THE END OF NET NEUTRALITY

WILLIAM G. LAXTON, JR.¹

ABSTRACT

In 2005, the FCC changed the competitive landscape of the high-speed Internet access industry by classifying both DSL and cable modem service as “information services.” While many hail this move as a victory for competition and free markets, others fear the ruling could jeopardize the future of the Internet. This iBrief examines the potential end of “net neutrality” and concludes that new federal regulations are unnecessary because antitrust laws and a competitive marketplace will provide consumers with sufficient protection.

INTRODUCTION

¹ “The Internet’s very future may hang in the balance.”² “[T]he future of the Internet is at stake.”³ These comments do not refer to a powerful new virus or a new programming bug like Y2K. Instead, these comments refer to the perceived threat of competition in the broadband industry.

² In the summer of 2005, the Supreme Court’s decision in National Cable & Telecommunications Ass’n v. Brand X Internet Services. (“Brand X”)⁴ and a subsequent Federal Communications Commission (“FCC”) order⁵ classified cable modem service and digital subscriber line (“DSL”) technology (collectively referred to as “broadband services”) as “information services” under the Telecommunications Act of 1996.⁶ This change freed broadband services from significant regulation under the Telecommunications Act of 1996 by eliminating the mandatory common

¹ J.D. Candidate, 2007, Duke University School of Law; Candidate for M.A. in Economics, Duke University, 2007; B.A. in Economics and History, University of North Carolina, 2002. The author would like to thank Professor Barak Richman for his help in the development of this iBrief.


⁴ 125 S. Ct. 2688 (2005).

⁵ 20 F.C.C.R. 14853 (FCC 2005) [hereinafter FCC DSL order].

carrier requirements placed on “telecommunication services.” The FCC announced that this change in designation would “benefit American consumers and promote innovative and efficient communications.”

¶3 Many consumer advocacy groups instead contend that this new designation will make it “doubtful that the Internet of the future will remain open and accessible to all.” They contend that deregulating the broadband industry opens the door for an end to net neutrality, which could “stifle competition” by limiting the ability of small companies to compete. Net neutrality refers to an Internet where the infrastructure remains separate from the content it carries and all data are treated equally by the carriers that transmit it. In a world of net neutrality, service providers are uninterested in the content that flows over their networks and do not compete in the content marketplace. Proponents of net neutrality fear that broadband providers may awake from their slumber as passive network providers and enter the world of regulating Internet content. They worry that this in turn could lead to a world of preferential content treatment, reduced consumer application choice and possible blocked content. To prevent these potential dangers, consumer rights advocates including the Consumers Union and the Consumer Federation of America have charged the doors of Congress looking to mandate net neutrality. The FCC, meanwhile, has publicly backed the concept of net neutrality and maintains that the FCC

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7 Nat’l Cable, 125 S. Ct. at 2696.
8 FCC DSL order, supra note 5.
12 Hiltzik, supra note 2.
13 See Cable’s Level Playing Field: Not Level. No Field, CENTER FOR CREATIVE VOICES IN THE MEDIA, Jan. 12, 2006, http://www.creativevoices.us/php-bin/news/showArticle.php?id=139. (claiming broadband companies “intend to discriminate against independent content on the Internet and provide their often captive broadband users with a ‘closed’ proprietary Internet in which the companies, not the users themselves, control the sites the user can visit and the applications he/she can use”).
will have the regulatory power to enforce net neutrality through its “Title I ancillary jurisdiction to regulate interstate and foreign communications.”

This iBrief examines the alleged need for additional regulations to ensure net neutrality in response to the FCC’s reclassification. Part I provides an overview of the competitive landscape in today’s broadband service industry. Part II reviews the regulatory and judicial decisions that have made an end to net neutrality possible. Part III examines the commonly expressed fears over an end to net neutrality. Parts IV and V explain how both competitive market forces and the federal antitrust laws provide mechanisms to ensure that these fears are not realized. This iBrief concludes that broadband expansion, not net neutrality, should guide the FCC and lawmakers in future decisions about the broadband Internet market. While regulations ensuring net neutrality could guarantee consumers’ access to today’s content and applications, open competition alone will guarantee consumer access to a dynamic Internet. Consequently, calls for regulated net neutrality by consumer groups and the FCC are misguided and could further limit the expansion of broadband Internet service in the United States.

I. COMPETITION IN THE BROADBAND INDUSTRY

The Broadband Internet access industry is a competitive industry marked by dynamic changes and quickly evolving technology. As one economist has explained, “[T]here is no monopoly [in broadband]. . . . [T]he broadband race today features multiple players vying for market share.” Cable modem and DSL services currently have market shares of approximately fifty-seven percent and thirty-six percent respectively. While these dominate market positions have been offered as proof that this market is not competitive, a closer examination reveals a different truth. Although enjoying relative dominance in the broadband service industry, DSL and cable modem services vigorously compete over both price and service. Economic research conducted in 2001 found that the

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cross-price elasticity of DSL and cable services was positive, indicating that consumers view the two products as substitutes.\textsuperscript{19} This result means that consumers will switch between DSL and cable modem service as a result of price differences. DSL providers have been aggressively cutting the price of their DSL services in order to attract new customers and keep their current customers happy.\textsuperscript{20} Additionally, while download speeds for DSL services typically lag behind cable modem speeds, DSL companies are improving their networks in an effort to provide equivalent download speeds.\textsuperscript{21} In response to DSL price reductions, cable companies have been lowering access prices and increasing download speeds.\textsuperscript{22} Competition between these two services, however, presents only a limited view of the future of broadband service competition.

