

REGULATORY CHALLENGES AND MODELS OF REGULATION

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INTRODUCTION

This event marks the Silicon Flatiron Program's third major policy conference aimed at examining the emerging regulatory regime that will govern the telecommunications, Internet, and information technology industries.¹ These industries form the backbone of what some call "the New Economy"² and others call the "information industries."³ From a legal standpoint, these dynamic industries are regulated, in significant part, by a framework embodied in the Telecommunications Act of 1996⁴ and the Clinton Administration's 1997 statement of Internet policy found in its Global Framework for Electronic Commerce.⁵ In short, this framework encourages technological convergence, competition, and minimal public regulation of the Internet—with the notable exception of providing strong intellectual property protection.

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1. For those interested in my overviews and synopses of the themes of the first two conferences, see Phil Weiser, *Paradigm Changes In Telecommunications Regulation*, 71 U. COLO. L. REV. 819 (2000) [hereinafter Weiser, *Paradigm Changes*]; Philip J. Weiser, *Law and Information Platforms*, 1 J. ON TELECOMM. & HIGH TECH. L. 1 (2002) [hereinafter Weiser, *Information Platforms*].

2. See Richard A. Posner, *Antitrust In The New Economy*, 68 ANTITRUST L.J. 925, 925 (2001) (defining New Economy as computer software, Internet-related, and telecommunications equipment and service providers).

3. This is actually my preferred term as well as its corollary, information law.

4. Pub. L. No. 104-114, 110 Stat. 56 (1996) (codified in various sections of 15, 18, and 47 U.S.C.).

5. See PRESIDENT'S AND VICE-PRESIDENT'S REPORT ON GLOBAL ELECTRONIC COMMERCE, A FRAMEWORK FOR GLOBAL ELECTRONIC COMMERCE, INFORMATION TECHNOLOGY MANAGEMENT WEB, at <http://www.itmweb.com/essay541.htm> (July 1, 1997).

This conference focuses on four possible regulatory strategies that policymakers can employ to govern the information industries. First, a federal agency, like the Federal Communications Commission (FCC) or the Federal Trade Commission (FTC), can adopt command and control regulations that govern an industry. Second, a regulatory framework can embrace a dual jurisdictional approach, where related federal and state agencies (or courts) work in partnership—under a cooperative federalism model—or with various degrees of tension. Third, a regime can rely on common law-type development by judges, as is the case with constitutional law, antitrust law, and copyright law. Finally, government can allow codes of conduct or standard setting bodies to self-regulate an industry. More often than not, policymakers and academics do not think systematically about which strategy (or strategies) to use for particular problems, leading both to legal uncertainty and inconsistency across the different areas of the law governing the information industries. Consequently, it is important that we move toward a coherent body of “information law.”⁶

The considerable ambiguity and legal uncertainty in this area is exactly what makes information law a fruitful area for legal academics and practicing lawyers, both of whom must strive to develop and apply old principles to fast changing markets.⁷ To provide some structure for thinking about this area, I will first outline a “layered model” for understanding the information industries. With that model on the table, I then discuss some cutting edge issues in information law and how those issues relate to the importance of thinking carefully about deploying the regulatory strategies outlined above.

6. This effort would harmonize the tension that exists between the relevant legal regimes. See, e.g., Philip J. Weiser, *The Imperative of Harmonization Between Antitrust and Regulation*, 698 PLI/PAT 73 (2002).

7. As business persons emphasize and policymakers recognize, legal uncertainty can impede investment and the development of sound business strategies. See, e.g., *Competition Issues In The Telecommunications Industry: Before The Senate Committee on Commerce, Science, and Transportation*, 3 (Jan. 14, 2003) (statement of Kathleen Abernathy, Commissioner, F.C.C.) (“It is no exaggeration to say that a company may prefer receiving an adverse ruling to having no rules at all; in the former case, the company can adjust its business strategy and move on consistent with the regulatory parameters, while in the latter the result is often paralysis.”), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-230241A3.doc. For a discussion of the strategies to reduce legal uncertainty and move more effectively to a next generation regulatory regime, see Jonathan E. Nuechterlein, *Incentives to Speak Honestly About Incentives: The Need for Structural Reform of the Local Competition Debate*, 2 J. ON TELECOMM. & HIGH TECH. L. 399 (2003).

I. THE LAYERS OF THE INFORMATION INDUSTRIES

As an analytical structure for understanding the information industries and how they are regulated, one can focus on four related “layers.” Building from bottom to top, these are: the physical layer, the logical layer, the applications layer, and the content layer.⁸ I will outline each in turn, noting how they are currently regulated.

