CONTENT DISCRIMINATION ON THE INTERNET: CALLS FOR REGULATION OF NET NEUTRALITY

Carol M. Hayes*

I. INTRODUCTION

What if the phone company charged you for your phone calls based on who you were or what you were talking about? Would it be fair if it cost you a dime to call your grandmother and tell her about the weather in your area, but fifty cents for your brother to call your grandmother and tell her the same thing? Similarly, would it be fair if it cost you a dime to call your grandmother and tell her about the local weather, but fifty cents to call your boss to tell her that you were sick and could not come in to work? Hypothetical situations like these go to the idea of content discrimination and are the underlying dilemmas that form the basis of discussions on the topic of net neutrality.

The concept of net neutrality is essentially that entities that enable content exchanges on the Internet should do so in a content-neutral manner. A failure to handle these exchanges without regard to content could result in situations where, for example, Yahoo!’s web content is prioritized so that customers of a

* J.D., University of Illinois College of Law, 2010; B.A., Psychology, University of Arkansas at Fayetteville, 2004. I want to thank my husband and my parents for their support and suggestions, and I also want to thank the excellent editors and members of the University of Illinois Journal of Law, Technology & Policy.

1. However, it is important to note that the telephone metaphor is not to be taken literally from a legal perspective, because telephone companies are “common carriers.” Common carriers are already explicitly forbidden from discriminating based on content or content provider. 47 U.S.C. § 202 (2006). Broadband service providers, on the other hand, are “information services” rather than “telecommunications services,” and thus are not common carriers. See Nat’l Cable & Telecomm. Ass’n v. Brand X Internet Serv., 545 U.S. 967, 1000 (2005) (affirming the FCC’s categorization of cable Internet providers as “information services”). Because broadband providers are not common carriers, their decisions with regard to discrimination based on content tend to be based on market forces, such as when a non-“common carrier” cable television provider decides which cable channels to carry in a particular locality. See Christian Hogendorn, Broadband Internet: Net Neutrality Versus Open Access 2 (Center for Network Industries and Infrastructure, Working Paper No. 2006-09, 2006), available at http://ideas.repec.org/p/cni/wpaper/2006-09.html (distinguishing between common carriers and non-common carriers). The question with regard to this sort of differential treatment, as the phone service metaphor poses, is whether that is “fair” in the context of the Internet.

particular web service provider can access Yahoo!’s search engine quicker and easier than they can access the search engine of Google, Yahoo!’s competitor.\(^3\)

Like many issues implicating politics and business, net neutrality is an issue that involves proponents calling for government regulation and opponents decrying the idea of regulation and urging society to trust the free market to take care of the issue.\(^4\) A detailed exploration of the arguments against regulation is beyond the scope of this note, which instead proceeds under the assumption that some form of government regulation is desirable, focusing on the questions of “who” and “how:” who should regulate net neutrality, and how should such regulation proceed? This Note will examine a recent decision by the Federal Communications Commission (“FCC”) and subsequent actions taken thus far towards regulating net neutrality concerns.

Assuming that net neutrality regulation is needed, it is important to address the issue of which government entity should be in charge of regulating. On the one hand, some citizen groups have urged federal legislation on this topic.\(^5\) At this time, net neutrality has not been evaluated by common law courts, and adjudications have taken place within the confines of administrative agencies.\(^6\) Given the potential unfair competition concerns, it is easy to see how net neutrality could be addressed by the Federal Trade Commission (“FTC”).\(^7\) Because of the implications for the telecommunications industry, however, this topic has been addressed most often and actively by the FCC.\(^8\)

---

3. This hypothetical situation is similar to one put forth by Tim Wu, Tim Wu & Christopher Yoo, Keeping the Internet Neutral?: Tim Wu and Christopher Yoo Debate, 59 Fed. Comm. L.J. 575, 582 (2007).

4. See, e.g., Tim Wu, Why Have a Telecommunications Law? Anti-Discrimination Norms in Communications, 5 J. ON TELECOMM. & HIGH TECH. L. 15, 28 (2006) ("[A]n anti-discrimination rule that creates strong ex-ante norms can be an effective measure for preventing private suffocation of what would otherwise be a vibrant information network.") [hereinafter Wu, Anti-Discrimination]; Christopher S. Yoo, Would Mandating Broadband Network Neutrality Help or Hurt Competition? A Comment on the End-to-End Debate, 3 J. ON TELECOMM. & HIGH TECH. L. 23, 57 (2004) (suggesting that allowing network owners to differentiate themselves “can foster innovation by allowing a wider range of network products to exist”) [hereinafter Yoo, Help or Hurt].


7. The FTC has statutory authority to address unfair methods of competition. 15 U.S.C. § 45 (2006). The statute, however explicitly excludes the FTC from regulating unfair competition among common carriers. Id. Since broadband service providers are not common carriers, however, it follows that regulating unfair competition matters affecting broadband providers would fall within the FTC’s jurisdiction. William Kovacic, Comm’n, Fed. Trade Comm’n, Prepared Statement on FTC Jurisdiction Over Broadband Internet Access Services Before the United States Senate Committee on the Judiciary (June 14, 2006), available at http://www.ftc.gov/os/2006/06/P052103CommissionTestimonyReBroadbandInternetAccessServices06142006Senate.pdf [hereinafter FTC JURISDICTION STATEMENT].

8. See Madison River Commc’ns, 20 F.C.C.R. at 4297–98 (examining the subject matter in the context of a DSL provider that was alleged to be discriminating against customers’ use of VoIP); In re Adelphia Commc’ns Corp., 21 F.C.C.R. 8203, 8298 para. 220 (2006) available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-06-105A1.pdf (discussing the potential for blocking Internet content in the context of the dissolution of Adelphia and the redistribution of Adelphia’s assets to Time Warner and Comcast); In re AT&T Inc., 22 F.C.C.R. 5662, 5727 para. 121 (2007) (finding no evidence that the merger will result in the firm engaging in packet discrimination or degradation).
If an administrative agency is the appropriate party to address these concerns, it must next be decided whether the issue should be addressed in a rulemaking or through case-by-case adjudications. The distinction between the two policymaking methods is important because rulemakings are prospective in nature, while adjudications are typically limited to addressing problems that have already escalated enough to cause significant harm to at least one party.

Much of this Note will concern steps taken by the FCC, which have thus far consisted of adjudications, policy statements and a proposed rulemaking. In August 2005, the FCC adopted an Internet Policy Statement that set forth principles “to ensure that broadband networks are widely deployed, open, affordable, and accessible to all consumers.” A few months before the Internet Policy Statement was issued, the FCC had adopted a consent decree terminating investigation into the behavior of a local phone company and DSL provider which had allegedly abused its power as a broadband service provider to block access to VoIP, which is a technology that allows customers to use their broadband connections in place of traditional local phone service. Given the nature of that alleged behavior and the closeness in time, it would be reasonable to infer that the Internet Policy Statement emerged to provide future guidance in situations where a provider may be discriminating against a particular type of content.

The FCC has also considered net neutrality concerns in situations like mergers and distributions of assets. In 2006, the FCC examined the division of the assets of former broadband provider Adelphia between Time Warner and Comcast, and indicated that in circumstances like that, the FCC would evaluate whether the actions of parties were consistent with the principles of its Internet Policy Statement. In that case, the FCC found no sign that either company was violating the Internet Policy Statement. The FCC then warned the parties that the agency would get involved if an Internet Service Provider (“ISP”) were found to be violating those principles by discriminating against any certain type of Internet traffic. This warning went largely untested until Comcast’s network management practices were subjected to scrutiny in 2008, and Comcast was found to be doing just that by interfering with its customers’ use of specific protocols. This Note will provide an analysis of the Comcast


11. Adelphia Commc'ns Corp., 21 F.C.C.R. at 8299 para. 223 (2006), (citing the Internet Policy Statement and stating that, although the policy statement is not a set of formal rules, future activities would be measured against the principles set forth in that policy statement).

12. Id.

13. Id.

dispute, especially centering on the net neutrality implications of Comcast’s intentional interference with traffic found to be using the BitTorrent protocol, and the FCC’s initial response.

Part II will provide a general background of the relevant history of the Internet, specifically about broadband access and the protocols underlying the Internet, as well as background information about the net neutrality debate and the government entities that have been urged to take leading roles concerning this issue. Part II also provides detailed information about the primary peer-to-peer (“P2P”) file sharing protocol that was implicated in the recent FCC decision concerning Comcast’s network management practices. Part III examines the net neutrality debate and how the FCC’s decision about Comcast’s network management practices fits within this debate. Part IV emphasizes the need for bright line rules in lieu of relying on case-by-case adjudications to form policy in this subject area.

