority.⁹⁶ By contrast, the courts upheld the FCC’s decision to preempt state regulation of information services and inside wiring under its Title I authority, but only where doing so was necessary to advance the FCC’s goals.⁹⁷ In short, for a regulatory measure enacted under Title I to withstand judicial review, it must relate closely to an express statutory policy.

93. COMPUTER SCIENCE AND TELECOMM. BOARD, NAT’L RESEARCH COUNCIL, BROADBAND: BRINGING HOME THE BITS 24 (2002) (“The present policy framework for broadband, which revolves around the Telecommunications Act of 1996, is problematic and is unsuited in several respects to the new era of broadband services.”); Barbara Esbin, *Internet over Cable: Defining the Future in Terms of the Past*, 7 COMMLAW CONSPECTUS 37, 42 (1999) (“[T]he 1996 Act’s primary approach to communications services, service providers and facilities neither fully reflects nor anticipates the impact of Internet-based communications capabilities on existing networks and the regulatory regimes that govern them . . .”).

94. *AT&T Corp. v. City of Portland*, 216 F.3d 871, 878 (9th Cir. 2000) (stating that information services “have never been subject to regulation”).

95. See AOL Order, *supra* note 33, at 6712 (dissenting statement of Commissioner Powell) (noting that, without a limiting principle to govern the extension of Commission regulation, the FCC’s willingness to regulate instant messaging suggests the development of a regulatory regime that will “regulate chat rooms, e-mail services, peer-to-peer services such as Napster, and even the Internet browser market”).

96. *GTE Serv. Corp. v. FCC*, 474 F.2d 724, 735–36 (2d Cir. 1972).

97. See *California v. FCC*, 39 F.3d 919, 931–33 (9th Cir. 1994) (limiting state regulation of information services); *Nat’l Ass’n of Reg. Util. Comm’rs v. FCC*, 880 F.2d 422, 429 (D.C. Cir. 1989) (limiting state regulations of inside wiring).

One effective limiting standard for the FCC's reliance on Title I authority to regulate broadband platforms would focus on whether the information platform at issue delivered voice, video, or data communications that are reasonably likely to substitute for a service regulated under the FCC's existing regulatory mission.⁹⁸ Significantly, this standard would rule out any FCC regulation of the content layer.⁹⁹ As to regulations of the applications, logical, and physical layers—or of equipment that would work in conjunction with any of the above—the presence or absence of the FCC's regulatory jurisdiction would depend on the actual marketplace facts. Instant messaging technology, for example, would only be subject to Title I regulation based on a showing of its reasonable substitutability for a currently regulated information platform technology.¹⁰⁰ To adopt a more lenient standard would allow the FCC leeway in expanding its regulatory mission without clear statutory guidance. But the reasonable substitutability test provides clear direction to the FCC while enabling it to regulate new technologies that substitute for old ones—say, instant messaging or Internet telephony—and thus enables it to adapt its regulations to marketplace developments. By providing it with this authority, the FCC will not be forced to fit new technology into old regulatory categories and will be able to address competition policy problems arising from new technological developments in a narrowly tailored and appropriate manner.

Finally, an important benefit of the information platforms-based justification for Title I regulation is that such an approach would help

98. This standard is consistent with the more general approach taken by the FCC. See *Promotion of Competitive Networks*, 15 F.C.C.R. 22,983, para. 101 (2000) (finding that legal authority under Title I depends on whether the absence of regulation in question “effectively hinders” achievement of a statutory goal and the action is “reasonably ancillary” to fulfilling the charge of an express statutory provision).

99. This policy follows the state of the FCC's existing regulatory mandate, with the notable exception of broadcast regulation, which sanctions the regulation of content on the theory that the relevant information platform is a scarce resource managed by the government. See *Nat'l Broad. Co. v. United States*, 319 U.S. 190, 226 (1943) (explaining that the FCC enjoys authority not only to issue licenses for the use of spectrum, but also to oversee how that spectrum is used); see also *Red Lion Broad. Co. v. FCC*, 395 U.S. 367, 388–90 (1969) (upholding scarcity rationale). This rationale, as I and others have observed, is suspect and ripe for revision. See Phil Weiser, *Promoting Informed Deliberation and a First Amendment Doctrine for a Digital Age: Towards a New Regulatory Regime for Broadcast Regulation*, in *DELIBERATION, DEMOCRACY, AND THE MEDIA* 11, 12–13 (Chambers and Costain eds., 2000); Thomas W. Hazlett, *Physical Scarcity, Rent Seeking and the First Amendment*, 97 COLUM. L. REV. 905, 944 (1997).

100. In announcing its regulation of instant messaging as part of its approval of the merger of American Online and Time Warner, the FCC relied on a more relaxed standard, simply announcing that, as a form of communication, it must have jurisdiction. See *AOL Order*, *supra* note 33, para. 148.

immunize the regulatory regime against First Amendment challenges. Over the years, the courts have scrutinized the FCC's imposition of access obligations with particular care where the Commission provided access to "speakers" as opposed to "common carriers."¹⁰¹ By choosing not to classify broadband transmission as "telecommunications," which is recognized as connoting no speaking rights, the FCC will have to explain why First Amendment rights do not constrain its ability to impose rights on an "information service provider," which is generally treated as a speaker. By explaining the significance of information platforms, even if they are not regulated as common carriers per se, the Commission can signal to courts that such regulations do not reflect preferences among types of speech—or even speakers—but rather that they serve to address market failures in a dynamic industry environment.

V. BROADBAND POLICY AND AN ANTITRUST-LIKE MODEL OF REGULATION

The broadband era and the opportunity for the FCC to rely on its Title I authority to develop new strategies for telecommunications regulation may well mark the beginning of the FCC's development of a next generation regulatory regime. In the old environment, characterized by the *Computer Inquiry* rules,¹⁰² the FCC regulated monopoly telephone companies to facilitate the development of new "information services," such as "dial-a-joke" and dial-up Internet access.¹⁰³ For such cases, these services might not have been developed or deployed in an effective manner without the cooperation of the local monopoly telephone provider. Moreover, as underscored by "Baxter's Law,"¹⁰⁴ the fact that prices for using the telephone network were heavily regulated created an incentive for telephone companies to leverage their market power from the telecommunications market into adjacent markets. But as noted above, the broadband marketplace differs from the traditional environment in several ways, creating the

101. See, e.g., *Comcast Cablevision of Broward County, Inc. v. Broward County*, 124 F. Supp. 2d 685, 693 (S.D. Fla. 2000) ("The cable operator, unlike a telephone service, does not sell transmission but instead offers a collection of content.").

102. See *infra* notes 113–16 and accompanying text (discussing the *Computer Inquiry* rules).

103. See *Wireline Broadband NPRM*, *supra* note 3, para. 36 ("[T]he core assumption underlying the 'Computer Inquiries' was that the telephone network is the primary, if not exclusive, means through which information service providers can gain access to their customers.").

104. See *infra* notes 129–33 and accompanying text (defining Baxter's Law).

opportunity for the FCC to experiment with new models of regulation.¹⁰⁵

This Part outlines a new model of regulating access in the broadband environment. Under Title II's traditional model of common carriage regulation, companies face proactive limits on how they could operate. By contrast, this Part outlines how the FCC can rely on its Title I authority to employ a reactive, antitrust-like model of regulation for the emerging broadband market, which faces no price regulation and has the potential for rival platforms to compete vigorously with one another. In short, this model would allow parties to develop their own business arrangements as they saw fit, subject only to an after-the-fact scrutiny of discriminatory conduct alleged to lack a redeeming efficiency justification.