\textsuperscript{7} The FCC changed the classification of cable modem services and DSL services with an understanding of the dynamic nature of the broadband Internet industry.\textsuperscript{23} The FCC stated that “[w]e find that an emerging market, like the one for broadband Internet access, is more appropriately analyzed in view of larger trends in the marketplace, rather than exclusively through the snapshot data that may quickly and predictably be rendered obsolete as this market continues to evolve.”\textsuperscript{24} According to FCC Chairman Kevin Martin, “Most Americans today can choose between several competing broadband service providers and service packages.”\textsuperscript{25} With this choice of services, consumers are benefiting from “fierce competition,” resulting in “faster and faster connections at lower and lower prices.”\textsuperscript{26}

\textsuperscript{8} While a snapshot view of the broadband industry shows only two dominant players, new entrants could quickly change the competitive landscape. Almost 3 million Americans use high-speed Internet services provided by satellite services, wireless phone companies, fiber optic wires

\textsuperscript{22} Id.
\textsuperscript{23} FCC DSL order, supra note 5 at 14880.
\textsuperscript{24} Id. at 14881.
\textsuperscript{26} Id.
or other wireline connections. The use of these services is increasing at a faster rate than broadband service use overall, with satellite and terrestrial wireless services use increasing by fifty percent in 2004.

Two wireline options, fiber optic and BPL services, could soon pose serious threats to the competitive dominance of DSL and cable modem service. Fiber optic systems are being developed by a number of providers, including traditional telephone companies like Verizon. Verizon’s multi-billion dollar FiOS network is currently available in fifteen states. BPL service is expected to become available in the Dallas-Fort Worth area by the end of 2006. Wireless broadband offerings are also gaining ground. Sprint, Verizon, and Cingular currently offer wireless broadband access that can provide download speeds comparable to DSL services. Verizon Wireless’s broadband service is available to 148 million Americans with speeds up to 2.0 megabits per second. DirecTV recently announced plans to invest $1 billion in developing a new wireless technology aimed primarily at rural consumers.

II. REGULATORY CHANGES IN THE BROADBAND INDUSTRY

A. Regulation Prior to Brand X

Under Title II of the Communications Act of 1934, providers of “telecommunications services” are subject to regulation as a common carrier. As such, they “must charge just and reasonable, nondiscriminatory rates to their customers, design their systems so that other carriers can interconnect with their communications networks, and contribute to the federal ‘universal service’ fund.” In passing the

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27 FCC News Release, supra note 17, at 1.
28 Id.

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Telecommunications Act of 1996, Congress attempted to address the new market of advanced telecommunication services by lessening the regulatory obligations of services classified as “information services.”\(^{36}\) Services classified as “information services” are not subject to common carrier regulation under the Telecommunication Act of 1996.\(^ {37}\) This decision followed the FCC’s trend since the 1980s of reducing regulatory restrictions on “enhanced” telecommunication services.\(^ {38}\) In passing the Telecommunications Act of 1996, Congress failed to conclusively decide if cable modem and DSL services qualified as a “telecommunication” or “information” service.\(^ {39}\) Federal courts, however, were forced to answer this question through challenges to local or federal regulatory decisions.\(^ {40}\) In response to ambiguity concerning the legal status of cable modem services under the Communications Act of 1934, the FCC issued a Declaratory Ruling and Notice of Proposed Rulemaking in March of 2002 that determined that cable modem service was an “information service.”\(^ {41}\) The FCC stated that “broadband services should exist in a minimal regulatory environment that promotes investment and innovation in a competitive market.”\(^ {42}\)

\(\textit{A. The Ninth Circuit’s Brand X Decision}\)

\(^1\) Seven petitions were filed in federal courts challenging the FCC’s 2002 Declaratory Ruling.\(^ {43}\) These cases were consolidated in April of 2002 into the \textit{Brand X} petition in the Ninth Circuit.\(^ {44}\) The Ninth Circuit opted to follow its earlier decision in \textit{AT&T v. City of Portland}\(^ {45}\) and determined that cable modem service was part “information service” and part “telecommunication service,” making it subject to common carrier regulations under the Telecommunications Act of 1996.\(^ {46}\)

\(^{36}\) Brand X Internet Servs. v. FCC, 345 F.3d 1120, 1126 (9th Cir. 2003).
\(^{37}\) Nat’l Cable, 125 S. Ct. at 2696.
\(^{38}\) Brand X, 345 F.3d at 1126.
\(^{39}\) Id.
\(^{40}\) See, e.g., Brand X, 345 F.3d at 1126; AT&T v. City of Portland, 216 F.3d 871 (9th Cir. 2000), MediaOne Group, Inc. v. County of Henrico, 257 F.3d 356 (4th Cir. 2001).
\(^{41}\) 17 F.C.C.R. 4798, 4802 (FCC 2002).
\(^{42}\) Id.
\(^{43}\) Brand X, 345 F.3d at 1127.
\(^{44}\) Id.
\(^{45}\) 216 F.3d 871, 878 (9th Cir. 2000).
\(^{46}\) Brand X, 345 F.3d at 1132.
B. Brand X in the Supreme Court

