

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
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Broadband Industry Practices)
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WC Docket No. 07-52

**EX PARTE FILING
UNITED STATES DEPARTMENT OF JUSTICE**

The United States Department of Justice (“Department”)¹ submits this *ex parte* filing to respond to suggestions by some companies and individuals that the Federal Communications Commission (“FCC” or “Commission”) adopt new regulations governing the transmission of traffic over the Internet—so-called “net neutrality” rules. The FCC should be highly skeptical of calls to substitute special economic regulation of the Internet for free and open competition enforced by the antitrust laws. Marketplace restrictions proposed by some proponents of “net neutrality” could in fact prevent, rather than promote, optimal investment and innovation in the Internet, with significant negative effects for the economy and consumers.

¹ Through its antitrust enforcement and competition advocacy efforts, the Department has substantial expertise in assessing competition and the effect of regulation with respect to the Internet and “net neutrality”-related issues. The Department has undertaken extensive examination of issues relating to Internet access and delivery services in connection with its investigations of the AT&T/Bell South, SBC/AT&T, Verizon/MCI, MCI/WorldCom/Sprint, and AT&T/MediaOne mergers. In AT&T/BellSouth, for example, the Department “investigated whether the merger would create competitive problems in Internet services, including ‘net neutrality’ concerns regarding the merged firm’s ability or incentive to favor its own Internet content over that of its rivals.” Press Release, U.S. Dep’t of Justice, Statement by Assistant Attorney General Thomas O. Barnett Regarding the Closing of the Investigation of AT&T’s Acquisition of BellSouth at 3 (Oct. 11, 2006), *available at* http://www.usdoj.gov/atr/public/press_releases/2006/218904.pdf.

The public policy objective here is clear: a thriving and dynamic Internet capable of meeting the demands of consumers for fast and reliable access to a rich variety of content and applications. Many commenters in this proceeding agree that the best way to achieve this objective is through marketplace competition. Other commenters, however, have urged the FCC to consider imposing prophylactic “neutrality” regulations to prohibit what they regard to be undesirable differentiation in the provision of Internet services. Some of these proposals, for example, could restrict broadband providers from offering different levels of quality of service at varying costs to content and application providers in a manner that efficiently responds to market demands. Other proposals would require interconnection, open access, and structural separation of companies offering both Internet access services or transmission and content or applications deliverable over the Internet.²

The Department submits, however, that free market competition, unfettered by unnecessary governmental regulatory restraints, is the best way to foster innovation and development of the Internet. Free market competition drives scarce resources to their fullest and most efficient use, spurring businesses to invest in and sell as efficiently as possible the kinds and quality of goods and services that consumers desire. Past experience has demonstrated that, absent actual market failure, the operation of a free market is a far superior alternative to regulatory restraints.

However well-intentioned, regulatory restraints can inefficiently skew investment, delay innovation, and diminish consumer welfare, and there is reason to believe that the kinds of broad

² See, e.g., Comments of Google, *In the Matter of Broadband Industry Practices*, WC Docket No. 07-52 (“*Broadband Industry Practices NOI*”), at 36 (June 15, 2007) (“Comments of Google”) (encouraging the Commission to consider, among other things, interconnection and open access requirements); Comments of Computer & Communications Industry Association, *Broadband Industry Practices NOI*, at 5-6 (June 15, 2007) (urging the FCC to adopt structural separation rules).

marketplace restrictions proposed in the name of “neutrality” would do just that with respect to the Internet. Congress passed the Telecommunications Act of 1996 to “promote competition and reduce regulation,” and to “encourage the rapid deployment of new telecommunications technologies.”³ In response, the Commission has deregulated various aspects of broadband services.⁴ Against this background, commenters proposing special regulation of the Internet should bear a substantial burden of demonstrating that it is appropriate.

Based on the record in this proceeding to date, proponents of “net neutrality” regulation have failed to show that a sufficient case exists for imposing the sorts of broad marketplace restrictions that have been proposed. Moreover, the Department has grave concerns about the potential negative consequences of such restrictions were they to be enacted. Given the dynamic and evolving nature of the Internet, the Department finds that there are especially strong reasons to be cautious about imposing restrictive regulations in this context.