The bottom layer is the physical layer. With technological convergence, we live in a world where cable companies provide telephone service; telephone companies provide Internet access; and Internet companies carry voice calls. These developments mean that regulations focused on the physical transport layer—whether the particular medium is a cable broadband facility, a telephone line, or a wireless connection—can be analyzed by the same competition policy framework. Any such framework will invariably focus on whether the facility is being deployed widely, whether subsidies are warranted to facilitate deployment or adoption, whether complementors and competitors to the facility are allowed appropriate access, and how access is priced (either for wholesale or retail customers). In the main, each of these questions tend to be analyzed by regulatory agencies. Increasingly, judges appreciate the technical expertise possessed by and complex policy judgments made by these agencies and realize that second-guessing their decisions is beyond their expertise.⁹ Thus, debates over institutional competence in this area more often focus on whether state or federal agencies should take the lead role rather than whether judges or regulators should be in control. In the case of the Telecommunications Act of 1996, the federal-state jurisdictional debate is very much alive, as both regulators and courts are still struggling to develop a sensible vision for allocating federal versus state authority under the Act’s pro-competitive vision.¹⁰

8. Kevin Werbach describes this as the four layer model of the Internet, see Kevin Werbach, *A Layered Model for Internet Policy*, 1 J. ON TELECOMM. & HIGH TECH. L. 37, 59-65 (2002), but it is possible to apply the model more broadly to the set of information industries which are all affected by the Internet.

9. The Supreme Court acknowledged this point in *Chevron U.S.A. v. Natural Resources Defense Council*, which limited the scope of judicial review of agency decisions. See 467 U.S. 837 (1984); see also Philip J. Weiser, *Federal Common Law, Cooperative Federalism, and the Enforcement of the Telecom Act*, 76 N.Y.U. L. REV. 1692, 1715-17 (2001) [hereinafter, Weiser, *Federal Common Law*] (explaining significance of this aspect of *Chevron*). For this same basic reason, courts should also be wary about mandating overly ambitious remedies in antitrust cases. See Philip J. Weiser, Goldwasser, *The Telecom Act, and Reflections on Antitrust Remedies*, 55 ADMIN. L. REV. 1, 14-17 (2003) [hereinafter, Weiser, Goldwasser].

10. For an example of the ongoing debate, compare *BellSouth Telecommunications, Inc. v. MCI Metro Access Transmission Servs., Inc.*, 317 F.3d 1270 (11th Cir. 2003) (en banc) with *id.* at 1285 (Tjoflat, J., dissenting). See also Jim Chen, *Subsidized Rural Telephony and the*

The logical layer is the least appreciated segment of the information industries, even though the basic standards that comprise it are crucial to shaping the Internet. These standards are generally developed and maintained by self-regulation, although the federal government's initial financial support during their development gave it an important regulatory role during the Internet's early days. The Transmission Control Protocol/Internet Protocol (TCP/IP), which facilitates all Internet communication, is the most significant of these standards. The current lack of direct government involvement in this area raises a series of important questions, including: how the TCP/IP standard will be upgraded to allow for more Internet addresses, how the security of the Internet's information infrastructure will be protected, and whether the Internet's open architecture will continue to adhere to the "end-to-end principle"¹¹ championed by its early pioneers. Suggesting that the Internet has come to a crossroads, some Internet policy observers argue that more government involvement is necessary to address these issues effectively.¹²

The applications layer represents the inventions that enable consumers to use the Internet in different ways. On this definition, the set-top box that is used for digital cable and interactive television is an application as well as an instant messaging system, a Web browser, or a media player. Depending on the nature of the application, it may be comprised of software or a combination of hardware and software. Another conception of this layer is the "digital device" layer, which mediates between the network—i.e., the combination of the physical and logical layer—and the viewing and usage of content. In general, the FCC stays out of the business of regulating applications, leaving judges—in implementing both antitrust and the intellectual property

Public Interest: A Case Study in Cooperative Federalism and Its Pitfalls, 2 J. ON TELECOMM. & HIGH TECH. L. 307 (2003); Roy E. Hoffinger, "Cooperative Federalism" *Gone Wrong: The Implementation of the Telecommunications Act of 1996*, 2 J. ON TELECOMM. & HIGH TECH. L. 375 (2003).

11. For a cogent discussion of the "end-to-end" architecture principle, see Dale Hatfield, *Preface*, 8 COMM'LAW CONSPECTUS 1, 1 (2000).

