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Phil Weiser

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PARADIGM CHANGES IN TELECOMMUNICATIONS REGULATION

PHIL WEISER*

It is an exciting time to be a telecommunications lawyer. I suspect that many said the same thing over the sixty-two years between the Communications Act of 1934 and the Telecommunications Act of 1996 (the "Telecom Act" or the "Act"), but recent changes in technology and the attendant legal and regulatory challenges of implementing the new Act are attracting considerable attention and legal talent to our field. The current shift in the regime for regulating telecommunications began in the 1970s with the Federal Communications Commission's ("FCC's") pro-competitive agenda and the Department of Justice's suit against AT&T.[1] These actions facilitated entry into previously closed-off markets, such as equipment manufacturing and long distance service, laying the foundation for the ambitious efforts called for by the Telecom Act. Today, we can look back at these efforts and see the inevitability of competition in telecommunications. Not too long ago, however, the FCC and many observers of telecommunications policy shunned the very thought of competition.[2] For that reason, we must be particularly grateful for the brave actions of those who helped to blaze the trail of competition in telecommunications, like Judge Harold Greene, who just recently passed away.[3]

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* Associate Professor of Law and Telecommunications, University of Colorado; J.D. 1994, New York University School of Law; B.A. 1990, Swarthmore College. Thanks to Ellen Goodman, Jon Nuechterlein, Marius Schwartz, and Kathy Wallman for helpful comments and encouragement.

1. *See* United States v. AT&T, 552 F. Supp. 131 (D.C. Cir. 1982), *aff'd sub nom.* Maryland v. United States, 460 U.S. 1001 (1983); *see also* Applications of Microwave Communications, Inc., 18 F.C.C.2d 953 (1969).

2. *See, e.g.*, Hush-A-Phone Corp. v. United States, 238 F.2d 266 (1956) (reversing FCC order preventing the use of the "Hush-A-Phone" product that would compete with Bell system customer premises equipment).

3. *See* Robert D. Hershey, Jr., *Harold Greene, Judge Who Oversaw The Breakup of AT&T, Is Dead at 76*, N.Y. TIMES, Jan. 31, 2000, at A24 (quoting Greene as saying that AT&T consent decree "brought competition into a field where there hadn't been any competition").

This Symposium brings together some of the nation's finest minds in the telecommunications field to reflect upon where we are in the journey to competition in all telecommunications markets. In enacting the Telecom Act, Congress opened a door that cannot be closed, committing our nation to a course that technological change would have eventually made inevitable: a future of competition and an end to artificial distinctions created by regulation. Managing the transition to competitive markets will continue to keep lawyers, economists, academics, and lobbyists busy for some time. Therefore, I hope our efforts here manage to add some value to this undertaking. In the areas of realigning our nation's jurisdictional framework for regulating telephony and for promoting universal service goals; pursuing open access policies in the name of competition; "remissioning" regulatory agencies long focused on command-and-control regulation; and coming to grips with the internet, any creative insights will be particularly valuable to those in Washington and elsewhere who are struggling to navigate the right course in these areas. To provide an overview of these important areas, and of what will be discussed in the papers presented at this Symposium, this essay outlines some of my thoughts on these topics.

I. THE EMERGENCE OF A COOPERATIVE FEDERALISM IN TELECOMMUNICATIONS REGULATION

Long before the Telecom Act, many observers recognized that a dual federalism model of telecommunications regulation could not persist as competition increasingly broke down the artificial boundaries between local and long distance calls. The old jurisdictional scheme, constructed around section 2(b) of the Communications Act,[4] mandated a separation between federal and state regulation that one court described as "hog tight, horse high, and bull strong, preventing the FCC from intruding on the states' intrastate turf."[5] But as the Supreme Court properly recognized in the *Iowa Utilities Board* litigation,[6] the Telecom Act moved away from a dual federalism model—under

4. 47 U.S.C. § 152(b) (1994).

5. Iowa Utils. Bd. v. FCC, 120 F.3d 753, 800 (8th Cir. 1997), *aff'd in part and rev'd in part sub nom.* AT&T v. Iowa Utils. Bd., 525 U.S. 366 (1999).

6. *See AT&T*, 525 U.S. at 378–84.

which the federal jurisdiction enjoyed only limited authority as to intrastate service—to a cooperative federalism one, where state agencies exercise federal authority as to the regulation of the local telephone network.

The transition to a new jurisdictional framework for telecommunications regulation, as discussed in Bob Rowe's article,[7] raises a series of difficult legal and regulatory questions, including how to reform the use of implicit subsidies to support universal service goals. Some commentators, like Professors James Alleman, Paul N. Rappoport, and Dennis Weller, argue that universal service policy is fundamentally misguided.[8] Until the Act is amended, however, the FCC and the state agencies are stuck with this formidable challenge.[9] After first discussing the change in the jurisdictional paradigm of telecommunications regulation, I then will reflect on some of the challenges posed by universal service reform.

A. Cooperative Federalism

The legal architecture of the Telecom Act follows the cooperative federalist model that Congress employed in prior regulatory regimes such as the Public Utility Regulatory Policies Act ("PURPA")[10] and the Pole Attachment Act of 1978.[11] PURPA, in setting a national policy to encourage the use of alternate energy sources, relied quite heavily on state agencies, allowing them considerable flexibility to implement its mandates.[12] In the Pole Attachment Act, Congress declined to in-

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7. *See* Bob Rowe, *Substance Plus Process—Telecoms Regulations Reforms to Protect Consumers and Promote Investment,* 71 COLO. L. REV. 879, 890 (2000) (noting that the Act sets out a number of cooperative federalist innovations to be implemented, including interconnection, consumer protection, universal service, Bell Operating Company provision of long distance service, and promotion of access to advanced technology).

8. *See* James Alleman et al., *Universal Service: The Poverty of Policy,* 71 U. COLO. L. REV. 849 (2000).

9. *See* Rowe, *supra* note 7, at 916 ("It is highly unlikely that, in the foreseeable future universal service expectations will vanish, given the expansive universal service definitions in Section 254 . . . .").

10. *See* 16 U.S.C. § 824a–3(b) (1994); 18 C.F.R. § 292.304 (1999).

11. *See* 47 U.S.C. § 224(c) (1994 & Supp. III 1997).

12. *See* Federal Energy Reg. Comm'n v. Mississippi, 456 U.S. 742, 750–51 (1982) (explaining that PURPA sought to both overcome the reluctance of utilities to purchase power from non-traditional providers and the burdens imposed on such providers by state and federal regulatory authorities); Crossroads Cogeneration Corp. v. Orange & Rockland Utils., Inc., 159 F.3d 129, 135 (3rd Cir. 1998)

sist on a uniform approach to this issue, but instead left the FCC with residual authority to implement the Act and offered states the opportunity to implement the statutory standard.[13] Similarly, the Telecom Act set forth a series of federal statutory mandates to provide access rights to the existing telephone network for new entrants, and offered the states the opportunity to implement this new regime in a manner consistent with federal law and FCC regulations.[14]

Because the Telecom Act imperfectly sets out the relationship between the federal and state agencies, its enactment spawned a great controversy over how its vision of cooperative federalism would work. Under the Act, new entrants into the local telephone market are entitled to interconnect with the incumbent providers and lease access to elements of the incumbent's network on an "unbundled basis."[15] The Act did not, however, definitively resolve whether the authority to price unbundled elements rested with the FCC or the state Public Utilities Commissions ("PUCs"), leading each side to claim that authority for itself.

After a three-year legal battle, the Supreme Court rejected the states' argument that Congress intended the states to exercise exclusive authority in the area of pricing unbundled elements.[16] By concluding that the FCC enjoyed complete residual authority under the Act, the Court rejected the Eighth Circuit's narrow reading that the FCC only enjoyed authority to regulate intrastate service where it was specifically authorized to act.[17] In so doing, Justice Scalia set forth a coherent vision of the Act that left open a number of novel legal issues, which arose as a result of the Act's groundbreaking cooperative federalism approach, such as whether state agencies deserve deference in interpreting federal law.[18]

("Though PURPA does limit the authority of state agencies in some respects, e.g., by exempting cogeneration facilities from some regulation, PURPA still provides a substantial role to state agencies in regulating energy contracts between utilities and cogenerators.").

13. *See* 47 U.S.C. § 224(b)–(c) (1994).

14. *See* 47 U.S.C. § 252 (Supp. III 1997).

15. *See* 47 U.S.C. § 251(c) (Supp. III 1997).

16. *See* AT&T v. Iowa Utils. Bd., 525 U.S. 366 (1999).

17. *See id.* 374–76.