A. *The Law and Economics of Open Access Policies*

For more than thirty-five years, "open access" defined a large set of policies adopted and implemented by the FCC and antitrust courts. This era began with the landmark *Carterfone* decision, in which the FCC concluded that AT&T—then a vertically-integrated monopoly—could not thwart the attachment of customer premises equipment ("CPE")¹⁰⁶ to the wireline telephone network.¹⁰⁷ Famously, the FCC's *Carterfone* decision spawned a set of rules that regulated the ability of incumbent telephone providers to prevent "foreign devices" from connecting to the telephone network and framed an ongoing debate regarding the role of telecommunications regulation in ensuring "open access" to the telecommunications network.¹⁰⁸ These rules, which govern the equipment that can be used in connection with the telecommunications network, were ultimately upheld as a legitimate use of the FCC's Title I authority.¹⁰⁹

105. See *supra* notes 82–93 and accompanying text (discussing how the attributes of the broadband market may not be adequately addressed by prior regulatory approaches).

106. Customer premises equipment refers to any equipment that "attaches" to the wireline telephone network, including telephones, modems, and private branch exchanges ("PBXs").

107. Use of the Carterfone Device in Message Toll Telephone Service, 13 F.C.C.2d 420, 424–25 (1968). This decision arose from an antitrust action brought by the developers of the Carterfone against AT&T, as the district court referred the issues related to AT&T's tariff to the FCC for decision. See *Carter v. Am. Tel. & Tel. Co.*, 250 F. Supp. 188, 190 (N.D. Tex. 1966), *aff'd*, 365 F.2d 486 (5th Cir. 1966).

108. For a discussion of the relevant events, see *Phonetele, Inc. v. Am. Tel. & Tel. Co.*, 664 F.2d 716, 723–25 (9th Cir. 1981).

109. *N.C. Utils. Comm'n v. FCC*, 552 F.2d 1036, 1051 (4th Cir. 1977) (rejecting the argument that Congress neither foresaw this use of FCC power nor had explicit statutory authorization to mandate such regulations).

In the wake of the *Carterfone* decision, the FCC developed a regulatory regime that sports an intimidating set of legal and economic concepts. Thus, before discussing the possibilities for a next generation regulatory regime, it is important to understand the basics of the regulatory regime initiated by *Carterfone*. This Section first discusses the legal underpinnings of this regime and then reflects on its economic justifications.

1. The Legal World Created by *Carterfone* and Its Progeny

To appreciate the formidable regulatory regime developed since *Carterfone*, it is important to understand the different facets of open access policy. In particular, the concept of “open access” actually encompasses three distinct but related forms of regulation: (1) compatibility, (2) unbundling, and (3) interconnection. I will discuss each in turn.

First, as in *Carterfone*, open access can involve *compatibility requirements* that ensure that a complementary product is interoperable with a basic platform. At first, AT&T complied with *Carterfone*’s mandate by filing tariffs requiring a “protective coupling arrangement” to mediate between the network and any foreign devices.¹¹⁰ But after a number of CPE developers challenged this action, both at the FCC and in antitrust actions, the FCC imposed a “terminal equipment registration program,” which became known as the Part 68 rules.¹¹¹ This program required that all CPE—including equipment manufactured by AT&T—be certified by the FCC as compliant with certain compatibility requirements.¹¹²

Closely related to the FCC’s pro-competitive regulation of the equipment market was its regulation of “information services,” which use data processing technology and access to the telecommunications network to produce an array of product offerings ranging from Dial-A-Joke to LexisNexis to dial-up Internet access. To facilitate competition

110. See *Litton Sys., Inc. v. Am. Tel. & Tel. Co.*, 700 F.2d 785, 799 n.15 (2d Cir. 1983) (quoting AT&T internal report that the tariff requirements of employing PCAs were “a redundant, artificial and economic barrier to those wishing to purchase their own equipment”); *N.E. Tel. Co. v. Am. Tel. & Tel. Co.*, 651 F.2d 76, 95 (2d Cir. 1981) (concluding that AT&T may have designed PCAs in an unreasonable manner).

111. See *Proposals for New or Revised Classes of Interstate and Foreign Message Toll Telephone Service (MTS) and Wide Area Telephone Service (WATS)*, Second Report and Order, 58 F.C.C.2d 736 (1976) [hereinafter *MTS Second Report and Order*], *aff’d*, *N.C. Utils. Comm’n v. FCC*, 552 F.2d 1036 (4th Cir. 1977); *Proposals for New or Revised Classes of Interstate and Foreign Message Toll Telephone Service (MTS) and Wide Area Telephone Service (WATS)*, First Report and Order, 56 F.C.C.2d 593 (1975).

112. See *MTS Second Report and Order*, *supra* note 111.

in this market, the FCC conducted what are now known as the *Computer Inquiry* proceedings, which initially restricted telephone companies from entering the information services market and ultimately focused on the enforcement of "open access" obligations.¹¹³

The *Computer Inquiry* proceedings addressed the core concern that incumbent telephone providers would use their power in the telecommunications market to eliminate competition in the adjacent information services market.¹¹⁴ In particular, the FCC identified the twin risks that the incumbent telephone providers would "cross-subsidize" their information services products by placing joint and common costs in the regulated telecommunications affiliate and that they would discriminate against nonaffiliated information service providers by degrading their level of access to the telephone network. Unfortunately, the FCC's justifications for its shifting policies on how to protect information services from the telephone companies' anticompetitive conduct undermined its position in court. Thus, the FCC's last revision of these rules, its *Computer III* regime, has yet to be upheld.¹¹⁵ Consequently, the *Computer Inquiries*—unlike the universally praised *Carterfone* regime—have received mixed reviews.¹¹⁶

On a similar leveraging theory, both the Department of Justice and MCI successfully challenged AT&T's conduct in the long distance market, explaining that AT&T's predatory conduct violated the antitrust

113. For a good review of these proceedings, see Robert Cannon, *The Legacy of the Federal Communication Commission's Computer Inquiries*, 55 FED. COMM. L.J. 167 (2003).

114. See Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Services and Facilities, Notice of Inquiry, 7 F.C.C.2d 11, para. 15 (1966) (noting that common carriers will compete with information service providers and that information service providers will "be dependent upon common carriers for reasonably priced communication facilities and services"); see also *United States v. W. Elec. Co.*, 673 F. Supp. 525, 566 (D.D.C. 1987) (noting ability and incentive of telecommunications providers to discriminate against information service providers).

115. Initially, the Ninth Circuit invalidated the FCC's rules for a failure to address the cross-subsidization issue. See *California v. FCC*, 905 F.2d 1217, 1233–38 (9th Cir. 1990); see also *id.* at 1228–29 & n.16 (pointing out inconsistent rationales). After remand, the Ninth Circuit upheld the rules insofar as they addressed the cross-subsidy concern, but reversed and remanded them on the ground that they failed to guard effectively against discrimination concerns. See *California v. FCC*, 39 F.3d 919, 926–27, 930 (9th Cir. 1994) (upholding justification that *Computer III* and concomitant regulatory reforms guard against cross-subsidy and concluding that rules to address discriminatory access concerns are not sufficiently supported to withstand judicial scrutiny).