II. BACKGROUND

A. Relevant Internet Terminology and Concepts

The Internet and all of its related developments, from e-mail to blogs to on-line commerce, came about through massive technological innovation. Since the transfer of information is a core component of what makes the Internet such an important tool, and the ability to limit the transfer of information is at the heart of the net neutrality debate, this Note will first provide a brief background of the Internet. The first Internet demonstration occurred in 1977, so the technology has had over thirty years to develop. Accordingly, a treatment of this topic threatens to be very complicated, but the scope of this discussion will be limited to those aspects directly relevant to the recent FCC adjudication concerning Comcast’s network management practices. This section will first examine the broader picture, providing information about broadband and bandwidth before delving into the more technical information and explaining the importance of protocols to assist the reader in understanding part of the technical context of the FCC’s decision concerning Comcast’s network management practices.

1. Broadband and Bandwidth

Two terms that get thrown around frequently in modern discussions of Internet policy are “broadband” and “bandwidth.” Bandwidth is essentially “the volume of information per unit of time that a transmission medium (like an Internet connection) can handle.” To see the effects of having more or less

---

16. Id. at 326. The first milestone for the Internet was actually in 1969 when the first packets were sent between two computers at ARPANET, which also resulted in the first network crash. Id. at 320.
17. Tim Fisher, Bandwidth, About.com, http://pcsupport.about.com/od/termsb/g/bandwidth.htm (last
bandwidth, one common analogy is to imagine a pipe that you are using to transport water; at a constant water pressure, a large pipe could transport more water than a smaller pipe in the same amount of time. The FCC defines broadband as high speed internet access with speeds in excess of two hundred kilobytes per second in at least one direction (upstream or downstream). Slower internet access such as dial-up is sometimes referred to as “narrowband,” and would be analogous to the small pipe. Putting the terms together, we can say that the larger “pipes” of broadband service allow you to download information at a higher bandwidth.

The faster speeds of broadband enable the transmission of larger files than would be feasible using a solely “narrowband” system, and there has been an increase in consumer demand for large, high quality files. An example of a major consumer benefit of broadband is the use of streaming by companies like Netflix, whereby consumers can view high quality video in real-time over the Internet without having to wait until the download is finished. Broadband and the commercialization of the Internet have led to the development of a variety of applications that require a lot of bandwidth, like on-line gaming and streaming video, and other potentially high-bandwidth activities like telecommuting. As bandwidth-intensive services become more common, ISPs are contending with capacity issues related to their available bandwidth.

In allocating the resource of bandwidth, “backbone” service providers provide set amounts to regional service providers, which in turn provide access to individual users. Accordingly, those regional providers inherently have a limit on their bandwidth usage—and yet, offering “Unlimited Bandwidth” has been a marketing technique of ISPs for many years. There is some evidence that broadband providers oversell bandwidth to content providers, perhaps on the assumption that end users would never use the maximum amount allocated.
This is an assumption which is becoming less and less safe as demand increases for bandwidth-intensive applications. The practice of overselling bandwidth has been criticized by industry representatives in Australia, who stated that the American practice of offering “unlimited” broadband service packages is a flawed business model.

2. Protocols

Before the Internet existed, one of the challenges for computer networking in general was that the computers in existence were simply not designed to interface with other computers. The functioning of the Internet was made possible by the development of protocols that enabled computers to communicate with each other. A “protocol” has been defined as consisting of “a set of requirements that precisely define [sic] the behavior and characteristics of a specific utility, like file transfer or the transmission of email.”

There are several layers of protocols, with the application layer containing the type of protocol that end users interact with the most. The two general types of protocols that are most relevant to this Note are networking protocols and application protocols.

TCP/IP, a suite of networking protocols consisting of the Transmission Control Protocol (“TCP”) and the Internet Protocol (“IP”), serves as one of the core technologies of the Internet. IP is focused on getting packets of data from point A to point B, and TCP protects the integrity of the packets of data so that the packets arrive at point B in the same shape that they were in when they left point A. TCP is a crucial protocol, since it protects the integrity of data, but as the Comcast situation shows, TCP would not protect data integrity in a situation where a third party was intentionally altering the flow of packets.

---

28. See Yoo, Help or Hurt, supra note 4, at 35 (listing “bandwidth-hungry” applications such as music downloading and streaming video).
30. OKIN, supra note 15, at 69.
31. Id.
32. Id. at 143. The File Transfer Protocol (“FTP”) is one type of protocol, and Okin defines FTP as “highly detailed rules that specify[ ] how the sending computer would open a connection to the destination computer, listen for an appropriate response, and then begin transmitting the data; and how the receiving computer would answer a request, signal a response, and accept the data.” Id. at 69.
34. OKIN, supra note 15, at 92; see also Yoo, Help or Hurt, supra note 4, at 33 (“[T]he most distinctive feature of TCP/IP is that it routes all packets in a nondiscriminatory . . . manner without regard to the packet’s content, point of origin, or associated application.”).
35. OKIN, supra note 15, at 159–60.
Application protocols can be said to enable human interactions with computers by defining the actions that can be performed on other networked computers. Considering how many people use email on a regular basis, perhaps the most well-known application protocol is the Simple Mail Transfer Protocol, or SMTP, which enables computer users to exchange emails with each other remotely.

B. The Net Neutrality Debate

Generally, proponents of net neutrality regulation say that the Internet will only reach its full potential if it is free from discrimination against users, uses, and ideas. However, opponents of net neutrality regulation say that the government should not regulate these concerns under the label of “net neutrality,” because that would be dictating what the ISPs can do to manage their bandwidth. As noted above, ISPs have a finite amount of bandwidth available, which supports the argument of net neutrality opponents that service providers should be given deference in how to manage this resource. An article by Tim Wu provides an overview of the net neutrality debate, noting that proponents of net neutrality (“openists”) often place the most emphasis on the importance of allowing innovation by outsiders, while opponents (“deregulationists”) tend to suggest that an unregulated Internet will provide incentives for the current market participants to innovate at the network level.

This Note began with an example of a phone company charging its customers more based on the customers’ identities or the subject of their conversations. However, a caveat is warranted because the net neutrality debate is not based on keeping consumers from being charged different prices for accessing the Internet. Some ISPs are currently moving away from the “unlimited bandwidth” terminology and are beginning to implement tiered services where the consumers have a limited amount of bandwidth that they can use each month. That situation is not a net neutrality issue. The metaphor of a phone conversation is still accurate, however, because the crux
of the net neutrality debate is about restricting content providers, and if you are the person who makes a phone call and disperses information to the person on the other end, you are effectively a content provider.

A common way to frame the net neutrality debate is that opponents of net neutrality would promote a tiered structure where ISPs would charge content providers more to have their content available in “the fast lane” of the Internet. In that situation, which content the consumer would see (or how fast he or she would see it) would depend on how much the content provider was paying. For example, backbone service providers may charge content providers more to guarantee that the content provider’s content would be quickly accessible by consumers.

Net neutrality as a concept, however, also encompasses other discriminatory practices by an ISP against content providers. One example of such practices is when AT&T censored anti-Bush lyrics during a live web cast of a performance by Pearl Jam at Lollapalooza in 2007. Another example, which took place just a month after Lollapalooza, involved Verizon’s initial refusal to allow a pro-choice organization to use Verizon’s network to distribute opt-in text messages to its subscribers. Discrimination against content providers in the form of creating a “fast lane” on the Internet is probably a more practical concern, but content discrimination like what occurred in the Pearl Jam and Verizon situations is a much more concrete example of what could potentially occur if ISPs and other similar service providers are allowed to prevent specific content from being distributed using the providers’ network.

C. Net Neutrality and the Government

The opponents of net neutrality regulation urge that this issue should be left to the market, without any government intervention. Proponents of net

---


48. See id. (expressing concerns about major ISPs’ interest in tiered access as a way of expediting data supplied by content providers that pay a premium rate).


51. See, e.g., Yoo, Help or Hurt, supra note 4, at 57 (suggesting that giving network owners more
neutrality regulation, on the other hand, often speak of turning to the federal government to protect these concerns. Proponents of such intervention sometimes refer to the Internet as being a meritocracy, built on the efforts of hardworking individuals with innovative ideas. Such proponents often cite facts such as the creation of Google in a garage and the creation of Facebook in a dorm room. If new content providers with limited funds were relegated to the “slow lane,” the argument goes, this would make it very difficult to establish a customer base, since consumers would be more inclined to use products from more established firms because those firms would have websites that load faster and are more reliable. This Note assumes that protecting innovation and ensuring that the meritocracy of the Internet continues to thrive are worthy goals, and thus the next issue is determining who should be placed in charge of ensuring that these goals are met.

Within the first few days of the Obama administration, the White House website contained agenda information concerning the new administration’s stance on technology policy issues. President Obama has expressed support for net neutrality and an open Internet. In September 2009, a new website was launched by the FCC, OpenInternet.gov, which lists as its purpose the preservation of “a free and open Internet to promote greater innovation, job creation, and a more connected America.” The website also includes a speech from the FCC Chairman expressing intent to promulgate a net neutrality rule. This indicates that action on this topic is forthcoming, but at this time it is too early to predict exactly what action the federal government will take, and thus this Note will explore several alternatives for regulating net neutrality.

1. Congressional Legislation and Net Neutrality

Two bills related to net neutrality went before the House or the Senate in 2008, but neither made it all the way through the process. In the Senate, the relevant bill was the Internet Freedom Preservation Act, and in the House, leeway could encourage innovation).

