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Conference Paper

A layered and nuanced assessment of network neutrality rationales

8th Asia-Pacific Regional Conference of the International Telecommunications Society (ITS): "Convergence in the Digital Age", Taipei, Taiwan, 26th-28th June, 2011

Provided in Cooperation with:
International Telecommunications Society (ITS)

Suggested Citation: Frieden, Rob (2011) : A layered and nuanced assessment of network neutrality rationales, 8th Asia-Pacific Regional Conference of the International Telecommunications Society (ITS): "Convergence in the Digital Age", Taipei, Taiwan, 26th-28th June, 2011, International Telecommunications Society (ITS), Calgary

This Version is available at:
https://hdl.handle.net/10419/52321

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A Layered and Nuanced Assessment of Network Neutrality Rationales

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The United States Federal Communications Commission ("FCC") has issued a Report and Order that codifies rules to preserve a free and open Internet for consumers. [1] The Order concentrates on the relationship between end users and Internet Service Providers ("ISPs"), but also addresses how ISPs must treat upstream providers of content, applications and services. Judicial review whether the FCC has lawful jurisdiction to impose such network neutrality [2] obligations severely restricts any regulatory intervention. [3] Assuming the FCC may salvage some basis to proceed, the Commission would have the most difficulty attempting to impose network

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[1] Preserving the Open Internet, GN Docket No. 09-191, Report and Order, FCC 10-201 (rel. Dec. 23, 2010); available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-10-201A1.doc [hereinafter cited as *Open Internet Order*]; *See also*, Preserving the Open Internet, 24 F.C.C.R. 13064 (2009); 74 Fed. Reg. No. 228, 62637 (rel. Nov. 30, 2009) [hereinafter cited as *Open Internet NPRM*].

[2] Network neutrality refers to government mandated nondiscrimination, transparency and other requirements on ISPs designed to foster a level competitive playing field among content providers and to establish consumer safeguards so that Internet users have unrestricted access limited only by legitimate concerns such as ISP network management and national security. *See* Rob Frieden, *A Primer on Network Neutrality*, 43 INTERECONOMICS REV. EUR. ECON. POL'Y, No. 1, 4-15 (Jan./Feb. 2008).

[3] *See* Comcast Corp. v. FCC, 600 F.3d 642 (D.C. Cir. 2010), *available at* http://pacer.cadc.uscourts.gov/common/opinions/201004/08-1291-1238302.pdf (FCC deemed unable to bar Comcast from interfering with its customers' use of peer-to-peer networking applications, because the Commission failed to show how its claim of jurisdiction was reasonably ancillary to the effective performance of its statutorily mandated responsibilities)[hereinafter cited as Comcast Corp.].

neutrality obligations for services that ride "over the top" [4] of ISP traffic transmission links that eventually reach end users. While the FCC's public interest mandate may support some consumer protection regulatory safeguards against anticompetitive and discriminatory conduct of facilities-based ISPs, the Commission has no legal basis to regulate content providers and to meddle with the robustly competitive marketplace for content and services.

The FCC's initiative responds to concerns about the behavior of ISPs in their capacity as first and last mile providers of Internet access and as intermediaries between consumers and sources of content, applications and services. Empirical and anecdotal evidence [5] prompted the

