
NET NEUTRALITY OR NET NEUTERING

Should Broadband Internet
Services Be Regulated?

edited by
Thomas M. Lenard
Randolph J. May



THE PROGRESS
& FREEDOM FOUNDATION

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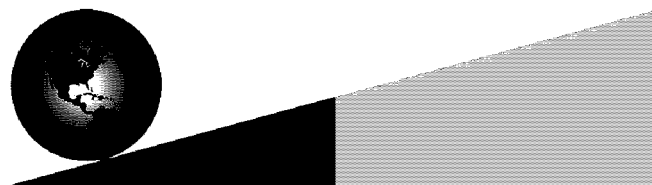
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Foreword

Randolph J. May and Thomas M. Lenard
The Progress & Freedom Foundation

Most of the papers in this book were originally presented at a June 2003 Progress & Freedom Foundation conference entitled, “Net Neutrality or Net Neutering: Should Broadband Internet Services Be Regulated.” As we now publish the suitably updated collection of papers, along with two others, the title remains entirely appropriate. For while calls to mandate rights of access to the broadband networks of cable operators, telephone companies, and other facilities-based broadband providers might ebb and flow, as we write this, the tide is running high. So persistent are calls for mandatory network access rights in the communications world that a book that explores the various facets of Net Neutrality is not likely to be soon outdated.

The Policy Statement released by the Federal Communications Commission in September 2005 in its long-running proceedings to establish an appropriate regulatory framework for cable operator and telephone company-provided broadband services describes the bundle of “rights” commonly understood to be encompassed under the rubric of Net Neutrality: (1) consumers are entitled to access the lawful Internet content of their choice; (2) consumers are entitled to run applications and services of their choice; (3) consumers are entitled to connect their choice of legal devices that do not harm the network; and (4) consumers are entitled to competition among network providers, application and services providers, and content providers.¹ These rights are generally supported by a coalition that includes consumer groups, such as Consumers Union and the Consumer Federation of America, non-facilities-based Internet Service Providers such as Earthlink, and suppliers of Internet content such as Yahoo, Amazon and Google. In a broad

¹ Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, FCC 05-151, CC Docket No. 02-33, September 23, 2005.

sense, the Net Neutrality debate is about whether law and regulation should dictate completely “open” or “dumb” broadband networks or whether the degree of “openness” should be left to the discretion of the network operator in light of marketplace imperatives.

At the present time, the FCC’s statement of the four Net Neutrality principles is characterized as “guidance,” not rules in the sense of positive law. But the agency concludes its policy statement by observing: “To foster creation, adoption and use of Internet broadband content, applications, services and attachments, and to ensure consumers benefit from the innovation that comes from competition, the Commission will incorporate the above principles into its ongoing policymaking activities.”²

Perhaps not surprisingly, it did not take long for the FCC to make good on its promise that it would incorporate the Net Neutrality principles into its ongoing policymaking activities. When the FCC approved the mergers of SBC Communications, Inc. and AT&T Corp. and Verizon Communications Inc. and MCI, Inc. in October 2005, it incorporated into its approval a condition requiring that the merger applicants “conduct business in a way that comports with the Commission’s Internet policy statement issued in September.”³ So, within two months of their promulgation, the FCC found the first occasion to incorporate the Net Neutrality principles “into its ongoing policymaking activities.”

The FCC is not alone in considering whether and how to respond to the ongoing calls for Net Neutrality. In light of the technological and marketplace changes that have taken place since passage of the Telecommunications Act of 1996, Congress is in the process of considering revisions to our communications law. The first two legislative proposals of any consequence—including one by the staff of the House Energy and Commerce Committee, which has jurisdiction in this area—both contain guaranteed network access rights of the type embodied in the FCC principles.

So those who seek mandatory access rights to broadband networks are actively pushing their cause. Yet, as timely as the Net Neutrality issue is today, it is by no means new. Whether there should be mandated access rights of

² *Id.*, at 3.