- In response to the FCC’s request, commenters provided scant evidence that consumers are being harmed by the business practices of Internet industry participants. To the contrary, Internet usage is soaring. Consumers are reaping substantial benefits from new services and technologies.
- The types of conduct that some proponents of regulation seek to prohibit—e.g., the prioritization of certain content and content providers (such as streaming video and other latency-sensitive content), offering of premium services and different levels of quality of service, preferential treatment of certain content, and vertical integration—in many instances actually may be procompetitive. A blanket prohibition on such conduct would likely result in significant marketplace distortion. Even assuming that a potential danger exists, the ambiguity of what conduct needs to be prohibited raises

³ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, 56 (preamble).

⁴ See, e.g., *In the Matter of Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, Universal Service Obligations of Broadband Providers, Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services*, CC Docket No. 02-33, Report and Order and Notice of Proposed Rulemaking, 20 F.C.C.R. 14,853, 14,896, paras. 1, 84 (2005) (removing common carrier regulations from “the dynamic and evolving broadband Internet access marketplace”) (“*Wireline Broadband Order*”).

a real possibility that regulation would prohibit some conduct that is beneficial, while failing to stop other conduct that may be harmful.

- A number of proposed “neutrality” restrictions have the potential to harm consumers. For example:
 - Precluding broadband providers from charging fees for priority service could shift the entire burden of implementing costly network expansions and improvements onto consumers. Because the average consumer may be unwilling or unable to pay significantly more for access to the Internet in order to ensure smooth delivery to consumers demanding bandwidth-intensive and latency-sensitive content, critical network expansion and improvement may be significantly reduced or delayed.
 - Mandating a single, uniform level of service for all content could limit the quality and variety of services that are available to consumers and discourage investment in new facilities. Services that are particularly vulnerable to delays in delivery or other network problems may either not be offered or will be offered at a lower level of quality than a competitive marketplace would have provided. In addition, the resulting one-size-fits-all uniform level of service may deprive consumers of the choice to pay for the quality they want—leaving some unhappy with the low quality and others unhappy with the high price.
 - Proposed regulations could unreasonably limit the ability of broadband providers to manage their networks efficiently. There are benefits to treating certain content differently. A number of companies offer services to provide faster delivery of content and/or to avoid some of the congestion and delay on the public Internet. Owners of network facilities have legitimate reasons to manage their facilities in ways that lessen congestion and address public safety issues.

The Department urges the Commission to weigh carefully the potential negative implications of regulation as it considers requests to initiate a rulemaking. Regulatory restraints in this dynamic and evolving sector of the economy could perversely stifle innovation and investment, reduce consumer choice, and increase prices to consumers. Anticompetitive conduct about which the proponents of regulation are concerned will remain subject to the antitrust laws and enforcement actions by government as well as private plaintiffs, and the Department will continue to monitor developments, taking enforcement action where appropriate to ensure a competitive broadband Internet access market.

I. THE GOVERNMENT SHOULD LIMIT REGULATION IN DYNAMIC INDUSTRIES SUCH AS THE INTERNET

As a general matter, market forces, rather than regulatory restraints on competition, are better at fostering innovation and investment, stimulating new products and services, reducing costs, and expanding choice.⁵ Accordingly, regulation should be avoided except in those rare instances of market failure (e.g., where competition cannot work because of a “natural monopoly”) or where regulation is necessary to protect a clearly defined and compelling public policy goal that cannot be achieved through competition. There is neither a sound theoretical nor empirical basis for restricting broadband competition at this time. From a theoretical perspective, differentiated products and pricing can provide consumers (and content providers) a broader array of choices that meets service preferences more effectively and efficiently. Further, such practices can enable greater investment that will speed innovation and development.