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[4] "In the Open System Interconnection ('OSI') model, layered network architecture for packet networks typically consists of seven layers: physical, data link, network, transport, session, presentation and application. The model calls for the independent operation of the layers, and supports the interaction of various applications and equipment that is designed to address separately each layer in a product offering. In the Transport Control Protocol ('TCP')-IP model, only four levels are used: link (combines OSI physical and data link levels), network, transport and application (combines OSI session, presentation and application levels). The functions supported at each layer are as follows: *physical*–represents electrical signaling, modulation, etc.; *data link*–moves packets (also called 'datagrams') between hosts based on a protocol such as Ethernet, Asynchronous Transfer Mode, frame relay; *network*–defines how data is routed between hosts over one or several networks, often based on IP; *transport*–establishes the connection between two hosts, creating a 'virtual' network, often based on TCP or Universal Datagram Protocol; *session*–controls the setup and termination of communications sessions; *presentation*–defines the format of the data exchanged (*e.g.*, text, graphic); *application*–defines how applications communicate with each other over the network (*e.g.*, e-mail) using various protocols." Communications Assistance for Law Enforcement Act and Broadband Access and Services, 19 F.C.C.R. 15676 n.181 (2004). *See also* Joshua L. Mindel & Douglas C. Sicker, *Leveraging the EU Regulatory Framework to Improve a Layered Policy Model for US Telecommunications Markets*, 30 TELECOMM. POL'CY 136, 137 (2006); Douglas C. Sicker & Lisa Blumensaadt, *Misunderstanding the Layered Model(s)*, 4 J. ON TELECOMM. & HIGH TECH. L. 299 (2006); David P. Reed, *Critiquing the Layered Regulatory Model*, 4 J. ON TELECOMM. & HIGH TECH. L. 281 (2006); Lawrence B. Solum & Minn Chung, *The Layers Principle: Internet Architecture and the Law*, 79 NOTRE DAME L. REV. 815 (2004); Richard S. Whitt, *A Horizontal Leap Forward: Formulating a New Communications Public Policy Framework Based on the Network Layers Model*, 56 FED. COMM. L.J. 587 (2004).

[5] Madison River Communications, LLC, 20 F.C.C.R. 4295, 4297 (2005) (small independent telephone company agreed to a $15,000 monetary forfeiture and consent decree agreeing not to block Digital Subscriber Link customers' access to Voice over the Internet Protocol telephone services); Formal Complaint of Free Press & Public Knowledge Against Comcast Corporation for

FCC to consider the need for enforceable rules to ensure that ISPs do not engage in anticompetitive behavior masquerading as legitimate network management, or otherwise reduce the positive spillover benefits accruing from Internet access. [6] However, no such evidence points to any dysfunction in the marketplace for content, applications and services available via the Internet.

The marketplace of ideas available via the Internet is as vigorous and open as any medium of communications so long as facilities-based intermediaries cannot use the excuse of network management requirements to pursue anticompetitive and harmful strategies that interfere with the flow of traffic upstream from content sources and downstream to end users. The FCC and other national regulatory authorities ("NRAs") have acknowledged the different characteristics of network access vis-á-vis the content and applications that ride over ISP transmission links. While the content and applications marketplace offers unlimited options, consumers may have only one or two viable broadband Internet access options. [7]

Secretly Degrading Peer-to-Peer Applications, Memorandum Opinion and Order, 23 F.C.C.R. 13028 (2008), *rev'd*, *Comcast Corp.*, *supra*, n. 3.

[6] Spillovers refers to positive consequences, externalities in the economic vernacular, resulting from a specific transaction that benefits third parties. *See* Brett M. Frischmann, *Speech, Spillovers, and the First Amendment*, 2008 U. CHI. LEGAL F. 301, 310-12 (2008). Brett M. Frischmann & Mark A. Lemley, *Spillovers*, 107 COLUM. L. REV. 257 (2007).

[7] *See* John B. Horrigan, *Broadband Adoption and Use in America*, Federal Communications Commission, Omnibus Broadband Initiative (OBI) Working Paper Series No. 1 (Feb. 2010), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296442A1.pdf; The Consumer Survey found that 35 percent of adult Americans do not have high-speed Internet connections at home -- or approximately 80 million adults and 13 million children over the age of five. For the 65 percent with Internet access, the vast majority use a cable modem or Digital Subscriber Line connection. "The simple fact is that our broadband market is a duopoly. Nationwide, incumbent phone and cable companies control 97 percent of the fixed-line residential broadband market. When the mobile data market is included, the incumbent phone and cable companies' nationwide market share only declines to 95 percent . . . ." Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, GN,

NRAs and national legislatures need to act with caution in their assessment of what should be done to preserve an open Internet, because statutory authority typically limits the degree of lawful regulation of Internet services. The potential for anticompetitive and otherwise harmful conduct lies in the terms and conditions that ISPs can impose where a vigorously competitive marketplace for their services does not exist. Facilities-based ISPs have both the incentive and ability to operate non-neutral networks that may not serve the public interest, particularly with respect to their ability to provide content origination and termination services facing limited competition coupled with the fact that end users typically rely on only one carrier to provide a single link to and from the Internet cloud. [8]