The Supreme Court reversed the Ninth Circuit decision in June, 2005.\(^{47}\) The Court determined that instead of following \textit{stare decisis}, the Ninth Circuit should have adhered to the framework set forth in \textit{Chevron U.S.A. Inc. v. NRDC},\(^{48}\) which held that “ambiguities in statutes within an agency’s jurisdiction to administer are delegations of authority to the agency to fill the statutory gap in reasonable fashion.”\(^{49}\) In light of \textit{Chevron}, the Supreme Court concluded that the FCC had reasonably classified cable modem services as “information services.”\(^{50}\) Significantly, the Court noted that the FCC did not have to immediately apply the reasoning of cable modem classification to DSL providers because the FCC was free to take a step-by-step approach in reclassifying the industry.\(^{51}\)

C. The FCC’s Classification of DSL as an Information Service

A few months after the \textit{Brand X} decision, the FCC classified DSL service as an “information service” in a Report and Order and Proposed Rulemaking (“DSL Report”).\(^{52}\) The FCC announced that its regulatory framework “established[d] a minimal regulatory environment for wireline broadband Internet access services to benefit American consumers and promote innovative and efficient communications.”\(^{53}\) The FCC’s decision ended the requirement that DSL providers grant competing Internet Service Providers (ISPs) access to their facilities.\(^{54}\) Existing agreements between competing ISPs and DSL providers, however, had to be honored for a period of one year.\(^{55}\) While the FCC freed broadband providers from the common carrier regulations of “telecommunication services,” it also asserted its continuing ability to regulate broadband Internet access through its Title I ancillary jurisdiction.\(^{56}\)

\(^{49}\) \textit{Nat'l Cable}, 125 S. Ct. at 2699.
\(^{50}\) \textit{Id.} at 2712.
\(^{51}\) \textit{Id.} at 2711.
\(^{52}\) FCC DSL order, supra note 5.
\(^{53}\) \textit{Id.} at 14855.
\(^{54}\) \textit{Id.} at 14858.
\(^{55}\) \textit{Id.}
\(^{56}\) \textit{Id.} at 14913; see also \textit{Nat'l Cable}, 125 S. Ct. at 2696 (“The Commission has jurisdiction to impose additional regulatory obligations under its Title I ancillary jurisdiction to regulate interstate and foreign communications.”).
III. THE END OF NET NEUTRALITY

¶14 With the end of common carrier regulations for broadband service providers, concerns about the continuation of net neutrality have emerged. Net neutrality envisions an Internet that does not favor one application or website over another. With a neutral Internet, “the network is charged merely with delivering bits, without unseen hands choosing which packets to prioritize or regulate.” Echoing the concerns of many consumer groups, the FCC voiced its support of net neutrality in a non-binding Policy Statement released the same day as the DSL Report. In its Policy Statement, the Commission announced that consumers were entitled “to access the lawful Internet content of their choice . . . to run applications and use services of their choice . . . to connect their choice of legal devices . . . [and are entitled] to competition among network providers, application and service providers, and content providers.” These principles, however, carry no regulatory muscle and are not currently enforceable. In the DSL Report, FCC Commissioner Michael J. Copps noted this lack of enforceability and expressed his preference for a “rule that [the FCC] could use to bring enforcement action” instead of merely a Policy Statement. The debate over net neutrality has recently focused on two areas: the blocking of websites or applications by broadband providers, and broadband providers granting different download speeds to different applications (a two-tiered Internet).

A. Content Blocking

¶15 Content blocking is one major result that consumers fear from an end to net neutrality. Proponents of net neutrality argue that Internet users could soon find their use applications, such as Apple’s iTunes music store, blocked by their broadband service provider. Content providers seeking to sell their own applications could block a rival application in order to maximize their own sales. Consumers wanting to download music would be forced to utilize the broadband service provider’s application because all

57 See, e.g., Hiltzik, supra note 2.
59 Fight to Keep the Internet Toll-Free, supra note 11.
60 FCC Policy Statement, supra note 14, at 14988.
61 Id.
63 FCC DSL order, supra note 5, at 14980.
64 Hiltzik, supra note 2.
other applications would be blocked. Furthermore, net neutrality proponents argue that “keeping the network open has been the key to the development of new services.”\textsuperscript{65} Now that the FCC and the Supreme Court have deregulated the broadband service industry, they argue that Congressional action enforcing net neutrality is needed to ensure that content is not blocked.\textsuperscript{66} Indeed, without Congressional action, net neutrality proponents argue “network operators will soon be able to put a chokehold on the Web” through the control of content.\textsuperscript{67}

1. The Madison River Experience

\textsuperscript{16} The experience of Madison River Communications’ customer Doug Herring provides a real-life example of content blocking. While traveling through Tennessee in November of 2004, Mr. Herring attempted to call his wife at their Alabama home but could not get through.\textsuperscript{68} Mr. Herring’s frustration turned to outrage when he discovered the reason behind his inability to call home.\textsuperscript{69} Madison River Communications, his DSL provider, had instituted a policy of blocking rival Voice-Over-Internet Protocol (VoIP) Internet phone services.\textsuperscript{70}