116. Compare Warren G. Lavey, *Ending Structural Separation for the Telephone Companies*, 18 CONN. L. REV. 81, 85–86 (1985) (arguing that *Computer I*'s separate subsidiary requirement did not rest on any demonstrated monopoly abuses or cost-benefit analysis), with Jonathan Weinberg, *The Internet and "Telecommunications Services," Universal Service Mechanisms, Access Charges, and Other Flotsam of the Regulatory System*, 16 YALE J. ON REG. 211, 222 (1999) (judging regulatory strategy taken by *Computer Inquiries* as "wildly successful").

laws.¹¹⁷ Consequently, AT&T agreed in a consent decree to divest its incumbent local telephone operations from its long distance and equipment manufacturing arms and subject the newly created Regional Bell Operating Companies ("RBOCs") to a quarantine that restricted them to providing regulated local service.¹¹⁸ The decree also imposed a set of "equal access" obligations to ensure that all long distance providers would receive nondiscriminatory access to the local networks for purposes of originating and terminating long distance calls.¹¹⁹ Ultimately, however, the Telecom Act ended the RBOCs quarantine and provided for competition in all telecommunications markets through entry of local providers into long distance markets and long distance providers into local service markets.¹²⁰

The second regulatory tool often discussed under the open access umbrella is "*unbundling*." Unbundling requires that a firm—often a monopolist—provide separately two products that it might otherwise wish to offer together. In some cases, where the two products are clearly distinct, this requirement is easily understood and implemented. In the regulation of telecommunications equipment, for example, the FCC initially imposed an unbundling mandate, requiring that telecommunications providers "unbundle" the sale of telephone service from equipment.¹²¹ In other cases, particularly in high technology markets, unbundling mandates require that regulators closely supervise product design decisions.¹²² Finally, unbundling can be particularly controversial where it involves a mandated leasing arrangement and regulators decide upon the wholesale price at which the unbundled product is offered to a competitor. Indeed, with respect to the Telecom

117. See *MCI Communications Corp. v. Am. Tel. & Tel. Co.*, 708 F.2d 1081, 1105 (7th Cir. 1983); *United States v. Am. Tel. & Tel. Co.*, 552 F. Supp. 131 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983).

118. See *Am. Tel. & Tel. Co.*, 552 F. Supp. at 161.

119. See *id.* at 227.

120. See 47 U.S.C. § 271 (2000 & West Supp. 2003) (providing for Bell company entry into in-region long distance markets).

121. See Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), 77 F.C.C.2d 384 (1980) [hereinafter Computer II]. After the development of a competitive market for equipment, the FCC ultimately lifted this unbundling requirement, relying solely on the certification requirement to protect competition. See Review of Customer Premises Equipment and Enhanced Services Unbundling Rules in the Interexchange, Exchange Access and Local Exchange Markets, 16 F.C.C.R. 7418, para. 1 (2001); see also Computer II, *supra*, para. 9 (lifting tariff requirements on CPE in light of certification regime and competitive opportunities in that market).

122. This is the case involving computer software products, for example. See M. Sean Royall, *Coping with the Antitrust of Technological Integration*, 68 ANTITRUST L.J. 1023, 1056 (2001) (discussing how competitors' marketing decisions affect regulation).

Act, the ongoing debates and litigation over unbundling policy largely revolve around this contentious issue.¹²³

The final regulatory tool involves the regulation of “interconnection.” The concepts of interconnection and compatibility requirements are sometimes used interchangeably, but for present purposes, this Article conceives of interconnection as the relationship between two competitors using the same technology platforms—say, wireless networks or Internet backbone networks. Compatibility requirements, by contrast, govern the relationship between a platform and a complementary product—say, the telephone network and a telephone or a modem. Like mandated leasing requirements, interconnection regulation can involve the oversight of some technical arrangements (e.g., how to interconnect) as well as price regulation (e.g., how to regulate the cost of exchanging traffic). Because interconnection does not involve the use of shared facilities, however, it is often less difficult to oversee than mandated leasing requirements.

In the Internet arena, there are only the beginnings of a regulatory regime that mandates any form of open access to Internet products or services. As noted above, the FCC is just beginning to consider what, if any, policies should be imposed on broadband transmission facilities, including whether any of the *Computer Inquiry* rules should be imposed on broadband platforms. By contrast, with respect to the Internet backbone market, the FCC has not even reached this stage of oversight, as its pronouncements to date have all suggested that no interconnection requirement is likely to be necessary.¹²⁴ Nonetheless, with respect to the instant messaging market, the FCC concluded that an interconnection requirement might be necessary to avoid anticompetitive harms and that AOL Time Warner, as a condition of its merger approval, would be subject to regulatory oversight on that score.¹²⁵ Like the questionable judgments that underlie some of the

123. See, e.g., *Verizon Communications, Inc. v. FCC*, 535 U.S. 467 (2002) (upholding the legality of the FCC’s methodology for pricing unbundled access six years after its adoption).

124. See MICHAEL KENDE, *THE DIGITAL HANDSHAKE: CONNECTING INTERNET BACKBONES* 4–9 (FCC Office of Plans & Pol’y, Working Paper No. 32, Sept. 2000), available at <http://www.fcc.gov/opp/workingp.html> (last visited Sept. 18, 2003); see also James B. Speta, *A Common Carrier Approach to Internet Interconnection*, 54 FED. COMM. L.J. 225, 247–501 (2002).

125. See AOL Order, *supra* note 33, para. 191; Weiser, *Internet Governance*, *supra* note 13, at 835–36. The FCC later concluded that its imposition of an interconnection mandate was unnecessary and inappropriate. See Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner Inc. and America Online, Inc., Transferors, to AOL Time Warner, Inc., Transferee; Petition of AOL Time Warner Inc. for Relief from the Condition Restricting Streaming Video AIHS, CS Docket No. 00-30 (Aug. 20, 2003), available at 2003 FCC LEXIS 4700.

FCC's revisions of the *Computer Inquiry* rules, the FCC's tentative and sometimes contradictory steps in this area reveal that it has yet to develop a clear economic justification for its open access policies.

2. Some Economics of Open Access

I, along with Joseph Farrell, have offered an extensive explanation of how the FCC should analyze open access issues, so I will only offer a brief synopsis of that analysis here.¹²⁶ First, and in an often underappreciated principle, even a platform monopolist has a powerful incentive to attract compatible applications to its platform. Take, for example, Palm's position in Personal Digital Assistants, where it still possesses a formidable share of the operating systems ("OS") market. Rather than try to monopolize the market for applications for its own OS platform, Palm shares access to its operating system. This allows others, such as Handspring, to build value-added products and also encourages developers to create applications for its system. Why is Palm so welcoming of outside innovation? Because the more valuable its system—i.e., its OS platform in conjunction with the applications for it—the more money it will earn in OS revenue. Thus, Palm possesses a powerful incentive, which Joseph Farrell and I call the "internalization of complementary externalities," or ICE, to attract and support applications for its platform.¹²⁷

Based on the attitude of platform monopolists suggested by the ICE theory and Palm's behavior, one might conclude that no regulatorily imposed open access obligations are necessary or advisable. I will come back to this argument shortly, which is associated with the Chicago School perspective and is often referred to as the "one monopoly profit" theory.¹²⁸ But before discussing the premise of this argument, it is important to acknowledge that there are exceptions to the ICE theory, which underlie, among other things, the antitrust cases against AT&T and Microsoft.