³ News Release, “FCC Approves SBC/AT&T and Verizon/MCI Mergers,” October 31, 2005. The FCC characterized the conditions it imposed, including the one relating to Net Neutrality, as “voluntary commitments.” Of course, the applicants were anxious to have the Commission approve the proposed mergers without any further delay. For two articles explaining how the FCC uses—or, perhaps put more bluntly, sometimes abuses—the merger approval process to impose “voluntary” conditions that do not directly relate to any claimed competitive impacts uniquely associated with the proposed merger, see Randolph J. May, *Telecom Merger Review—Reform the Process*, NATIONAL LAW JOURNAL, May 30, 2005, at 27; Randolph J. May, *Any Volunteers?*, LEGAL TIMES, March 6, 2000, at 62.

one form or another is a recurring question in “network” industries in general and the communications sector in particular.⁴ While the call for mandated network access assumes different names at different times, the change in terminology should not confuse the underlying issues at stake. For roughly the first three quarters of the twentieth century, the nation’s telecommunications marketplace was dominated by AT&T. Before the 1984 breakup of the integrated Bell System in compliance with the antitrust consent decree in *U.S. v. AT&T*,⁵ no one seriously disputed AT&T’s market power in the local telephone market. Thus, when the FCC fashioned its landmark *Computer II* regime in the early 1980s, as the previously separate communications and data processing markets begin to converge to enable the creation of a new online services market, it was not surprising that the new regime imposed on AT&T a non-discrimination requirement and safeguards intended to enforce it.⁶

The new online services, such as Telenet, Tymnet and CompuServe, were almost entirely dependent upon the local transmission facilities of AT&T for transport of the then newly emerging applications, such as e-mail, and data storage and retrieval, that combined some form of computer processing with basic transmission into what were called enhanced services. There was widespread agreement that, given its market power, AT&T had both the incentive and the ability to discriminate against its newly emerging enhanced services competitors. So, the FCC drew what it characterized at the time as a “bright line” between what it called “basic” and “enhanced” services,⁷ and it mandated that AT&T could offer enhanced services only through a fully separate subsidiary. This so-called structural safeguard was the means by which the agency enforced the requirement that AT&T’s competitors were entitled to access AT&T’s basic local network facilities on the same terms and conditions as AT&T itself.

⁴ A common feature of “network industries” as that term is used here is that these industries exhibit increasing returns to scale in consumption. This characteristic is commonly called “network effects”.

⁵ *United States v. AT&T*, 552 F.Supp.131 (D.D.C. 1982), *aff’d sub nom. Maryland v. United States*, 460 U.S. 1001 (1983).

⁶ See Second Computer Inquiry, *Final Decision*, 77 F.C.C. 2d 384 (1980).

⁷ “Basic service” was defined as the offering of a “pure transmission capability over a communications path that is virtually transparent in terms of its interaction with customer supplied information.” 77 F.C.C. at 420. “Enhanced services” were defined as services that combine “basic service with computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber’s transmitted information, or provide the subscriber with additional, different, or restructured information, or involve subscriber interaction with stored information.” 77 F.C.C. 2d at 387.

The *Computer II* decision and its open access requirement were predicated on the existence of AT&T's market power. But even in 1980 there was a hint of the anticipated changes in the market environment that were on the horizon. While referring to the "existing ubiquity" of AT&T's network, the Commission stated that "technological trends suggest that hard-wired access provided by the telephone company will not be the only alternative...."⁸

In 1984, AT&T divested itself of the local operating companies, and the *Computer II* structural safeguards were applied to the "Baby Bells." In 1986, in the *Computer III* proceeding, the FCC replaced the structural separation requirement with a new set of non-structural safeguards intended to enforce the non-discrimination mandate. At the heart of this new network access regime was a set of requirements applicable to the local telephone companies called "Open Network Architecture" or ONA.⁹ ONA required the local companies to unbundle elements of their networks as a means of ensuring that competitive information service providers had access to the network on the same terms and conditions as the operating company. This was followed, under the Telecommunications Act of 1996, by another new regime of network access mandates—Unbundled Network Elements or UNEs. The intent was to prevent the Bell companies from using their presumed market power to disadvantage competitors who were still presumed to need access to the Bells' networks in order to compete. The effort of the FCC to implement this particular access regime led to an eight year saga that met judicial reversal at every turn.¹⁰

Thanks in large part to the technological advances spurred by the digital revolution, the Commission's suggestion in the *Computer II* proceeding that alternatives would develop to the "last mile" networks of the local telephone companies has proved true. We are well into a rapid transition from a narrowband world into one in which access to broadband services is increasingly ubiquitous. There may be debate concerning the current competitiveness of the broadband marketplace and the extent of market power of any of the various broadband providers. But it is very difficult to argue with the FCC's assertion in 2002, when it initiated the rulemaking proposing to reclassify telephone company-provided broadband services as information services, that there are now "very different legal, technological and market cir-

⁸ 77 F.C.C. 2d at 468.