12. See, e.g., Zoe Baird, *Governing The Internet: Engaging Government, Business, and Nonprofits*, 81 FOREIGN AFF. Nov./Dec. 2002, at 15 (arguing that "[a] reliance on markets and self-policing has failed to adequately address the important interests of Internet users" and that it is time for governments to play a role "on key Internet policy issues"). *But see* Charles Cooper, *Do Gooders Will Wreck The Internet*, CNET NEWS.COM, January 3, 2003, at <http://news.com.com/2010-1071-978983.html> (criticizing Baird article). Any argument for a role for government in Internet regulation is indebted to Lawrence Lessig's discussion of the issue. See generally LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* (1999).

laws—to develop the basic rules of the road.¹³ Nonetheless, when there is a “chicken and egg” problem in coordinating the rollout of devices and network upgrades, such as in the case of digital television, the FCC sometimes gets involved in the design of network devices and applications. This intervention, however, requires the agency to set technical standards for how these applications will work and is fraught with difficulty.¹⁴

For most users of the Internet, the content layer—and the legal issues related to it—is familiar territory. As is increasingly appreciated, the digital age enables all types of content—be it music, movies, emails, or voice conversations—to be copied and spread rapidly. For the courts and Congress, the advent of digital technology and the Internet have spawned efforts to protect the rights of copyright holders as well as to protect children from pornography. In terms of protecting copyright holders, most citizens did not pay attention when Congress enacted the Digital Millennium Copyright Act (DMCA) and the Sonny Bono Copyright Term Extension Act (CTEA).¹⁵ In the wake of their enactment, a series of litigants have asked federal judges—without much success—to either interpret these enactments narrowly or invalidate them as constitutionally infirm on the ground that they unjustifiably limit the public domain and/or the fair use privilege.¹⁶ In almost the reverse of the copyright context, many citizens pushed for regulation of pornography on the Internet, but the Supreme Court has only rarely upheld the relevant statutory provisions as constitutional.¹⁷

13. To date, the Microsoft litigation reflects antitrust law’s most significant role in regulating the applications layer. See *U.S. v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001) (holding Microsoft liable for excluding Netscape from the market), *cert. denied*, 534 U.S. 952 (2001). For a critique of the FCC’s unique foray into regulating applications by imposing a regulatory regime over AOL/Time Warner’s instant messaging system, see Philip J. Weiser, *Internet Governance, Standard Setting, and Self-Regulation*, 28 N. KY. L. REV. 822 (2001) [hereinafter Weiser, *Internet Governance*].

14. One promising strategy for agencies to set technical standards is to develop general mandates that can be implemented by standard setting bodies. For a discussion of this approach, see Weiser, *Internet Governance*, *supra* note 13.

15. See 17 U.S.C. § 1201 (2000) (DMCA); 112 Stat. 2827 (1998) (CTEA).

16. See, e.g., *Eldred v. Ashcroft*, 123 S.Ct. 769 (2003) (rejecting challenge to CTEA); *Universal City Studios, Inc. v. Corley*, 273 F.3d 429 (2d Cir. 2001) (upholding application of DMCA).

17. See *Reno v. ACLU*, 521 U.S. 844 (1997) (invalidating Communications Decency Act); *Ashcroft v. ACLU*, 535 U.S. 564 (2002) (remanding Child Online Protection Act for further scrutiny); *Ashcroft v. Free Speech Coalition*, 535 U.S. 234 (2002) (invalidating law regulating child pornography created with digital technology); *United States v. Am. Library Ass’n, Inc.*, 123 S.Ct. 2297 (2003) (upholding the constitutionality of the Children’s Internet Protection Act (CIPA)).

II. INFORMATION LAW CHALLENGES AND REGULATORY RESPONSES

One strategy for regulating the information industries would be to assign different regulatory models to the different layers outlined above. Under this approach, the FCC could oversee the physical layer, including the management of spectrum policy. The logical layer could remain “unregulated,” with standard setting bodies, self-regulation, and free market competition governing its development. The applications layer could remain the domain of antitrust and, to a lesser degree, intellectual property law (insofar as it regulates through providing or withholding protection).¹⁸ Finally, the content layer could be subject to congressional enactments and the judicial interpretations of them, including judgments on their constitutionality. The salutary aspect of this approach would be that it might ensure that there is a tailored treatment of each layer and its unique issues. But this approach to technology policy would also unnecessarily limit regulatory flexibility and require a constant policing between the boundaries of each layer.¹⁹

The inverse model for regulating the information industries would be to apply each model of regulation identically to all layers. This redundant regulatory strategy would create a series of conflicts because common law rules, for example, need to be modified to recognize the presence of regulatory actors.²⁰ Moreover, legal doctrines such as the First Amendment standards that govern the content layer may not automatically translate to issues related to the physical layer.

Ideally, the regulatory strategy for each layer can be crafted and applied with sufficient nuance so that it is sensitive to the unique characteristics of the issues arising at each layer. This sensitivity ultimately counsels that these different strategies should be mixed and matched to address the policy issues arising at the different layers. To provide some context for this “mixing and matching” approach to regulatory strategy, I outline below the cases of spectrum, network unbundling, network neutrality, copyright, and privacy policy.