The need to investigate and possibly remedy problems in the terms, conditions and nature of consumers' access to the Internet does not provide the FCC with the basis for an unprecedented expansion of its regulatory wingspan to regulate content and applications that traverse networks. Ample case law supports the premise that the FCC has no basis to impede and regulate Internet-mediated content and services. The FCC has questionable authority even to remedy discriminatory and intrusive meddling of subscribers' links to and from sources of content. Network neutrality objectives never have extended upstream to sources of content and software,

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Docket No. 09-137, Comments of Free Press at 46 (Sep. 4, 2009) *available at* http://www.ncta.com/PublicationType/RegulatoryFiling /NCTA-Comments-11-12-09.aspx.

[8] The Internet cloud refers to the vast array of interconnected networks that make up the Internet and provide users with seamless connectivity to these networks and the content available via these networks. "The increasing functionality of the Internet is decreasing the role of the personal computer. This shift is being led by the growth of 'cloud computing'--the ability to run applications and store data on a service provider's computers over the Internet, rather than on a person's desktop computer." William Jeremy Robison, *Free at What Cost?: Cloud Computing Privacy Under The Stored Communications Act*, 98 GEO. L.J. 1195, 1199 (April, 2010).

because consumers have ample options, subject only to the constraints imposed by ISPs in their capacity as intermediaries and operators of the sole means for end users to access the Internet.

The often contentious network neutrality debate typically cleaves along an absolute for-or-against dichotomy based largely on one's philosophy about the Internet's past and future direction, the ability of marketplace forces to promote self-regulation and the degree of confidence in governments' ability to remedy acute problems. Thoughtful scholarly literature, which can examine nuances in the debate, has become subordinate to sponsored research designed to influence policymakers with a preconceived point of view. A "big picture" analysis ironically leads to viewpoints at polar opposites and advocacy that finds no middle ground.

The issue of whether the Internet requires some degree of government oversight, dispute resolution and stewardship requires serious consideration, rather than sloganeering and dueling web pages. [9] An essential element for such analysis breaks down the Internet into at least three layers having different characteristics that can affect the arguments for or against the application of network neutrality rules. A physical layer provides the infrastructure needed to establish a basic communications link between two or more parties. Ridding on top of this basic bitstream transmission conduit are communications protocols and standards like the Transmission Control Protocol that manage the routers that select networks to carry traffic and the Internet Protocol that establishes a globally used addressing system. Farther atop the physical layer and the layers that set up and process transmissions are the content, applications and software that provide various services.

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[9] *Compare* Save the Internet Home Page, http://www.savetheinternet.com/ with Net Competition.Org Home Page, http://www.netcompetition.org/.

This paper will consider the network neutrality debate in the context of these three different layered components of the Internet. The paper will show that compelling arguments for enforceable network neutrality rules are strongest at the low layer, contestable at the middle layer and unnecessary at the high layer. Such a nuanced view of network neutrality explains that the need for government involvement depends on which part of the Internet's networking infrastructure one examines. For those comfortable with government involvement and network neutrality rules, this paper will challenge the need for such oversight in the competitive marketplace for Internet-mediated content, applications and software. For others uncomfortable with any government involvement, this paper will identify instances where market failure and the lack of competition necessitate the availability of an authorized referee to require fair dealing by a limited number of operators providing Internet access. In the middle layers, where ISPs not only use protocols and technologies to manage their networks, but possibly also to favor corporate affiliates and certain third party providers of content, this paper suggests the need for a government referee authorized to resolve disputes and to examine causes of congestion and service interruptions.

I. A Controversial Extension of Regulatory Oversight

Ostensibly structured to offer an acceptable compromise the FCC's *Open Internet Order* imposes basic network neutrality obligations on ISPs [10] with qualified exceptions made for reasonable network management, [11] specialized services [12] and wireless broadband access. [13]

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[10] Specifically the FCC imposes rules on the providers of broadband Internet access service, defined as a "mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints, including any capabilities that are incidental to and enable the operation of the communications service, but excluding dial-up Internet access service. This term also encompasses any service that the Commission finds to be providing a functional equivalent of the service described in the previous sentence, or that is used to evade the protections set forth in this Part." *Open Internet Order* at ¶44.