The most significant exception to ICE that is almost universally acknowledged is Baxter's Law. This exception, named after the architect of the AT&T consent decree, former antitrust chief and scholar William Baxter, focuses on the propensity of a platform monopolist facing price regulation to evade that regulation by leveraging its market

126. See Farrell & Weiser, *supra* note 7.

127. See *id.*

128. See, e.g., ROBERT H. BORK, THE ANTITRUST PARADOX 229 (1978) ("[V]ertically related monopolies can take only one monopoly profit."); RICHARD A. POSNER & FRANK EASTERBROOK, ANTITRUST 870 (2d ed. 1981) ("There is only one monopoly profit to be made in a chain of production.").

power from the platform market into adjacent and unregulated applications markets.¹²⁹ In the ideal scenario for the monopolist, it can evade the strictures of regulation in the platform market by charging a monopoly price in the applications market. For AT&T, its opposition to the *Carterfone* decision and the subsequent open access rules related to equipment markets stemmed in considerable part from the fact that those rules limited AT&T's ability to use this tactic successfully.¹³⁰ In the pre-*Carterfone* days, the AT&T monopoly could offer consumers only one choice for a phone and charge high prices for that product, often in the form of a leasing arrangement. But when consumers were able to take advantage of competitive alternatives—instead of paying the incumbent's rate for a leased phone—AT&T lost a source of monopoly profits.

Baxter's Law also recognizes more subtle versions of monopolistic conduct. For starters, given that regulators are inherently imperfect, a platform monopolist can fairly easily find ways of moving the costs of developing a complementary product into the platform market and thus make profits in the unregulated market.¹³¹ Again, in the equipment market, AT&T could gain an unfair advantage over competitors by shifting a substantial share of the development costs to the regulated telephone service side of the operation. For most businesses, such tactics would come back to hurt them, but under rate of return regulation, firms can survive—and even thrive—using such tactics because they are promised a rate of return for all expenditures made as part of delivering the regulated service.¹³² In addition to using cross-subsidization, a platform monopolist can also—as was alleged of AT&T for both equipment manufacturing and long distance markets—

129. See Paul L. Joskow & Roger G. Noll, *The Bell Doctrine: Applications in Telecommunications, Electricity, and Other Network Industries*, 51 STAN. L. REV. 1249, 1249–50 (1999) (discussing “Baxter’s Law” and deeming it the “Bell Doctrine”).

130. The state regulatory authorities opposed the *Carterfone* regime for a different reason: the removal of the customer premises equipment from the local network (with which it previously had been bundled) limited the scope of the charges that state authorities could regulate and use to subsidize other services.

131. See *United States v. Am. Tel. & Tel. Co.*, 552 F. Supp. 131, 170–71 (D.D.C. 1982) (discussing AT&T’s use of this practice), *aff’d sub nom.* *Maryland v. United States*, 460 U.S. 1001 (1983).

132. The institution of price-cap regulation, which aims to sever the link between expenditures and allowable earnings, ameliorates this problem, but does not necessarily solve it entirely. See *California v. FCC*, 39 F.3d 919, 926 (9th Cir. 1994) (concluding that price-cap regulation “significantly reduce[s]” an incumbent firm’s “incentive and ability” to engage in cross-subsidization); *United States v. W. Elec. Co.*, 993 F.2d 1572, 1580 (D.C. Cir. 1993) (explaining how price-cap regulation “reduces” an incumbent telephone provider’s ability to “shift costs from unregulated to regulated activities, because the increase in costs for the regulated activity does not automatically cause an increase in the legal rate ceiling”).

discriminate against nonaffiliated firms by making it more difficult for them to offer reliable products or services that are compatible with the platform. In the face of these competitive concerns, Baxter concluded that the only effective remedy against AT&T was a quarantine of the regulated local monopolists on the theory that this remedy would reduce both the incentive and opportunity to engage in such tactics.¹³³

In addition to Baxter's Law, there are a number of exceptions to ICE, many of which fall into what commentators call the "post-Chicago School" of antitrust economics.¹³⁴ Rather than discuss those issues here, this Article focuses on two particular exceptions that could arise in the Internet context and that animated the Department of Justice's antitrust case against Microsoft. First, there is the competitive concern raised in the Microsoft case that, for certain markets, complementary products can threaten the platform monopoly itself. In *United States v. Microsoft*,¹³⁵ the Justice Department argued that Microsoft viewed Netscape's web browser product, particularly in combination with Java technologies, as a threat to its platform monopoly in the operating systems market and thus adopted a set of predatory strategies to exclude Netscape from the market.¹³⁶ Second, there are instances in which a platform provider may use its gatekeeping role to "hold up" the deployment of applications, thereby giving itself an additional source of revenue and deterring future innovation. In the *Microsoft* case, the threat to Netscape to cooperate with Microsoft or face destruction reflects a possible instance of this exception to ICE.¹³⁷ Similarly, this concern also surfaced in the antitrust case against AT&T, as it used this tactic in declining to allow innovators to provide new technologies for

133. See Joskow & Noll, *supra* note 129, at 1249–50 (discussing Baxter's thinking on this point).

134. For an early survey of this movement, see Jonathan B. Baker, *Recent Developments in Economics That Challenge Chicago School Views*, 58 ANTITRUST L.J. 645, 651–52 (1989).

135. *United States v. Microsoft Corp.*, 87 F. Supp. 2d 30 (D.D.C. 2000), *aff'd in part, rev'd in part*, 253 F.3d 34 (D.C. Cir. 2001).

136. *See id.* at 38 ("In this case, Microsoft early on recognized middleware as the Trojan horse that, once having, in effect, infiltrated the applications barrier, could enable rival operating systems to enter the market for Intel-compatible PC operating systems unimpeded. Simply put, middleware threatened to demolish Microsoft's coveted monopoly power."); *see also* James B. Speta, *Tying, Essential Facilities, and Network Externalities: A Comment on Piraino*, 93 NW. U. L. REV. 1277, 1282 (1999) (pointing out that Microsoft's predatory actions vis-à-vis Netscape can be explained on the ground that Microsoft viewed the browser as a partial substitute for the operating system); Michael D. Whinston, *Exclusivity and Tying in U.S. v. Microsoft: What We Know, and Don't Know*, 15 J. ECON. PERSP. 63, 73 (2001) (same).

137. *See Microsoft*, 87 F. Supp. 2d at 45–46 (discussing Microsoft's proposal).

use in the telecommunications industry and suggesting that it would introduce those technologies through its own affiliate.¹³⁸

Commentators continue to argue over whether ICE represents the central rule or is, in fact, the exception.¹³⁹ Pointing to the FCC's tradition of open access regulation and the use of a similar commitment to "modularity" in developing the Internet, some commentators, most notably Professor Lawrence Lessig, argue that regulation should insist on an open architecture model in Internet markets.¹⁴⁰ In contrast to this plea for openness, many Chicago School adherents maintain that the marketplace can be trusted—Baxter's Law excepted, of course—to enforce a commitment to open architecture where it would be efficient to employ such a strategy.¹⁴¹ Finally, there is room for a third way that follows the model of antitrust in presuming that minimal intervention is appropriate, but is sensitive to the possibility of exceptions to ICE and believing that regulators can diagnose and address such exceptions effectively.

B. An Antitrust-like Model for Broadband Regulation

The FCC's current broadband proceedings have produced a familiar debate about the merits of open access regulation and its challenges. The one notable exception to the usual open architecture versus Chicago School debate is the network neutrality argument outlined above.¹⁴² Network neutrality proponents concede that open access rules designed to facilitate the preservation of alternative ISPs may be unwise because they do not necessarily protect the development of Internet content and services and they would entail the difficult work associated with the type of unbundling regime required by the Telecom Act.¹⁴³ Unfortunately, they also have yet to develop a clearly articulated explanation of the economics behind or the legal framework to

138. See, e.g., Willard K. Tom & Joshua A. Newberg, *Antitrust and Intellectual Property: From Separate Spheres to Unified Field*, 66 ANTITRUST L.J. 167, 202 (1997) (relating AT&T's explanation to Corning, Inc., that "it would be 30 years before [AT&T's] telephone system would be ready for optical fiber" and that when it was, [AT&T] would make its own).