52. See, e.g., Wu, Anti-Discrimination, supra note 4, at 28 (suggesting that anti-discrimination regulation would serve to protect the market).
53. Wellington, supra note 46, at 537.
54. Id. at 544.
55. See, e.g., id. (noting that it would likely be harder for startups with few resources to succeed under a prioritized system).
56. The Agenda – Technology, http://www.whitehouse.gov/issues/technology/ (last visited Sept. 29, 2009). The page continues to be updated as the administration’s views and actions on technology policy issues continue to develop.
57. E.g., Press Release, White House, Remarks by the President on Securing Our Nation’s Cyber Infrastructure, (May 29, 2009), available at http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-on-Securing-Our-Nations-Cyber-Infrastructure (“Indeed, I remain firmly committed to net neutrality so we can keep the Internet as it should be – open and free.”).
there was a bill entitled the Internet Freedom Preservation Act of 2008. In April of 2008, a Senate committee hearing was held entitled “The Future of the Internet,” and one of the main issues addressed was net neutrality. In November of 2008, Senator Byron Dorgan expressed his intent to introduce a new net neutrality bill in January of 2009, with the aim of preventing “telephone and cable companies from discriminating against Internet content.”

In early 2009, the economic stimulus bill passed with a section that has a potential to impact the Internet policy community. The final version of the American Recovery and Reinvestment Act signed by President Obama on February 17, 2009 contains provisions that require recipients of NTIA grants for broadband deployment to adhere to the principles set forth in the FCC’s 2005 Internet Policy Statement. While that requirement is not the same as a Congressional mandate that providers not discriminate, the inclusion as a requirement for receipt of certain grants does indicate that Congress views the Internet Policy Statement as a valid and important set of standards. Under the statute, the FCC has been entrusted with designing a National Broadband Plan by February 2010, and in April of 2009, the FCC released a Notice of Inquiry seeking comments concerning the potential content of a National Broadband Plan.

Another net neutrality issue arose during the Senate’s consideration of the bill when Senator Diane Feinstein of California sought to insert an amendment into the stimulus bill allowing ISPs to use “reasonable network management practices” (a phrase also used in the Internet Policy Statement) to combat child pornography and copyright infringement, but that language did not make it into the final bill that was signed by President Obama.

For the third year in a row, Congressman Ed Markey (D-MA) has introduced a net neutrality bill in the House of Representatives, currently titled...
the Internet Freedom Preservation Act of 2009. Markey’s two prior attempts at passing a net neutrality bill failed, but some commentators are optimistic that with a pro-net neutrality presidential administration and with new support from the FCC, the bill might stand a stronger chance of getting through the process this time. The text of Congressman Markey’s proposed legislation expands on the FCC’s Internet Policy Statement, and assigns to the FCC the responsibility of engaging in rulemaking and enforcement of net neutrality principles.

Opponents of legislation protective of net neutrality maintain that such legislation is unnecessary since consumers would not stand for discriminatory practices by ISPs, and thus the market would prevent the potential negative results of an unregulated Internet. Nonetheless, this is almost certainly an issue that will continue to appear before Congress until some sort of action is taken in either direction, especially given the consistent support of certain members of Congress who remain poised to raise the topic in one form or another until a net neutrality bill makes it all the way through the legislative process. Since Congressional action may also involve delegating responsibility for regulating net neutrality to administrative agencies, this Note next examines the two most likely administrative agencies for this task.

2. The FTC and Net Neutrality

The FTC’s statutory mandate is to prevent unfair methods of competition. The FTC was formed in an age where the notion of “unfair competition” was firmly rooted in the tangible, but the nature of living in a “digital age” means that new methods of many old tricks are now possible. In 2006, the FTC issued a statement explaining why they should have jurisdiction over disputes involving broadband providers. The FTC Act denies the FTC


68. Id.


70. E.g., Dixon, supra note 63. Dixon’s article also quotes an AT&T executive who referred to the recent Comcast decision by the FCC as evidence that the current FCC principles already deal with unreasonable discrimination by broadband providers. The Comcast decision in issue is the very FCC decision that this note examines. However, the “current principles” referred to by the AT&T executive are just that: principles, not rules. See Internet Policy Statement, supra note 9, at 16988 n.15 (stating that the FCC was “not adopting rules in this policy statement.”).

71. See supra note 7.


73. See FTC JURISDICTION STATEMENT, supra note 7, at 2 (arguing that the FTC offers a substantial contribution to the policing of unfair competition concerns involving the Internet).
jurisdiction over entities considered “common carriers” under the Act.\(^74\)

However, since DSL and cable broadband are “information services” and do not qualify as “common carriers” under the Communications Act,\(^75\) the FTC reasoned that it has jurisdiction to take steps to protect consumers from unfair trade practices and antitrust concerns raised by the behavior of broadband ISPs.\(^76\) Though the FCC has been a much more active agency with respect to net neutrality concerns over the past several years,\(^77\) given the FTC’s focus on consumer protection and competition action by the FTC might also be an effective way to address matters relating to net neutrality.\(^78\)

In November of 2006, the FTC held a series of public hearings and panels entitled “Protecting Consumers in the Next Tech-ade,” which included treatment of the topic of net neutrality.\(^79\) As of 2007, the FTC’s official stance on net neutrality emphasizes a focus on case-by-case analysis as specific issues become ripe for enforcement.\(^80\) In general, the FTC urges Congress to be cautious concerning the possibility of net neutrality legislation, and suggests that anticompetitive behavior on the part of ISPs could be adequately addressed via antitrust measures.\(^81\) In June of 2007, the FTC released a 170-page report primarily about net neutrality concerns.\(^82\) The report concluded by stating that the current level of oversight by the FTC, FCC, and DOJ were adequate and that Congress should not step in to mandate net neutrality requirements.\(^83\) The report also asserted that claims of potential harms from anticompetitive practices were largely prospective in nature and that such harms had not been seen to occur in practice outside of the context of Madison

---

76. FTC JURISDICTION STATEMENT, supra note 7, at 2–3.
77. See supra notes 8–9 (listing some actions taken by the FCC).
78. See Raymond Gifford, “Let the FTC Do It!” Maybe It Already Can, THE PROGRESS AND FREEDOM FOUND. (2006), http://www.pff.org/issues-pubs/p2006/p212ftc.pdf (last visited Sept. 29, 2009) (referring to the FTC’s focus on consumer protection as a factor that makes the FTC a more appropriate agency to address net neutrality concerns than the FCC).
81. FTC BROADBAND POLICY, supra note 80, at 157. The DOJ, which has concurrent jurisdiction with the FTC on antitrust matters, also claims that net neutrality concerns should be addressed by through antitrust means rather than seeking regulation by Congress or the FCC; FTC Urges Caution on Net Neutrality, N.Y. TIMES, June 28, 2007, at C2. The FTC’s report stated that it would be unwise to create a statutory mandate for net neutrality, in part because it was uncertain whether data prioritization would deter innovation, as net neutrality proponents suggest, or whether data prioritization would in fact promote innovation; Press Release, Department of Justice, Department of Justice Comments on “Network Neutrality” in FCC Proceeding (Sept. 6, 2007), http://www.usdoj.gov/atr/public/press_releases/2007/225782.pdf (last visited Sept. 29, 2009).
82. FTC BROADBAND POLICY, supra note 80.
83. Id. at 161.
Commentators have generally interpreted the FTC’s response as being a “hands off” approach with respect to net neutrality.

If the FTC is correct in its analysis that application of antitrust law and unfair competition protections would address the net neutrality issue more effectively than Congressional legislation, perhaps the FTC should become a more visible player in net neutrality disputes.

This Note, however, takes the position that if the FTC does get involved in net neutrality regulation, the FTC should do so through rulemaking rather than simply through adjudication, and that the FTC is incorrect that this is a situation where corrective action is not yet needed.

3. The FCC and Net Neutrality

Over the last few years, the main agency that has taken actions implicating net neutrality concerns has been the FCC. The FCC was created by the Communications Act of 1934, which gave the FCC the authority to regulate the telecommunications industry. The Supreme Court has said that the FCC also has ancillary authority to regulate parties that provide “information services,” which includes broadband providers. The FCC considered net neutrality concerns in at least three types of contexts prior to the Comcast decision.

In addition to proceedings directly addressing alleged discriminatory conduct, members of the public used the public comment forum to raise net neutrality concerns in the contexts of mergers and of redistribution of the assets of companies, and the FCC addressed these concerns when adjudicating these other types of issues.

The first notable investigation of alleged discriminatory conduct was Madison River, where a local phone company and DSL provider was alleged to be blocking ports for VoIP traffic and was fined $15,000 as part of the consent decree.

Clearly, a phone company that directly interferes with its customers’ ability to use a competing product for phone service would be engaging in questionable practices. However, Madison River may not be good precedent, since 1) it was a consent decree and not a full adjudication; and 2) the consent decree was executed in March 2005 under the legal theory that a DSL provider

---

84. Id. at 122. Significantly, this statement was made before AT&T censored a live web cast, before Verizon refused to carry pro-choice text messages, and before Comcast was found to be discriminating against the BitTorrent protocol.