On the empirical side, despite the Commission’s request for evidence of harmful discrimination or behavior, as discussed further below, commenters failed to present evidence suggesting that a problem exists. To the contrary, it appears that the Internet is flourishing without the proposed sectoral regulation. Statistics evidence an explosion in Internet usage in recent years due to new applications and increased broadband subscribership. According to press accounts, in June 2006 alone *2.5 billion* videos were watched on YouTube;⁶ by May 2007,

⁵ As reported by the Antitrust Modernization Commission, for example, “[n]umerous studies of sectoral deregulation in the United States show that the unleashing of market forces has greatly increased efficiency and provided substantial benefits to consumer welfare.” Antitrust Modernization Comm’n, *Report and Recommendations* 334 & nn.9, 10 (Apr. 2007), available at http://www.amc.gov/report_recommendation/amc_final_report.pdf.

⁶ *YouTube Serves Up 100 Million Videos a Day Online*, USA TODAY, July 16, 2006, available at http://www.usatoday.com/tech/news/2006-07-16-youtube-views_x.htm?

“hundreds of millions” of videos were being downloaded every day.⁷ Consumers increasingly are utilizing the Internet for everything from shopping, to news and information. E-commerce accounted for sales of \$31 billion in the first quarter of 2007, an 18 percent increase from the first quarter of 2006.⁸ Internet advertising produced \$16.9 billion in revenues in 2006, a 35 percent increase from 2005.⁹

The number of Internet subscribers also continues to grow, with reports indicating that there were approximately 65 million new broadband subscribers worldwide from June 2006 to May 2007.¹⁰ In 2000, there were 420 million online users worldwide, a number that increased to 1 billion in 2005 and is expected to double by 2010.¹¹ In the United States, the FCC found that high-speed (or broadband) lines increased by 26 percent during the first half of 2006, from 51.2 million to 64.6 million lines in service. Between June 2005 and June 2006, the Commission found that high-speed lines increased by 52 percent (or 22.2 million lines).¹²

⁷ See Comments of AT&T, *Broadband Industry Practices NOI*, at 21 (June 15, 2007) (citing Rob Hof, *YouTube: 100 Million Videos a Day*, BUSINESSWEEK, July 14, 2006, available at http://www.businessweek.com/the_thread/techbeat/archives/2006/07/youtube_100_mil.html). According to AT&T, some analysts project that video traffic will represent 80 percent of all Internet traffic by 2010. *Id.*

⁸ Kristina Knight, *Online Retailing Sees 18% Growth in U.S.*, BizReport, May 18, 2007, available at http://www.bizreport.com/2007/05/online_retailing_sees_18_growth_in_us.html.

⁹ Internet Advertising Bureau, *Internet Advertising Revenue Report 3* (May 2007), available at http://www.iab.net/resources/adrevenue/pdf/IAB_PwC_2006_Final.pdf.

¹⁰ Michael Paxton & Elaine Potter, *Global Broadband Subscriber Base to Nearly Double*, In-Stat, May 30, 2007 (“*Global Broadband Subscriber Base*”), available at <http://www.in-stat.com/press.asp?ID=2016&sku=IN0703510MBS>.

¹¹ See Thomas M. Lenard and Daniel B. Britton, *The Digital Economy Fact Book 8* (8th ed. 2006), available at http://www.pff.org/issues-pubs/books/factbook_2006.pdf.

¹² FCC, *High-Speed Services for Internet Access: Status as of June 30, 2006* 1 (Jan. 2007), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-270128A1.pdf (“2006 FCC High-Speed Services Report”).

The increased usage and popularity of new services that are sensitive to delays in delivery (known as latency-sensitive traffic) has increased demand for bandwidth.¹³ In response, broadband providers have made, and continue to make, significant investments in Internet infrastructure to meet rising demand and reduce Internet congestion.¹⁴ The Commission's statistics report that the total number of broadband fiber lines increased from 40,627 in 2000 to 698,990 as of June 30, 2006,¹⁵ and the number of residential broadband fiber lines likewise increased from 325 in 2000 to 442,027 fiber lines as of June 30, 2006.¹⁶

¹³ For example, reports indicate that YouTube consumes as much bandwidth as the entire Internet consumed in 2000. See Jim Duffy, *Don't Expect Video to Exhaust Fiber Glut*, Network World (Feb. 15, 2007), available at <http://www.networkworld.com/newsletters/optical/2007/0219optical1.html>. In addition, according to Cisco, by 2010 "just 20 homes using the latest broadband technology to access video content will generate enough traffic to equal the entire load on the Internet in 1995." See *id.*; see also Comments of Packet Management System Manufacturers, *Broadband Industry Practices NOI*, at 1-2 (June 15, 2007).