139. See, e.g., Herbert Hovenkamp, *Post-Chicago Antitrust: A Review and Critique*, 2001 COLUM. BUS. L. REV. 257, 278–79 ("The principal difference between Chicago and post-Chicago economic analysis" is the prevalence of a "complex set of assumptions about how a market works, [which make] anticompetitive outcomes seem more plausible.").

140. See LAWRENCE LESSIG, *FUTURE OF IDEAS* 147–67 (2001).

141. See Frank H. Easterbrook, *The Limits of Antitrust*, 63 TEXAS L. REV. 1, 3 (1984) ("[J]udicial errors that tolerate baleful practices are self-correcting, while erroneous condemnations are not.").

142. See *supra* notes 31–32 and accompanying text (describing the network neutrality argument).

143. See Wu, *supra* note 30.

administer this form of regulation. In my view, an appealing version of the network neutrality approach is to implement the principle through an antitrust-like approach to regulation.

For some, an “antitrust-like approach to regulation” would appear to be an oxymoron, as a number of commentators suggest that antitrust law should replace telecommunications regulation altogether.¹⁴⁴ Alternatively, some commentators argue that antitrust law can discipline regulation and give meaning to the FCC’s broad mandate embodied in its public interest standard.¹⁴⁵ Taking an antitrust-like approach to regulation, however, means that regulatory agencies can look to the antitrust model for guidance even without purporting to follow its standards as a court would. In particular, I envision an antitrust-like approach to regulation as (1) relying on a basic standard developed by after-the-fact judgments, (2) being sensitive to the ICE principle and tethering regulatory intervention to its exceptions, and (3) reflecting a careful awareness that regulatory intervention must be likely to do more good than harm. This Section will outline each principle in turn and then explain how, taken together, they provide a model of regulation for broadband markets.

1. A Nondiscrimination Standard Developed by After-the-fact Judgments

Unlike proactive command and control regulation, antitrust law relies on basic standards developed through adjudication. A central virtue of this approach is that the Sherman Act’s statutory policies are generally enforced through legal standards and not categorical rules. The legal standard that forms the heart of the Sherman Act is the rule of reason, which requires a balancing of competitive harms and benefits before condemning a practice as illegal.¹⁴⁶ Moreover, the antitrust regime, with the exceptions of practices proven to have a “pernicious effect on competition and [no] redeeming virtue,” does not categorically condemn practices as per se illegal.¹⁴⁷ Nonetheless, where practices are facially anticompetitive, the antitrust laws allow for an abbreviated rule of reason inquiry that presumes such conduct to be

144. See HUBER, *supra* note 49, at 3–9.

145. See John W. Berresford, *The Future of the FCC: Promote Competition, Then Relax*, 50 ADMIN. L. REV. 731, 733 & n.7 (1998).

146. See Michael S. Jacobs, *The New Sophistication in Antitrust*, 79 MINN. L. REV. 1, 48 (1994) (discussing the rule of reason inquiry and its virtues).

147. N. Pac. R.R. v. United States, 356 U.S. 1, 5 (1957) (stating that although some activities may be per se illegal, the principle of per se unreasonableness avoids intensive complicated investigations in practices and agreements).

illegal, but offers firms an opportunity to present a benign explanation for such conduct.¹⁴⁸

Following the antitrust model, telecommunications regulation could develop a similar regulatory architecture for Internet markets that are not prone to Baxter's Law, but where there are reasons to be concerned about anticompetitive conduct. This model would announce a regulatory standard of nondiscriminatory access, but refuse to elaborate on that standard until parties demonstrated an actual denial of such access. Thus, rather than rely on the prophylactic (or *ex ante*) development of categorical rules to regulate behavior, the FCC could announce a standard that would be enforced after-the-fact.

The FCC's development of an antitrust-like regime would attempt to give the marketplace more freedom to evolve and would rely on subsequent proceedings to determine whether incumbent broadband providers acted in an anticompetitive manner. A likely version of this type of regulation would rely on the presumption that a discriminatory access arrangement—be it to Internet content, services, or equipment—is anticompetitive, but would offer the broadband transmission provider the opportunity to justify the practice with reference to a legitimate business reason. In prior instances of enforcing a nondiscrimination mandate, the FCC has adopted this type of a burden shifting approach, as it provides the firm with the best access to the information an opportunity to justify conduct that is facially suspect.¹⁴⁹

In evaluating the merits of an antitrust-like model versus the adoption of proactive command and control rules, regulators must take seriously the difficulty of gathering reliable information and superintending alternative possible remedies. In particular, many affected parties will view regulatory intervention as an opportunity to gain an advantage over a competitor and thus will provide misleading information to regulators.¹⁵⁰ By not only identifying the types of competitive risks that may occur, but also insisting on clear and actual evidence of such risks, regulators can ensure that they respond appropriately to actual competitive threats—and not speculative ones.¹⁵¹

148. See Gregory J. Werden, *Antitrust Analysis of Joint Ventures: An Overview*, 66 ANTITRUST L.J. 701, 716–22 (1998); see also *Cal. Dental Ass'n v. FTC*, 526 U.S. 756, 770 (1999).

149. See *Nat'l Communications Ass'n v. AT&T Corp.*, 238 F.3d 124, 130 (2d Cir. 2001) (explaining FCC's practice and rationale for burden-shifting approach).

150. See Weiser, *Internet Governance*, *supra* note 13, at 841.

151. This Article does not discuss the exact details of how such an enforcement regime would work, including whether and how it would provide opportunities for alternative dispute resolution short of a litigated decision.

2. ICE and Its Exceptions

The hardest question for regulators in confronting demands to impose open access regulation is how to calibrate the appropriate default rule. As noted above, some commentators suggest that regulators should not be willing to allow any deviation from a completely open architecture, fearing that the exceptions to ICE may well constitute the rule in terms of how platform monopolists are likely to behave.¹⁵² Others explain that regulatory involvement in such decisions is wholly unnecessary, as in a world without price regulation, monopolists who do not follow ICE will be disciplined either by the market or by antitrust law.¹⁵³

Unlike courts hearing antitrust cases, which must wait until after an actual antitrust violation has been proved before acting, the FCC is empowered to supervise access obligations when it concludes that the marketplace is vulnerable to anticompetitive conduct.¹⁵⁴ Indeed, the very premise of economic regulation is that agencies can make predictive judgments about likely economic effects and balance the costs and benefits from their regulation.¹⁵⁵ On a similar rationale, Congress provided for a regulatory presumption against mergers between cable and local telephone companies because potential competition arguments would be difficult to evaluate from a pure antitrust standpoint.¹⁵⁶

152. See LESSIG, *supra* note 140, at 147–67.

153. See, e.g., Easterbrook, *supra* note 141, at 2 (stating that monopoly prices are self-destructive and attract entry).

154. See, e.g., *Nat'l Broad. Co. v. United States*, 319 U.S. 190, 223–24 (1943).

155. See *FCC v. Nat'l Citizens Comm. for Broad.*, 436 U.S. 775, 814 (1978) (stating that complete factual support is not required where agency predictions “necessarily involve[] deductions based on the expert knowledge of the agency”); *Am. Postal Workers Union v. United States Postal Serv.*, 891 F.2d 304, 314 (D.C. Cir. 1989) (stating that agencies are entitled to make “predictive judgments” and that “‘complete factual support’” is not required when they act within their area of expertise (citation omitted)), *rev'd on other grounds*, 498 U.S. 517 (1991); *N.C. Utils. Comm'n v. FCC*, 552 F.2d 1036, 1054 (4th Cir. 1977) (“[N]o general principle of administrative law forces all agencies to conduct exhaustive economic impact studies before taking action.”).