18. *See, e.g., id.* at 733 n.10 (stating that the scheme put in place by Telecom Act "is decidedly novel, and the attendant legal questions, such as whether federal

I cannot quarrel with Justice Scalia's conclusions that the presumption in federal legislation should be that Congress leaves all residual authority to the federal agency to interpret federal law and that the Telecom Act lacked the unmistakable clarity to carve out from FCC oversight the pricing standard for unbundled elements. I do take exception, however, to Justice Scalia's suggestion that there is something "surpassing strange" about a world in which Congress would choose to delegate federal authority to state agencies without FCC oversight.[19] Admittedly, such a scheme raises challenging legal questions, but as Justice Thomas's dissent implicitly suggests, I believe that these questions can be answered satisfactorily.[20]

In accepting the presumption that the FCC enjoys residual authority over all telecommunications regulation, it is important to recognize that the FCC takes on a great responsibility to exercise that authority carefully. The FCC should not, therefore, assume that the mere presence of federal authority demands the creation of uniform federal rules. As I have explained elsewhere, the notion that federal law must be uniform continues to resonate, particularly among judges, despite the fact that "Our Federalism" has always entrusted states with the administration of federal law and tolerated diverse results.[21] To be sure, an occasional judge will decide that state agencies should be given deference in the implementation of federal statutory standards where the FCC has declined to set forth a single interpretation.[22] Far more often, however, courts will state that they will not review state agency decisions under a deferential standard, but do just that in practice.[23] That

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courts must defer to state agency interpretations of federal law, are novel as well.").

19. *See id.* at 730 n.6.

20. *See id.* at 741 (Thomas, J., concurring in part and dissenting in part). I leave the answers to these questions to a forthcoming article.

21. *See* Philip J. Weiser, Chevron, *Cooperative Federalism, and Telecommunications Reform*, 52 VAND. L. REV. 1 (1999).

22. *See, e.g.*, US West Communications, Inc. v. Public Serv. Comm'n, 75 F. Supp. 2d 1284 (D. Utah 1999).

23. Courts have often acknowledged that "it is neither desirable nor practical for this court to sit as a surrogate public utilities commission to second-guess the decisions made by the state agency to which Congress has committed primary responsibility for implementing the Act in Oregon." MCI Telecomms. Corp. v. GTE Northwest, Inc., 41 F. Supp. 2d 1157, 1161 (D. Or. 1999). Yet courts almost uniformly conclude that "whether the PUC properly interpreted and applied the Act . . . is a question of federal law that is reviewed *de novo*." *Id.* Nonetheless,

stance is unfortunate, because an important feature of a cooperative federalist framework is its allowance for a state laboratory approach to regulation.[24]

B. Universal Service

As difficult as it is may be to develop a coherent understanding of the Act's cooperative federalism legal framework, it is even more difficult to develop an understanding of how to advance its universal service goals. In 1996, Congress codified the decades-old principle that telephone users should be afforded access to the telephone network at reasonable rates, regardless of where they live.[25] This ambitious vision, which called for the subsidization of telephone users in rural and poor areas, did not provide much guidance as to exactly how it should be implemented.[26] Rather, the Act handed the ball to the FCC, mandating that the FCC work with a Joint Federal-State Board—another cooperative federalism innovation of telecommunications regulation that calls for federal and state regulators to work together—to figure it out.[27]

In developing a new scheme for universal service support that relies on explicit, competitively neutral subsidies—as opposed to implicit ones that are built into the rate structure—the FCC must confront a series of technical, economic, and political minefields. In essence, the FCC has been saddled with the task of designing a program similar to the Medicaid Act's system of providing medical service to the poor, though on a much smaller scale. Medicaid, like universal service support, involves a grant-in-aid program where the federal government sets basic standards, provides monetary support, and leaves

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such courts often go ahead and defer to state agency interpretations in practice by accepting the state agency decision where the statutory term was ambiguous and not clearly addressed in an FCC regulation. *See* Weiser, *supra* note 21, at 44-53.

24. *Cf.* New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting). With respect to the model for handling disputes concerning interconnection agreements between new entrants and incumbents, for example, different states have experimented with alternative approaches. *See* Bob Rowe, *"Best Practices" in Implementation of the Telecommunications Act*, in PLI Order No. G0-0089, at 41, 44 (PLI Pat., Copyrights, Trademarks, & Literary Prop. Course Handbook Series No. 584 (1999)).

25. *See* 47 U.S.C. § 254 (1994 & Supp. III 1997).

26. *See* Texas Office of Pub. Util. Counsel v. FCC, 183 F.3d 393, 423 (5th Cir. 1999) (describing § 254's mandate as "aspirational" in nature).

27. *See* 42 U.S.C. § 254(a)(1) (Supp. III 1997).

the implementation—as well as elective supplementation—to the states.[28] Given the breadth of this challenge, one should not be surprised to learn that the FCC has not exactly moved with alacrity to institute a new universal service regime.[29]

The Fifth Circuit's review of the FCC's Universal Service Order[30] may well undermine both the FCC's ability to undertake this ambitious effort and its ability to move to a cooperative federalism framework in this area. Initially, the FCC concluded that its mandate to support universal service authorized it to collect fees from intrastate as well as interstate services. The Fifth Circuit, however, concluded that "there is substantial support in the statute for a dual regulatory structure in the administration of the universal service program."[31] In justifying this result, the Fifth Circuit noted that allowing the FCC to assess intrastate revenues would run afoul of section 2(b)'s jurisdictional limitation.[32] Unfortunately, this holding runs contrary to the political science perspective that national efforts, far more than local ones, effectively can pursue distributional policy goals such as subsidizing telephone service in remote areas.[33] Consequently, the Fifth Circuit's decision not only departs from the cooperative federalist thrust of *Iowa Utilities Board*, but it also will limit the funds available for distribution from the federal government to the states, thus making it more difficult for the less-well-off states to implement workable universal service programs.

II. OPEN ACCESS

On numerous occasions, FCC Commissioner Michael Powell has stated that an interesting side of technological convergence is regulatory convergence. America Online ("AOL"), for

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28. *See* 42 U.S.C. § 1396a (Supp. III 1997).

29. *See Texas Office of Pub. Util. Counsel*, 183 F.3d at 408 n.8 (noting that the FCC postponed the effective date of universal service reform from January 1, 1999, to July 1, 1999, and then to January 1, 2000).

30. *See id.*

31. *Id.* at 424.

32. *See id.* at 447.

33. *See* Sheryll D. Cashin, *Federalism, Welfare Reform, and The Minority Poor: Accounting For the Tyranny of State Majorities*, 99 COLUM. L. REV. 552, 582 (1999) ("[T]he empirical evidence on the political economy of state decisionmaking suggests that the state level provides a worse environment than the national arena for deciding fundamental questions about redistribution.").

example, must have had a few interesting internal discussions about how to explain why AT&T should provide open access to AT&T's cable modems, but it need not provide AT&T—or Microsoft—with access to its Instant Messaging service, which enjoys an overwhelming market share. With AOL's decision to buy Time Warner, one can only imagine that those debates have become much more interesting. AT&T, on the other hand, has been forced to explain why open access to cable modems would decrease incentives for investment, whereas the unbundling of the incumbent's telecommunications network should proceed apace. Coupled with these marketplace developments, the Supreme Court's remand on the standard for unbundling network elements should create a valuable opportunity for policymakers and commentators to examine the open access issue with greater care and forethought than the FCC was able to muster in the compressed time frame in which it produced its original local competition order.

In discussing "open access," it is essential to develop a common vocabulary to facilitate a clearer and more principled discussion of the issue. In particular, the FCC should focus more carefully on the competitive costs and benefits of unbundling physical and virtual facilities as distinct from costs involved in mandating interconnection or compatibility to a common standard with respect to an established customer base. The "open access" umbrella thus encompasses three very different phenomena: (1) competitive risks posed by control of key facilities, which can be addressed by unbundling; (2) a commitment to openness in and ubiquitous access to certain technologies that requires an interconnection right, compatible standards and/or common protocols; and (3) a "marketplace of ideas" concern about control over key modes of communication that necessitates regulatory intervention. In the interest of brevity, I will limit my analysis to the first two points.[34]

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34. Fortunately, others at the Symposium have decided to address the marketplace of ideas concern, which is clearly a very important issue for the FCC to consider. Mark Cooper, for example, comments that, in the case of cable modems, "it is interesting to note that even Wall Street analysts recognize the special treatment of communication networks and the media. Simple arguments about the market have never been the sole determinant of public policy." Mark Cooper, *Creating Open Access to the Broadband Internet*, 71 U. COLO. L. REV. 1011, 1020 n.15 (2000); *see also* Denise Caruso, *Digital Commerce*, N.Y. TIMES, Jan. 31, 2000, at C5 ("[T]he free speech issue arises when a single entity, of any size, controls both a transmission medium and the information that flows over it.").