The transparency requirement obligates all ISPs to disclose their network management practices, performance characteristics and terms and conditions of their broadband services. [14] The FCC adopted different requirements for fixed and mobile broadband providers on the other two key requirements. Fixed providers may not block lawful content, applications, services, or non-harmful devices while mobile broadband providers may not block access to lawful websites, or applications that compete with their voice or video telephony services. [15] On the other key

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[11] "A network management practice is reasonable if it is appropriate and tailored to achieving a legitimate network management purpose, taking into account the particular network architecture and technology of the broadband Internet access service." *Id*. at ¶82.

[12] "'[S]pecialized services,' such as some broadband providers' existing facilities-based VoIP and Internet Protocol-video offerings, differ from broadband Internet access service . . .." *Id*. at ¶112. "We will closely monitor the robustness and affordability of broadband Internet access services, with a particular focus on any signs that specialized services are in any way retarding the growth of or constricting capacity available for broadband Internet access service. We fully expect that broadband providers will increase capacity offered for broadband Internet access service if they expand network capacity to accommodate specialized services. We would be concerned if capacity for broadband Internet access service did not keep pace. We also expect broadband providers to disclose information about specialized services' impact, if any, on last-mile capacity available for, and the performance of, broadband Internet access service. We may consider additional disclosure requirements in this area in our related proceeding regarding consumer transparency and disclosure." *Id*. at ¶114.

[13] Despite the likelihood that wireless network access will grow and perhaps become the primary way people access the Internet, the FCC established relaxed anti-blocking rules based on spectrum and operational limitations not applicable to wire-based networks. "A person engaged in the provision of mobile broadband Internet access service, insofar as such person is so engaged, shall not block consumers from accessing lawful websites, subject to reasonable network management; nor shall such person block applications that compete with the provider's voice or video telephony services, subject to reasonable network management." *Id*. at ¶99.

[14] *Id*. at ¶1. "A person engaged in the provision of broadband Internet access service shall publicly disclose accurate information regarding the network management practices, performance, and commercial terms of its broadband Internet access services sufficient for consumers to make informed choices regarding use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings." *Id*. at ¶54.

[15] "A person engaged in the provision of fixed broadband Internet access service, insofar as such person is so engaged, shall not block lawful content, applications, services, or non-harmful devices, subject to reasonable network management." Id. at ¶63.

requirement fixed broadband providers may not unreasonably discriminate in transmitting lawful network traffic while mobile carriers face a general no blocking rule that guarantees end users' access to the web and protects against mobile broadband providers' blocking applications that compete with their other primary service offering—voice and video telephony. [16]

The *Open Internet Order* rejects assertions that network neutrality requirements would stifle innovation, reduce incentives to invest in network infrastructure and reduce employment in the Internet economy:

> We believe these rules, applied with the complementary principle of reasonable network management, will empower and protect consumers and innovators while helping ensure that the Internet continues to flourish, with robust private investment and rapid innovation at both the core and the edge of the network. This is consistent with the National Broadband Plan goal of broadband access that is ubiquitous and fast, promoting the global competitiveness of the United States. [17]

In light of strident dissents from the two Republican Commissioners, the *Open Internet Order* appears to emphasize that the final rules logically follow from the nonpartisan consensus reached in 2005, [18] and do not violate the Constitution,[19] particularly First Amendment expression

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[16] *Id*. at ¶99.

[17] *Id*. at ¶1.

[18] "The rules we proposed in the *Open Internet NPRM* and those we adopt today follow directly from the Commission's bipartisan *Internet Policy Statement*, adopted unanimously in 2005 and made temporarily enforceable for certain broadband providers in 2005 and 2007; openness protections the Commission established in 2007 for users of certain wireless spectrum; and a notice of inquiry in 2007 that asked, among other things, whether the Commission should add a principle of nondiscrimination to the *Internet Policy Statement*. Our rules build upon these actions, first and foremost by requiring broadband providers to be transparent in their network management practices, so that end users can make informed choices and innovators can develop, market, and maintain Internet-based offerings. The rules also prevent certain forms of blocking and discrimination with respect to content, applications, services, and devices that depend on or connect to the Internet." *Id*. at ¶5(citations omitted).

rights of ISPs and the Fifth Amendment prohibition on government confiscation of property without compensation.