85. Id. at 75.


87. See generally FTC JURISDICTION STATEMENT, supra note 7 (suggesting that the FTC should use its power to protect consumers and competition in the broadband area).


89. Nat’l Cable & Telecomm. Ass’n v. Brand X Internet Serv., 545 U.S. 967, 976 (2005). The term “information service” includes “the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications.” 47 U.S.C. § 153 (2006); see Nat’l Cable & Telecomm. Ass’n, 545 U.S. at 989 (reasoning that cable broadband service providers are providers of information services, but are not common carriers).

90. See supra note 8.

91. See supra text accompanying notes 11–12 (describing the Adelphia proceeding).

was a common carrier, and that legal theory was revised following the *Brand X* decision that same year. Under an order handed down by the FCC in August of 2005, DSL and cable now are both considered information service providers under the Telecommunications Act.

One example of net neutrality concerns being raised in the context of division of a company’s assets was in 2006 when the FCC oversaw the redistribution between Time Warner and Comcast of the business assets of Adelphia Communications. Commenters to that proceeding expressed concerns that Time Warner and Comcast might engage in discriminatory practices affecting content. The FCC found that neither Time Warner nor Comcast had willfully engaged in any discriminatory practices against any type of content, but invited any parties to file a complaint with the FCC if any company were found to be engaging in such discriminatory practices in the future.

An example of the FCC’s examination of net neutrality concerns in the context of a merger is the FCC’s handling of the AT&T/BellSouth merger in 2007. The FCC examined the record and concluded that the merger did not raise any concerns that the merged firm would discriminate against or degrade packets. In the merger agreement, AT&T/BellSouth agreed not to provide or to sell “any service that privileges, degrades or prioritizes any packet transmitted over AT&T/BellSouth’s wireline broadband Internet access service based on its source, ownership or destination.”

A very important example of a non-adjudicatory activity on the subject is the FCC’s Internet Policy Statement, which was issued in 2005 a few months after the *Madison River* consent decree. The Internet Policy Statement sets out four things to which consumers are entitled with regards to the Internet: the freedom to access the content of their choice; the freedom to use the applications of their choice; the freedom to access the Internet using their choice of devices; and a marketplace that fosters “competition among network providers, application and service providers, and content providers.” All aspects of the Internet Policy Statement defer to the reasonable network management practices of the broadband providers, and the policy statement is explicit that the freedoms apply only to legal consumer activity. Moreover, the Internet Policy Statement is purely a statement of policy to be taken into consideration by the FCC in future policymaking activities, and is not binding

---

93. FTC BROADBAND POLICY, supra note 80, at 48 n.217.
96. Id. at 8295 para. 213.
97. Id. at 8298 para. 220.
99. Id. at 5727–40.
100. Id. at app. F.
102. Id. at 14987–88 para. 4.
103. Id. All of the principles set forth are qualified accordingly, using phrases like “lawful” and “legal” and “subject to the needs of law enforcement.”
precedent for the FCC. Policy statements by an administrative agency differ from substantive rules in that they do not set precedent but instead are essentially like press releases communicating how an agency will approach future rulemakings or adjudications on a particular issue.

The Internet Policy Statement was guided by the four Internet freedoms enumerated by former FCC Chairman Michael Powell in 2004. The only real difference in the freedoms listed by Powell is that the fourth freedom Powell lists is not a pro-competition freedom, but rather that consumers should be entitled to obtain “clear and meaningful information” concerning their Internet service plans. It is unclear why the FCC adopted the other three freedoms almost verbatim, but did not attempt to protect a consumer’s right to information.

In September of 2009, Chairman Julius Genachowski of the FCC gave a speech in which he expressed support for net neutrality and indicated that the FCC would be working to create a proposed rule to protect net neutrality. A Notice of Proposed Rulemaking was adopted on October 22, 2009, and if the draft language is enacted as a rule without substantial changes, it would codify the FCC’s Internet Policy Statement and add two additional principles: the principle of nondiscrimination, and the principle of transparency. This Note supports these efforts by the FCC for several reasons, especially the importance of promulgating a rule in order to make it clear what conduct is prohibited. While adjudications may be appropriate in some circumstances, the view of this Note is that net neutrality is a topic that should be regulated through rulemaking. The following section clarifies distinctions between rulemakings and adjudications.

4. Administrative Agencies and Policymaking

Given administrative agencies’ importance in this debate, it is important to note that even if a particular administrative agency is assigned the task of regulating net neutrality concerns, the debate would not stop there. The next issue concerns how an administrative agency should create policy on this topic. An administrative agency’s two primary methods for policymaking are rulemakings, which are prospective in nature, and adjudications, which are

104. Id. at 14988 n.15 (“Accordingly, we are not adopting rules in this policy statement.”).
107. Id. at 12. Powell’s essay states that the freedom to obtain clear and meaningful service plan information is the most important freedom of the four. It is unclear why the FCC’s Internet Policy Statement included a principle about encouraging competition but did not include a principle requiring disclosure to consumers about their service plans.
analogous to cases resolved in traditional courts.\(^{110}\)

In *Chenery*, the Supreme Court expressed a preference that administrative agencies should, when possible, fill in gaps in legislation through rulemaking rather than adjudication.\(^{111}\) The Court reasoned that an administrative agency’s power to set prospective rules meant that an agency generally has “less reason to rely upon *ad hoc* adjudication to formulate new standards of conduct.”\(^{112}\) However, the *Chenery* Court acknowledged that some situations would be more appropriately resolved by adjudication than rulemaking.\(^{113}\) Situations where adjudication may be more appropriate include the emergence of problems which an agency could not reasonably foresee, situations where an agency has insufficient experience with a problem to justify setting a hard and fast rule, or problems which are “so specialized and varying in nature as to be impossible of capture within the boundaries of a general rule.”\(^{114}\) The debate between rulemaking and adjudication in addressing disputes is one that the FCC brought to the forefront in its recent adjudication concerning Comcast’s network management practices,\(^{115}\) and is one which will soon have to be resolved conclusively in order for net neutrality regulation to go forward.

### D. The Technology at Issue: BitTorrent

The recent FCC decision that this Note examines was in response to how Comcast chose to manage its network traffic: by blocking user uploads of data via several P2P protocols, including the BitTorrent protocol.\(^{116}\) It would be easy, but inaccurate, to frame the dispute as Comcast discriminating against software in the interest of deterring customers from engaging in piracy of copyrighted media. To stifle the temptation to turn to a simpler answer, this subsection examines BitTorrent in detail to illustrate how this technology became a key player in the recent FCC decision about Comcast’s network management practices.

#### 1. Technology of BitTorrent

BitTorrent is a P2P file-sharing technology that ultimately uses a very

---

110. See SEC v. Chenery Corp., 332 U.S. 194, 202 (1947) (discussing an agency’s power to engage in rulemaking or adjudication to resolve a conflict).
111. *Id.* (“The function of filling in the interstices of the Act should be performed, as much as possible, through this quasi-legislative promulgation of rules to be applied in the future.”).
112. *Id.*
113. *Id.*
114. *Id.* at 202–03.
small file to allow users to download a particular large file. Unlike traditional P2P file-sharing programs, which typically provide a centralized search system to allow users to find files, the BitTorrent system is entirely decentralized, relying on files with a “.torrent” extension to connect users to trackers, which list the other users who have the file open in their BitTorrent download client. There are several BitTorrent download clients available, but when this note uses the term “BitTorrent,” it is actually referring to a protocol used for transferring data. BitTorrent is not a networking protocol like TCP or IP, but is instead an application protocol similar to SMTP, which is the protocol that enables e-mail usage.

Using BitTorrent takes several steps. First, a user must install software that utilizes the BitTorrent protocol to allow use of the .torrent files. When a user chooses to download a file using a conventional BitTorrent client, he or she launches the .torrent file, and the computer instructions given in that file essentially begin to build the requested file from smaller parts of the file that are obtained from different users on the Internet who currently have that .torrent file running, including people who are in the process of downloading the file themselves. The decentralized nature of file transfers using the BitTorrent protocol means, among other things, that it is very difficult to halt the unauthorized distribution of a given file, since the potential number of sources increases with each new downloader.


120. OKIN, supra note 15, at 173.


122. See Carmack, supra note 118 (providing a diagram illustrating the process of P2P file sharing using BitTorrent). For a concrete example, consider the following: Max is a programmer who designs open source software. His newest creation is a word processing program called Max 2.0, which he distributes using BitTorrent because it has a large installation file and he doesn’t have much bandwidth available on his Web site. Max is supplying the main file and is running the tracker, and Max is acting as the “seeder”—that is, he is sharing a full copy of the file. Jill hears about this great new open source word processing program, and starts downloading Max 2.0 using the .torrent file that Max posted on his Web site. While Jill is downloading the file using BitTorrent, Ryan also decides he wants to download this great new program. When Ryan starts running the .torrent file, his download will probably be going faster than Jill’s, because not only is he downloading pieces of the whole from Max, he is also now downloading from Jill from the pieces that she has downloaded so far. The speed of Jill’s download will also increase because she is now downloading pieces of the file from Ryan that she has not yet downloaded from Max. This is essentially what is happening in the diagram provided by Carmack.