¹⁴ For example, Verizon projects that it will spend nearly \$23 billion to deploy its FiOS service to 18 million customer premises by 2010. See Verizon Comments, *Broadband Industry Practices NOI*, at 10 (June 15, 2007). AT&T reports that it has invested over \$18 billion in capital expenditures since 2004. AT&T, *2006 Annual Report* 49 (2006), available at http://www.att.com/Investor/ATT_Annual/downloads/ATT_2006_Annual_Report.pdf. AT&T recently announced plans to invest approximately \$500 million in fiber network upgrades to deliver broadband services (including video) to customers in Georgia alone. See *AT&T to Invest \$500 Million into Georgia Optical Infrastructure*, Lightwave (May 31, 2007), available at [http://lw.pennnet.com/display_article/294094/13/ARTCL/none/XNEWS/AT&T-to-invest-\\$500-million-into-Georgia-optical-infrastructure/](http://lw.pennnet.com/display_article/294094/13/ARTCL/none/XNEWS/AT&T-to-invest-$500-million-into-Georgia-optical-infrastructure/). Comcast reports that it devoted over \$11 billion to capital expenditures in the last three years, including over \$4 billion investment in 2006, of which \$320 million was devoted exclusively to upgrading its fiber-optic cable network. Comcast, *2006 Annual Report* 41 (2006), <http://www.comcast.com/2006ar/annual2006.pdf>. Press Release, Comcast, *Comcast Reports 2006 Results and Outlook for 2007 Announces 3-for-2 Stock Split* 3, 10 (Feb. 1, 2007), available at http://media.corporate-ir.net/media_files/irol/11/118591/Earnings_4Q06/4q06_release.pdf.

¹⁵ *2006 FCC High-Speed Services Report* tbl. 2.

¹⁶ *Id.* tbl. 3. Increases in the availability of fiber and DSL occurred as the FCC relaxed wireline broadband regulation, see *id.* tbls. 1-3, which suggests that deregulation may be correlated with increased investment. The Commission previously concluded that historic regulation of the wireline broadband Internet access marketplace "constrain[ed] technological

In addition, several companies have developed services to provide faster delivery of content and/or to avoid much of the congestion and delay on the public Internet.¹⁷ For example, commercial content distribution networks, such as Akamai, Limelight Networks, and Internap Network Services, operate thousands of servers throughout the world that cache content and services to provide faster and more reliable access to specific Internet websites.¹⁸ Even though these arrangements allow participating content and access providers to pay for a higher quality of service, and thus create unequal treatment vis-à-vis other content providers, proponents of “net neutrality” do not allege that such services need to be prohibited.¹⁹ In addition to these caching services, the Department believes that there can be significant benefits in allowing broadband providers to manage their networks and differentiate among some traffic on the Internet.²⁰

advances and deter[red] broadband infrastructure investment by creating disincentives to the deployment of facilities capable of providing innovative broadband Internet access services.” *Wireline Broadband Order*, 20 F.C.C.R. at 14,865, para. ¶ 19.

¹⁷ Packets of traffic on the public Internet are processed on a “best efforts” basis, which does not provide any guarantees regarding speed, delivery, service quality, or priority treatment when the network is congested. When routers have more packets to process than capacity to do so, the overflow packets are queued up for processing in the order they arrive, up to the router’s physical capacity. Any additional packets beyond the router’s capacity are lost.

¹⁸ One of the largest content distribution networks, Akamai, reports that its services “reduce the impact of traffic congestion, bandwidth constraints and capacity limitations” by “accelerating and improving the delivery of content and applications over the Internet.” Akamai, 2006 Annual Report 1, 2 (2006), *available at* http://www.akamai.com/dl/investors/akamai_annual_2006.pdf. According to Akamai, its servers alone deliver 10-20 percent of all web traffic. Akamai, Facts & Figures 2, *available at* http://www.akamai.com/html/about/facts_figures.html (last visited on July 16, 2007). Another way in which a business service can obtain prioritized, more secure and reliable service is through a virtual private network.