18. For a discussion of how copyright law regulates applications, see Philip J. Weiser, *The Internet, Innovation, and Intellectual Property Policy*, 103 COLUM. L. REV. 534 (2003).

19. The Telecom Act’s strategy of regulating different technologies under different regimes, even where they provide similar services, raises exactly these sorts of issues. See John T. Nakahata, *Regulating Information Platforms: The Challenge of Rewriting Communications Regulation From The Bottom Up*, 1 J. ON TELECOMM. & HIGH TECH. L. 95, 141 (2002) (describing current telecommunications regulatory system as “an archaic classification of communications services into regulatory pigeonholes that cannot survive”).

20. This theme is developed, as to the relationship of antitrust law and regulation, in Weiser, Goldwasser, *supra* note 9.

The last century of spectrum policy followed the basic agency model of command and control regulation contemplated by the Communications Act of 1934. In the late 1950s, Nobel Laureate Ronald Coase criticized this model, explaining that property rights—presumably enforced by the FCC or common law courts—could better manage the spectrum than command and control regulation.²¹ This suggestion has inspired some critical assessments of the soundness of the initial decision to rely on agency regulation of the spectrum²² as well as a number of reform proposals to move the agency towards a property rights model.²³ Moreover, in the late 1990s, some commentators suggested that technological change could facilitate the self-regulation of access to spectrum treated as common property.²⁴ Finally, some commentators have suggested that courts should mandate certain approaches to spectrum policy as required by the First Amendment.²⁵

Upon taking office as Chairman of the FCC, Michael Powell initiated a re-examination of the FCC's spectrum policy, led by Peter Tenhula and Paul Kolodzy.²⁶ This effort promises a new regulatory regime for regulating spectrum that will take seriously the arguments of those advocating for both the property rights model and “commons” approaches. Moreover, this initiative may also shift spectrum policy towards more a reactive, common law approach—whether superintended by courts or the FCC—as opposed to proactive, command and control agency regulation. Finally, to minimize interference while enabling the use of unlicensed spectrum, spectrum shared between multiple users, or spectrum owned by others, the FCC will need to set technical standards

21. See Ronald Coase, *The Federal Communications Commission*, 2 J. L. & ECON. 1 (1959).

22. See, e.g., Thomas W. Hazlett, *The Wireless Craze, the Unlimited Bandwidth Myth, the Spectrum Auction Faux Pas, and the Punchline to Ronald Coase's "Big Joke": An Essay on Airwave Allocation Policy*, 14 HARV. J.L. & TECH. 335, 366-73 (2001).

23. See, e.g., Gregory L. Rosston & Jeffrey S. Steinberg, *Using Market-Based Spectrum Policy to Promote the Public Interest*, 50 FED. COMM. L.J. 87 (1997).

24. See, e.g., Yochai Benkler, *Overcoming Agoraphobia: Building the Commons of the Digitally Networked Environment*, 11 HARV. J.L. & TECH. 287 (1998).

25. See Stuart Minor Benjamin, *The Logic of Scarcity: Idle Spectrum as a First Amendment Violation*, 52 DUKE L.J. 1 (2002) (arguing that idle spectrum violates the First Amendment); Yochai Benkler & Lawrence Lessig, *Net Gains: Will Technology Make CBS Unconstitutional?*, THE NEW REPUBLIC, Dec. 14, 1998, at 12, 14 (arguing that broadcast regulation may violate the First Amendment if “spread-spectrum technology” enables multiple, non-interfering uses of spectrum frequencies).

26. The proceedings of the FCC's Spectrum Policy Task Force can be found at <http://www.fcc.gov/sptf>. See also Michael K. Powell, *Broadband Migration III: New Directions in Wireless Policy*, Remarks at the Silicon Flatirons Telecommunications Program, University of Colorado at Boulder (Oct. 30, 2002), at <http://www.fcc.gov/Speeches/Powell/2002/spmnp212.html>.

that will govern such arrangements.²⁷ This effort, particularly if an ambitious one, may well lead the agency to look to outside standard setting bodies or other entities for assistance.