A. *Unbundling*

From an antitrust perspective, mandates to unbundle facilities—whether real or virtual—serve two purposes: first, to prevent the use of market power in one market to disadvantage competition in a second market; and second, to facilitate competitive entry into a market where a company's entrenched monopoly power would be extraordinarily difficult to overcome. Courts and commentators generally refer to such actions under the category of "exclusionary conduct," such as illegal tying or exclusive dealing arrangements, which raises rivals' costs by "locking up" either a necessary input or "foreclosing" access to a significant segment of consumers.[35] AT&T perfected a classic form of such exclusionary conduct by requiring all customers purchasing telephone service from it to rent their telephones from AT&T as well, thereby impeding competition in the customer equipment market.[36] Similarly, Microsoft's policy of integrating its Internet Explorer browser into its Windows Operating System and not providing a version of its Operating System without its browser utilized its market power in one market to impede competition in an adjacent market.[37] In both cases, some type of an "unbundling" remedy could be used to facilitate full and fair competition in the would-be competitive market.

The Telecom Act envisioned the unbundling of an incumbent provider's proprietary network elements only where "necessary," and where the lack of access to unbundled elements would "impair" a competitor's ability to compete.[38] In short, the Act followed the antitrust law principle that a monopolist does not have to provide its competitors with a helping hand if they could get access to the requested element on their own.[39] In the telecommunications context, however, the historic monopoly position of the local phone companies meant that access to the

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35. *See, e.g.*, X PHILLIP AREEDA ET AL., ANTITRUST LAW ¶ 1782a5 (1996) ("Tying is not unreasonable under the antitrust laws absent foreclosure in the tied market or other genuine threat to competition.").

36. *See* Use of the Carterfone Device in Message Toll Telephone Service, 13 F.C.C.2d 420 (1968).

37. *See* United States v. Microsoft Corp., 65 F. Supp. 2d 1, 41 (D.D.C. 1999).

38. *See* 47 U.S.C. § 251(d)(2) (Supp. III 1997).

39. *See* Olympia Equip. Leasing Co. v. Western Union Tel. Co., 797 F.2d 370, 377–78 (7th Cir. 1986) (concluding that new entrant had no right to the incumbent monopolist's sales lists).

"piece parts" of the local network would not always be available. Thus, new entrants would invariably need to rely on the incumbent's network for at least some portion of time.[40]

As the Supreme Court held in *Iowa Utilities Board*, the Act requires the FCC to develop a limiting principle to determine what facilities must be unbundled pursuant to the "necessary and impair" standard.[41] Unlike the FCC's earlier approach, which suggested a presumption in favor of unbundling and was overturned by the Supreme Court, the FCC's revised rules, which were developed on remand from the Supreme Court's decision, take a more prudent course. In short, the new rules properly appreciate that, in the case of investing in new facilities, unbundling requirements should not attach where there are alternatives to the incumbent's network.[42]

The FCC's recent actions in the unbundling area demonstrate a greater awareness of the importance of what should not be unbundled (so as to encourage new investment) as well as what is really important to facilitate new entry. In the con-

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40. In short, the access to unbundled elements must be assessed "in light of the existence of competition among different bundles of end services." Jerry A. Hausman & J. Gregory Sidak, *A Consumer-Welfare Approach to the Mandatory Unbundling of Telecommunications Networks*, 109 YALE L.J. 417, 425 (1999); *see also* AT&T v. Iowa Utils. Bd., 525 U.S. 366, 428 (1999) ("given the Act's basic purpose, it requires a convincing explanation of why facilities should be shared (or 'unbundled') where a new entrant could compete effectively without the facility, or where practical alternatives to that facility are available.") (Breyer, J., concurring in part and dissenting in part).

41. *See AT&T*, 525 U.S. at 387–92.

42. *See* Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, Rel. No. FCC 99-238, at ¶ 8 (Sept. 15, 1999). As Hausman and Sidak explained:

> Regulatory use of cost-based rates (such as TELRIC) creates disincentives for new investment and for innovation in telecommunications. If the new investment succeeds, the CLEC [competitive local exchange carrier] can purchase the ILEC's [incumbent local exchange carrier's] unbundled element at cost, as set by TELRIC. If the new investment fails, the CLEC does not bear any of the cost, but the ILEC's shareholders bear the cost of the unsuccessful investment. Thus, [under such an approach,] the regulators force the incumbents to provide CLECs a free option on its investment.

Hausman & Sidak, *supra* note 40, at 458. In fairness to the FCC, it did recognize this risk in its original order and sought to address it through raising the price of access by adjusting the cost of capital component of its pricing methodology. *See* Implementation of Local Competition Provisions in the Telecommunications Act of 1996, 11 F.C.C.R. 15,499, at 15,856 (Aug. 8, 1996). Nonetheless, I am skeptical that such an approach, as opposed to not unbundling such facilities at all, would prove viable or successful.

text of the development of advanced services, for example, the FCC rightly concluded that incumbent providers need not provide competitors with access to packet switches, which are used to process data communication.[43] In essence, the FCC concluded that these are new facilities that entrants can easily purchase and employ, provided they receive the necessary cooperation from the incumbent providers.[44] At the same time, the FCC properly concluded that collocation space in incumbent central offices, which is necessary to access local phone lines, must be shared on appropriately fair terms.[45] With regard to such space, the incumbent providers would save themselves much heartache by contracting out the management of central office collocation space to a neutral third party, who could take responsibility for providing collocation services. In so doing, the incumbent providers would remove themselves from a position to "gate" the entry of their competitors and be a target of regulatory and antitrust scrutiny.

With the Supreme Court's decision in *Iowa Utilities Board* and the subsequent FCC decision on unbundled elements behind us, the open access issue *du jour* is whether AT&T and other cable operators should provide open access to their cable modems. AT&T has sought to address this issue, which led to a lawsuit in response to the City of Portland's attempt to impose such a mandate,[46] by agreeing to enter into a business arrangement with Mindspring two years from now.[47] Advocates of "open access," including most Internet Service Providers ("ISPs"), nonetheless remain vigilant on this topic.[48] The regulatory battle shows no sign of ending, though AOL's

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43. *See* Implementation of Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, Release No. FCC 99-238 (Executive Summary section).

44. *See id.* Similarly, the Commission concluded that incumbent local exchange carriers ("LECs") need not provide access to their operator services platform if incumbent LECs provide the necessary customized routing—so that competitive LECs can route their own calls—and directory listings to provide competitive operator services. *See id.*

45. *See* Deployment of Wireline Services Offering Advanced Telecommunications Capability, 14 F.C.C.R. 4761, 4788–89 (1999), and references cited therein, *aff'd in part and rev'd in part by* GTE Serv. Corp. v. FCC, 2000 WL 255470 (D.C. Cir. Mar 17, 2000).

46. *See* AT&T v. City of Portland, 43 F. Supp. 2d 1146 (D. Or. 1999).

47. *See* Alan K. Ota, *Critics Say AT&T's 'Open Access' Would Still Shut Out Competitors*, 57 CONG. Q. WKLY. REP. 2969, 2969 (1999).

48. *See id.*

evolving stance on this topic—in response to its pending purchase of Time Warner—is bound to make it more interesting.[49]

At the dawn of the broadband era, the FCC, local franchising authorities, and Congress are left to guess about the possible future dominance of cable modems and the emergence of a potentially captive customer base. According to traditional antitrust law standards, cable modems would need to capture over twenty-five percent of the relevant customer base in order to conceivably pose a threat to exclude entry into upstream markets such as electronic commerce or internet content.[50] To establish that cable modems constitute an essential facility, advocates of unbundling this facility would need to demonstrate that potential service delivery alternatives, such as Digital Subscriber Line ("DSL") (whether provided by incumbents or new entrants), high speed wireless, and satellite are not sufficient to constrain any market power garnered by cable modem providers.[51]

After weighing the competitive pros and cons, there is sound cause for hesitation before imposing new unbundling obligations, whether on cable modems or on other new technologies. Imposing an unbundling mandate on cable modems, packet switches, or AOL's Instant Messaging will undoubtedly deter investment in those areas—after all, why invest in new facilities, intellectual property, or a customer base when you will not be able to appropriate all returns on this investment? For this reason, antitrust law imposes no general duty to share.[52] In other words, the challenge here is to harmonize the

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49. *See* Caruso, *supra* note 34 (reporting fears that AOL's once ardent open access stance may "evolve").

50. *See, e.g.,* U.S. Healthcare, Inc. v. Healthsource, Inc., 986 F.2d 589 (1st Cir. 1993).