⁹ Third Computer Inquiry, Report and Order, 104 F.C.C. 2d 958 (1986).

¹⁰ The long and short of it is that at least three times courts held that the FCC regulations required excessive network unbundling that was not consistent with the statutory directive contained in the 1996 Act. For some of the history of the long-running UNE litigation in its final throes, see *United States Telecom Ass'n v. FCC*, 359 F. 3d 554 (D.C. Cir. 2004).

cumstances” than when the agency “initiated its *Computer Inquiry* line of cases.”¹¹

In the three years since that FCC observation (one of many, of course) the pace of technological and marketplace change has continued to accelerate. Broadband networks have vastly more bandwidth available than previously and, as the FCC recently observed, this greater bandwidth encourages the introduction of services “which may integrate voice, video, and data capabilities while maintaining high quality of service.”¹² The Commission goes on to add that, in a digital world “it may become increasingly difficult, if not impossible, to distinguish ‘voice’ service from ‘data’ service, and users may increasingly rely on integrated services using broadband facilities delivered using IP rather than the traditional PSTN (Public Switched Telephone Network).”¹³

One only has to scan the daily newspaper—either the one in hand or online—to see the alacrity with which cable operators, telephone companies, satellite operators and wireless service providers all are racing to offer integrated packages of voice, video, and Internet access services. Other potential broadband operators, such as power companies, lurk on the sidelines as potential competitors. It is in this rapidly evolving competitive environment that calls for Net Neutrality mandates—really nothing more than old-fashioned *Computer II*-like non-discrimination access requirements—continue to be made.

We hope that this book’s collection of papers proves useful to policymakers, communications industry participants, and others as they consider the various aspects of the Net Neutrality debate. The essays by Tom Lenard and David Scheffman; Christopher Yoo; Adam Thierer; and Bruce Owen and Greg Rosston set forth the arguments against the imposition of Net Neutrality mandates in today’s environment, while Mark Cooper’s paper argues strenuously in favor of imposing such requirements. In his essay, Joe Farrell examines arguments on both sides and explains why he has doubts about the positions of those either favoring or opposing Net Neutrality mandates. In the end, relying on what he still sees as the marketplace uncertainties, and with no apologies for the “consciously inconclusive tone” of his paper, he suggests we “could apply the open access rule to one, but not both, of the two main broadband pipes.” In that way, “we would in some sense be making

¹¹ Appropriate for Broadband Access to the Internet over Wireline Facilities, *Notice of Proposed Rulemaking*, 17 F.C.C. Rcd. 3019, 3038 (2002).

¹² IP-Enabled Services, *Notice of Proposed Rulemaking*, 19 F.C.C. Rcd 4863, 4876 (2004).

¹³ *Id.*

the right choice as to one, rather than hoping to get both right but fearing to get both wrong.”

With all due respect to the virtues of doubts, in our view, the arguments against a Net Neutrality mandate are substantially stronger than those on the other side. Regardless, however, of anyone’s current beliefs or doubts, we are convinced that these essays collectively provide a wealth of information and a diversity of views that will contribute to the understanding of the Net Neutrality issue. They discuss the history of access mandates; the current and projected state of the broadband marketplace; the impact of access mandates on investment in new broadband facilities, applications and content; the relationship of Net Neutrality mandates to the preservation of property rights and an open marketplace of ideas; the costs and benefits associated with regulating or not; and much more. In short, after perusing the essays contained in this book, even if he or she still harbors some of the doubts that lead Joe Farrell to adopt a “consciously inconclusive tone,” the reader surely will be in a much better position to make up his or her own mind in the important debate about Net Neutrality. If we are right on this score, the book will have achieved the goal which we set for ourselves.

Finally, we want to thank Marie Ryan, PFF Research Assistant, and Michael Pickford, former PFF Research Associate, for valuable research and editorial assistance. Marie Ryan, Amy Smorodin, PFF’s Director of Communications, and Brooke Emmerick, Special Events and Publishing Coordinator, all deserve thanks for their work in formatting and producing the final version of this book. And thanks too to Jane Creel, PFF’s Director of Finance and Operations, and Ray Gifford, PFF’s President, for providing help in all the usual ways that are required to support a project like this from start to finish.

While much credit is due to the PFF staff, and, of course, to the contributing authors for producing what we are confident will be a valuable contribution to the Net Neutrality debate, the responsibility for any errors remains our own.