The Telecom Act's commitment to require the "unbundling" of the local telephone infrastructure to facilitate entry represents an ambitious experiment in industrial policy. Under any conceivable course of events, a forced sharing regime, where an incumbent monopolist would "unbundle" parts of its network for lease to its competitors, would not be easy for regulators to superintend. Unfortunately, many business persons, politicians, and citizens were not chastened by the difficulty in managing a transition to a new regulatory regime. Moreover, since the Act's passage, the FCC has yet to adopt a set of unbundling requirements that can withstand judicial scrutiny.²⁸ Finally, to make matters worse, the federal and state regulators have yet to clearly determine how to enforce the Act's unbundling requirements.²⁹

A number of papers in this conference grapple with the intricacies of unbundling policy and the difficult task that the FCC undertook in its Triennial Review, which revised the rules that govern what elements of an incumbent provider's network must be unbundled. In terms of unbundling policy, it is critically important that the FCC justify its approach to unbundling by reference to innovation policy. First, an innovation policy focus means that where innovation can be brought to the telecommunications marketplace only through the unbundling of a particular element, there is a compelling argument for unbundling that element. This analysis flows from the Act's standard for unbundling, which centers on whether access to an unbundled network element is

27. See *FCC Getting More Hands-On With Technical Spectrum Rules*, WCA Says, COMMUNICATIONS DAILY, Jan. 15, 2003, LEXIS, Nexis, Computing & Technology File (explaining significance of interference rules). To explain a proposal to allow unlicensed devices to operate in the broadcast spectrum, one of the FCC's leading engineers commented that "[t]he FCC wants to encourage the sharing of spectrum and take advantage of it when it's not being used, as long as there is not interference . . . [but we don't want the spectrum to get] crowded to the point where it doesn't work." Richard Shim, *FCC: Open Up TV Waves To Wireless*, CNET NEWS.COM (Jan. 16, 2003), at <http://news.com.com/2100-1033-981047.html> (quoting Alan Scrim, Chief of the Policy and Rules Division in the FCC Office of Engineering and Technology).

28. See, e.g., *AT & T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366, 389-90 (1999); *U.S. Telecom Ass'n v. F.C.C.*, 290 F.3d 415, 422 (D.C. Cir. 2002) (*USTA*).

29. For a discussion of the Telecom Act's enforcement regime, see Weiser, *Federal Common Law*, *supra* note 9, at 1740-1752. For a recognition of the importance of this issue, see *Competition Issues in the Telecommunications Industry: Before the Senate Committee on Commerce, Science, and Transportation* 12 (Jan. 14, 2003) (statement of Michael K. Powell, Chairman, F.C.C.), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-230241A1.pdf ("Enforcement should be something carriers take seriously, and not merely a cost of doing business, and one way to do this is to make sure that [the FCC is] working together, and not at cross-purposes, with the states.").

“necessary” for a competitor and the absence of access would “impair” its ability to compete.³⁰ As the Supreme Court explained, this inquiry requires the consideration of whether competitors can obtain these elements—or reasonable substitutes for them—from a source other than the incumbent provider.³¹ Second, an innovation policy focus means that where a product is likely to be offered even without an unbundling requirement—either because the incumbent will ensure that it reaches consumers or because an alternative provider will offer it—the costs of unbundling may well outweigh its benefits.

In addition to the substantive policy questions involved in the debate, unbundling policy also raises a critically important question of regulatory strategy. In particular, the question of what network elements must be unbundled may be decided differently in different states. As appropriately recognized by the D.C. Circuit, the FCC’s reasons for providing so little discretion to state agencies under its earlier rules were very unconvincing.³²

I have discussed the role of state agencies under the Act elsewhere at length,³³ so I will only comment briefly on this issue here to note the inconsistent course taken by the FCC’s Triennial Review decision.³⁴ On some issues, it left the state agencies with no discretion—i.e., with respect to the provision of the unbundling of the data portion of the loop (or line-sharing, as it is often called)—thereby surrendering an important regulatory tool that the Act provides. On other issues—i.e., with respect to unbundled switching—the FCC left the state agencies with, in many cases, a totality of the circumstances inquiry that will tax their resources by asking them to make open-ended judgment calls. In short, the FCC’s approach to both line sharing and unbundled switches took vastly different options to enlisting state agencies in telecommunications policy. The better model, and the path not taken in the Triennial Review decision, is for the FCC to leave room for state experimentation under a clear federal framework (i.e., that identifies plausibly sensible alternatives) and to allow states to petition for a different approach by requesting a waiver from the FCC’s policy prescription.

30. 47 U.S.C. § 251(d)(2) (2000). For a discussion of this issue, see Weiser, *Paradigm Changes*, *supra* note 1 at 827-31; *USTA*, 290 F.3d at 418-28.

31. See *Iowa Utils. Bd.*, 525 U.S. at 389-90.

32. *USTA*, 290 F.3d at 422-25.

33. For a discussion of the nature of the Act’s cooperative federalism framework, see Weiser, *Federal Common Law*, *supra* note 9, at 1740-43; Philip J. Weiser, *Chevron, Cooperative Federalism, and Telecommunications Reform*, 52 VAND. L. REV. 1 (1999).