2. Uses of BitTorrent

BitTorrent was created by Bram Cohen in 2001. One of the motivations behind creating this new file-sharing system was to provide services to fans of “jam bands.” These bands gave explicit permission for recordings to be made of their live shows and for these recordings to be redistributed to other fans, but this led to a problem of how to distribute these recordings. Cohen’s new BitTorrent protocol enabled these fans to quickly and easily distribute these recordings with the consent of the artists. Cohen designed BitTorrent so that file sharing with this system would be more in line with the “golden rule,” essentially requiring people to upload more if they want to be able to download files at faster speeds.

Because a .torrent file is just a small text file that includes pointer information, and the larger target file does not need to be stored on the same server as the .torrent file, it is very cheap to host a very large number of .torrent files on one Web site—including Web sites that encourage the use of .torrent files for the purpose of copyright infringement. One of the most infamous Web sites for this purpose is The Pirate Bay, which was originally based in Sweden and distributes primarily copyrighted material using .torrent files. Cohen has stated that he has never used his own protocol to download illegally, and called it “patently stupid” for users to use BitTorrent to distribute files in violation of copyright, since BitTorrent was never designed to be an anonymous system.

Because the FCC’s Internet Policy Statement is explicit that consumers’ activities should only be protected insofar as their conduct is legal, Comcast’s discrimination against users of the BitTorrent protocol would not warrant intervention by the FCC if the protocol itself were illegal. However, in spite of BitTorrent’s use in piracy, it is highly doubtful that use of the protocol will be made illegal for two reasons: first, BitTorrent has substantial noninfringing uses; second, BitTorrent was not originally distributed for the purpose of copyright infringement.

125. See Posting of Mark Schultz to Technology & Marketing Law Blog, http://blog.ericgoldman.org/archives/2005/06/what_happens_to.htm (June 28, 2005, 09:26 PST) (noting that BitTorrent was developed to aid in distribution of authorized recordings of jam band concerts).
126. Id.
127. Id.
131. Schiesel, supra note 128.
In *Sony Corp. of America v. Universal City Studios, Inc.* the manufacturer of the Betamax Video Tape Recorder ("VTR") was found to not be infringing on the copyright of the studios because the VTR was capable of "substantial noninfringing uses."132 BitTorrent is frequently used to distribute many kinds of copyrighted works with the consent of the creator133 and to distribute materials that are in the public domain.134 For example, Linux-based operating systems, which are open source,135 are frequently distributed through BitTorrent,136 and BitTorrent is also the default (and sometimes the only) download method for many players of World of Warcraft when they have to download and install official game patches.137

The second reason that use of the BitTorrent protocol will likely never be made illegal is because of the underlying purpose of the creation of BitTorrent. In the landmark case of *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.* over twenty years after *Sony Corp.*, the Supreme Court found that Grokster, in spite of having substantial noninfringing uses, had induced copyright infringement because the software was distributed for the purpose of enabling copyright infringement by users.138 The same is not true of BitTorrent, which was created explicitly for noninfringing uses, such as the authorized distribution of recordings of jam band concerts.139 Thus, while it is unfortunate that BitTorrent is a system that has made piracy easier, it would be inappropriate to prohibit all uses of the protocol, since that would also prohibit completely legitimate uses. Since use of the BitTorrent protocol is and will remain legal, the FCC’s Internet Policy Statement can be applied to protect the rights of users of the BitTorrent protocol as long as those users are themselves engaging in legal activity.

---

133. *See, e.g.*, Legal Torrents – FAQ, http://beta.legaltorrents.com/about/faq (last visited Sept. 30, 2009) ("All of the content we offer is licensed so it is legal to share online, with Creative Commons or other share-friendly licenses.").
135. "Open source" means that the source code is available to everyone, which allows independent software developers to contribute to the software’s further development. *See The Linux Homepage at Linux On-Line, http://www.linux.org/ (last visited Sept. 30, 2009) ("Developed under the GNU General Public License, the source code for Linux is freely available to everyone.").
137. *World of Warcraft.com, Blizzard Downloader FAQ, http://www.worldofwarcraft.com/info/faq/blizzarddownloader.html* (last visited Sept. 30, 2009). While not explicitly referring to its use of the BitTorrent protocol, the Blizzard Downloader information makes reference to "trackers" and "peers," which is terminology that is associated with the BitTorrent protocol. The description of the downloader, especially the phrase "[e]ach person downloading the file will offer a portion of their upload bandwidth to allow other users to download the same file," also sounds exactly like how the BitTorrent protocol works.
139. *See Schultz, supra* note 125 (emphasizing the significance of Cohen’s innocent intent in creating BitTorrent); *see also Grokster*, 545 U.S. at 937 ("The inducement rule, instead, premises liability on purposeful, culpable expression and conduct, and thus does nothing to compromise legitimate commerce or discourage innovation having a lawful promise.").
3. Where BitTorrent Is Today

Likely looking for new ways to participate in the digital marketplace, the entertainment industry took notice of the potential for profiting using BitTorrent as a new method of digital file distribution.\textsuperscript{140} Bram Cohen now operates BitTorrent Entertainment, which offers paid downloads for thousands of movies, television shows, songs, and computer games.\textsuperscript{141} The illegal uses are still occurring, but U.S. authorities have been successful in shutting down many domestic websites that were once hosting .torrent files that were created to distribute unauthorized files.\textsuperscript{142}

III. DISCUSSION AND ANALYSIS

Up to this point, this Note has focused on providing background information about the dispute, primarily seeking to provide answers to the questions of: what is “net neutrality;” what entities can regulate net neutrality concerns; and what is it about BitTorrent that puts it in a position to be at the center of a net neutrality dispute. This section of the Note will provide more insight into the views on both sides of the net neutrality dispute and will detail the repercussions of a recent FCC decision that affects how ISPs may manage their network traffic.

A. Arguments Concerning Net Neutrality

There are a variety of scholarly viewpoints about net neutrality, but this Note focuses on a subset concerned primarily about the relationship between net neutrality, competition and innovation. Tim Wu and Christopher Yoo are legal scholars who are on opposing sides of the net neutrality debate. While they both view competition as being essential to innovation, they differ on how to best encourage competition.\textsuperscript{143} Wu, for example, is a strong proponent for net neutrality and emphasizes encouraging competition by protecting ease of market entry at the content and application level of the Internet.\textsuperscript{144} Wu’s logic is that if a company could pay an ISP to prioritize its website so that the company’s site would be accessed more quickly than the websites of its

\textsuperscript{140} See Burt Helm, BitTorrent Goes Hollywood, BUSINESSWEEK, May 9, 2006, available at http://www.businessweek.com/technology/content/may2006/c20060508_693082.htm (reporting that BitTorrent had entered into a deal with Warner Bros. to assist in distribution of digital content).


\textsuperscript{143} Wu & Yoo, supra note 3, at 575–76, 578. Yoo suggests that competition between providers would be better served using a “network diversity” approach instead of a net neutrality approach, and Wu suggests that allowing networks to block or prioritize content is what would hurt competition.

\textsuperscript{144} Id. at 578.
competitors, this would make it more difficult for a small competitor to break into a market that is already arranged in a hierarchy.\textsuperscript{145} Taken to the extreme, this same approach to net neutrality typically also fears the possibility that one company could actually receive an almost exclusive license with an ISP in a particular region.\textsuperscript{146}

Christopher Yoo, on the other hand, suggests instead that efforts should be made to protect competition at the “last mile”—that is, make more Internet access options available to consumers, such as 3G and fiber optic lines.\textsuperscript{147} From Yoo’s perspective, allowing service providers to discriminate against content providers in choosing how to manage their bandwidth would actually encourage more innovation to help make alternatives to DSL and cable broadband services more economically viable, thus assisting in market entry at the network level.\textsuperscript{148} Yoo acknowledges the possibility that discriminatory conduct could be undertaken for the purpose of harming competition in his proposed scenario, but believes that in that situation, engaging in discriminatory conduct may be “an understandable attempt to prevent high-volume users from imposing congestion costs on other users.”\textsuperscript{149}

