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ABSTRACT

OPEN INTERNET

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- *The Internet was built with American ingenuity on a foundation of openness. To sustain its social and economic benefits, the Internet must remain open.*
- *The Supreme Court's Brand X decision and subsequent FCC action stripped open access guarantees from cable broadband and DSL 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.*
- *End users' neutral access to applications, content, and services must be preserved. Policymakers should clarify basic infrastructure access rules to promote open Internet access competition and innovation at the network's edges.*

***Definition*:** Network neutrality is 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. The FCC adopted network neutrality principles in 2005, and ordered more specific non-discrimination rules for broadband access be applied to the post-merger AT&T/BellSouth in 2007 and beyond. These rules essentially mirror the status quo so that residential, small business, and rural end users are not disadvantaged or neglected in favor of higher volume customers. These rules do not constitute regulation of the Internet; they merely prevent monopoly and duopoly abuses in a country where users have at best two choices for broadband access to the Internet. The question is whether open Internet principles will be enforced only by the FCC, or mandated specifically by Congress.

***Background*:** The complexity of the Internet ecosystem, which involves the interaction of many different market segments (infrastructure, protocol, hardware, and application/content), means rhetorical slogans do not serve policymakers well in this area. In promoting universal affordable Internet access, Congress and the FCC must strike a delicate balance between consumer freedom and business model flexibility. As prominent Internet legal scholar Lawrence Lessig noted in his testimony before Congress, the Internet was born on and rapidly expanded over traditional phone lines. The Internet was launched in the 1980s 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 data traffic as voice conversations had been carried – free of blocking, delay, or degradation. Neutrality principles were inherent in the common carrier regulations that governed these networks until very recently.

The Supreme Court's *Brand X* decision accelerated the broadband access debate by removing open access requirements from cable modem service. The FCC subsequently released 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 digital data streams that must flow through their networks. New wireless technologies once offered hope for the future, but the FCC's 700 MHz auction of the most valuable remaining spectrum resulted in an incumbent sweep of new licenses and yielded no new competitors. White spaces could introduce competition in some markets, but the full potential is years from being tapped. 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 risk without an established customer base usually proves insurmountable.

As technologies improve and the ability to surreptitiously filter network traffic becomes a reality, network operators have begun taking initial steps to pick and choose winners and losers, citing various business and technical concerns or needs.

Network operators have the technical ability to block or interfere with "bit torrent" style file sharing involving competing video content, as Comcast already has. They could also censor legal speech or expression that they find objectionable.

Deep packet inspection technology allows network operators to become gatekeepers for digital data streams based on source or content if they so choose. These are real concerns since no natural free-market check exists against these practices. In fact, normal business incentives of the dominant broadband providers lead them to discriminatory practices. The weakening of antitrust enforcement in recent years only exacerbates this risk.

***CCIA's Position*:** Targeted, restrained regulation of local transport infrastructure to preserve or enable connectivity is beneficial and often necessary where a competitive market is absent. The lack of competition for critical physical local access connections cannot be ignored given the layered nature of the Internet and the need to protect innovation. Along with a plan to improve broadband deployment in unserved and underserved geographic areas, open Internet rules must become hallmarks of our national broadband policy.

Middle ground exists between unbridled network operator discretion and an absence of network management. An 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. Then again, as long as the network owners and not end users have complete discretion to determine bandwidth, latency and throughput, and to employ techniques like deep packet inspection and even forging of data packets, they can easily prioritize some users, services, applications, and content while disadvantaging others.

It is dangerous if the FCC does not enforce the neutrality principles upon which the Internet was launched. In the absence of a sufficiently competitive marketplace, it is better for broadband-based economic growth that a few large network operators seek FCC permission for certain network management practices than for innumerable end users, applications, and service innovators to have to seek network operators' permission to proceed. The regulatory burden will be minimal if the FCC acts quickly to define "unreasonable" network management. Neutrality and non-discrimination rules can be subject to sunset if and when the competitive local access situation improves. In the meantime, protecting the "downstream" free market (websites,

content, applications, and services) should be the highest policy priority as this represents the inherent value of the Internet.

***Current Status*:** This issue first rose to prominence when leading telecommunications executives intimated an intention to change traditional Internet access models so as to charge Internet software companies for access to supposed fast lanes on "their" pipes. In both the 109th and 110th Congresses, Senators Dorgan (D-ND) and Snowe (R-ME) introduced the "Internet Freedom Preservation Act" intended to restrict broadband access providers from discriminating among users and competitors by offering preferential treatment for higher fees. The bill was co-sponsored by Senators Boxer (D-CA), Clinton (D-NY), Harkin (D-IO), Leahy (D-VT), Sanders (I-VT), and then Senator Obama (D-IL). In 2007, the FCC initiated a notice of inquiry into "Broadband Industry Practices." In response to petitions from Free Press et al and Vuze, Inc., the FCC in early 2008 opened an inquiry into the matter of content blocking by cable network operator Comcast. Shortly thereafter, Congressmen Ed Markey (D-MA) and Chip Pickering (R-MS) introduced the "Internet Freedom Preservation Act of 2008" to establish broadband policy and direct the FCC to conduct public meetings around the country to assess competition and consumer choice in broadband Internet access services. Chairman John Conyers (D-MI) of 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. Conyers and Rep. Zoe Lofgren introduced the "Internet Freedom and Nondiscrimination Act of 2008" to establish an antitrust remedy for anticompetitive and discriminatory practices by broadband network operators. A major victory for the open Internet came on August 1, 2008, when the FCC ruled that Comcast violated U.S. Internet policy by deliberately discriminating against the Bit Torrent file-sharing application.

In 2009, the open Internet debate has largely concentrated around the stimulus legislation ("The American Recovery and Reinvestment Act of 2009") and whether non-discrimination requirements would be attached to broadband stimulus funds. The final language of the legislation included provisions designed to require recipients of grants from the NTIA Broadband Technology and Opportunity Program to adhere to the four principles delineated by the FCC in its 2005 Broadband Policy Statement. In theory, all broadband networks must abide by the principles outlined in the Commission's Broadband Policy Statement, but how these principles will be enforced is somewhat unclear. The applicability of these principles will be hotly debated this year, and the outcome of decisions regarding the FCC's authority to enforce the 2005 statement will shape the future openness of the Internet.

The Stimulus Legislation also instructed the FCC, in conjunction with the NTIA and other government agencies, to prepare a comprehensive National Broadband Plan. In its April 2009 Notice of Inquiry, one of the many issues on which the Commission has asked for guidance is how to best implement a policy of non-discrimination and ensuring access to open networks .