¹⁹ *See, e.g.*, Comments of Google at 4 n.6.

²⁰ Broadband providers also need the ability to prioritize Internet traffic in order to (1) serve public safety officials better during emergencies, and (2) ensure the security of their networks.

II. THE CASE FOR REGULATING THE INTERNET HAS NOT BEEN MADE, AND REGULATORY RESTRAINTS CAN STIFLE INVESTMENT AND INNOVATION TO THE DETRIMENT OF THE ECONOMY AND CONSUMERS

Commenters failed to submit evidence in response to the Commission's request for evidence of harmful discrimination or other behavior suggesting the existence of a systematic or widespread problem. Rather, commenters advocating regulation cited only a few isolated examples of problematic conduct, such as in Madison River, where a small, rural incumbent local exchange carrier in North Carolina allegedly blocked the traffic of a competing VoIP service. The FCC promptly addressed the issue and commenters submitted no evidence of any such blocking or other harmful conduct since this 2005 incident. A few commenters cited examples of alleged harmful behavior that occurred outside the United States, which are irrelevant to the instant proceeding.²¹ Other commenters stated that there is not widespread evidence of a problem.²²

In contrast to the paucity of evidence of present harm to correct, there is reason to believe that the type of regulatory restraints proposed by some commenters under the mantle of "neutrality" could actually deter and delay investment and innovation, and result in less choice and higher prices to consumers of Internet services. Proponents of "net neutrality" regulation do not agree on a definition of what conduct should be prohibited, nor what networks would be

²¹ See, e.g., Comments of the National Association of Telecommunications Officers and Advisors, *Broadband Industry Practices NOI*, at 8 (June 15, 2007) (citing a 2005 incident in which a Canadian broadband provider, Telus, allegedly blocked access to the website of a Telus union during a labor dispute between Telus and the union).

²² See Comments of Hands Off The Internet, *Broadband Industry Practices NOI*, at 4 (June 15, 2007); Comments of the Media Institute, *Broadband Industry Practices NOI*, at 3 (June 15, 2007); Comments of Fiber-to-the-Home Council, *Broadband Industry Practices NOI*, at 56 (June 15, 2007). Comments of Consumers for Cable Choice, *Broadband Industry Practices NOI*, at 1 (June 15, 2007); Comments of the United States Internet Industry Association, *Broadband Industry Practices NOI*, at 2 (June 15, 2007).

regulated (wireline and/or wireless), or even the extent to which pieces of the Internet need to be regulated (just the last-mile or the Internet backbone). The mere fact that a definition of “net neutrality” remains elusive should give the Commission great pause before imposing regulation. Without knowing what services and technologies will be introduced in the future, it will be difficult to craft regulations that take into account the dynamic nature of the Internet. Indeed, given the ambiguity surrounding what conduct regulatory proposals seek to prohibit, there is a real possibility that regulation would prohibit some conduct that is beneficial, while failing to stop other conduct that is harmful.

As noted above, much of the conduct that some proponents of “net neutrality” regulation are concerned about can be procompetitive. Differentiating service levels and pricing, for example, is a common and often efficient way of allocating scarce resources and meeting consumer preferences. The United States Postal Service, for example, allows consumers to send packages with a variety of different delivery guarantees and speeds, from bulk mail to overnight delivery. These differentiated products respond to market demand and expand consumer choice. No one challenges the benefits to society of these differentiated products; nor does anyone seriously propose that the United States Postal Service be banned from charging different fees for next-day delivery than for bulk mailers. Whether or not the same type of differentiated products and services will develop on the Internet should be determined by market forces, not regulatory intervention.