\textsuperscript{17} Madison River was blocking its customers’ use of Vonage’s VoIP services.\textsuperscript{71} After receiving notice of this action, the FCC quickly stepped in to solve the problem.\textsuperscript{72} Madison River entered into a consent decree agreeing to pay a fine of $15,000 and agreeing not to block VoIP services on its DSL lines.\textsuperscript{73} The FCC pursued the Consent Decree through “common carrier” requirements.\textsuperscript{74} Yet, today this type of enforcement action would not work because common carrier regulations are no longer applicable to broadband providers. The FCC was able to use common carrier restrictions in compelling the consent decree because the status of

\begin{footnotesize}
\begin{itemize}
\item[65] Id.
\item[66] Id.
\item[67] Catherine Yang, \textit{At Stake: The Net as We Know It}, BUSINESSWEEK ONLINE, Dec. 15, 2005, http://www.businessweek.com/technology/content/dec2005/tc20051215_141991.htm.
\item[68] Id.
\item[69] Id.
\item[70] Id.
\item[72] Id.
\item[74] Id.
\end{itemize}
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DSL providers as “information services” had not yet been established. The recent change in classification “may [now] limit what VOIP providers can do if their service is blocked by a broadband provider.” The inability of common carrier regulations to remedy this type of behavior under the current regulatory classification of broadband services is one of the reasons net neutrality proponents are demanding new regulations for the broadband industry.

2. Other Content Blocking Fears

Broadband providers have sent out mixed signals regarding content blocking. Madison River is the only content provider thus far known to have blocked rival company’s content or applications. Some broadband companies have publicly announced their opposition to content blocking. Other broadband providers have been sending different signals. AT&T CEO Edward Whitacre Jr. remarked that, while Internet content and application companies wanted to use his network for free, he “ain’t going to let them do that.” Although they have eschewed content blocking, broadband providers have expressed their desire to expand their businesses into the content and application arena. Net neutrality proponents fear that these companies will have increased incentives to block applications as they begin to compete in the application marketplace.

B. The Move toward a Two-Tiered Internet

Another prevalent fear about the loss of net neutrality is the emergence of a “two-tiered” Internet or an Internet in which select content and applications would be offered at higher speeds. This concept is not new, but it has moved to forefront of the “net-neutrality” debate as DSL providers have increasingly pressed for congressional approval of a two-tier scheme. DSL providers are proposing a two-tiered Internet to provide a fee based faster platform for content and application companies. Predictably, many Internet companies have voiced their opposition to such a

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76 Hiltzik, supra note 2.
77 Yang, supra note 67.
78 Id.
79 Id.
80 Id.
81 Id.
83 Id.
regime. Google announced that it would not even entertain talks with broadband providers on the topic of a two-tiered internet.

\(\textbf{\#20}\) Speed differentiation is now possible through the development of packet-based technology, which allows broadband providers to “control which data gets to its destination first—whether it be video, voice or otherwise.” In addition to allowing broadband providers to extract fees from application/content companies, this technology would allow broadband providers to offer their own content/applications at greater speeds than rival products. While stopping short of blocking an application outright, a broadband provider could decrease the available speed of an application so that the application could not effectively compete with other applications running at faster speeds. Consumers would be left with the choice of using the broadband provider’s own service, or selecting an inferior option.

\(\textbf{\#21}\) Although DSL providers are leading the push for a two-tiered Internet, cable broadband providers have also expressed an interest in varying internet speeds. Cable providers’ version of a two-tiered Internet, however, appears aimed at increasing consumer choice rather than at harming content and application providers. In particular, cable companies are now offering consumers the choice of purchasing increased bandwidth for an additional fee.

\(\textbf{C. The Impending Deadline}\)

\(\textbf{\#22}\) Proponents of net neutrality mark January, 2008, as a potential “breakpoint” in the future of the Internet. Restrictions imposed by the FCC for approval of the Verizon Communications/MCI and SBC/AT&T mergers end in early 2008. These restrictions included an agreement not to block content access to web sites for a period of two years. Thus, while phone companies have said that they would never engage in content blocking—and indeed, they have not yet done so—net neutrality proponents fear that they may change their mind once they are legally free to do so.

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84 Fight to Keep the Internet Toll-Free, supra note 11.
85 Id.
86 Barnard, supra note 83.
87 Id.
88 Hiltzik, supra note 2.
89 Id.
IV. NET NEUTRALITY: A LOT OF SMOKE, BUT NO FIRE

¶23 Those calling for net neutrality regulations claim that “unrestrained commerce [will] throttle [the Internet’s] freedom and innovation.” With broadband providers expanding their product lines to include content as well as access services, net neutrality proponents fear the diversity of content and applications on the Internet will be crushed by the profit motivated actions of broadband providers. They fear that the unregulated nature of the broadband market will allow broadband providers to destroy the vitality of the Internet. This fear, however, does not properly acknowledge the current state of the broadband service industry. The high-speed Internet access industry is a competitive industry with new entrants adding to the competitive landscape every day. In this competitive environment, net neutrality fears are misplaced. Furthermore, while proponents of net neutrality seek to protect consumers by preventing the expansion of broadband providers into the content and application markets, such an expansion could actually offer great benefits to consumers.