34. Review of the Section 251 Obligations of Incumbent Local Exchange Carriers, *Report and Order*, CC Docket No. 01-338 (Aug. 21, 2003), available at http://www.fcc.gov/Daily_Releases/Daily_Business/2003/db0821/FCC-03-36A1.pdf

Over the course of the next several years, a critical issue in broadband policy will be whether the owners of broadband networks are required to adhere to the open standard of the Internet protocol. As Tim Wu explains, the debate over whether Internet Service Providers (ISPs) should be assured of the ability to resell an incumbent's broadband connection does not go to the heart of concerns about maintaining the Internet's open architecture.³⁵ Thus, the critical question is not whether government policy requires multiple ISP access to cable, telephony, or other broadband platforms, but whether it will impose a non-discrimination requirement on downstream content in order to preserve the Internet as an open platform for innovation. Such a regime would allow intra-network rules that restrict bandwidth usage and the like, but would view as suspicious any rules that would discriminate against some outside content or services without a legitimate business justification.³⁶

To justify a governmental non-discrimination mandate with respect to broadband platforms, the FCC faces two basic challenges. First, the agency must develop a clear conceptual framework that grapples with the question of why broadband infrastructure providers would discriminate against upstream content that, as a complementary service, would make their platform more valuable.³⁷ Without such a showing, a reviewing court will, almost certainly, remand the issue back to the FCC for a more careful evaluation.³⁸ Second, the FCC must evaluate whether the proposed remedy is indeed likely to address the competitive harm it is concerned about and whether, accounting for administrative and error costs, the prescribed remedy will do more good than harm.

If the FCC is able to craft a minimally intrusive and easily implemented regime to ensure broadband network neutrality, it might succeed in mirroring what most providers would do anyway and also build in a potentially important insurance policy against discriminatory behavior. In making this judgment, the FCC must consider whether the marketplace incentives towards openness and the influence of standard setting bodies would—without any FCC action—maintain the Internet

35. For a clear explanation of this point, see Tim Wu, *Network Neutrality, Broadband Discrimination*, 2 J. ON TELECOM. & HIGH TECH. L. 141, 147-49 (2003); see also James Speta, *A Common Carrier Approach To Internet Interconnection*, 54 FED. COMM. L. J. 225 (2002).

36. Wu, *supra* note 35, at 165-70; see also Philip J. Weiser, *Toward A Next Generation Regulatory Regime*, 49 LOY. L. REV. (forthcoming 2003).

37. This issue is taken up in 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 2003), available at <http://repositories.cdlib.org/iber/cpc/CPC02-035> (last visited Sept. 24, 2003).

38. See, e.g., *USTA*, 290 F.3d at 422 (overruling, for lack of a reasoned justification, the FCC's rules on local telephone network unbundling).

as an open platform. If the FCC addresses this issue effectively in its broadband rulemakings, it may well adopt rules that are as enduring and important as the Computer Inquiry rules that they appear ready to modify (or replace entirely).³⁹

Copyright policy provides an illustrative example of how the common law model of regulation can work. Like antitrust rules, the history of copyright policy largely reflects a reliance on judge made rules through common law adjudication.⁴⁰ After new technologies, such as player pianos and VCRs, were invented, the federal courts and ultimately the Supreme Court evaluated whether these inventions should be banned on the ground that they facilitated unlawful infringement.⁴¹ In rejecting these arguments, the courts allowed these technologies to develop, and ultimately left room for Congress, with the benefit of experience with the judicially devised approaches, to institute a new regulatory regime.⁴² For both copyright and antitrust policy—as well as constitutional law—it is very clear that Congress appreciates that the courts possess an impartiality that confers upon them an institutional competence for deciding certain types of questions.⁴³ Moreover, common law courts react to developments in the marketplace and decide matters as they arise; agencies, by contrast, generally adopt rules that structure the marketplace proactively. In situations involving new technologies, the common law approach provides more flexibility and thus will often be superior.

Contrasted with the historic tradition outlined above, there are two notable trends in copyright policy. First, Congress is increasingly accepting and acting on the arguments of industry related to the threats

39. See Farrell & Weiser, *supra* note 37, at 44-49 (discussing the FCC's *Computer Inquiries*).

40. As Judge Boudin put it, "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." *Lotus Dev. Corp. v. Borland Int'l, Ltd.*, 49 F.3d 807, 820 (1st Cir. 1995) (Boudin, J., concurring), *aff'd by an equally divided Court*, 516 U.S. 233 (1996).