Randolph J. May
Thomas M. Lenard

Washington, DC

Chapter 1

Distribution, Vertical Integration and the Net Neutrality Debate

Thomas M. Lenard and David T. Scheffman
The Progress & Freedom Foundation

I. INTRODUCTION

The issue of whether to adopt a mandatory net neutrality policy—i.e., to subject broadband providers to an open-access requirement that would prohibit them from discriminating against content providers—is one of the most important and controversial Internet policy issues before the FCC and the Congress. Despite the high levels of penetration achieved in recent years,¹ broadband is still at a relatively early stage of development. Indeed, the long-hoped-for promise of broadband has yet to arrive and it is still not clear what “it” will be when it does arrive. Broadband providers, content providers and technology companies of various kinds are all placing expensive and risky bets on new technologies and “programming models” and will be doing so for many years to come. Obviously, the regulatory environment affects incentives to make these investments and to implement business models that could be successful and beneficial to consumers.

Moreover, the issue of whether to impose a net neutrality requirement is not just a “regulatory” or a “telecom” issue, important as these issues are. Internet policy can have a significant effect on the broader macro-economy as well, because the Internet is a key element of the information and commu-

¹ Federal Communications Commission, *High Speed Services for Internet Access: Status as of December 31, 2004* (July 2005).

nication technology (ICT) sector, which has been the principal factor in the extraordinary performance of the U.S. economy during the last decade.²

This paper argues that the case for net neutrality regulation is weak for a number of reasons:

- Broadband—and what the actual contours of viable business models will look like—is still in its infancy. The issue here is nothing like the issue of traditional telecom regulation, which was concerned with established, relatively stable products and services.
- Broadband is a distribution business and arrangements that are not neutral with respect to the products being distributed—in this case, content and applications—are typical of distribution businesses. In fact, “non-neutral” business models are likely to be necessary to provide sufficient incentives to invest, both in content and the distribution infrastructure itself. Such investments, probably large and risky, are going to be required to develop business models that are viable and achieve some of the apparent promise of an *eventual* broadband era.
- Classical telephony was an electronic communication distribution business. Broadband is already—and in the future will be much more of—a media business. The economics of the media business are fundamentally different from the economics of classic telephony. Media distribution businesses provide content or programming in order to add subscribers in a way that is profitable. Put differently, inclusion is more characteristic of these businesses than exclusion. This does not mean that there are no conceivable exclusion issues, but now is certainly not the time to focus on alleged issues of “fairness” or abstract conceptions of “competition.” The primary objective should be to not hinder the development of successful business models that can achieve some of the promise of broadband.

² For an analysis of the impact of IT on past and future growth and productivity, see Dale W. Jorgensen, Mun S. Ho and Kevin J. Stiroh, *Projecting Productivity Growth: Lessons from the U.S. Growth Resurgence*, Federal Reserve Bank of New York, March 15, 2002.

- Even with two major providers in local broadband markets, there is evidence of a lot of competition. Under these conditions, it is difficult to envision circumstances where it would be in the interest of a broadband provider to foreclose access to any valuable content or application. Moreover, there is substantial investment in new broadband technologies, suggesting that additional competition is on the way.
- Content providers have multiple outlets for their products, because the market for content is national (or even international) in scope. This makes it even more unlikely that content that is valuable to consumers could be foreclosed from the market.
- Even if broadband was a monopoly, which it clearly is not, the case for net neutrality regulation would not be automatic. Monopolies often have the incentive to behave efficiently with respect to the vertical decisions that would be affected by such regulation.³ While there are exceptions to this conclusion, these exceptions do not appear to be applicable to the current markets for broadband and content, because they are not monopolies.

The outline of the paper is as follows: Section II briefly outlines the current regulatory debate and the arguments made by net neutrality proponents. Those arguments depend importantly on the competitive environment for broadband, which we describe in Section III. In Section IV, we discuss some characteristics of the distribution business generally, and how they apply to the broadband sector and the net neutrality debate. In Section V, we discuss some circumstances in which access regulation might be justified and argue that these circumstances are not applicable in the current broadband environment. Section VI offers some conclusions.

³ The economic arguments demonstrating this are well summarized in Joseph Farrell and Philip J. Weiser, *Modularity, Vertical Integration, and Open Access Policies: Toward a Convergence of Antitrust and Regulation in the Internet Age*, 17 HARVARD J. OF L. AND TECH. 86.