51. The City of Portland, for example, seemed inclined to accept the characterization of cable modems as an essential facility. *See City of Portland*, 43 F. Supp. 2d at 1150. The "essential facility" doctrine stems from the 1912 Supreme Court decision in *United States v. Terminal R.R. Ass'n*, 224 U.S. 383 (1912). In short, the essential facility doctrine has focused most intently on the consequences of "vertical integration—in particular, the duty of a vertically integrated monopolist to share some input in a vertically related market [e.g., the provision of broadband access to the internet] with someone operating in an upstream or downstream market [e.g., the provision of internet content or e-mail]." IIIA AREEDA ET AL., ANTITRUST LAW ¶ 771a, at 172 (1995).

52. Thus, Professor Areeda explained that "[c]ompulsory access, if it exists at all, is and should be very exceptional." Phillip Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 ANTITRUST L.J. 841, 852 (1990). The essential facilities cases highlight this point again and again. *See, e.g.,* Alaska

basic goal of the intellectual property regime, which is to encourage innovation,[53] and the basic goal of antitrust law, which is to prevent the abuse of monopoly power.[54] Thus, with respect to cable modems and other new technologies, sound competition policy counsels against categorical restrictions and intrusion into the marketplace until experience proves that the threat of exclusionary conduct is real and not merely imagined.[55]

Airlines v. United Airlines, 948 F.2d 536, 545–46 (9th Cir. 1991) (holding that control over passenger reservation system is not sufficiently susceptible to abuse to constitute an essential facility); Olympia Equip. Leasing Co. v. Western Union Tel. Co., 797 F.2d 370, 377–78 (7th Cir. 1986) (holding that a new entrant had no right to its competitors' sales lists). Thus, while I would agree with Mark Cooper that "[t]he tools of discrimination must be controlled or taken out of the hands of network monopolists to prevent them from using their market power over facilities to undermine competition or stifle creativity in programming and content," see Cooper, *supra* note 34, at 1016, I cannot conclude that, based upon current market conditions, cable modems—as opposed to, say, the local loop or Microsoft's Windows—constitute a monopoly service.

53. As Professor Areeda succinctly explained with regard to forced licensing of patents, "diminishing the inventor's reward reduces incentives for inventive activity and seems inconsistent with the premise of the patent system." III AREEDA & HOVENKAMP, ANTITRUST LAW, ¶ 707, at 180 (rev. ed. 1996); *see also, e.g.*, Sony Corp. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984) (explaining that the limited copyright monopoly "is intended to motivate the creative activity of authors and inventors by the provision of a special reward"); Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975) ("The immediate effect of our copyright law is to secure a fair return for 'author's' creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good."); Data Gen. Corp. v. Grumman Sys. Support Corp., 36 F.3d 1147, 1186–87 (1st Cir. 1994) ("[I]n passing the Copyright Act, Congress itself made an empirical assumption that allowing copyright holders to collect license fees and exclude others from using their works creates a system of incentives that promotes consumer welfare in the long term by encouraging investment . . . ."); SCM Corp. v. Xerox Corp., 645 F.2d 1195, 1207 (2d Cir. 1981) ("[T]he essence of a patent is the monopoly or exclusionary power it confers upon the holder").

54. As Professor Areeda put it:

> Forcing a firm to share its inputs with a rival is an exceptionally drastic antitrust remedy, having the consequences of preserving the monopoly and often of turning the defendant's facility into what amounts to a public utility. . . . Antitrust's purpose is not to permit particular rivals to survive, but to make markets more competitive. If the market can be made more competitive without forcing the defendant to share the facility, then granting the relief undermines antitrust's purpose.

IIIA AREEDA & HOVENKAMP, *supra* note 51, ¶ 773b3, at 206; *see also id.* ¶ 774c, at 220 ("An important consequence of [forced] sharing is that the plaintiff or alternative suppliers to the plaintiff lose some or all of the incentive to produce an alternative to the input on their own.").

55. As Professor Areeda explained:

B. Architecture, Interconnection, and Open Access

Some advocates of "unbundling" cable modems focus on the threat to the "open architecture of the Internet."[56] Unlike the essential facilities justification, which can be rejected on antitrust grounds, this argument for "open access" requires a more nuanced examination. Unlike the unbundling argument, developing open architecture policies—which is not necessarily the same as mandating shared access to an essential facility, or a non-essential facility, as in the case of cable modems—is well

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> [A]ntitrust begins with the premise that its 'regulatory' domain is those markets in which competition and other free market forces can be expected to work acceptably well, but which may require occasional legal intervention addressing problems of monopoly, oligopoly, or collusion. If the facts do not support a fairly unambiguous judgment that intervention will make things better, however, then the best course of action for the antitrust tribunal is to not intervene at all.

I AREEDA & HOVENKAMP, ANTITRUST LAW, ¶ 112, at 131 (rev. ed. 1997). It is rather soon to make a judgment about cable modems, given that the incumbent LECs appear to have just recently begun to seriously roll out their DSL offerings. The ILECs appear to have just recently focused on the imperative of the high-speed broadband race, suggesting that they may have underestimated the need to deploy a broadband offering or viewed it as a threat to their existing offerings. *See* Michael Powell, *June 15, 1999 Remarks Before the Federal Communications Bar Association (Chicago Chapter)* (visited Feb. 14, 2000) <http://www.FCC.gov/Speeches/Powell/spmkp902.html> ("[U]pgrades to cable plant have intensified a potential competitive threat that has led, I believe, to heightened investment in alternative broadband technology by other firms."); *Hearing on Broadband: Competition and Consumer Choice in High-Speed Internet Services and Technologies Before the Senate Judiciary Committee* (testimony of Kevin M. Moore, Director, Deutsche Banc Alex. Brown), July 14, 1999 (visited Feb. 14, 2000) <http://www.senate.gov/~judiciary/71499kmm.htm> ("We believe that it is the success of the cable modem that is causing the current wave of RBOC [regional Bell operating company] investment in DSL services. . . . We believe that the primary reason for lack of innovation is that ultimately, every new innovation either creates opportunities for RBOC competitors and/or cannibalizes existing services, neither of which is good for the RBOCs.").

56. *See* Letter from Jeffrey Chester, Center for Media Education Computer Professionals for Social Responsibility et al., to William E. Kennard, Chairman, Federal Communications Commission (Jan. 27, 1998), *available at Fight the Gatekeepers!* (visited Feb. 14, 2000) <http://www.nogatekeepers.org/archive/19990127-1.shtml> (expressing concern that "closed cable model will become the industry norm, eroding the openness and innovation that has made the Internet what it is today."); *Written Ex Parte of Professor Mark A. Lemley and Professor Lawrence Lessig*, CS Docket No. 99-251, 38–39 Application for Consent to the Transfer of Control of Licenses MediaOne Group, Inc. to AT&T, *available at* (visited Feb. 19, 2000) <http://cyber.law.harvard.edu/works/lessig/MB.html> [hereinafter Lemley & Lessig] (arguing that a lack of an "open access" mandate would allow AT&T to alter the open architecture of the Internet).

worth considering, albeit with some appropriate skepticism. Indeed, AOL, the once-champion of unbundling cable modems, has made this very distinction with regard to access to its Instant Messaging service.[57]

The central question related to open architecture concerns is whether "locked in" customers will face difficulties in accessing the "open internet." In particular, policymakers should be concerned about whether customers might be restricted from reaching certain sites or face degraded interconnection arrangements between providers.[58] In the cable modem context, Professors Mark A. Lemley and Lawrence Lessig argue that such problems might exist, suggesting that AT&T would have the ability and incentive to limit the types of services that users can access[59] and would exercise its power over what services might be used on its network.[60]

Similar to the case of AT&T's cable modems, AOL might make it impossible for its users to connect to rival chat rooms or Instant Messaging services.[61] To be sure, such actions by AT&T or AOL would diminish the value of their respective networks, but they might still make sense to each company in order to diminish the ability of rivals to build up their customer bases.[62]

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57. *See New Media*, COMM. DAILY, Dec. 9, 1999, *available in* 1999 WL 7580968 (reporting that AOL allows "interconnection" to its Instant Messaging and that limits on access to Microsoft resulted from "Microsoft's attempt to piggyback on AOL infrastructure").

58. *See* Dale Hatfield, Keynote Address at Communications Management Day (Ohio University, Apr. 27, 1999), Policy and Regulatory Issues: The Rapid Growth of the Internet, 3 (Apr. 27, 1999) (on file with the University of Colorado Law Review) ("This emphasis on openness not only facilitates access by end users but also facilitates the interconnection of the private and public networks of which the Internet is comprised.").

59. *See* Lemley & Lessig, *supra* note 56, at 28.