41. See *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984) (upholding use of VCR against copyright challenge); *White-Smith Music Pub. Co. v. Apollo Co.*, 209 U.S. 1 (1908) (holding that piano roll recordings did not infringe copyright in musical compositions). As Stacey Dogan puts it, these decisions reflect a tradition of copyright common law cases which hold that "copyright holders should almost never have veto power over new technologies"—particularly ones that can be used for both infringing and non-infringing purposes. Stacey L. Dogan, *Code Versus The Common Law*, 2 J. ON TELECOMM. & HIGH TECH. L. 73, 75 (2003).

42. In response to the *White-Smith* case, for example, Congress ultimately enacted a compulsory license regime. See *Goldstein v. California*, 412 U.S. 546, 565-66 (1973) (discussing *White-Smith* and the ensuing legislative response).

43. See CHRISTOPHER L. EISGRUBER, *CONSTITUTIONAL SELF-GOVERNMENT* 57-59 (2002) (describing nature of judicial impartiality).

posed by new technologies as opposed to waiting for those technologies to mature before taking action. In particular, Congress enacted the CTEA and the DMCA in response to such arguments. Second, as a result of these enactments, the federal courts are addressing significant intellectual property policy issues in the context of constitutional scrutiny rather than interstitial lawmaking. In *Eldred v. Ashcroft*, which involved a constitutional challenge to the CTEA, the Supreme Court emphasized that institutional competence concerns limit judicial oversight based on constitutional principles even where the policy judgment at issue appears “arguably unwise.”⁴⁴ Even in *Eldred*, however, the Supreme Court did not slam the constitutional oversight door shut; the Court’s decision, for example, stressed the importance of “built-in First Amendment accommodations,”⁴⁵ thereby allowing litigants to argue that the DMCA, unlike the CTEA, fails that requirement.⁴⁶

With the intense focus on the judicial battles, some commentators fail to appreciate that the federal courts are unlikely to be the sole battleground for the future of copyright policy. In particular, there are a number of developments that suggest that the FCC and other actors will play an important role in regulating content in the digital age. In an effort to extend the DMCA’s legacy of limiting digital copying, Senator Hollings proposed that, if the relevant industries did not adopt a copy protection standard for all digital devices, the FCC should adopt one and impose it on the marketplace.⁴⁷ Unlike during the debate over the DMCA, the technology community is now far more vigilant about opposing such efforts, so this measure seems unlikely to pass.⁴⁸

44. *Eldred*, 123 S. Ct. 769, 783 (2003). This admonition follows what Chris Eisgruber views as an important principle of constitutional law: where “strategic issues dominate moral ones . . . the case for judicial deference to legislatures is strong.” Christopher L. Eisgruber, *Constitutional Self-Government and Judicial Review: A Reply To Five Critics*, 37 U.S.F. L. REV. 115, 182 (2002). See also Philip J. Weiser, *Justice White and Judicial Review*, 76 U. COLO. L. REV. 1305 (2003) (arguing that Justice White’s judicial practice acutely reflected this sensitivity).

45. *Eldred*, 123 S. Ct. at 788.

46. It is worth noting that, even where the courts ground their copyright decisions on constitutional grounds, they can still make contingent rulings by leaving open the door for congressional revision. See Eisgruber, *supra* note 44, at 203 (explaining the benefits of this strategy, as used in the Dormant Commerce Clause cases). In *Feist*, however, the Court did not take this route. *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340 (1991). See Thomas Nachbar, *The Quest To Keep Copyright Pure*, 2 J. ON TELECOMM. & HIGH TECH. L. 33, 37-38 (2003) (criticizing this aspect of *Feist*).

47. Consumer Broadband and Digital Television Promotion Act of 2002, S. 2048, 107th Cong. (2002), available at http://www.eff.org/IP/SSSCA_CBDTPA/20020321_s2048_cbdtpa_bill.pdf.

48. See Lisa Bowman, *Tech Execs Lash Into Piracy Proposals*, CNET NEWS.COM, (Mar. 14, 2002) (noting opposition to proposal), at <http://news.com.com/2100-1023-860192.html>. In the wake of this proposal, a number of technology companies and

Nonetheless, the FCC may well play an important role in this area, as the cable and the consumer electronics industries' recent cable compatibility agreement asks it to develop a regime to govern the nature of permissible copying of digital content.⁴⁹ On another non-judicial front, the revision of the Uniform Commercial Code to require the enforcement of click-through licenses, which is often painted as a threat to fair use rights in the digital age,⁵⁰ has stalled at the state level.⁵¹ Finally, to the extent that industry consortia or standard setting bodies shape the development of digital rights management systems, it remains to be seen whether they take account of user concerns—be they privacy or fair use.⁵²

The final issue, and the one most open to different regulatory strategies, is privacy policy. At present, there is no clear federal policy on informational privacy. The FCC has adopted certain rules governing telephone companies' use of customer information, but those will rules will likely be tested in court. Indeed, the Tenth Circuit invalidated the FCC's earlier ones on the ground that they failed to account for First Amendment concerns (i.e., the right of the telephone company to speak to its customers).⁵³ In the absence of any Internet privacy rules, the Federal Trade Commission has partially filled the vacuum by ensuring that companies adhere to their advertised privacy policies.⁵⁴ Similarly, a number of state legislatures—as well as state attorneys general—have

organizations have formed the Alliance For Digital Progress to lobby against this or similar measures. See <http://www.alliancefordigitalprogress.org>.