B. Blocking Content and A Two-Tiered Internet in a Competitive Environment

¶24 With a backdrop of competition in the broadband Internet access market, the net neutrality becomes “a solution in search of a problem.” Content blocking in particular poses limited danger to consumers in light of the competitive landscape. Without market power, content blocking is a losing proposition for broadband service providers. Fundamentally, a majority of consumers reject the notion of blocked Internet content. The Consumer Federation of America conducted a survey in which seventy percent of respondents indicated that they opposed having content on the Internet blocked by Internet providers. With such strong consumer preferences, broadband providers would suffer dearly for blocking consumers’ access to content. If a DSL company blocked the use of Google.com in favor of its own search engine, consumers who valued Google.com would switch to a different provider. Indeed one DSL company official noted, “If [phone companies] restrict where people go on the Net, they’d leave in droves’ for cable competitors.”

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91 Hiltzik, supra note 2.
92 Yang, supra note 67.
94 Id.
95 Yang, supra note 67, (quoting Bill Smith, chief technology officer at BellSouth).
\(\S25\) Losing customers is a frightening proposition for service providers that have spent billions in infrastructure costs. It is estimated that providing cable modem or DSL services to residential neighborhoods costs between $300 and $500 per home.\(^96\) This substantial initial investment requires time to recoup and explains why Wall Street demands that companies report subscriber growth in order to justify their investment in infrastructure.\(^97\) It is doubtful that content blocking could boost short term profit enough to overcome the likely long term profit losses associated with losing customers. It would take a lot of music downloads or subscription website fees to justify losing the recurring revenue stream of a consumer paying forty-five dollars per month for broadband service. Moreover, angering current customers would undoubtedly have a negative impact on a broadband provider’s ability to attract new customers.

\(\S26\) Switching costs could reduce the ability of customers to move to a new provider if their current broadband service blocked content by providing significant financial incentives to stay with the incumbent provider. A competitive marketplace, however, significantly reduces the threat of switching costs. In an industry where firms aggressively compete on price and download speed, it is not a stretch to assume that terms of service will also be evaluated in a competitive environment. If a firm took advantage of onerous switching costs to extract short term profits from its customers, it would likely suffer long term consequences. Consider the example of Madison River. If Madison River’s customers truly valued Vonage but were prevented from switching to a new provider because of high short term switching costs, the long term consequences for Madison River would be disastrous. When the terms expired, consumers would flock in large numbers to a competing service that did not block Vonage’s services. This high rate of churn (the industry term for losing customers) would be devastating to the company’s bottom line.

\(\S27\) The potential for a two-tiered Internet is likewise unlikely to harm consumers in a competitive marketplace. If a broadband provider tried to use varying speeds to push its own application or content, it would face the same consumer reaction as it would with content blocking; dissatisfied consumers would leave for another provider. Again, this is a nightmare situation for broadband companies because of the fixed costs associated with deploying a network. Fears about a two-tiered Internet stifling competition miss the bigger picture and ignores the reality of the Internet. For instance, if a broadband provider were to require every blog to pay a fee or be stuck with slow speeds, bloggers would leave en masse for another

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\(^97\) Moritz, supra note 20.
provider. The ability of consumers to demand services they desire in a competitive marketplace guarantees that a two-tiered Internet will not thwart innovation and diverse content. Consumers should support any increase in competition in the broadband industry that would force providers to extract fees from these mammoth content companies in order to offer consumers lower prices for access.

¶28 In a competitive marketplace, content blocking and the use of a two-tiered Internet to push proprietary content pose little danger to consumers. While these strategies could form an effective short term method of boosting a provider’s profitability, the potential for long term market share erosion should convince any rational provider to eschew these strategies.

B. The Benefits of a Non-Neutral Internet

¶29 Net neutrality fears are also misplaced because a non-neutral Internet would likely benefit consumers by expanding broadband penetration and offering an increased variety of applications/content on the Internet. In contrast, increased regulation or a heavy handed application of the FCC’s Title I ancillary powers are likely to impede the prospects of universal broadband access and the growth of application variety.

1. Broadband Expansion

¶30 In March of 2004 President Bush said that he wanted the United States to have universal broadband access by 2007. The United States broadband penetration currently stands at approximately eleven percent. This level of penetration ranks the United States at 16th in the world in 2005, a drop from thirteenth in 2004. The benefit of universal broadband penetration in the United States has been estimated at $300 billion a year. If the United States wants to have universal access to broadband services, there are only two plausible options: a new massive government spending project or the development of universal service through private investment. Assuming private investment is the preferable step, the main obstacle to

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99 TURNER, supra note 18, at 4.
100 Id. Korea, the world leader, has a penetration rate of nearly twenty-five percent.
101 CRANDALL, supra note 19, at 126.
102 While this point is not a certainty, it is beyond the scope of this iBrief to evaluate the welfare gains/losses from a publicly financed government program to ensure universal penetration. The author assumes private investment would be preferable in part because of the near impossibility of Congressional approval.
universal broadband penetration is a lack of incentives. Specifically, the lack of incentives to build the networks and the lack of incentives for consumers to purchase broadband services are blocking universal broadband penetration.

¶31 The FCC took the first step toward creating the correct incentive structure to build the networks by relieving broadband service providers of the common carrier regulations. The FCC and commentators agree that these restrictions reduced the incentive for broadband companies to invest in their infrastructure. When a rival is given free access to a company’s capital improvements there is little reason to invest in costly improvements. Whereas when investing in the infrastructure provides a competitive advantage, the incentive to invest in capital improvements is great. Just as common carrier regulations limited the incentive to invest, limiting the ability of broadband providers to compete in the content/application market will dampen the incentives for future investment. The cost of deploying new technologies is staggering. In 2000, the National Exchange Carriers Association estimated that the cost of upgrading rural telephone lines not currently DSL capable would be $10.9 billion. While technological advances in both DSL and wireless service providers have certainly lowered this figure, achieving universal access is an expensive proposition. To ensure the continued investment of billions of dollars in new infrastructure, broadband providers need assurances that they will be able to profit from their investments.