60. *See id.* at 23.

61. *See* Don Clark, *AOL and Apple Team Up to Offer Instant Messaging*, WALL ST. J., July 30, 1999, at B6 (noting that Instant Messaging could be a very important platform and discussing efforts to create open access to AOL's customer base); Don Clark, *Internet Rivals Attempt to Open Up AOL's Instant Message System*, WALL ST. J., July 26, 1999, at B2 (detailing AOL's efforts to keep other services from accessing its Instant Messaging platform).

62. *See* Joseph Farrell, *Creating Local Competition*, 49 FED. COMM. L.J. 201, 203–04 (1996) (explaining how Bell used this strategy of refusing to interconnect with independents to exclude rivals despite the fact that it also limited the value of Bell's network); MILTON L. MUELLER JR., UNIVERSAL SERVICE 45–46 (1997) (same).

Turning once again to antitrust principles, we can take heart that dominant firms will not generally choose to act in the manner feared by Lemley and Lessig. As Professor James Speta convincingly explains, even a dominant firm generally will not choose to limit its installed base of customers' access to complementary services, because doing so would limit the value that customers enjoy from remaining on that firm's network.[63] Apple, for example, made a grave mistake in limiting access to its operating system so that other hardware manufacturers could not produce Apple-compatible computers, which would have raised the value of the Apple network.[64] For this reason, AT&T claims that it will not limit its customers' access to online service providers' applications and their networks,[65] and many believe that the cable companies will voluntarily open up their networks to resellers of broadband access.[66]

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63. *Written Ex Parte of Assistant Professor James B. Speta*, Application for Consent to the Transfer of Control of Licenses MediaOne Group, Inc. to AT&T, CS No. 99-251, 8–12, *available at* (visited Feb. 19, 2000) <http://pubweb.nwu.edu/~jsp381/>; *id.* at 9 ("In fact, a monopolist generally has every incentive to encourage innovation and competition in adjacent markets.").

64. Lemley & Lessig, *supra* note 56, at 15. As one analyst explained:

> Consumers who, at comparable prices and speeds, can get unlimited choice of content over the telcos vs. limited choice over their cable network are not likely to opt for the cable network. Beta v. VHS and Apple vs. Microsoft both tell us that customers primarily care about content and applications and will flock to the vendor that gives them the best and widest selection of each.

Competition and Consumer Choice in High-Speed Internet Services and Technologies: Hearings on Broadband Before the Senate Judiciary Comm. 3 (July 14, 1999) (statement of Anna-Maria Kovacs, First Vice President, Janney Montgomery Scott), *available at* (visited Mar. 21, 2000) <http://www.senate.gov/~judiciary/71499amk.htm> .

65. As AT&T CEO Michael Armstrong has stated:

> Some [On-Line Service Providers] have been publicly worrying that the new broadband model we're launching might keep them out by denying our customers access to their services. But there's no way that should happen. That wouldn't be in our best interests, or the best interests of our customers. Our message to the OSPs is: If you've got a service our customers want, we want you on our system.

Michael Armstrong, *Telecom and Cable TV: Shared Prospects for the Communications Future*, Address Before the Washington Metropolitan Cable Club, Nov. 2, 1998, at 3–4, *available at C. Michael Armstrong, Nov. 2, 1998* (visited Feb. 19, 2000) <http://www.att.com/speeches/98/981102.maa.html>.

66. Moore, *supra* note 55, at ¶ 4 ("We believe that AT&T would rather have the online providers utilizing its facilities instead of someone else's."); *see also Hearings*, *supra* note 64, at 2 (testimony of Anna-Maria Kovacs) ("I believe that the deployment of DSL, in turn, will spur the cable industry to insure that it offers consumers a choice in content, content providers, and gateways that is com-

Despite the likelihood that a monopolist will encourage the development and deployment of complementary products, a monopolist might, in some cases, view certain products as a threat to its installed base and thus limit openness to protect its position. AOL, for example, might be inclined to limit access to its Instant Messaging so that customers remain committed to its own "killer application." Similarly, AT&T might choose to limit streaming video to protect its core cable operations. Such episodes, if found to be exclusionary, would justify a lighter regulatory touch—say, a ban on blocking access to URLs or on unreasonable limits on streaming video—to protect the openness of the internet. To demonstrate that such actions were exclusionary, one would need to establish that switching costs, be they from AOL or AT&T, were sufficiently great and unanticipated so as to lock customers into a specific provider, thus preventing them from switching in response to any exclusionary restrictions.[67]

The important point of facilitating open access to customers—as opposed to mandating the sharing of facilities—is that the economics of interconnection are far more likely to justify regulatory intervention than the economics of essential facilities. The essence of this type of openness argument is that it is important to keep the costs of innovation down by ensuring that a broad customer base—all with access to an open and

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parable to what the telcos can offer."); *Few Regulatory Obstacles Seen For AOL Time Warner*, COMM. DAILY, Jan. 11, 2000, *available in* 2000 WL 4694269 (reporting that "'[t]here's not many cases of closed access working very well, restricting content to one location and making people come to you . . . . It would be a mistake for them to limit consumers to only AOL or Time Warner content, and I think they get that.'").

67. For an explanation of switching costs and the lock-in effect, see CARL SHAPIRO & HAL R. VARIAN, INFORMATION RULES 103–39 (1999). *See also* Kodak v. Image Technical Servs., 504 U.S. 451, 473–75 (1992). For a suggestion that the conduct described above is unlikely to occur, see Powell, *supra* note 555, at 7 ("The day someone sees a web URL on the side of a bus for a cool store that sells a jacket they want, and the cable company's portal does not let them get there, or impedes their ability to get there, I would not want to be on the customer service line when the call came in."). Regulators should be mindful that even interconnection mandates, if applied to situations where a firm created a market that another company could also create or replicate, can discourage socially valuable investment. *See* Farrell, *supra* note 62, at 210 ("Just as we would not want to reduce the life of a patent from seventeen years to seventeen minutes, since that would reduce innovative effort, so also it would be unwise policy to make all developers of network externalities share them in all circumstances.").

standardized protocol—will be able to utilize a new product.[68] Thus, by ensuring openness through no more restrictive means than necessary, regulators can facilitate new entry where customers might otherwise be "locked in" to a closed system with high switching costs.[69]

The economics of interconnection are aptly illustrated by the framework employed in the *Lotus* case.[70] The case examined whether Borland could utilize Lotus' familiar command hierarchy without infringing its copyright.[71] At a broader level, this case addressed the appropriate level of copyright protection to afford to user interfaces with which users had become familiar at some time and expense.[72] In concluding that Lotus did not deserve protection for the command hierarchy, Judge Michael Boudin suggested that withholding copyright protection is warranted where "one places a very high value on public access to a useful innovation that may be the most efficient means of performing a given task."[73] Put differently, when protecting an innovation from open access would threaten to "fenc[e] off access to a commons,"[74] such protection would more likely limit, rather than enhance, consumer welfare.[75] As for

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68. *See* Lemley & Lessig, *supra* note 56, at 9 ("By keeping the cost of innovation low, it has encouraged an extraordinary amount of innovation.").

69. *See* Hatfield, *supra* note 58, at 5 (The Internet's open architecture "encourages innovation because it results in an open, standards-based, general-purpose platform upon which even the smallest of entrepreneurs can create new businesses and revolutionize old ones.").

70. Lotus Dev. Corp. v. Borland Int'l., Inc., 49 F.3d 807 (1st Cir. 1995) (Boudin, J., concurring), *aff'd by an equally divided Court*, 516 U.S. 233 (1996).

71. *Id.* at 820.

72. For an overview of the case law in this area, see Mark L. Gordon, *Copying To Compete: The Tension Between Copyright Protection and Antitrust Policy in Recent Non-Literal Computer Program Copyright Infringement Cases*, 15 J. MARSHALL J. COMPUTER & INFO. L. 171, 187 (1996) (concluding that "[t]he courts are addressing monopoly concerns [arising from users being locked-in to a particular command hierarchy] by scaling back copyright protection in an attempt to promote growth in the computer technology field").

73. *Lotus*, 49 F.3d at 819.