Additionally the *Open Internet Order* extensively attempts to demonstrate that the FCC has lawful jurisdiction to promulgate network neutrality rules, primarily because Congress, in Section 706 of the Telecommunications Act, authorized the Commission to take all reasonable steps to promote widespread access to the Internet. [20] In light of the D.C. Circuit Court of Appeals reversal of the FCC's sanctioning Comcast for violating network neutrality principles, the Commission must establish clear and direct statutory authority to impose new rules. The Commission heavily relies on Section 706 of the Telecommunications Act which does not explicitly authorize regulation and rule making. The FCC infers that the duty to encourage the deployment of "advanced telecommunications capability" authorizes the Commission to use whatever tools it considers necessary to achieve timely progress. [21]

The assumption of statutory authority requires two novel reinterpretations of the definition for telecommunications contained in the Communications Act, as amended. First, the FCC has to consider advanced telecommunications capability to include Internet access, [22] despite having

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[19] *See Id*. at ¶¶138-150.

[20] *See Id*. at ¶¶115-137.

[21] "As noted, Section 706 of the 1996 Act directs the Commission (along with state commissions) to take actions that encourage the deployment of 'advanced telecommunications capability.' . . . Under Section 706(a), the Commission must encourage the deployment of such capability by 'utilizing, in a manner consistent with the public interest, convenience, and necessity,' various tools including "measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment." *Id*. at ¶117.

[22] "'[A]dvanced telecommunications capability,'" as defined in the statute, includes broadband Internet access." *Id*. at ¶¶117, *citing* 47 U.S.C. § 1302(d)(1) (defining "advanced telecommunications capability" as "high-speed, switched, broadband telecommunications

previously concluded that the technologies providing such access constitute an insignificant factor when the Commission determined that cable modem service fit within the information service classification. [23] Second, the FCC now has to elevate the significance of the telecommunications bit transmission function in Internet access [24] to trigger public interest concerns about competition and anticompetitive practices having previously subordinated it so that the Commission could provide an unregulated "safe harbor" for all Internet access technologies including cable modem service, [25] Digital Subscriber Lines, [26] Broadband over Power Lines [27] and wireless services. [28]

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capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology"); National Broadband Plan for our Future, Notice of Inquiry, 24 FCC Rcd 4342, 4309, App. para. 13 (2009) ("advanced telecommunications capability" includes broadband Internet access); Inquiry Concerning the Deployment of Advanced Telecomms. Capability to All Americans in a Reasonable and Timely Fashion, 14 F.C.C.R. 2398, 2400 (Section 706 addresses "the deployment of broadband capability").

[23] *See* Nat'l Cable & Telecomm. Ass'n v. Brand X Internet Servs., 545 U.S. 967, 977–78 (2005)[hereinafter cited as Brand X].

[24] Note that before the FCC deregulated Internet access, the Commission considered it possible to separate the telecommunications component: "We conclude that advanced services are telecommunications services. The Commission has repeatedly held that specific packet-switched services are 'basic services,' that is to say, pure transmission services. xDSL and packet switching are simply transmission technologies. . . . An enduser may utilize a telecommunications service together with an information service, as in the case of Internet access. In such a case, however, we treat the two services separately: the first service is a telecommunications service (e.g., the xDSL-enabled transmission path), and the second service is an information service, in this case Internet access." Deployment of Wireline Services Offering Advanced Telecommunications Capability, Memorandum Opinion and Order, and Notice of Proposed Rulemaking 13 F.C.C.R. 24012, 24029-30 (1998).

[25] Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, 17 F.C.C.R. 4798 (2002), *affirmed sub nom*. Nat'l Cable & Telecomm. Ass'n v. Brand X Internet Servs., 545 U.S. 967, 977–78 (2005).

[26] Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, Report and Order and Notice of Proposed Rulemaking, 20 F.C.C.R. 14853 (2005) *pet. for review den.*, Time Warner Telecom, Inc. v. FCC, 507 F.3d 205 (3d Cir. 2007).

Now the FCC wants to validate the telecommunications component as the driver for public interest regulatory safeguards.