¶32 One way to persuade broadband services to expand their service area to all corners of America and upgrade their existing facilities would be to allow broadband services to compete in the content and application markets. Broadband providers have shown interest in recouping the development cost of their networks through the application/content market. Broadband service providers could compete in a variety of application markets including VoIP, music download services, online gaming, subscription content services, and the emerging IP-TV market. By competing in these markets, broadband service providers will gain additional revenues to fund infrastructure improvements. The incentive to

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for a new multi-billion dollar domestic infrastructure expansion in the current political climate.

103 FCC DSL order, supra note 5, at 14877-78; Hazlett, supra note 16, at 210; Crandall, supra note 19, at 113.
105 Yang, supra note 67, (Quoting Link Hoewing, vice-president for Internet policy at Verizon Communications, “If I can find new ways to pay for this network, it's gravy for everyone”).
upgrade a network in order to offer the speeds necessary to provide IP-TV
are greatly increased if a broadband service provider feels that they can
profit from deployment of an IP-TV market on their network.\footnote{106}

\textsection{33} Additionally, universal penetration cannot be achieved without
improvements in consumer incentives. Even if broadband access is
available to every consumer in America, universal penetration will only be
achieved if every consumer chooses to use the offered access. Allowing
broadband providers to compete in the application market will drive
consumer demand in two ways. First, the development of new bandwidth
intensive applications will lead to an increase in consumer demand for
broadband services.\footnote{107} As the ability of a broadband connection to
significantly improve the entertainment, business, and educational options
of consumers increase, demand for broadband will rise. Second, additional
competitors in both the broadband market and the application market will
lower prices of both.

2. Other Consumer Benefits from a Non-Neutral Net

\textsection{34} In addition to benefiting from universal access, consumers would
benefit through additional competition in the application/content market.
More competition means lower prices, increased variety, and a larger
incentive for companies to innovate.\footnote{108} With a competitive broadband
environment, and the understanding that blocking content will drive
consumers away, broadband providers wanting to gain revenues through the
content/application markets will be forced to compete on price and
innovation to attract consumers. As technological advances blur the
distinction between traditional phone, television, and Internet services,
consumers should welcome every potential competitor, even their
broadband service provider. Google, iTunes, NBC Universal and AOL are
all planning to sell TV programs to consumers through the Internet.\footnote{109}
Consumers would greatly benefit if this list grew to include Verizon,
Comcast, DirecTV, and every other potential broadband provider.

\textsection{35} Broadband providers will also have an incentive to finance the
development of new products if they are allowed to compete in the

\footnote{106}Christopher E. Fulmer, \textit{When Discrimination is Good: Encouraging Broadband Internet Investment Without Content Neutrality}, 2006 DUKE L. & TECH. REV. 0006 (2005),
\url{http://www.law.duke.edu/journals/dltr/articles/2006dltr0006.html}.
\footnote{107}CRANDALL, \textit{supra} note 19, at 170.
\footnote{108}This is not a contradiction to the earlier discussion of the competitive nature
of the broadband industry. Competition is a continuum from monopoly to
perfect competition. The Broadband industry rests somewhere in between the
two, and consumers will benefit the further it moves toward perfect competition.
\footnote{109}Top Tech News, \textit{supra} note 94.
application market. If a broadband provider developed a better version of VoIP, they would not only gain revenues from the VoIP market but also induce consumers to switch to that broadband service. This in turn will lead to new innovations from other broadband providers and independent application providers attempting to win back consumers. By entering the application market, broadband providers will facilitate the competitive tug-of-war over consumers that drives innovation and lowers prices.

¶36 A two-tiered Internet also offers consumers substantial benefits. As more consumers use high bandwidth applications, “bottlenecks” in the internet are more common and the speed of downloads decreases.\(^{110}\) To combat these delays, DSL companies are proposing a two-tiered Internet that would allow consumers to pay additional rates for greater download speed. One DSL provider has argued that a two-tiered Internet will “guarantee that an Internet-TV viewer doesn’t experience annoying millisecond delays during the Super Bowl because his teenage daughter is downloading music files in another room.”\(^{111}\) Offering consumers choices in download speeds enhances efficiency by allowing consumers to choose what Internet speed best serves their purposes. Different Internet activities require vastly different download speeds. A consumer interested in high-definition television programming may require speeds up to 19 megabits per second.\(^{112}\) Under a single tier Internet approach, a provider would only be able to meet this consumer’s speed demands by charging all other consumers for speeds that they do not want, which could lower aggregate consumer welfare by excluding some consumers from the market for broadband services.

V. ANTITRUST LAWS AS A SOLUTION WHERE COMPETITION FAILS

¶37 Where competition in the broadband service market exists, competitive market forces will protect consumers from the dangers of a non-neutral internet. Where competition breaks down or does not exist at all, antitrust laws can be used to provide consumers the necessary protection. In particular markets where a broadband provider enjoys monopoly power, Section 2 of the Sherman Act\(^ {113}\) will provide a remedy for anti-competitive behavior and an incentive for the monopolist not to engage in harmful business practices. Furthermore, where competition breaks down due to collusion among broadband providers, Section 1 of the Sherman Act\(^ {114}\) provides a remedy and steep punishment for the guilty

\(^{110}\) Id.