74. *Id.*

75. As Judge Boudin explained,

> But if a better spreadsheet comes along, it is hard to see why customers who have learned the Lotus menu and devised macros for it should remain captives of Lotus because of an investment in learning made by the users and not by Lotus. Lotus has already reaped a substantial reward for being first; assuming that the Borland program is now better, good reasons exist for freeing it to attract old Lotus customers: to enable the

the present open architecture of the Internet Protocol, this reasoning applies wholeheartedly, particularly because such openness constitutes an important safeguard against any firm monopolizing the internet.[76]

III. THE MISSION OF REGULATORY AGENCIES

The era of the administrative state has never before witnessed the transformation of an agency focused on protecting consumers in a world of regulated monopolies to an agency focused on enforcement and consumer protection in a world of emerging competition. Nonetheless, it is quickly becoming conventional wisdom that technological change and the emergence of competition require such a "re-missioning" of federal and state agencies.[77] Other deregulatory initiatives, such as those in airlines and in rail, left the anachronistic administrative agencies to the scrap heap of history.[78] The challenge of shifting an agency's focus to acting in aid of the market, instead of in place of it, has led Peter Huber, among others, to suggest abolishing the FCC altogether.[79] Given the incumbent

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old customers to take advantage of a new advance, and to reward Borland in turn for making a better product.

Id. at 821.

76. *See* JASON OXMAN, THE FCC AND THE UNREGULATION OF THE INTERNET 5 (OPP Working Paper No. 31, 1999), *available at* <http://www.fcc.gov/Bureaus/OPP/working_papers/oppwp31.txt>) (The internet's "openness is driven by the sharing of that common communications protocol: IP, the Internet protocol, developed by early Internet pioneers. No one owns the Internet protocol, no one licenses its use, and no one restricts access to it."); *see also* Michael Powell, Address before the Federal Communications Bar Association (Chicago Chapter) 3 (June 15, 1999), *available at* <http://www.FCC.gov/powell/speeches>. As Professor Lessig explains, the danger of owning the commons that forms the Internet experience is that "[i]f the code of cyberspace is owned . . . it can be controlled; if it is not owned, control is much more difficult." LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 7 (1999).

77. *See* John F. Duffy, *The FCC and the Patent System: Progressive Ambitions, Heroic Institutions, and the Technology of Regulation*, 71 U. COLO. L. REV. 1071 (2000); Roger Fillian, *Change Blowing PUC's Way*, DENVER POST, Jan. 9, 2000, at K1 (noting the changing role of telecommunications regulation).

78. *See* Tom W. Bell, *The Common Law in Cyberspace*, 97 MICH. L. REV. 1746, 1750 (1999) ("[T]o judge from the Civil Aeronautics Board and the Interstate Commerce Commission, federal agencies that regulate networks appear uniquely vulnerable to fatal reforms.").

79. *See* PETER HUBER, LAW AND DISORDER IN CYBERSPACE: ABOLISH THE FCC AND LET COMMON LAW RULE THE TELECOSM 7 (1997) (arguing that the FCC "should shut its doors once and for all").

providers' considerable monopoly power in pricing access to their local loops and allowing for interconnection, this proposal seems farfetched.[80] Nonetheless, we should take its provocative thesis seriously: administrative agency reform is a lost cause, and the FCC will be doomed to repeat past anticompetitive decisions.[81]

As we mark the fourth anniversary of the Telecom Act, which came just after the first Baby Bell entered the in-region long distance market,[82] it seems appropriate to envision a regulatory regime premised on enforcing pro-competitive and pro-consumer mandates, not on limiting entry and exit and regulating rates.[83] Much to the FCC's credit, it has set out a blueprint for this transition, highlighting the important role to be played by an Enforcement Division in its new structure.[84] Ideally, this model would address Huber's core criticism of agency regulation: that it prevents innovative action on the front end, rather than deterring or addressing such action through back-end enforcement, a problem not faced by common

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80. *See* Joseph D. Kearney, *Twilight of the FCC?*, 1 GREEN BAG 2d 327, 329 (1998) ("Huber has virtually nothing to say on how non-discriminatory and reasonably priced interconnection would be ensured under his proposal. This is a notable shortcoming.").

81. Among FCC past errors are its six-year delay in allowing MCI to enter the private line long distance market and its twelve-year delay in allowing entry into the mobile telephone market after it was technically feasible. *See* John W. Berresford, *The Future of the FCC: Promote Competition, Then Relax,* 50 ADMIN. L. REV. 731, 736 (1998).

82. *See* Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region, InterLATA Service in the State of New York, CC Docket No. 99-404, Rel. No. FCC 99-404, at pt.3 (Dec. 22, 1999).

83. Indeed, in concluding that Bell Atlantic should be permitted to enter the long distance market in New York, FCC Commissioner Furchtgott-Roth pointed to the importance of enforcement in superintending the Act's pro-competitive mandates. *See id.* (Commissioner Harold Furchtgott-Roth, concurring statement) ("While I do not purport to assert that the section 251/252 process necessarily establishes the exclusive remedy for disgruntled BOC interconnectors, I do view with skepticism assertions of inadequate BOC performance lodged for the first time in the section 271 approval process.").

84. *See A New FCC For The Twenty First Century* (visited Feb. 23, 2000) <http://www.fcc.gov/21st_century/draft_strategic_plan.txt>; *see also* William E. Kennard, *Federal Agency Focus: Federal Communications Commission,* 50 ADMIN. L. REV. 723, 730 (1998) (noting that the FCC is working to repeal, or forbear from enforcing, regulations that "may have been useful when the FCC actively mandated conduct and outcomes in the regulated-monopoly markets, but they are useless and even counterproductive today").

law processes.[85] In casting a qualified vote of confidence in the agency's future, I join Professor Joseph Kearney in suggesting that we must question what new model will best serve the agency's new mission, as the old model is best left to the scrap heap of history alongside the now abandoned Interstate Commerce Commission.[86]

To take just one context where the FCC will need to develop workable processes for a new era, let me focus on its merger review process. And in focusing on the FCC's process, I should say that many of my criticisms and suggestions also hold for parallel state processes. In my view, the FCC's actions in this area risks running afoul of two concerns: (1) failing to develop manageable standards; and (2) imposing conditions that it will be unlikely to enforce.

Over thirty-five years ago, Judge Henry Friendly remarked that the prime flaw with administrative agencies is their "failure to develop standards sufficiently definite that decisions will be fairly predictable and that the reasons for them will be understood . . . ."[87] This concern seems quite compelling with regard to what AT&T/Media One or Bell Atlantic/GTE might expect under the public interest standard applied by the FCC. In reviewing mergers, some state commissions, like the New York Public Service Commission, appear to focus more intently on core concerns like quality of service standards and rebates, to ensure that consumers benefit from the efficiencies that a merger will occasion.[88] Other commissions, like the Illinois Commerce Commission, impose wide-ranging conditions, such

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85. *See* HUBER, *supra* note 79, at 8. Although Huber declines to give the FCC credit for much of anything, he does acknowledge that the soundness of the Commission's *Carterfone* decision and refusal to regulate the customer premises equipment market were important predicates to the rise of the Internet. *See id.* at 78–79.

86. *See* Joseph D. Kearney, *Will the FCC Go the Way of the ICC?*, 71 U. COLO. L. REV. 1153 (2000).

87. Henry Friendly, *The Federal Administrative Agencies: The Need For Better Definition of Standards*, 75 HARV. L. REV. 863, 867 (1962).

88. *See* Proceeding on Motion of the Commission as to the Joint Petition of New York Telephone Company, NYNEX Corporation, and Bell Atlantic Corporation for a Declaratory Ruling that the Commission Lacks Jurisdiction to Investigate and Approve a Proposed Merger between NYNEX and a Subsidiary of Bell Atlantic or, in the Alternative, for Approval of Merger, Case 96-C-0603 (State of New York Pub. Serv. Comm'n Mar. 20, 1997) (order approving proposed merger subject to conditions) *available at* (visited Mar. 21, 2000) <http://www.dps.state.ny.us/fileroom/doc1619.pdf>

as the mandate that SBC-Ameritech roll out DSL service in every central office in the state.[89] To some extent, Congress must share the blame for the uncertainty in this area, as, with rare exceptions such as the prophylactic limits on mergers between cable and telephone companies in the same service area,[90] it left the FCC without much guidance in how to proceed through this thorny area. Hopefully, the FCC will develop some clear rules and standards in this area to facilitate a more expeditious merger review process and provide guidance to the industry, but its record on this score thus far is hardly inspiring.[91] To be fair, I cannot say that I have developed a particularly compelling vision of how the public interest standard should be defined in this context, other than to include the Clayton Act's standards, which are already enforced by the Justice Department and the Federal Trade Commission. I can say, however, that an inconsistent and vague application will be ineffective and will strengthen the case for limiting the FCC's mission not only in the merger review area, but in other areas as well.[92]

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89. *See* Illinois Commerce Commission Website, *SBC/Ameritech Reorganization, Final Summary of Conditions* (visited Feb. 23, 2000) <http://www.icc.state.il.us/icc/tc/sbc.asp>.

90. *See* 47 U.S.C. § 302(a) (Supp. III 1997).