Despite having previously concluded that the broadband marketplace was robustly competitive and close to ubiquitous, the Commission now cites to more recent market penetration data to support its involvement:

> Section 706(b) of the 1996 Act provides additional authority to take actions such as enforcing open Internet principles. It directs the Commission to undertake annual inquiries concerning the availability of advanced telecommunications capability to all Americans and requires that, if the Commission finds that such capability is not being deployed in a reasonable and timely fashion, it "*shall take immediate action* to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market." In July 2010, the Commission "conclude[d] that broadband deployment to *all* Americans is not reasonable and timely" and noted that "[a]s a consequence of that conclusion," Section 706(b) was triggered. Section 706(b) therefore provides express authority for the pro-investment, pro-competition rules we adopt today. [29]

Additionally the FCC invokes elements of Title II, III and Title VI of the Communications Act of 1934, as amended, to authorize regulation of ISPs even though they qualify for the largely unregulated statutory classification of information service providers and not telecommunications service providers for which Title II applies. Instead of stating that ISPs operate as telecommunications service carriers when they provide essential first and last mile access to the

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[27] United Power Line Council's Petition for Declaratory Ruling Regarding the Classification of Broadband Over Power Line Internet Access Service as an Information Service, Memorandum Opinion and Order, 21 F.C.C.R. 13281 (2006).

[28] Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks, WT Docket No. 07-53, Declaratory Ruling, 22 F.C.C.R. 5901(2007).

[29] *Open Internet Order* at ¶123.

Internet—a scenario suggested by FCC Chairman Julius Genachowski [30] and now apparently rejected—the Open Internet Order states that because some Internet-based services compete with traditional telephone, broadcast and video services, the Commission has jurisdiction to impose rules and regulations to prevent anticompetitive practices and to promote competition.

The FCC justifies imposing network neutrality rules on ISPs based on the Commission's conclusion that ISPs have the incentive and ability to engage in anticompetitive practices that limit Internet openness in terms of content, applications, services and devices accessed over, or connected to broadband Internet access service. The Commission provides three examples suggesting that ISPs may have incentives to block or degrade content that competes with that offered by the ISP or an affiliate, to impose surcharges on competing content providers in addition to end user subscription fees and to degrade competitors' traffic:

1) "[B]roadband providers may have economic incentives to block or otherwise disadvantage specific edge providers or classes of edge providers, for example by controlling the transmission of network traffic over a broadband connection, including the price and quality of access to end users. A broadband provider might use this power to benefit its own or affiliated offerings at the expense of unaffiliated offerings." [31]

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[30] FCC Chairman Julius Genachowski, The Third Way: A Narrowly Tailored Broadband Framework (May 6, 2010), available *at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-297944A1.doc (proposing to apply Title II regulation only to the bit transmission portion of ISP services and rejecting a renewed attempt to find a way to extend Title I ancillary jurisdiction or reclassifying all aspects of Internet access as a telecommunications service); Austin Schlick, FCC General Counsel, A Third-Way Legal Framework for Addressing the Comcast Dilemma (May 6, 2010) *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-297945A1.doc (providing legal rationale for narrow application of selected sections of Title II regulatory authority over Internet access).

[31] *Open Internet Order* at ¶21.

2) "[B]roadband providers may have incentives to increase revenues by charging edge providers, who already pay for their own connections to the Internet, for access or prioritized access to end users. Although broadband providers have not historically imposed such fees, they have argued they should be permitted to do so. A broadband provider could force edge providers to pay inefficiently high fees because that broadband provider is typically an edge provider's only option for reaching a particular end user. Thus broadband providers have the ability to act as gatekeepers." [32]

3) "[I]f broadband providers can profitably charge edge providers for prioritized access to end users, they will have an incentive to degrade or decline to increase the quality of the service they provide to non-prioritized traffic. This would increase the gap in quality (such as latency in transmission) between prioritized access and non-prioritized access, induce more edge providers to pay for prioritized access and allow broadband providers to charge higher prices for prioritized access. Even more damaging, broadband providers might withhold or decline to expand capacity in order to "squeeze" non-prioritized traffic, a strategy that would increase the likelihood of network congestion and confront edge providers with a choice between accepting low-quality transmission or paying fees for prioritized access to end users. [33]

The FCC considers the three examples of discrimination as more than theoretical in light of actual examples where ISPs, such as Comcast, blocked or degraded traffic without legitimate

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[32] *Id*. at ¶24.