This Note aligns more with Wu in terms of viewing a neutral Internet as being essential to enabling market entrance by smaller content providers. However, the debate surrounding net neutrality is a very detailed one, with many different concerns addressed. Opponents of net neutrality regulation justify their perspectives in a variety of ways. One opponent of net neutrality regulation, Randolph May, argues that if the government mandated that ISPs must refrain from discriminating against content, this would violate the First Amendment rights of the broadband providers to choose what messages to convey.\textsuperscript{150} Others, like Yoo, focus on the potentially harmful effects of regulation on innovation at the network level.\textsuperscript{151} Some commentators have examined the technical background of the Internet and thereby concluded that the Internet was never intended to be neutral, and these commentators instead encourage some kind of middle ground.\textsuperscript{152}

\begin{thebibliography}{152}
\bibitem{145} Wu cites Vonage to illustrate how important it is that outsiders be allowed to participate in the market. Wu, \textit{Broadband Debate}, supra note 39, at 72.
\bibitem{146} Wu & Yoo, supra note 3, at 582. Wu offers a hypothetical example where AT&T might enter into an exclusive deal with Yahoo! to make Yahoo!’s web searches load faster than Yahoo!’s competitors.
\bibitem{147} Yoo, \textit{Help or Hurt}, supra note 4, at 59–60.
\bibitem{148} Wu & Yoo, supra note 3, at 575–76; see also Yoo, \textit{Help or Hurt}, supra note 4, at 61 (“[A]llowing last-mile broadband providers to differentiate their product offerings can help prevent declining-cost industries from devolving into natural monopolies.”).
\bibitem{149} Yoo, \textit{Help or Hurt}, supra note 4, at 67.
\bibitem{150} Randolph J. May, \textit{Commentary: Net Neutrality Mandates: Neutering the First Amendment in the Digital Age}, 3 \textit{US. J.L. \\
& POL’Y FOR INFO. SOC’Y} 197, 203–04 (2007). May also focuses on the idea that net neutrality regulation would effectively treat broadband service providers as common carriers again, in contradiction of the Supreme Court’s \textit{Brand X} decision. Id. at 209–10; but see Amit M. Schejter \\
\bibitem{151} Yoo, \textit{Help or Hurt}, supra note 4, at 27.
\bibitem{152} Douglas A. Hass, \textit{Note, The Never-Was-Neutral Net and Why Informed End Users Can End the Net}
Many proponents of net neutrality regulation focus on the benefits to application innovation. In the context of examining spillovers, Professors Frischmann and Lemley conclude that the overall value of preserving innovation at the applications level may be more important than encouraging innovation at the network level.

As noted above in Part II in the context of the FTC and the FCC, the Supreme Court’s *Brand X* decision validated the FCC’s categorization of cable providers as “information services” instead of as “telecommunications services.” This is another aspect of the issue that has upset many net neutrality proponents, who would much prefer the statutory guarantee protecting consumers from “unjust or unreasonable discrimination” by communication services designated as common carriers. That aspect of the net neutrality debate is beyond the scope of this Note, but the tradeoff between common carriers and information services may not be wholly negative from a net neutrality perspective, since designating these services as “information services” in fact opened up broadband providers to potential regulation by the FTC.

**B. The FCC Decision Concerning Comcast’s Behavior**

The central player in the situation that this Note examines is Comcast Communications. Comcast is currently the nation’s largest provider of cable services, including cable television, Internet, and broadband phone services.

**1. What Comcast Did**

The earlier action by the FCC that is most relevant to analysis of the

---

153. See, e.g., Wu, Anti-Discrimination, supra note 4, at 37 (“[T]he prevention of the distortion of the applications market [through anti-discrimination rules] is central to making communications networks useful public infrastructures and platforms for innovation.”).


155. See supra note 74 and accompanying text (noting the upheld ruling that cable providers are deemed to be “information services” instead of “telecommunications services”).


158. FTC JURISDICTION STATEMENT, supra note 7, at 4 (noting FTC’s jurisdiction over certain broadband services designated as “information services”).

The current dispute is the FCC’s 2005 issuance of the Internet Policy Statement, which is not legally binding because it is merely a policy statement, but which does provide a set of standards which the FCC could use as a guide in the appropriate situation. It is first important to note that, under the FCC’s Internet Policy Statement, ISPs are afforded some deference when it comes to deciding how to manage the provider’s available bandwidth as long as the ISPs are using “reasonable network management” practices. Thus, whatever behavior Comcast engaged in would be subjected to a reasonableness test by the FCC.

In late 2007, studies uncovered that Comcast customers using the BitTorrent protocol were experiencing delays in their file transfers. At first, Comcast denied any interference, but later admitted to interfering with network traffic as a method of managing Comcast’s bandwidth. Comcast’s network management practices included targeting users of the BitTorrent protocol. Once the Comcast system located BitTorrent traffic, the system would force a TCP RST packet into the stream of information that was flowing between the users. A TCP RST packet forces the command “Reset” into the traffic flowing between two computers on a network, causing the connection to be interrupted. This would reset the connection, and in many instances would result in the BitTorrent client being unable to reconnect to resume downloading or uploading the target file.

In addition to interfering with traffic, Comcast was found to be giving false or misleading answers when faced with questions about slow connections. First, Comcast denied interfering with any P2P traffic. Then, when studies demonstrated that the delay was a problem on Comcast’s end, Comcast admitted that the Comcast system was causing the delays, but only during times of peak network congestion. When a final study revealed that the delays were occurring at the same rate regardless of the time of day, making it clear that either Comcast was lying or Comcast’s networks were

---

160. Internet Policy Statement, supra note 9, at 14988 n.15.
162. Comcast Order, supra note 14, at 13030–32 para. 6, 9.
163. Id. at 13031 para. 8.
164. Id.; see also Peter Eckersley, et al., Packet Forgery by ISPs: A Report on the Comcast Affair 2 (2007), http://www.eff.org/files/eff_comcast_report2.pdf (providing details of tests the EFF conducted in investigating whether Comcast was interfering with user traffic) [hereinafter PACKET FORGERY by ISPs].
equally congested at all times, Comcast finally came clean and admitted that their P2P management system was triggered regardless of the overall network congestion or the time of day. 170 Two “Internet user watchdog groups,” Free Press and Public Knowledge, filed with the FCC on November 1, 2007 to request that the FCC investigate and discipline Comcast accordingly. 171

2. What the FCC said

Since 2005, the FCC has made multiple statements indicating that they were watching for signs that ISPs were discriminating against applications or content, and that if a situation like that came up, the FCC would take action on it. 172 If the FCC had found that Comcast’s behavior did not merit condemnation, such a decision would have been inconsistent with the FCC’s prior statements. As such, the FCC was in a position where they practically had to find that Comcast was in the wrong. This Note will next provide further detail about the FCC’s findings in several important areas.

a. The FCC found that it had jurisdiction to decide on this matter

Comcast first challenged whether the current dispute was within the FCC’s jurisdiction, so the FCC’s ruling on this matter provided a lengthy analysis of the source of the agency’s authority. 173 Since Comcast is a provider of “information services,” the FCC has a potentially limited authority to adjudicate, but the FCC stated that they had ancillary rights to regulate the behavior of broadband services under several situations. 174

An additional justification for the FCC’s authority to decide this matter was that Comcast had received an abeyance from a court in Northern California on this very issue, on the grounds that the California court did not have jurisdiction over the dispute since it was within the sole subject matter jurisdiction of the FCC. 175 Additionally, the FCC found that Comcast had waived any potential objections to a finding that the FCC had jurisdiction in this matter because both Comcast and Free Press were party to the Adelphia proceeding two years prior, during which the FCC had issued an order including a warning that future allegations of discriminatory broadband provider practices would be investigated by the FCC. 176 The FCC reasoned that if Comcast objected to the FCC’s jurisdiction over the issue at hand, Comcast should have raised an objection following the issuance of the

---

170. Id.
172. In re Adelphia Commc’ns Corp., 21 F.C.C.R. 8203 (2006); In re AT&T Inc., 22 F.C.C.R. 5662 (2007); see also Internet Policy Statement, supra note 9 (setting forth policy guidelines that the FCC would use in examining similar matters in the future).
174. Id. at 13034–35 para. 14.
175. Id. at 13041–42 para. 23.
b. The FCC’s Justifications for Choosing Adjudication

The FCC’s decision provided three reasons why case-by-case adjudications of Internet policy disputes were more appropriate than formal rulemakings. The three justifications for choosing adjudication were: 1) the Internet is too new of a medium to promulgate rulemakings; 2) differences between the networks would make it difficult to promulgate a rule that applies effectively to all providers of broadband services; and 3) adjudications, rather than rulemakings, are more in line with the Telecommunication Act’s focus on a policy that would preserve a “vibrant and competitive free market” and the FCC’s own precedent emphasizing a need for minimal regulation of the Internet.178 Case law urges administrative agencies to use quasi-legislative rulemakings, rather than ad hoc adjudication, to fill in gaps in the agency’s organic statute whenever possible,179 so it is important to analyze the FCC’s reasoning in order to determine whether the Internet should in fact be one of those topics for which oversight is more appropriate in the form of adjudication.

i. Is the Internet a Sufficiently New Technology?

In spite of the general preference for rulemaking to fill in gaps left by the legislature, the FCC insisted that broadband issues are more suited for adjudication, citing the Internet’s status as a “new medium” as one reason for this preference.180 On first glance, the “newness” of the Internet appears to be the strongest justification for choosing adjudication over formal rulemaking. However, careful analysis seriously calls into question the FCC’s reliance on this factor. Considering that private consumers began connecting to the Internet in the early 1990s,181 and the first Internet demonstration took place in 1977,182 this begs the question of how old a communications technology must be before the FCC will no longer consider it a “new medium.”

