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ABSTRACT

OPEN INTERNET

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- *The Internet was built with a combination of government, private and academic community resources on a foundation of American innovation, openness and nondiscrimination. To sustain its social and economic benefits, the Internet must remain open and free of commercial or government gatekeepers.*

- *Court decisions and FCC deregulation removed open access guarantees from cable broadband and DSL phone lines. In the absence of nondiscrimination safeguards, Internet companies, end users, and network providers now debate where legitimate network management ends and unacceptable discriminatory blocking of content and connectivity begins. The FCC will soon decide.*

- *Neutral end user access to applications, content, and services must be preserved. The FCC must clarify its statutory authority over the basic transmission component of broadband access to the Internet. Without basic rules, there is nothing to stop Internet Access Providers (IAPs) from favoring their biggest customers and affiliated online content and services while disadvantaging most households and small businesses.*

***Definition*:** The concept that incumbent owners of critical "last-mile" broadband access infrastructure should not block, degrade, or impair end user access to lawful applications, content, or services over the Internet has been commonly referred to as Net neutrality. The FCC adopted network neutrality principles in 2005 and ordered that more specific non-discrimination rules for broadband access be applied to the post-merger AT&T/BellSouth. These principles essentially mirror current broadband industry practices so that residential, small business and rural end users are not disadvantaged or neglected in favor of higher volume customers. In 2009 the FCC proposed rules based on the original Internet Policy principles and on non-discrimination. Such rules would not regulate the Internet, but are intended to prevent monopoly and duopoly providers from abusing their market power over Internet connections in a country where most users have, at best, two choices for full broadband access to the Internet. IAPs would continue to manage their networks to address congestion and operational threats such as malware and viruses.

***Background*:** The complexity of the Internet ecosystem, which involves the interaction of many different market segments (network infrastructure, software, hardware, applications and content services), renders simple rhetorical slogans misleading. In promoting universal affordable Internet access, Congress and the FCC must strike a delicate balance between consumer freedom and entrepreneurial innovation on the one hand, and network owner business model flexibility on the other. As prominent Internet legal scholar Lawrence Lessig once noted in testimony before Congress, the Internet was born on and rapidly expanded over traditional phone lines. While the telephone companies were not initially interested in IP applications, they were more than willing

to sell the dedicated transmission lines required for the Internet to be launched in the 1970s and commercially developed in the 1990s within a framework of nondiscriminatory open access. Local and long distance networks were considered essential infrastructure, so they carried all new data traffic as voice conversations had been carried – free of blocking, delay, or degradation. Neutrality principles were inherent in the Title II common carrier regulations that governed these networks until 2005.

The Supreme Court's 2005 *Brand X* decision accelerated the broadband access debate by removing open access requirements from cable modem service. The FCC subsequently released telephone DSL service from these same obligations in the spirit of regulatory parity. As a result, the few Internet service providers, who actually own facilities that connect to end users, acquired an unprecedented level of control over the information that flows through their local networks to and from the Internet. Unlike in the 1990s when Prodigy, AOL and hundreds of other ISPs sold e-mail and other services separately from local distribution networks, telephone and cable IAPs began to bundle services in order to bootstrap their critical underlying telecom connections into the full deregulation that was applied to "information services."

Wireless technologies once offered more hope for competition, but the FCC's 2007 auction of the most valuable remaining 700 MHz spectrum resulted in an incumbent sweep and yielded no new competitors. The harsh reality is that for potential new entrants, the magnitude of investment required for building out new independent networks and the relative level of market risk without an established customer base and legacy infrastructure usually proves insurmountable.

This issue first rose to prominence when leading telecommunications executives announced an intention to change traditional Internet access models so as to charge online service companies for access to supposed fast lanes on "their" pipes. In both the 109th and 110th Congresses, the Senate Commerce Committee debated the bipartisan "Internet Freedom Preservation Act" intended to restrict broadband access providers from discriminating among users and competitors. A similar bill is currently pending in the House. The FCC initiated a notice of inquiry into "Industry Broadband Practices" in 2007. The House Judiciary Committee held a hearing in March 2008 entitled "Net Neutrality and Free Speech on the Internet" at which a diverse array of groups—from the Christian Coalition to the ACLU—agreed on the importance of an open and nondiscriminatory Internet. In response to petitions from Free Press and Vuze, Inc., the FCC opened an inquiry into content blocking of bit torrent–style filing sharing by cable network operator Comcast, and found Comcast to be in violation of its Internet Policy. However, Comcast appealed that decision in court and won on the basis of faulty FCC legal reasoning and procedures on the subject from 2005-2008.