[33] *Id*. at ¶29.

network management concerns. Similarly the Commission states that the benefits in guarding against such anticompetitive practices outweighs the costs. [34]

II. Absent a New Legislative Mandate, the FCC Lacks Certain Jurisdiction to Regulate All Layers of Internet-Mediated Services.

Throughout the FCC's comprehensive explanation of how the Internet has become a successful medium of communication, along with the Commission's efforts to promote access, the FCC has concentrated on the relationship of end users upstream to the Internet cloud via facilities-based ISPs:

> The rules we propose today address users' ability to access the Internet and are not intended to regulate the Internet itself or create a different Internet experience from the one that users have come to expect. Instead, our proposals attempt to build on existing policies . . . that have contributed to the Internet's openness without imposing conditions that might diminish innovation or network investment. [35]

Wisely, the FCC has left the application and content layers essentially unregulated. This has helped enable an incredible outpouring of innovation and creativity online.

However, as part of its *Open Internet NPRM*, the FCC asked whether it should depart from this approach and apply openness principles to Internet content and applications as well. The FCC cannot lawfully extend its regulatory wingspan to impose enforceable rules and regulation for two

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[34] "By comparison to the benefits of these prophylactic measures, the costs associated with the open Internet rules adopted here are likely small. Broadband providers generally endorse openness norms—including the transparency and no blocking principles—as beneficial and in line with current and planned business practices (though they do not uniformly support rules making them enforceable) Even to the extent rules require some additional disclosure of broadband providers' practices, the costs of compliance should be modest." *Id*. at ¶39.

[35] *Open Internet NPRM*, 24 F.C.C.R. at 13068. "Broadband Internet access service providers have an incentive to use this gatekeeper role to make it more difficult or expensive for end users to access services competing with those offered by the network operator or its affiliates." *Id*. at 13094.

primary reasons. First, the D.C. Circuit Court's opinion in *Comcast Corp. v. FCC* severely limits any extension of ancillary jurisdiction [36] toward Internet-mediated information services, [37] despite evidence of congressional intent and a broad public interest mandate that may support reasonable efforts to promote consumer freedom by overseeing the conduct of facilities-based ISPs. Second, any residual legal or policy rationale for regulating ISPs that survives the *Comcast* decision does not apply to content and application providers.

Operators at the network level provide an essential link between ends users and sources of content and applications. Consumers generally have limited options available and typically select one and only one operator to provide all access services. The lack of competitive options, coupled

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[36] The FCC relies on a claim of ancillary jurisdiction when the Commission lacks explicit statutory authority. The FCC successfully invoked ancillary jurisdiction to regulate cable television even before the Commission received a statutory mandate to do so. "The FCC needed a hook to assert jurisdiction over cable. To reach that goal, it used a two-step process. First, the Commission found that cable was within its primary statutory grant of authority under section 152(a) of the [Communications] Act, which allows the FCC to regulate 'all interstate and foreign communication by wire or radio.' Second, the FCC invoked section 303(r) of the Act, which allows the Commission to issue 'such rules and regulations and prescribe such restrictions and conditions, not inconsistent with law,' as 'public convenience, interest, or necessity requires.' The FCC also referenced section 154(i), which provides that '[t]he Commission may perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with [the Communications Act], as may be necessary in the execution of its functions.' Kevin Werbach, *Off the Hook*, 95 CORNELL L. REV. 535, 572 (Mar. 2010) (citations omitted). The Supreme Court affirmed the FCC's claim of ancillary jurisdiction. United States v. Sw. Cable Co., 392 U.S. 157 (1968). *See also* FCC v. Midwest Video Corp. (Midwest Video II), 440 U.S. 689 (1979); United States v. Midwest Video Corp. (Midwest Video I), 406 U.S. 649 (1972); James B. Speta, *The Shaky Foundations of the Regulated Internet*, 8 J. TELECOMM. & HIGH TECH. L. 101 (Winter 2010); John Blevins, *Jurisdiction as Competition Promotion: A Unified Theory of the FCC's Ancillary Jurisdiction*, 36 FLA. ST. U. L. REV. 585 (Summer 2009); Andrew Gioia, *FCC Jurisdiction Over ISPs in Protocol-Specific Bandwidth Throttling*, 15 MICH. TELECOMM. & TECH. L. REV. 517 (Spring 2009).