49. See Implementation of § 304 of the Telecomms. Act of 1996; Commercial Availability of Navigation Devices; Compatibility Between Cable Systems and Consumer Electronics Equipment, *Further Notice of Proposed Rulemaking*, 18 F.C.C.R. 518 (2003); see also *Fixing Spectrum Policy Is Among Powell's Top Priorities*, COMMUNICATIONS DAILY, Jan. 13, 2003, LEXIS, Nexis Library, Communications Daily File (“Intellectual property is Achilles heel of overall digital transition and FCC is ‘groping its way through what role it can play.’”) (quoting Michael Powell, FCC Chairman).

50. See, e.g., Yochai Benkler, *Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain*, 74 N.Y.U. L. REV. 354, 429-40 (1999) (criticizing movement to revise the UCC to facilitate the licensing of content).

51. See Paul Festa, *States Spar Over Stalled Software Act*, CNET NEWS.COM, (July 30, 2002), at <http://news.com.com/2100-1023-947182.html>.

52. For a discussion of how digital rights management regimes could be designed to accommodate fair use, see Dan L. Burk & Julie E. Cohen, *Fair Use Infrastructure for Rights Management*, 15 HARV. J.L. & TECH. 41 (2001).

53. See *U.S. West, Inc. v. FCC*, 182 F.3d 1224 (10th Cir. 1999) (invalidating FCC rules addressing use of customer information).

54. See Patricia Jacobus, *FTC Investigates DoubleClick's Data-collection Practices*, CNET NEWS.COM, (Feb. 16, 2000), at <http://news.com.com/2100-1023-237007.html?legacy=cnet>.

proceeded to develop their own initiatives to address the issue.⁵⁵ Finally, a number of self-regulatory efforts, including programs like Trustee and BBBOnline, and standard setting ones, such as the World Wide Web Consortium's Platform for Privacy Preferences (P3P), have attempted to address the issue.

Given the significant debate on the issue and the diverse set of possible approaches, privacy policy may well prove to be a valuable testing ground for other Internet policy issues. Unlike digital rights management, network unbundling, network neutrality, or spectrum policy, most Internet users understand threats to their privacy and have complained in the face of sharing personal information without their permission.⁵⁶ Moreover, privacy is an area where state actors can experiment with different approaches (say, as to local telephone companies⁵⁷) and, depending on the nature of a federal regime, state entities may also play a role in enforcement. Finally, given the industry's strong self-interest in building confidence in e-commerce, this area may also be one where standard setting solutions or other self regulatory ones will be supported adequately and will develop quickly enough to make a difference.

III. CONCLUSION

Because the policymaking world moves in years, not months, the response to the Internet and information industries revolution that began in the mid-1990s is still in its infancy. Over time, policymakers will develop a set of regulatory strategies that will rely on some combination of the models of regulation discussed above. At present, however, it is not only clear that many important information law problems remain unsolved, but also that we have not even fully developed our understanding of *how* to solve them. That most certainly does not mean we should wait to do so; it does mean that, despite our best efforts, we are unlikely to resolve these issues the first time around. But with experimentation and reform efforts over time, we are likely—at least if

55. A number of states, for example, have passed anti-spam laws. For a full list of states governing spam, see *Anti-Spam Laws: State-by-State*, ZDNET.COM, at <http://techupdate.zdnet.com/techupdate/stories/main/0,14179,2880726,00.html>.

56. For an example of one such incident, see *Lilly Settles With State*, SILICON VALLEY/SAN JOSE BUSINESS JOURNAL, (Jul. 25, 2002) (reporting on incident where email addresses of users of Prozac were publicly released), available at <http://www.bizjournals.com/sanjose/stories/2002/07/22/daily61.html>.

57. See, e.g., *In re Dissemination of Individual Customer Proprietary Network Information*, 2002 WL 257813, *4 (Ariz. C.C. Jan. 28, 2002) (regulating incumbent provider's use of customer information).

the past is prologue—to find our way to a relatively stable and sound regulatory regime.