156. See 47 U.S.C. § 572(d)(6)(A)(iii) (2000) (barring mergers between local telephone and cable companies unless the FCC determines that “the anticompetitive effects of the proposed transaction are clearly outweighed in the public interest by the probable effect of the transaction in meeting the convenience and needs of the community to be served”). Similarly, one could imagine similar cases where the regulatory authorities would judge certain mergers too risky from a competitive standpoint, even where there remained some uncertainty as to whether they would meet an antitrust standard. See Joel Klein, *Making the Transition from Regulation to Competition: Thinking About Merger Policy During the Process of Electric Power Restructuring* (Jan. 21, 1998), available at <http://www.usdoj.gov/atr/public/speeches/1332.htm> (last visited Sept. 18, 2003).

Chicago School critics doubt whether regulators can engage in a careful balancing of the costs and benefits of regulation, but the success of the *Carterfone* decision suggests that there is, at the very least, considerable potential merit in economic regulation when there are reasons to believe that market failures exist.¹⁵⁷ Moreover, where the FCC fails to justify its regulatory strategies, the courts play a salutary role in evaluating its decisions.¹⁵⁸ In order to justify the regulatory measures it develops, the FCC should analyze, by reference to ICE and its exceptions, whether it is reasonably likely that a platform monopolist will act in an anticompetitive fashion towards application markets. Similarly, if the FCC imposes a nondiscrimination standard along the lines outlined in this Article, it should insist that any party alleging a violation of that standard also provide a reasonably plausible theory as to why a firm would discriminate in a manner not suggested by ICE—i.e., explain how one of the ICE's exceptions can shed light on the purportedly anticompetitive conduct.

3. Is It Worth the Candle?: The Costs of Regulation

Even where the FCC identifies competitive harms that are reasonably likely to occur, it is still possible that the regulatory cures to those harms will be worse than the disease. To borrow from antitrust jurisprudence, regulators should take account of the potential for erroneous regulatory intervention, the negative side effects of possible remedies, and the presence of alternative regulatory strategies.¹⁵⁹ This Subsection will first discuss some of the potential costs of regulation and then apply those to the broadband context.

A paramount concern for regulators must be whether the regulatory initiative itself will create such formidable administrative costs as to overwhelm any benefits arising from it. The *Carterfone* regime avoided this fate by focusing on measures that required minimal regulatory effort—the compatibility regime enforced through a certification requirement and an easy-to-understand unbundling requirement. The merits of some of the *Computer Inquiry* rules, at least with respect to

157. See, e.g., *United Air Lines, Inc. v. Civil Aeronautics Bd.*, 766 F.2d 1107, 1113–14 (7th Cir. 1985) (upholding regulation of airlines to address, among other things, practices with respect to the operation of computerized reservation systems).

158. See, e.g., *Schurz Communications, Inc. v. FCC*, 982 F.2d 1043, 1049, 1056 (7th Cir. 1992) (rejecting regulation of television network's entry into production as unjustified).

159. For a similar model, see Howard A. Shelanski & J. Gregory Sidak, *Antitrust Divestiture in Network Industries*, 68 U. CHI. L. REV. 1, 17–18 (2001). Shelanski & Sidak identify three related considerations for the development of antitrust remedies: (1) the cost of “false positives,” (2) the competitive costs of not taking action, and (3) the costs of administering a remedial regime. *Id.*

certain products such as voicemail, are not so easily defended.¹⁶⁰ In the context of implementing the Telecom Act's market opening provisions, the presence of significant administrative costs continues to be a challenge. As Justice Breyer put it, "[e]ven the simplest kind of compelled sharing, say, requiring a railroad to share bridges, tunnels, or track, means that someone must oversee the terms and conditions of that sharing."¹⁶¹ In the context of Internet-related products, such challenges may multiply if unbundling mandates require a regulator to direct the redesign of a technologically integrated product for use by competitors.¹⁶²

In addition to the concern that mandated access for multiple ISPs does not address the core concern of protecting the development of Internet-facilitated content and services,¹⁶³ the regulatory effort to facilitate unbundled access to broadband transmission is a considerable deterrent to adopting any such policy. Unlike contractual tying arrangements, where the tied product is sold separately at a market price, there is no market price for the broadband transmission that ISPs are interested in purchasing. Thus, as demonstrated by the fact that the open access provisions in the consent decree imposed by the Federal Trade Commission ("FTC") on AOL Time Warner rely on the contract negotiated with Earthlink,¹⁶⁴ any assurance of open access for ISPs will

160. See, e.g., Jerry A. Hausman, *Valuing the Effect of Regulation on New Services in Telecommunications*, 1997 BROOKINGS PAPERS ON ECONOMIC ACTIVITY: MICROECONOMICS 1, at 3-4 (discussing costs—measured in the billions of dollars—imposed by the FCC's structural separation requirement and other regulation that delayed the introduction of voicemail).

161. *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366, 428 (1999) (Breyer, J., concurring in part and dissenting in part); see also Spulber & Yoo, *supra* note 1, at 895-99 (outlining concerns related to compelled access arrangements).

162. See Dennis W. Carlton, *A General Analysis of Exclusionary Conduct and Refusal To Deal—Why Aspen and Kodak Are Misguided*, 68 ANTITRUST L.J. 659, 675 n.30 (2001) (suggesting a limiting principle that only where a benchmark exists for a discriminatory access arrangement between a vendor and different customers, which is designed to and has the effect of undermining competition in a related market, should antitrust scrutiny attach).

163. See Gerald Falhauber, Comments at the E-2-E Workshop (Dec. 1, 2000) (calling multiple ISP access "simply an ISP preservation act"), available at <http://cyberlaw.stanford.edu/e2e/papers/Fal.pdf2> (last visited Sept. 14, 2003). "[O]pen access for ISPs on cable broadband is not the same as full content access and guaranteed developer access. It may or may not be a good proxy, but nobody has made a serious argument that it is." *Id.*; see also U.S. GEN. ACCOUNTING OFFICE, TECHNOLOGICAL AND REGULATORY FACTORS AFFECTING CONSUMER CHOICE OF INTERNET PROVIDERS (Oct. 2000) (noting body of expert opinion suggesting that a reduction in ISPs did not, in and of itself, pose a threat to users of the Internet through broadband connections), available at <http://www.gao.gov/news.items/d01345.pdf> (last visited Sept. 14, 2003).

164. See *In re Am. Online, Inc.*, F.T.C. CS No. C-3989 Sec. II.A (2000), available at <http://www.ftc.gov/os/2001/04/aoltwdo.pdf> (last visited Sept. 19, 2003).

require regulators to set a price for wholesale access.¹⁶⁵ In addition to price setting, unbundling of broadband transmission would also raise a series of questions for regulators relating to the quality of the access and coordination issues regarding shared bandwidth, which would invariably result in market delays and uncertainty.¹⁶⁶ Finally, in answering such questions, the Commission might well, in effect, institute a set of access arrangements that would preclude marketplace experimentation with alternative forms of access.¹⁶⁷

The network neutrality proposal, particularly if implemented through an antitrust-like approach, should involve minimal regulatory costs. To the extent that a nondiscrimination norm tracks what most efficient platform monopolists would do anyway, it may not generate many cases of noncompliance. But to the extent that there are cases where Internet content, services, or equipment are not allowed to connect to a broadband network in a nondiscriminatory manner, it is reasonable for the FCC to require an explanation. Particularly because there would be an opportunity for firms to justify such restrictions, which is not usually the case with traditional command and control regulation, this model of regulation would only minimally restrict the marketplace by focusing on core competitive concerns.¹⁶⁸

4. *Carterfone* Revisited

The FCC's actions in its broadband rulemakings may prove to be the *Carterfone* decision for the Internet age. As I envision it, the importance of developing an appropriate network neutrality requirement

165. See John E. Lopatka & William H. Page, *Internet Regulation and Consumer Welfare: Innovation, Speculation, and Cable Unbundling*, 52 HASTINGS L.J. 891, 924–25 (2001). Other “open access” advocates acknowledge that such a step would require the provision of wholesale access at regulatorily established terms and conditions as well as regulation of the uses for the product. See Steven A. Augustino, *The Cable Open Access Debate: The Case for a Wholesale Market*, 8 GEO. MASON L. REV. 653, 672 (2000).