One argument by some proponents of “net neutrality” regulation is that broadband providers should not charge content and application providers for faster and/or more reliable service. Such a rule, however, could force consumers, regardless of their usage of broadband

services, to bear the costs of maintaining and upgrading broadband providers' networks.²³

Several studies have noted that prohibiting broadband providers from charging content providers directly would leave consumers shouldering a disproportionate share of the costs necessary to upgrade network infrastructure. A recent paper by Benjamin E. Hermalin and Michael L. Katz examines the relationships among consumers, broadband providers, and content providers, and suggests that "net neutrality" regulation that requires broadband providers to offer the same quality of service to everyone may be inefficient and reduce overall welfare.²⁴ Other studies have identified similar effects and have attempted to quantify the effect of proposed regulations.²⁵

Other "net neutrality" proposals could prohibit broadband providers from offering differentiated quality of service. Such a rule, however, would eliminate choice and could deter the use and development of new, latency-sensitive applications that require more reliable

²³ Consumers also would likely face higher prices due to the added costs incurred by providers to comply with regulations, such as monitoring and reporting requirements.

²⁴ See Benjamin E. Hermalin & Michael L. Katz, *The Economics of Product-Line Restrictions With an Application to the Network Neutrality Debate* 28 (AEI-Brookings Joint Center for Regulatory Studies, Working Paper 07-02, 2007), available at <http://www.aei-brookings.com/admin/authorpdfs/page.php?id=1362&PHPSESSID=5db67c5b521ccddb517c3dbe68ed2bb>.

²⁵ For example, Steven Pociask estimates that, if consumers bear the entire cost of network upgrades through increases in broadband Internet access, this type of "net neutrality" regulation will cause consumer surplus to fall \$9.3 billion annually. See Steven B. Pociask, *Net Neutrality and the Effects on Consumers* 24 (American Consumer Institute 2007), available at <http://www.theamericanconsumer.org/ACI%20NN%20Final.pdf>. Although the study's approach depends on a number of key assumptions comparing market dynamics absent "net neutrality" regulation (e.g., that the entire cost of network upgrades are borne by content/application providers, which causes consumer prices for Internet access to fall and demand to increase) with market dynamics with "net neutrality" regulation (e.g., that consumers bear the entire cost of network upgrades, which causes consumer prices for Internet access to increase, and demand to fall), the magnitude of the estimated loss in consumer surplus suggests "net neutrality" regulation may not be in consumers' interests.

delivery. A study by Robert Litan and Hal Singer concludes that without reliable low-latency packet delivery, applications that demand a high quality of service, such as telemedicine, may not be viable.²⁶ The Litan and Singer study examines online video gaming, another application that demands high-quality packet delivery, and attempts to estimate the cost to society of “net neutrality” regulation as to this application. The study estimates consumer surplus in the online video gaming industry to be \$195 million in 2006,²⁷ and argues that “net neutrality” regulation may reduce or eliminate this surplus entirely.

Finally, it may be efficient for content providers that demand higher quality of service to bear the cost of upgrades necessary to support those services. Any regulation that prohibits this type of pricing may leave broadband providers unable to raise the capital necessary to fund these investments. Most significantly, regulation may reduce or deter investment in current and future competitive alternatives for broadband access, such as wireless, fixed wireless/WiMAX, WiFi, broadband over power lines, and satellite providers.

²⁶ See Robert E. Litan & Hal J. Singer, *Unintended Consequences of Net Neutrality Regulation*, J. Telecomm. & High Tech. L. (forthcoming 2007), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=942043 (“*Litan and Singer Study*”). This finding is consistent with comments submitted by users and providers of telemedicine, who fear that regulations that prevent prioritization of packets could “threaten continued advances in telemedicine.” See Comments of Providea at 2, *Broadband Industry Practices NOI* (filed June 15, 2007). Providea is “a video communications and network integrator that supports health care and ‘telemedicine’ applications across the nation.” *Id.* at 1; see also Comments of the Association of Washington Public Hospital Districts at 1-2, *Broadband Industry Practices NOI* (filed June 15, 2007) (urging against the enactment of “regulations that would stifle investment, innovation and network intelligence” because such action would harm telemedicine).

²⁷ *Litan and Singer Study* at 26.

III. CONCLUSION

For the foregoing reasons, the Department urges the Commission to exercise caution before initiating a notice of proposed rulemaking and adopting rules that would regulate this dynamic sector.

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