One obvious parallel is to look at the history of regulation of cable television. Cable television was invented in 1948 (originally called “Community Antenna Television,” or CATV),183 and by 1972, the FCC had begun regulating CATV through the rulemaking procedure.184 Considering that

---

177. Comcast Order, supra note 14, at 13043–44 para. 27.
178. Id. at 13045–46 paras. 29–32.
181. See OKIN, supra note 15, at 106 (describing the emergence of the ISPs to connect commercial users to the Internet around 1990).
182. See id. at 81 (describing DARPA’s 1977 Internet experiment).
the FCC had engaged in full rulemaking within twenty-four years after the invention of CATV, the FCC’s argument that a thirty-two year old technology is still too “new” for rulemaking becomes tenuous at best. Accordingly, the Internet’s “newness” should not be considered a factor that justifies a policy favoring adjudication.

ii. Are network management practices among providers too varied to be regulated?

The last sentence of the FCC’s second reason states “[t]his is not to say that general rules could not apply to all such systems, but only that, given the present record, we are not certain that a one-size-fits-all approach is good policy.” The FCC’s language in this second justification is remarkably weak relative to the fundamentally flawed “newness” justification. Clearly, the FCC does not know what to do and does not yet have enough information. The FCC even complains that broadband providers are cryptic concerning their network management practices.

If broadband providers are being cryptic about their network management practices, that has significant implications for consumer protection. Subscribers to broadband services should undeniably have the right to know if there is a possibility that their broadband provider is managing subscribers’ connections in a way that could potentially be harmful to the subscribers’ devices or their data. The FCC does have an interest in protecting consumers, so this dismissive “We don’t know” justification is troubling. If the FCC is faced with a lack of information, the appropriate action would be to research the issue to remedy that shortfall. It is possible that the FTC could also assist the public in obtaining this information from broadband providers, but the FCC’s simple doubt about whether a rulemaking would be “good policy” does little to support this justification in favor of adjudication.

iii. Would Adjudication Do More than a Rulemaking to Protect Competition?

Net neutrality commentators have engaged in many debates on the very subject addressed in the FCC’s third justification for adjudication. There is a potential trade off either way, whether net neutrality regulations are implemented or not. Opponents of net neutrality regulation project that in a world without such regulations, owners of the networks will have more incentive to innovate in order to compete with each other. Conversely, net neutrality proponents believe that in a society where government regulation ensures that the network providers cannot apply discriminatory network management practices, competition among content providers will be richer and

185. Comcast Order, supra note 14, at 13046 para. 31.
186. Id.
187. See supra Part IIIA (discussing arguments regarding net neutrality).
188. See Yoo, Help or Hurt, supra note 4, at 27 (emphasizing the importance of focusing on competition among last-mile technologies—that is, among broadband providers).
market entry will be easier for new participants.\footnote{See Wu, Anti-Discrimination, supra note 4, at 38 (focusing on the importance of anti-discrimination rules to protect “easy-entry service markets from infrastructure economics”).} In any case, competition is clearly a key issue, since the fourth entitlement for consumers according to FCC’s Internet Policy Statement is the protection of a competitive broadband environment—all kinds of competition, whether between network providers, application providers, or content providers.\footnote{Internet Policy Statement, supra note 9, at 14988 para. 4.}

By not acting to regulate net neutrality, the FCC has implicitly stated that competition among broadband providers is more important than competition among content providers, even though the FCC’s Internet Policy Statement does not rank one as being more important than the other.\footnote{Id.} Even without taking the policy statement into consideration, this justification is still lacking. While a preference for protecting competition among network providers is not as unsupported as the first two justifications for preferring adjudication, the polarity that exists between protecting innovation at the network level and protecting innovation at the content level means that a significant question exists that the FCC has not fully addressed yet. Accordingly, this justification is too weak to stand on its own. The FCC has thus failed to justify choosing adjudication over rulemaking to resolve Internet policy concerns.

c. What the FCC said about Comcast’s behavior, and what remedies were appropriate

The FCC declined to adopt preventative rules in the Comcast situation, stating that a case-by-case analysis is appropriate given the ever-changing state of the Internet and the surrounding industry.\footnote{Comcast Order, supra note 14, at 13045–46. See Section IV.A, infra, (analyzing the reasons Comcast gave for addressing Internet policy issues using case-by-case adjudication instead of a rulemaking).} The above section analyzed this criticism and found it lacking. We now look beyond the debate over adjudication versus rulemaking to examine the FCC’s substantive responses to Comcast’s behavior.

Using the language of its Internet Policy Statement, the FCC ultimately concluded that Comcast’s behavior was not a reasonable network management practice.\footnote{Id.} The FCC pointed out that, as a source that allows consumers to purchase and download videos to watch on their home computers, BitTorrent Entertainment was one of Comcast’s competitors.\footnote{Id. at 13030 para. 5.} The FCC examined Comcast’s practices and concluded that the practices were “invasive and outright discriminatory,” relying in part on anecdotal evidence about customers whose legal uses of BitTorrent had been delayed by Comcast’s practices.\footnote{Id. at 13051–52 para. 42.}

The FCC’s analysis of the reasonableness of Comcast’s practices purports to require a “tight fit” between Comcast’s chosen practices and the significant goal of network management.\footnote{Id. at 13055–56 para. 47.} The FCC concludes that Comcast’s practice
was overinclusive, since it would delay the traffic of any customer using a particular P2P protocol, regardless of how much that customer’s P2P usage contributed to network congestion. The FCC also pointed out that Comcast’s failure to disclose the relevant practices to its customers was especially problematic, because such nondisclosure compounded any anticompetitive harm caused by these practices.

During the proceeding, Comcast committed to end these discriminatory practices before the end of 2008 and instead institute a “protocol-agnostic network management technique.” Upon a finding that Comcast’s present network management practices were unreasonable, the FCC did not fine Comcast but instead directed Comcast to execute its previously announced plan within the same timeline, disclose to the FCC how Comcast had been interfering with BitTorrent, and also disclose to the FCC how Comcast would proceed with implementing protocol-agnostic network management practices. Comcast was given thirty days from August 20, 2008 to submit written descriptions of their past discriminatory activity and their future plans for implementing a non-discriminatory network management technique, with a warning that if Comcast did not comply with this thirty day deadline, further proceedings would be undertaken by the FCC.

On September 19, 2008, Comcast submitted the requested response. As had been theorized by the EFF in their November 2007 white paper on the topic, Comcast confirmed that they had utilized the services of a company called Sandvine to assist with their network management practices. Beginning in 2005, Comcast began implementing a system that would manage protocols that were found to place “excessive burdens on the network.” In 2007, Comcast achieved wide-scale deployment of the protocol management system. Comcast maintained that the inspection system was content neutral, and that the equipment did not obtain any information concerning the files being transferred except to determine what protocol was in use. Comcast

197. Id. at 13056 para. 48.
198. Id. at 13058–59 para. 52.
199. Id. at 13059–60 para. 54.
200. Id.
201. Id. at 13059–60 paras. 54–55.
202. See Vishesh Kumar, Comcast Submits Plans to Manage Broadband, WALL ST. J., Sept. 20, 2008, at B7 (stating that Comcast formally submitted plans detailing how the company was planning to manage its broadband network); Peter Eckersly, Comcast Unveils Its New Traffic Management Architecture, Sept. 22, 2008, http://www.eff.org/deeplinks/2008/09/comcast-unveils-its-new-traffic-management-archite (providing some technical analysis of the response, as well as a link to Comcast’s full response). Eckersly works with the Electronic Frontier Foundation, a non-profit organization which was not a party to the Comcast adjudication before the FCC, but which assisted in uncovering Comcast’s questionable network management practices. See also PACKET FORGERY BY ISPs, supra note 164, at 3 (examining the results of tests conducted on Comcast connections in a November 2007 white paper).
203. PACKET FORGERY BY ISPs, supra note 164, at 1 n.1.
205. Id. at 3–4.
206. Id. at 5.
207. Id. at 7.
also reported that, even with that network management system in place, P2P traffic comprised about half of all of the upstream traffic on Comcast’s broadband network.\(^{208}\)

Comcast promised the FCC that it would end the current network management practice at issue by the end of 2008.\(^{209}\) Comcast pledged that, in its place, the company will implement a “protocol-agnostic” network management system that would manage network resources during times of congestion by deprioritizing the network traffic of users who are using a disproportionate share of the network’s bandwidth.\(^{210}\) Comcast stated that the transition to this protocol-agnostic congestion management system was underway at the time of the company’s September response to the FCC, and that the transition was to be completed by the end of 2008.\(^{211}\)

By the middle of January 2009, Comcast had again come under scrutiny by the FCC for its network management practices.\(^{212}\) The FCC sent Comcast a letter on January 18, 2009, requesting clarification on an item in the information that Comcast sent to the FCC in September detailing Comcast’s planned network management practices.\(^{213}\) The letter from the FCC references the Comcast website, which includes information stating that Comcast’s VoIP customers will not be affected by the new network management technique, but that customers who use other VoIP providers may experience degradation of VoIP call quality.\(^{214}\) The implication was that treating VoIP customers differently, depending on whether they used Comcast’s VoIP or a competitor’s VoIP, directly implicated the same concerns about discrimination that got Comcast in trouble in the first place. The FCC’s letter requested a response from Comcast by January 30, 2009. Comcast responded to the FCC’s inquiry by asserting that the differing VoIP treatment was not a result of any behavior with regard to the content being transmitted on Comcast’s High-Speed Internet lines, because Comcast’s VoIP traffic was not routed using Comcast’s High-Speed Internet lines.\(^{215}\)

After losing in the FCC adjudicatory proceeding, Comcast appealed the FCC’s decision.\(^{216}\) In August 2009, Comcast filed its Opening Brief with the

\(^{208}\) Id. at 11.