166. See *Iowa Utils. Bd.*, 525 U.S. at 429 (Breyer, J., concurring in part and dissenting in part) (“The greater the administrative burden, for example, the more the need for complex proceedings, the very existence of which means delay”); Warren G. Lavey, *Ending Structural Separation for Telephone Companies*, 18 CONN. L. REV. 81, 86 (1985) (noting how, under the *Computer I* regime, parties were forced to undergo the time, expense, and uncertainty of long regulatory proceedings of litigating the status of “hybrid services”).

167. See DEBORAH A. LATHEN, CABLE SERVICES BUREAU, BROADBAND TODAY: A STAFF REPORT TO WILLIAM E. KENNARD, CHAIRMAN OF THE FEDERAL COMMUNICATIONS COMMISSION, ON INDUSTRY MONITORING SESSIONS CONVENED BY CABLE SERVICES BUREAU 40 (1999) (noting the different conceptions of what type of access arrangement is optimal), available at <http://www.fcc.gov/Bureaus/Cable/Reports/broadbandtoday.pdf> (last visited Sept. 14, 2003).

168. See Phil Weiser, *Paradigm Changes in Telecommunications Regulation*, 71 U. COLO. L. REV. 819, 835–36 (2000).

is that it would help ensure that the Internet's basic protocol remains open and nonproprietary. At present, the basic architecture of the Internet rests on wide-open access to content and services that are compatible with the TCP/IP protocol.¹⁶⁹ As long as this remains true, customers will also be able to access content or services over the Internet regardless of their ISP.¹⁷⁰ To be sure, this regime would not necessarily protect every aspect of the Internet's "end-to-end" design, as network providers might be able to justify certain exceptions from the "end-to-end" principle related to, say, filtering spam.¹⁷¹

To safeguard the Internet's open nature, the FCC would need to be sensitive to any effort by a broadband provider to limit access to Internet content, such as blocking access to specific websites.¹⁷² Indeed, this form of "open access" is prevalent in today's Internet,¹⁷³ so imposing this requirement would be a fairly costless policy to ensure that widespread access remains available. Among other things, it would assure content and applications developers that consumers would not be denied access to their innovations unless the developers surrendered them to the broadband transmission provider.¹⁷⁴

169. See PETER W. HUBER ET AL., FEDERAL TELECOMMUNICATIONS LAW § R15 11.8.1, at 1053 (2d ed. 1999) ("TCP/IP is the universal protocol of *unbundled, equal access* carriage—a protocol that is content-neutral, network-neutral, medium-neutral. It is, in short, the purest form of 'common carriage.'").

170. As the FCC explained:

It bears repeating that cable modem service subscribers, by "click-through" access, may obtain many functions from companies with whom the cable operator has not even a contractual relationship. For example, a subscriber to Comcast's cable modem service may bypass that company's web browser, proprietary content, and email. The subscriber is free to download and use instead, for example, a web browser from Netscape, content from Fox News, and email in the form of Microsoft's "Hotmail." Whether the subscriber chooses to utilize functions offered by his cable modem service provider or obtain them from another source, these functions are all included in the standard cable modem service offering.

Cable Modem Order, *supra* note 3, para. 25 (citation omitted).

171. For an excellent discussion of the Internet's "end-to-end" design principle and the reasons for allowing exceptions to it, see Marjory S. Blumenthal & David D. Clark, *Rethinking the Design of the Internet: The End-to-End Arguments vs. the Brave New World*, ACM TRANSACTIONS ON INTERNET TECH. 1, 70 (2001), available at http://www.nationalacademies.org/cstb/people_blumenthal.html (last visited Oct. 30, 2003).

172. See *id.* at 91–92 (discussing the relationship between domain name system and the Internet access provider).

173. Cable Modem Order, *supra* note 3, para. 11 (stating that cable allows operators and subscribers to access anything available on the internet).

174. The Commission's *Cable Modem Order* noted this possibility:

We note that we are unaware of any allegation that a cable operator has denied "click through" access to other ISPs. Moreover, although it is technically feasible for a cable operator to deny access to unaffiliated content, or to relegate unaffiliated content to the

Under a reactive model of regulation to enforce a nondiscrimination norm, the Commission would not need to impose mandatory disclosure rules governing the design of broadband networks of the type contained in the *Computer III* rules,¹⁷⁵ but could enforce and develop a basic nondiscrimination standard through case-by-case adjudications.¹⁷⁶ Indeed, it seems particularly unwise to develop a set of disclosure requirements—let alone mandate that an underlying transmission component be provided separately under tariff—if broadband providers are likely in any event to set up a “private commons” to ensure that equipment manufacturers and Internet content and services developers have access to the necessary specifications and bandwidth. As the FCC has recognized, proactive regulation such as mandated tariffing has a series of drawbacks, including delaying the introduction of new services, facilitating tacit collusion, and imposing administrative costs on service providers.¹⁷⁷

Should individual companies manipulate the relevant interfaces, deceive users or developers about the openness of the relevant specifications, or take any other actions that commentators have speculated as likely to unnecessarily limit innovation,¹⁷⁸ the FCC would need to condemn such conduct quickly.¹⁷⁹ In particular, if the FCC

“slow lane” of its residential high-speed Internet access service, we are unaware of a single allegation that a cable operator has done so.

Cable Modem Order, *supra* note 3, para. 87.

175. See Cannon, *supra* note 113, at 201 (detailing *Computer III* requirements).

176. By waiving some of *Computer III*'s affirmative requirements, the FCC has already begun to move in this direction. See *Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review—Review of Computer III and ONA Safeguards and Requirements*, Report and Order, 14 F.C.C.R. 4289, para. 4 (1999) (posting of comparably efficient interconnection plans on a website deemed sufficient to satisfy *Computer Inquiry* rules).

177. See Implementation of Sections 3(n) and 332 of the Communications Act, Second Report and Order, 9 F.C.C.R. 1411, para. 177 (1994) [hereinafter Communications Act Order]; see also Motion of AT&T Corp. To Be Reclassified as a Non-Dominant Carrier, Order, 11 F.C.C.R. 3271, para. 27 (1995).

178. See, e.g., Jerry A. Hausman et al., *Residential Demand for Broadband Telecommunications and Consumer Access to Unaffiliated Internet Content Providers*, 18 YALE J. ON REG. 129, 158 (2001) (discussing concerns related to “content discrimination” that could involve strategies ranging from “blocking outside content entirely, to affording affiliated content preferential caching treatment”).