As network technologies advance and the ability to surreptitiously filter network traffic is now a reality, IAPs have begun taking steps to pick and choose winners and losers, citing "quality of service" demands from high paying customers. Network operators can easily block or interfere with "bit torrent" style file sharing that involves competing video content, as Comcast did. Given the April 6, 2010 federal Appeals Court decision in Comcast v. FCC, there is currently no enforceable legal impediment to IAPs censoring legal speech or expression that they deem objectionable, or to blocking or throttling Internet traffic for any reason they choose.

An example of intrusive network technology is deep packet inspection (DPI), which allows network operators to become gatekeepers for digital data streams based on source or content.

These are real concerns since no natural free-market check exists against these practices. In fact, normal business incentives of dominant broadband providers push them toward discriminatory practices to maximize revenue.

***CCIA's Position*:** Basic rules regarding local access connections that preserve or enable household and small business connectivity are beneficial and often necessary where a truly competitive market is lacking. The lack of competition for critical physical local access connections cannot be ignored given the layered nature of the Internet and the fact that user access to everything online is dependent upon a physical network connection. Indeed, the National Broadband Plan (NBP) presented to Congress by the FCC in March cannot be substantially implemented without a clarification of precisely how the FCC's statutory authority over telecommunications applies to local broadband Internet access connections.

Despite the political polarization around this issue, middle ground exists between unbridled network operator discretion and minimal network management. Unfortunately, a high-level agreement between Google and Verizon on their mutual preference for light-handed regulatory approach does not include consensus on either procedural or substantive specifics. The current effort to explore and identify what is "reasonable network management" may narrow the differences that create such heated rhetoric on the subject of net neutrality. Of course, telephone and cable network operators need to employ legitimate network management techniques to ease congestion as they add new capacity. This is particularly true for wireless networks. However, as long as network owners have unbridled discretion to determine bandwidth, latency and throughput, while also employing techniques such as deep packet inspection and even forging of data packets, they can easily favor some users, services, applications, and content at the expense of others. Mandated disclosure of such practices might expose them for public scrutiny, but not cure the abuses. IAPs should be able to charge "bandwidth hogs" higher rates for using more capacity, but should not be free to block or delay traffic without notice.

The FCC must clarify and preserve the essential neutrality principles upon which the Internet was launched and now thrives. In the absence of a sufficiently competitive marketplace, it is better for broadband-based economic growth that no party needs to seek network operator permission to launch innovative online services. CCIA supports the creation of a Technical Advisory Board in which large network operators/IAPs proactively work with FCC engineers and representatives from smaller network operators, applications, content providers and end users to identify and limit unreasonable network management practices. This approach will avoid "surprise" FCC rulings on discriminatory practices after the fact. Neutrality and non-discrimination rules can be phased out if and when the duopoly local access situation abates. In the meantime, protecting the "downstream" free market (websites, content, applications, and services) should be the highest policy priority as it represents the best incubator of e-commerce innovation and freedom of expression.

***Current Status*:** In 2009, the Network Neutrality debate largely focused on the stimulus legislation ("The American Recovery and Reinvestment Act of 2009"). Opponents and proponents of network neutrality fought over whether non-discrimination requirements would be attached to broadband stimulus funds. The legislation included provisions designed to require recipients of grants from the Broadband Technology and Opportunity Program (BTOP) to adhere to the four principles delineated by the FCC in its 2005 Broadband Policy Statement. This condition proved not to be an investment deterrent, as the NTIA received a deluge of some 2,300 grant applications last summer in the first round alone.

The stimulus legislation also instructed the FCC, in conjunction with the NTIA and other government agencies, to prepare a comprehensive NBP. In its Notice of Inquiry, one of the many issues on which the Commission has asked for guidance is how to best implement a non-discrimination policy. The NBP was presented to Congress on March 16, 2010, but the FCC had already initiated a separate proceeding late last year aimed at "Preserving the Open Internet." The comment cycle in that proceeding is now complete and the matter will be ready for decision later this year. Spokesmen from some of the largest network operators are declaring "war" on the FCC proposals designed to protect consumers, entrepreneurs, small businesses and the "public interest" in Internet access. They say Congress should throw out the Telecom Act of 1996 and start over. This is a high-octane tantrum from special interests that may actually have the political clout to paralyze policymaking and lock in their 2005 deregulation, no matter the cost.