\(^{209}\) Id.


\(^{211}\) Id. at 15.


Court of Appeals for the D.C. Circuit. In the brief, Comcast asserts in part that the FCC violated the Administrative Procedures Act, and that the FCC was improperly relying on the Internet Policy Statement even though the policy statement does not have the force of law. The latter criticism ignores that the purpose of a policy statement in administrative law is to provide guidance in decision makings, not to dictate outcomes, and the criticism also ignores that Comcast itself was a party in the Adelphia proceeding when the FCC explicitly said that it would use the Internet Policy Statement to assist with evaluating issues if any provider is found to be engaging in discriminatory activity in the future. At the time of this writing, the appeal is still pending, and it is unknown how the D.C. Circuit will respond to Comcast’s claims.

IV. RECOMMENDATIONS: WHAT IMPACT SHOULD THE FCC’S COMCAST DECISION HAVE?

The Comcast situation demonstrates that some form of strong government intervention is needed in order to clarify this issue and prevent companies from taking advantage of the current system’s vagueness. The FCC was very clear in the Adelphia order that they would step in if they saw a company doing exactly the thing that Comcast was doing, and they did so, but the FCC may have handled the Comcast adjudication more mildly than the situation warranted. Robert Entner of IAG research noted that Comcast has received a light slap on the wrist, with the implication being that the next company who behaves in such a way could lose a whole hand. But did Comcast’s reprimand even rise to the level of a slap on the wrist? Virtually nothing was done as part of the adjudication other than to tell Comcast to do what it claimed it was already planning to do. However, in October of 2009, the FCC adopted a Notice of Proposed Rulemaking that, as drafted, would codify the FCC’s Internet Policy Statement and enumerate two additional requirements for broadband providers. This Note suggests that the FCC’s handling of the Comcast situation was inadequate, since Comcast was merely advised to behave, but that the FCC has taken the right steps by beginning the process of setting forth a prospective rulemaking to ensure that all parties are on notice of prohibited conduct.

218. See id. (asserting that the policy statement does not create mandatory rules of conduct).
221. See id. (asserting the Commission’s opinion that it maintains jurisdiction over such violations).
A. Criticism of the Remedy

Some critics of this decision may claim that the FCC was unduly harsh, blaming the result on former Chairman Kevin Martin’s apparent bias against the cable industry. This Note, however, views the FCC’s reprimand of Comcast to be excessively mild. The mildness of the remedy may be due in part to the fact that Comcast and BitTorrent had settled their differences before the FCC decision was handed down, but that still does not make the remedy adequate. It is, however, encouraging that the FCC continued to keep an eye on Comcast’s network management practices, particularly with regard to its VoIP service.

B. How Should Net Neutrality Be Handled?

The FCC makes it explicit in the Internet Policy Statement that the policy statement is not a rule. In the Comcast dispute, the FCC made it clear that they were purely handling this dispute by adjudication and not by a rulemaking, due in part to the changing nature of the Internet. The FCC’s argument favored case-by-case adjudications over rulemakings, although such adjudications render it impossible to prevent harm. However, just over a year after the Comcast decision was handed down, the FCC has a new Chairman who has expressed an intention to promulgate a rule to protect net neutrality and openness on the Internet. This Note is in full support of these efforts, since adopting the Internet Policy Statement as a rule would give these principles the force of law and provide clear notice to service providers of what conduct would be prohibited.

Considering that the current dispute involved Comcast making business decisions that had a negative impact on a competing seller of entertainment products, if the FCC’s planned future rulemaking does not address all of the relevant issues, the FTC could also get involved in order to address the unfair competition concerns. Addressing net neutrality concerns through congressional action is also a possibility, and the existence of consistent net neutrality supporters in Congress indicates that a net neutrality bill should have no problem finding sponsors within either branch of the legislature.

The FCC’s willingness to pursue a rulemaking to protect net neutrality is very encouraging. If setting bright line rules were not an option in addressing net neutrality concerns, then the only remaining option would be to treat the harmful effects of discriminatory actions only when (or if) the actions are uncovered and brought before an entity with the authority to decide the

---

226. See Lasar, VoIP, supra note 215 (describing the FCC’s recent inquiry concerning Comcast’s management of VoIP traffic).
227. Internet Policy Statement, supra note 9, at 14988 n.15.
dispute. That seems to create a difficult situation where problems are not resolved except on an *ad hoc* basis before an administrative agency or a court. Such a scheme can be cost prohibitive, given the high cost of adjudication, making it less likely that injured parties will bring claims. Additionally, while the more visible instances of content discrimination, such as AT&T’s censorship of political speech during a web cast of a Pearl Jam concert,\(^{230}\) are readily perceptible by the public at large, subtle degradation of service and content by ISPs is likely to be overlooked by most Internet users.\(^{231}\) If users do not realize that their Internet service quality is being harmed by their ISP’s behavior, and instead assume that a slow connection with one particular website or service is because “the other guy” has a slower server, it is unlikely that they will take their own ISP to task. A system of case-by-case analyses without a bright line rule thus invites wrongdoers to find loopholes and threatens to multiply the number of unreported injuries.

One of the best justifications for legislation or rulemaking is that legislation and rulemaking are proactive rather than reactive. Case-by-case analyses can be very effective, but at some point, standardization and clear rules are desirable. In the absence of a rulemaking by an administrative agency, Congress could intervene in the interest of setting clear guidelines. Congress could either put a firm scheme in place to protect net neutrality, or mandate that a rulemaking would be appropriate and then delegate the execution to the appropriate administrative agency.\(^{232}\)

Another reason why this Note supports the FCC’s plan to propose a net neutrality rule is that a clear rule takes away some of the flexibility currently enjoyed by ISPs to evade oversight by the FCC. The method of case-by-case analysis under the *Comcast* decision serves to avoid setting bright line rules, and arguably gives the broadband provider industry leeway to find more creative ways of discriminating against content. Other industry actors might prove more successful than Comcast in arguing that they were not on notice that their activities went against the FCC’s policy. Accordingly, having a firm rule in place will help eliminate some of this wiggle room and ensure that bad actors can be reprimanded more effectively.

The process of setting a bright line rule on this issue at first appears to be a daunting task. However, the FCC’s Internet Policy Statement already sets much of the necessary framework for such a rule,\(^{233}\) and the FCC’s current plan for a proposed rule explicitly invokes the Internet Policy Statement to a significant degree.\(^{234}\) Further research is needed to structure a rule that could be consistently applied to all broadband providers, but opening up the

---

230. Wellington, supra note 46, at 533.
231. Id. at 549 (“[W]aiting for a network neutrality violation to surface is ineffective because typical consumers may not realize their ISP is degrading a particular website.”).
232. One example of a situation when Congress set forth explicit direction for an agency in order to accomplish progress in a particular area is the amendments to the Clean Air Act in 1990. See Overview by Section of CAA, http://www.epa.gov/ttn/atw/overview.html (last visited Sept. 12, 2009) (setting out a very detailed system for controlling Hazardous Air Pollutants under § 112 of the Act).
proposed rule for public comment will generate a lot of additional insights to contribute towards the formation of an optimal rule.

V. CONCLUSION

The net neutrality debate illuminates a very important issue in modern society. Protecting net neutrality would serve to encourage innovation and competition at the application and content levels of the Internet, a goal consistent with the FCC’s Internet Policy Statement. However, the confusion over which government entity should address this issue, and how, has previously made it difficult to make progress to protect this important interest. When Comcast chose to discriminate against network traffic based on the protocol being used, they may have inadvertently brought the net neutrality debate to the forefront of national policy.

Prospective guidance is needed at this stage to clarify the roles of the courts and administrative agencies in protecting the interests of Internet content providers. This guidance could be provided by Congress, but rules promulgated by an administrative agency would also serve to fill this gap. The FCC has now expressed an intention to promulgate a rule on net neutrality based on the Internet Policy Statement, so it appears that this long-awaited guidance will soon appear with the force of law. The courts and agencies require the type of guidance that legislation and rulemakings can provide, and the law must continue to evolve to address new incarnations of threats to competition and consumer autonomy.