179. By using a complaint procedure with a pre-determined regulatory framework—i.e., a presumption that discriminatory access arrangements are troubling and an opportunity to demonstrate a legitimate business justification—the FCC can facilitate an efficient and effective disposition of complaints. See, e.g., Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, Report and Order, 16 F.C.C.R. 6417, para. 150 (1999) (stating that failure to make services accessible to handicapped persons can be justified, on a case-by-case basis, by showing that it was not “readily achievable”).

identified conduct along these lines that violated the nondiscrimination standard, it should then proceed to consider developing any necessary proactive rules to prevent such or similar conduct from recurring. Significantly, the nondiscrimination approach—even if supplemented with rules resulting from experience—would not prevent universally applied rules that restrict broadband transmission for all uses or applications, nor would it call for the regulation of the price of access.¹⁸⁰

The regulatory architecture for the model of regulation outlined here would bear some important similarities to the *Carterfone* regime and some notable differences from the *Computer Inquiry* rules. Like *Carterfone*, it would rely on a presumption—and one grounded in economic theory—about the manner in which a platform monopolist relates to those in adjacent markets.¹⁸¹ Similarly, it would follow the *Computer Inquiries*' creativity in classifying CPE and information services under Title I and devising an alternative regulatory regime to that prescribed by Title II,¹⁸² making clear that it would address any plausible competitive harms should they arise.¹⁸³ Unlike the *Computer Inquiries*, however, it would not impose an extensive array of obligations on platform providers based on expected harms to competition.

The FCC has yet to develop a regime along the lines of the model urged here, but its *Carterfone* precedent provides some important guideposts. Significantly, *Carterfone* itself recognized the principle, underscored in antitrust law, that a firm need not interconnect its network to rivals where it would prove detrimental to the network to do so.¹⁸⁴ Indeed, in the wake of *Carterfone*, providers of enhanced services or equipment who could not establish that the arrangements in question were actually discriminatory were not provided the

180. At present, the cable companies limit the usage of cable modems (including restricting the use of home computers as servers) because of technical concerns about the capacity of their network, which even some open access advocates recognize as a potentially legitimate business practice related to the limits of the cable network. See Hausman et al., *supra* note 178, at 149. By contrast, selected restrictions that target particular activities that compete with the cable company, such as video streaming, may raise competitive concerns. See *id.* at 160–61.

181. The D.C. Circuit has previously endorsed the reliance on reasonable presumptions in regulatory policy. See *W. Res., Inc. v. Surface Transp. Bd.*, 109 F.3d 782, 788 (D.C. Cir. 1997).

182. See *Computer and Communications Indus. Ass'n v. FCC.*, 693 F.2d 198, 212 (D.C. Cir. 1982) (upholding FCC's conclusion "that an alternative regulatory scheme would more effectively further the goals of the Act").

183. See *Computer II*, *supra* note 121, paras. 124–27.

184. See *Use of the Carterfone Device in Message Toll Telephone Service*, *supra* note 107, at 421.

compatibility arrangement they sought.¹⁸⁵ Similarly, with respect to the requirement that wireline providers interconnect with wireless providers at reasonable, nondiscriminatory rates, the FCC adopted a reactive model of regulation that relied on complaint proceedings based on a presumption approach.¹⁸⁶ To be sure, there were not many complaint proceedings of this kind conducted by the FCC, but the fact that there were some is encouraging, suggesting that the FCC could examine on a case-by-case basis whether certain policies enforced by broadband providers were discriminatory or justified by legitimate business reasons.¹⁸⁷

VI. CONCLUSION

The FCC is now facing a set of issues that will help shape the future evolution of the Internet and the role of government in its development. During the first generation of the Internet, the government provided funding and support that kept the Internet's basic standard (TCP/IP) open and nonproprietary and the FCC enforced its *Computer Inquiry* rules to ensure that competition developed in the information service market. When the government privatized its infrastructure and adopted a philosophy of "unregulation" during the second generation of the Internet, the FCC hesitated to develop or enforce regulations in this context. But as FCC Chairman Powell recognizes, "[t]he important public policy question is not whether to regulate the Internet or not . . . it is how to regulate it responsibly in a manner that maximizes consumer welfare and does not stunt its infinite growth and innovation potential."¹⁸⁸

185. *Rogers Radio Communications Servs., Inc. v. FCC*, 751 F.2d 408, 414–15 (D.C. Cir. 1985) (upholding FCC's decision that Rogers was not entitled to an access arrangement more favorable than that provided to the incumbent provider's own affiliate).

186. See Communications Act Order, *supra* note 177, paras. 233–34 (explaining that a showing of discrimination in interconnection arrangements constitutes a prima facie case that can be rebutted by a demonstration that the requested arrangement is either "not technically feasible or is not economically reasonable").

187. Under such a system, for example, the FCC would be authorized to determine whether limitations on video streaming might be a legitimate means of protecting bandwidth unrelated to any motivation to protect the revenue streams from video programming interests. See James B. Speta, *The Vertical Dimensions of Cable Open Access*, 71 U. COLO. L. REV. 975 (2000) (explaining why limits might be legitimate). Similarly, providers could justify technical discrimination on the grounds that it facilitates efficient price discrimination (i.e., of the kind that increases output), but any such evaluations must necessarily be grounded in the facts of the individual cases.

188. Michael Powell, Law in the Internet Age, Remarks at the D.C. Bar Association Computer and Telecommunications Law Section and the Federal Communications Bar Association (Sept. 29, 1999), available at <http://www.fcc.gov/Speeches/Powell/2000/spmpk002.html> (last visited Sept. 14, 2003).

In the wake of a series of marketplace and legal developments, the FCC has signaled its intention to re-think how to regulate broadband platforms in particular and the Internet more generally.¹⁸⁹ With respect to this dynamic market environment,¹⁹⁰ the FCC faces the challenging task of tailoring its regulatory oversight to the relevant competitive risks and justifying its actions based on its Title I authority. The collision between telecommunications regulation and the Internet holds out great potential for the development of a next generation regulatory regime, but this enterprise holds great risks for all involved and will require even greater imagination than the FCC used in developing—based on its Title I authority—a regulatory regime to govern CPE. By adopting an antitrust-like model for ensuring network neutrality, the FCC could take an important step in that direction as well as advance the principles set out by its broadband proceedings.¹⁹¹

189. See Wireline Broadband NPRM, *supra* note 3, at 3070 (separate statement of Kathleen Q. Abernathy) (“I am confident that, if market failures are identified, the Commission can and will intervene to the extent necessary to protect consumers.”); Cable Modem Order, *supra* note 3, at 4867 (separate statement of Michael K. Powell) (stating that Title I “has been invoked consistently by the Commission to guard against public interest harms and anti-competitive results” and is adequate “to strike the right regulatory balance”).

190. See Weiser, *Internet Governance*, *supra* note 13, at 830 (underscoring the need for a regulatory strategy that recognizes the dynamism of the Internet); COMM. ON THE INTERNET IN THE EVOLVING INFO. INFRASTRUCTURE, NAT’L RESEARCH COUNCIL, THE INTERNET’S COMING OF AGE 1 (2001) (“All indications are that the Internet revolution—given its impact, ‘revolution’ appears to be the appropriate label—is not nearly over.”), available at <http://www.nap.edu/books/0309069920/html> (last visited Oct. 1, 2003).

191. In particular, the FCC identified four specific principles: (1) increasing the availability of broadband; (2) developing a conception of broadband that would include “any and all platforms capable of fusing communications power, computing power, high-bandwidth intensive content, and access to the Internet”; (3) devising a minimal regulatory environment to promote investment and innovation; and (4) crafting a consistent analytical framework to apply to all broadband platforms. Wireline Broadband NPRM, *supra* note 3, paras. 3–6.