91. Commissioner Powell has spoken very eloquently on this subject. *See* Applications of Ameritech Corp., Transferor, and SBC Communications Inc., Transferee, For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95 and 101 of the Commission's Rules, 14 F.C.C.R. 14712, 15197 (1999) (Powell, Concurring in Part and Dissenting in Part); Michael Powell, *10/6/99 Separate Statement of Commissioner Michael Powell* (last modified Oct. 6, 1999) <http://www.FCC.gov/Speeches/Powell/Statements/stmkp929.html> ("I have particular concerns that in an effort to have these conditions carry weight by making them extensive and detailed, we may actually confuse the industry and our sister authorities as to the Commission's position on the subjects covered."); *Federal Communications Commission Reform for the New Millennium: Oversight Hearing Before the Subcomm. On Telecommunications Trade & Consumer Protection of the House Comm. On Commerce*, (October 26, 1999) (Prepared Statement of the Honorable Michael K. Powell), from Federal Information Systems Corporation Federal News Service, *available in* Congressional Universe (online service) ("While I believe that there is room to preserve a complementary role for the FCC in the review of mergers, we need to have some disciplined procedures and limiting principles to ensure the rapid processing of such transactions, to preserve the rights of the parties and to avoid duplication with other authorities.").

92. One recently suggested approach would be for the FCC to essentially follow antitrust law standards in applying the public interest standard. *See* Wil-

Coupled with the challenge of developing consistent and manageable standards is the challenge of ensuring that the conditions imposed as part of approving a merger will be enforced. The combination of seemingly elastic and unhelpful standards, along with conditions that are unlikely to be enforced, can only undermine the sense that the agency's mission respects basic rule of law values.[93] The recently created Enforcement Bureau may be up to the challenging task ahead of it,[94] but the cultural change necessary to pull off this effort may well prove too daunting for an agency whose core mission has been command and control regulation since its creation.[95] Thus, the type of discussion sparked by Professor John Duffy's call to model regulation on the patent system is the right sort of approach for thinking about new models of telecommunications regulation.[96] Personally, I am more intrigued by different governance structures, such as specialized courts or industry self-regulatory bodies under FCC oversight, to ensure that disputes in this area are handled quickly and effectively.[97] Nevertheless, at this point, we need to consider all possible options.

IV. THE INTERNET

Historians may look back at the Telecommunications Act of 1996 and see a carefully crafted policy to keep the internet

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liam H. Read & Ronald Alan Weiner, *FCC Reform: Governing Requires A New Standard*, 49 FED. COMM. L.J. 289 (1997).

93. Chairman Kennard has acknowledged such criticism, but insists that the Commission will enforce the commitments made by SBC in connection with its merger with Ameritech. *See* William E. Kennard, Remarks Before the Competitive Carrier Summit 2000, *available at Chairman Kennard's 1/19/2000 Remarks "The FCC's New Enforcement Ethic" before the Competitive Carrier Summit 2000, Conference on Current U.S. Telecom Policy in Washington, D.C.* (last modified Jan. 19, 2000) <http://www.FCC.gov/Speeches/Kennard/2000/spwek003.html>.

94. *See FCC Is Focused On Enforcement*, NAT'L L.J., Dec. 27, 1999, at B4 (quoting Chairman Kennard as stating that "We are refocusing a lot of the attention of the agency right now to enforcement.").

95. Chairman Kennard acknowledges this challenge, but insists that the new bureau will be a part of "changing the culture of enforcement at the FCC." Kennard, *supra* note 93.

96. *See* Duffy, *supra* note 77.

97. The Securities and Exchange Commission's reliance on the National Association of Securities Dealers ("NASD") is one example of such an approach. *See* 15 U.S.C. § 78o-3 (1994 & Supp. III 1997).

free from regulation,[98] particularly with all of the calls for the "unregulation of the Internet."[99] It seems to me, however, that Congress did not fully grasp the importance of the internet in this landmark legislation, but simply took modest steps to immunize ISPs from liability[100] and to ban certain indecent communications.[101] Given the interests at stake, the debate over how to treat the internet will only heat up in the years to come. Without getting too deep into this debate, let me suggest that policymakers will face questions related to both the internet's communications infrastructure and the administration of the internet. I will briefly address each in turn.

A. Internet Communications

The regulatory pedigree of the internet stems from the FCC's creation of an "enhanced services" classification, over which it claimed jurisdiction (as ancillary to its regulation of basic services), but forbore from regulating.[102] Before the rise of the internet, this basic policy made sense: companies that purchased telecommunications for data processing services should remain free of FCC regulation. The use of internet technology to provide voice telephony and streaming video, however, will threaten to undermine the existing common carrier and content regulation regimes if this issue is left unaddressed.

I believe that the FCC has no choice other than to struggle with the challenges posed by the internet. We are in the midst of an historic transition from a world where data is carried on a voice network to a world in which voice will be carried on a data network that will not differentiate between video, voice, data, or other forms of communication.[103] As Commissioner

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98. *See, e.g.*, 47 U.S.C. § 230(b)(2) (Supp. III 1997).

99. *See generally* Oxman, *supra* note 76.

100. *See* 47 U.S.C. § 230 (Supp. III 1997); Blumenthal v. Drudge, 992 F. Supp. 44 (D.D.C. 1998).

101. *See* 47 U.S.C. § 223 (Supp. III 1997); Reno v. American Civil Liberties Union, 521 U.S. 844 (1997).

102. *See* Amendment of Section 64.702 of the Commission's Rules and Regulations, 77 F.C.C.2d 384, 432–33 (1980) (final decision). Numerous commentators have detailed this history. *See* Oxman, *supra* note 76; Steve Bickerstaff, *Shackles on the Giant: How The Federal Government Created Microsoft, Personal Computers, and the Internet*, 78 TEX. L. REV. 1, 7–21 (1999).

103. *See* Moore, *supra* note 55.

Powell succinctly put it, "if you don't believe that [current] regulatory choices . . . have a direct and indirect effect on the development of the Internet, you're really missing something."[104] Among other challenges, the FCC will be forced, over the next year alone, to confront the issue of how calls to ISPs should be treated for purposes of reciprocal compensation arrangements and whether internet telephony should be placed within the access charge system.[105] Moreover, some commentators are also asking whether the internet backbone market, which carries all internet traffic and ensures ubiquitous connectivity between users, should remain unregulated and free of any interconnection obligation.[106]

B. Internet Administration

I suspect that everyone who opposes "regulation of the internet" means something different by "regulation." To some, this means relying on self-regulation, market mechanisms, or social norms, without the force of legal sanctions, to regulate

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> The bottom line is that 95% of the world's legislation/regulation is currently oriented to what will be 5% of the world's traffic. . . . The last several years of debate and litigation around reciprocal compensation for ISPs illustrates the amount of energy and resources that can be wasted when regulatory policies do not consider the Internet.

Id.

104. *FCC Commissioner Ponders Extent of Regulation Among Rivals on Internet*, 77 Antitrust & Trade Reg. Rep. (BNA) 417, 417 (Oct. 14, 1999); *see also* Bickerstaff, *supra* note 102, at 6 ("In effect, the FCC directly and indirectly went about creating a regulatory structure that, despite numerous intervening decisions over almost thirty years, still shapes the computer services marketplace and effectively subsidizes public use of the Internet.").

105. For a discussion of the reciprocal compensation issue, see Kasey A. Chappelle, Comment, *The End of the Beginning: Theories And Practical Aspects of Reciprocal Compensation for Internet Traffic*, 7 COMMLAW CONSPECTUS 393 (1999). For a discussion of the internet telephony issue, see Dennis W. Moore, Jr., *Regulation of the Internet and Internet Telephony Through the Imposition of Access Charges*, 76 TEX. L. REV. 183, 184–85 (1997).

106. *See* Hatfield, *supra* note 58, at 6 ("Outright refusals to interconnect or failure to develop proper financial arrangements can lead to fragmentation of the network. . . . Evidence of this fragmentation is indicated by large newspaper ads by large, backbone ISPs indicating the superior performance they can provide if the traffic stays on the network from end-to-end."); Hal R. Varian, *Manager's Journal: How To Strengthen The Internet Backbone*, WALL ST. J., June 8, 1998, at A22.

private conduct.[107] To others, internet regulation means allowing existing common law regimes to develop conceptions of property that might protect against trespass—say, unauthorized use of a web site—or privacy.[108] In the case of the United States government's decision on how to privatize internet governance, "unregulation" means setting up a nonprofit corporation to oversee the assignment and use of domain names.[109] Ironically, at the same time that many in Congress and elsewhere are calling for the unregulation of the internet, Congress is seeking to develop statutory frameworks for perplexing internet public policy challenges ranging from "cybersquatting"[110] to protecting consumer privacy.[111]

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107. For an explanation of how forces other than "law" regulate conduct, see Lawrence Lessig, *The New Chicago School*, 27 J. LEGAL STUD. 661, 662–66 (1998) (discussing how markets, social norms, and architecture all regulate conduct).