\(^{111}\) Yang, supra note 67.

\(^{112}\) CRANDALL, supra note 19, at 131.


parties. The presence of this legal mechanism to address potential harms in the absence of competition makes additional regulation unnecessary.\textsuperscript{115}

\textit{A. Monopolization}

\textsuperscript{38} A monopolization claim under Section 2 of the Sherman Act requires two main elements. First, a firm must be found to possess monopoly power in the relevant product market.\textsuperscript{116} In addition to the possession of monopoly power, a firm must also engage in anti-competitive behavior.\textsuperscript{117} If a court determines that a broadband service provider has monopoly power in a given market, a Section 2 claim could exist if the firm were to engage in behavior that harmed the competitive process.

\textit{1. Defining the Market}

\textsuperscript{39} To establish if a broadband service provider possesses monopoly power, the relevant product and geographic market must be identified. A product market is defined by the goods that offer consumers “reasonable interchangeability for the purposes for which they are produced—price, use and qualities considered.”\textsuperscript{118} Broadband Internet access, defined broadly to include cable, DSL and other emerging broadband technologies, constitutes a single product market due to the substitutability of the services.\textsuperscript{119}

\textsuperscript{40} The relevant geographic market for a broadband service provider’s potential antitrust violation is the local market. “The purpose of the search for the relevant geographical market is to find the area or areas to which a potential buyer may rationally look for the goods or services that he seeks.”\textsuperscript{120} For the broadband market, the geographic market consists of the broadband providers that are available to a particular person’s home or place of business.

\textsuperscript{115} While beyond the scope of this iBrief, there is also a vital need for a strict and consistent merger review process to ensure the competitive nature of the broadband marketplace.
\textsuperscript{119} See generally CRANDALL, supra note 19, at 120 (explaining the substitutability of cable and DSL), United States General Accounting Office, Wire-Based Competition Benefited Consumers in Selected Markets 12, (Feb. 2004), available at http://www.gao.gov/new.items/d04241.pdf (indicating the substitutability of other services by reporting price changes in DSL and cable following other broadband services market entry).
While most Americans currently have more than one broadband option and many new technologies promise to expand the number of competitors in all markets, some Americans have only one broadband option available. A February 2004 study by the Pew Charitable Trust found that twenty-nine percent of rural Internet users have only one Internet option. In local geographic markets where there is only one broadband provider, the provider could be found to possess the monopoly power necessary for a Section 2 claim.

In addition to the possession of monopoly power, Section 2 violations of the Sherman Act require “the willful acquisition or maintenance of [monopoly] power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.” Separating these two possibilities requires drawing a distinction “between exclusionary acts, which reduce social welfare, and competitive acts, which increase it.” The key, however, is to examine the behavior of a monopolist and determine if the conduct has harmed the competitive process or merely harmed a competitor.

In a broadband marketplace dominated by a monopolist, anticompetitive behavior could take many forms. Exclusive contracts with key content providers could be found to disrupt the competitive process if they effectively foreclosed the possibility of competition in the broadband service marketplace. Similarly, requiring consumers to sign long-term contracts with harsh break clauses might significantly limit the potential for competition in the broadband market and could give rise to a Section 2 claim. In addition to these claims, a monopolist broadband provider that refuses to allow content providers to access its network could violate the essential facilities doctrine.

2. Blocking Content and the Essential Facilities Doctrine

If a monopolist broadband provider blocked a competing application or a content provider’s access to its network, one potential Section 2 claim would be a violation of the essential facilities doctrine. While the Supreme Court has only implied approval of this doctrine,

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121 Martin, supra note 25 (Chairman Martin’s statement that “most” Americans have more than one broadband option necessarily means that some Americans do not).
122 Rainie et. al., supra note 104, at (ii).
123 See Grinnell, 384 U.S. at 570 (Section 2 violations require “the possession of monopoly power in the relevant market.”).
124 Id. at 570-71.
126 See, e.g., id. at 69.
appellate courts addressing the theory have approved its use. The four elements necessary to establish an essential facilities claim are: “(1) control of the essential facility by a monopolist; (2) a competitor’s inability practically or reasonably to duplicate the essential facility; (3) the denial of the use of the facility to a competitor; and (4) the feasibility of providing the facility.” These elements appear to be present in the case of a monopolist broadband provider blocking content or applications.

¶45 The first element is met where broadband service is essential to an application’s use. For applications requiring high download speeds to operate effectively, such as digital phone service or music downloads, broadband access could be found to be necessary for their operation. The second element would be met where a court determined that an independent application provider could not reasonably be expected to develop a broadband infrastructure of its own. Given the high cost and technical expertise needed to create an independent broadband network, this element is likely met. The third element of the offense would be met when a broadband provider blocked an application or a content provider’s use of the broadband network. Finally, the feasibility requirement is satisfied if it the broadband company can easily open up its infrastructure to the application.