108. *See* Jerry Kang, *Information Privacy in Cyberspace Transactions*, 50 STAN. L. REV. 1193 (1998). A property rights regime to protect informational privacy would enable individuals to choose when—and for how much—to sell rights to their privacy entitlement. *See* Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089, 1092 (1972) (noting that where the state protects an entitlement by recognizing a property right, "someone who wishes to remove the entitlement from its holder must buy it from him in a voluntary transaction").

109. *See* Lawrence Lessig, *Jefferson's Nature* 14–15 (Mar. 27, 1999) <http://cyber.law.harvard.edu/works/lessig/NatureD3.pdf>; *see also* Statement of Policy, Management of Internet Names and Addresses, 63 Fed. Reg. 31741 (1998); Memorandum of Understanding Between the U.S. Department of Commerce and Internet Corporation for Assigned Names and Numbers <http://www.icann.org/general/icann-mou-25nov98.htm>.

110. "Cybersquatting" involves the use of domain names to infringe on a firm's trademark. *See* G. Gervaise Davis III, *Internet Domain Names and Trademarks: Recent Developments in Domestic and International Disputes*, 21 HASTINGS COMM. & ENT. L.J. 601 (1999). Just last year, Congress passed a new law, the Anticybersquatting Consumer Protection Act, which provides new tools for addressing cybersquatting. *See* Appendix to Pub. L. No. 106-113 (S. 1948) § 3002 (to be codified at 15 U.S.C. § 1125(d)); Michael D. Bednarek & John I. Stewart, Jr., *Cyberpirates, Beware*, NAT'L L.J., Jan. 31, 2000, at C1.

111. *See Gilmore Proposes "No New Taxes" On Internet*, COMM. DAILY, Jan. 11, 2000, *available in* 2000 WL 4694272 (quoting House Commerce Committee Chairman Tom Bliley (R-Va.) as stating that government "needs a solution" for Internet privacy). Professor Yochai Benkler explains that all such efforts share the common thread of "perceiv[ing] a destabilizing effect that the Net has on the pre-Net equilibrium of control over certain kinds of information, and all intervene to settle the lack of equilibrium by setting the parameters for a new pattern of control over the information flows on the Net." Yochai Benkler, *Net Regulation: Taking Stock and Looking Forward*, 71 U. COLO. L. REV. 1203, 1238 (2000). Other commentators have also hailed how the Internet will require new regulatory approaches. *See, e.g.*, Robert Kuttner, *Piracy on the Net: Why It Needs More*

At this point in the internet's development, I doubt that there will be a simple model for "regulating" the internet or "keeping it unregulated," for that matter. Whether the FCC, another regulatory agency, or common law courts will be authorized to regulate internet behavior under the mantle of privacy protection, protecting children, safeguarding competition, or resolving commercial disputes is an open question that may not be decided for some time. Moreover, the ultimate answer may depend on how existing legal regimes—such as antitrust, intellectual property, and constitutional law—adapt themselves to this new medium.[112] I, like Professor Yochai Benkler,[113] hope the debate over what regulatory regime to employ for the internet continues, and is not settled prematurely. I also hope policymakers reap the benefits of different experiments in how to address the perplexing public policy challenges raised by the internet.[114] Indeed, spectrum policy might have

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Policing, Business Week, Jan. 24, 2000, at 28 ("An unregulated Net is also a menace to personal privacy. The Wild West days of the Net are probably numbered.").

112. Just recently, Senator Orrin Hatch (R-Ut.) made the oft-noted point that if antitrust enforcement cannot preserve competition, then the cries for regulation are less likely to fall on deaf ears. *See* John R. Wilke & David Bank, *Sen. Hatch Issues Warning Microsoft May Be Building "Proprietary Internet,"* WALL ST. J., Feb. 6. 1998, at B15 (Senator Hatch noted, with respect to the possibility of Microsoft illegally gaining market power over Internet browsers, that "[v]igilant and effective antitrust enforcement today is preferable to the heavy hand of government regulation of the Internet tomorrow"). Mindful of this point, one antitrust court explained that "courts must be careful not to abdicate their responsibilities under the Antitrust laws in the name of expedience. When the adverse effect of allowing a monopolist to maintain certain practices is clear, a court should stay its hand rarely, if ever." Byars v. Bluff City News Co., Inc., 609 F.2d 843, 864 n.57 (6th Cir. 1979), *aff'd on appeal after remand*, 683 F.2d 981, (6th Cir. 1982).

113. *See* Benkler, *supra* note 111.

> We should look at what it is about the digitally networked environment that destabilized the relations of control over information. Once we know the cause of the concern, we can begin to imagine fixes, and we can begin to imagine the kinds of dynamic effects that different kinds of fixes will have.

Id. at 1258.

114. This includes courts, too, who are struggling mightily to determine the proper conception of the First Amendment's impact on governmental regulation of informational privacy and source code. *See, e.g.*, US West v. FCC, 182 F.3d 1224, (10th Cir. 1999); Bernstein v. United States Dept. of Justice, 176 F.3d 1132, 1141 (9th Cir. 1999), *reh'g granted and opinion withdrawn by* 192 F.3d 1308 (9th Cir. 1999) ("encryption software, in its source code form and as employed by those in the field of cryptography, must be viewed as expressive for First Amendment purposes").

been better served had Congress taken more of a wait-and-see approach in the 1920s, rather than quickly establishing the Federal Radio Commission to license spectrum. As Thomas Hazlett has explained, the common law model embodied in the *Oak Leaves Broadcasting* case might have provided some insight on how to recognize property rights in spectrum that could be privatized and auctioned off to the highest bidder well before we settled on that approach as a matter of national policy, had we given that model a chance to work.[115]

On a final note on this topic, I want to second Larry Lessig's advice that citizens and policymakers not make the mistake of thinking that doing nothing with respect to the internet will enable a "natural course" of action.[116] The internet, like the electromagnetic spectrum, is a medium that exists in large part because the government—through one means or another—facilitated the emergence of a common protocol and a ubiquitously accessible network. To keep this network working, someone must make decisions on how to allocate domain names, whether to insist on certain types of filtration standards, and whether any privacy protections should be put in place. The nature of these questions, and the internet's present architecture, may well look vastly different two years from now, or even two months from now.[117] To be sure, government need not make those decisions, but, as they do in physical space, citizens will ultimately turn to their government for action if they feel they are being treated unfairly in cyberspace.[118] Whatever government does in response to those concerns, we

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115. *See* Thomas W. Hazlett, *The Rationality of U.S. Regulation of the Broadcast Spectrum*, 33 J.L. & ECON. 133, 149 (1990) (discussing Tribune Co. v. Oak Leaves Broadcasting Station, reprinted in Cong. Rec.-Senate 215–19 (December 10, 1926)).

116. *See* LESSIG, *supra* note 76, at x, 4.

117. *See* Lawrence Lessig, *The Law of the Horse: What Cyberlaw Might Teach*, 113 HARV. L. REV. 501, 515 (1999) ("[I]f these technologies of identification were in general use on the Internet, then the *regulability* of behavior in cyberspace would increase. And government can affect whether these technologies are in general use.").

118. For one argument on why government should play a role in formulating the values of cyberspace, see Lessig, *supra* note 109, at 15–16; *see also* LESSIG, *supra* note 76, at 5 ("We build a world where freedom can flourish not by removing from society and self-conscious control; we build a world where freedom can flourish by setting it in a place where a particular kind of self-conscious control survives.").

can be sure that the consequences will be significant and not all of them intended.[119]

CONCLUSION

No one said telecommunications regulation was for the faint of heart. In fact, it may well resemble Max Weber's description of politics in general: "the strong and slow boring of hard boards. It takes both passion and perspective."[120] The challenges ahead in telecommunications policy will require hard-headed thinking and an honest engagement with the types of questions discussed above. If the papers here are any sign of what the academy can bring to this discussion, I hope that these sorts of debates will continue in the years ahead, helping to shed light on issues that will need all of the passion and perspective policymakers can muster.

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119. *See, e.g.*, Benkler, *supra* note 111, at 1249–51 (discussing how a number of potential policies will require filtering and labeling of information, thus interfering with free information flow).

120. MAX WEBER, *Politics As a Vocation*, *in* FROM MAX WEBER: ESSAYS IN SOCIOLOGY, 77, 128 (H.H. Gerth & C. Wright Mills eds., 1948).