¶46 The potential for this claim is important not only because of the ex-post relief that it affords those injured by a monopolist blocking content, but because of the deterrence that it provides for this type of behavior. The Sherman Act is a criminal statute. Additionally, violations of the Sherman Act result in treble damages. These steep penalties should motivate any monopolist broadband provider to think twice before engaging in anticompetitive behavior.

3. Potential Entrants: A Caveat to the Essential Facilities Claim

¶47 Significantly, the dynamic nature of the broadband service industry may lead a court to determine that even in locales where only one broadband provider operates, the monopoly power necessary for an essential facilities claim does not exist. As Judge Easterbrook of the Seventh Circuit has explained, “[T]he lower the barriers to entry, and the shorter the lags of new entry, the less power existing firms have.”

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128 MCI Commc’ns Corp. v. American Tel. & Tel. Co., 708 F.2d 1081, 1133 (7th Cir. 1983).
130 Id. § 2.
131 Ball Memorial Hosp., Inc. v. Mutual Hosp. Ins., Inc., 784 F.2d 1325, 1335 (7th Cir. 1986).
Although a determination that potential entrants exist could undermine an essential facilities claim, it also offers consumers protection from the very behavior an essential facilities claim seeks to redress. In a market where a single firm offers broadband services, that firm enjoys price and service control that they would not have if a new entrant came to the market. By angering consumers through content or application blocking, it creates a market environment where a new entrant could more easily win over existing consumers. This would make entering the market more attractive to the potential competitor and could result in increased broadband choice for consumers. Although the consumer could potentially suffer in the short run from content blocking, the long term consequences to a firm engaging in content blocking in a market with potential entrants make it unlikely that a strategic firm would choose to mortgage its long term business vitality for short term gains.

B. Collusion in the Marketplace

Collusion, “the supreme evil of antitrust,” should be the main fear of net-neutrality proponents. If collusion exists, content blocking and a two-tiered internet pose significant dangers to competition and consumer welfare. If competing broadband providers in a single market collude to block the content or applications of a rival, competition in the application market would be harmed. Likewise, if competing firms agreed to slow down a rival application in favor of their own proprietary applications, consumers would suffer. These arrangements may have the effect of raising the price of the application, reducing the available options to consumers, and discouraging innovation. While this type of behavior certainly offers an example of how an end to net neutrality could harm consumers, existing antitrust law provides a means of solving this market failure.

Section 1 of the Sherman Act prohibits “every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade.” A concerted refusal to deal, also known as a group boycott, generally falls within this prohibition on combinations in restraint of trade. For instance, the Supreme Court applied per se antitrust condemnation to an agreement among suppliers and a full price retail store not to sell goods to a discount retailer. Likewise, if competing broadband providers colluded to block consumers’ use of an application owned by a rival firm, a Section 1 violation would exist. Moreover, if broadband service providers conspired to set the price on applications or broadband

service itself, a *per se* violation of Section I would exist.\(^{136}\) Thus, Section I of the Sherman Antitrust Act already provides consumers and the Federal Trade Commission with a remedy for collusive behavior that is harmful to competition; there is no need for additional regulation in the context of net neutrality.

V. CONCLUSION

\(^{50}\) Since its emergence the Internet has existed as a vibrant marketplace marked by innovation and increased consumer welfare. By providing consumers with faster download speeds, the broadband service industry has expanded these gains and allowed for new technologies such as VoIP, IP-TV, video conferencing, music downloads, and more. The recent classification of broadband service providers as “information services” has moved the broadband market closer to a free competitive marketplace. This classification was made with the understanding that the broadband service market today is a dynamic competitive marketplace. It has freed broadband providers from “common carrier” restrictions and provided an increased incentive for capital investments. Some consumer rights advocates, however, view the new classification as a potentially devastating blow to the future of the Internet. They fear that the classification will end net neutrality and put a “chokehold on the Web.”\(^{137}\)

\(^{51}\) These fears about the end of net neutrality are misplaced because ample protections exist in a competitive market and antitrust laws act to further this competition. In a competitive marketplace, producers are at war with each other over consumer dollars. Especially given the high fixed costs of developing and improving infrastructures, broadband providers have strong disincentives to engage in behavior that will anger consumers. Furthermore, where the competitive forces of the market fail because of local monopolies or collusion among competitors, the antitrust laws provide a remedy for those harmed and a strong disincentive for broadband providers to engage in anticompetitive practices.

\(^{52}\) Moreover, Congress and the FCC’s main concern should be expanding the broadband market, and not policing vague “what if” scenarios. Universal broadband access could offer the United States immense economic and social benefits. Additional regulations, however, will reduce the incentive for private investment in infrastructure. Likewise, allowing broadband providers to enter vertical marketplaces will present consumers with additional products and spark the innovation necessary to expand broadband penetration.

\(^{136}\) See United States v. Socony-Vacuum Oil Co., 310 U.S. 150, 218 (U.S. 1940) ("price-fixing agreements are unlawful *per se* under the Sherman Act").

\(^{137}\) Yang, *supra* note 67.
Net neutrality is indeed “a solution in search of a problem.” Consumer groups and the FCC are fighting the wrong battle when they demand that broadband providers remain content neutral. *Brand X* and the FCC’s subsequent DSL classification were the first step in allowing competitive market forces to provide consumers with better products at lower prices. Continuing on this path requires the FCC and Congress to remain neutral to the broadband industry. That prospect is a “net neutrality” worth fighting for.

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138 *Id.*