[37] Information service is defined as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service." 47 U.S.C. § 153(20) (2010).

with sole reliance on one origination and termination carrier for most individual subscribers, accrues ample market power for ISPs that possess both the incentive and ability to abuse this power, particularly when vertically integrated ISPs offer content and applications that compete with what unaffiliated ventures have available.

The FCC has no basis to depart from its longstanding policy that recognizes the competitive and operational distinctions between facilities-based providers and those services that depend on networks to reach end-users. Consistent with its statutory mandates, the Commission could apply regulatory oversight where facilities-based, first and last-mile providers have the incentive and power to use their control in network infrastructure in ways that could interfere with competition and innovation in services that depend on this infrastructure. Content and applications, riding on top of network links, qualify for non-regulation in light of the fact that these layers operate competitively and must rely on the telecommunications services [38] of carriers possibly subject to regulatory oversight. Ventures offering content and applications operate in a robustly competitive marketplace, limited only by the network bottleneck through which all content and applications must traverse. Applying network neutrality principles to the vibrant application and content markets would endanger the open Internet because of the real potential for such regulations to stifle innovation, create disincentives for investment and impose unnecessary operating costs.

In the absence of a new statutory mandate to impose network neutrality rules, the FCC must find a jurisdictional basis in existing law. The Commission primarily has applied its ancillary jurisdiction based on Title I of the Communications Act, coupled with the view that other portions of the Communications Act provide the statutory basis for affirmative efforts to promote access to

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[38] Telecommunications service is defined as "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used." 47 U.S.C. § 153(46) (2010).

the Internet. In light of the *Comcast* decision, a reasonable reading of these statutory references would limit their applicability to ventures that operate wire or radio conduits as telecommunications service providers and not to information service providers, or suppliers of Internet-mediated content, software and services. Nothing in the statutory provisions cited by the FCC to justify its regulatory intervention to promote an "open" Internet provides any basis for the Commission to extend its regulatory reach to ventures supplying the content delivered by unaffiliated ISPs.

Lower down in the layers that combine to create Internet services, the FCC might reclassify Internet access as a telecommunications service, subject to portions of the available regulations contained in Title II of the Communications Act. Such a reclassification surely will trigger an onslaught of lobbying and litigation, [39] but it need not impose burdensome government oversight. The FCC has a congressionally authorized procedure for streamlining common carrier oversight in light of precompetitive marketplace conditions that support the use of "light-handed" regulation. [40]

A. The Commission's Statutory Basis for Applying Network Neutrality Rules (including Title I, Secs. 201(b), 230(b) and 706(a)) Extend Only to Ventures that Provide Internet Access via Wire or Radio.

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[39] *See, e.g.*, Edward Wyatt, *F.C.C. Proposes Rules on Internet Access*, N.Y. TIMES, May 7, 2010, at B3, *available at* http://www.nytimes.com/2010/05/07/technology/07broadband.html.

[40] 47 U.S.C. § 160(a) (2009) establishes regulatory forbearance criteria for telecommunications service providers. The FCC can abandon most Title II common carrier regulatory requirements if it determines that: (1) enforcement of such regulation or provision is not necessary to ensure that the charges, practices, classifications, or regulations by, for, or in connection with that telecommunications carrier or telecommunications service are just and reasonable and are not unjustly or unreasonably discriminatory; (2) enforcement of such regulation or provision is not necessary for the protection of consumers; and (3) forbearance from applying such provision or regulation is consistent with the public interest.

The FCC recognizes that facilities-based ISPs, operating between end users downstream and content providers upstream, have the incentive and ability to engage in practices [41] that can frustrate the Internet access goals of both subscribers and content providers, as well as broader public interest objectives:

> In many parts of the United States, customers have limited options for high-speed broadband Internet access service. Moreover, broadband providers generally sell other services—such as voice and video—that face competition from content and applications offered by others over the Internet. As a result, broadband providers' interests in maximizing profits may not always align with the interests of end users and the public. [42]
>
> Broadband Internet access service providers possessing market power may have an incentive to raise prices charged to content, application, and service providers and end users. Not only would that harm users overall, but it could reduce innovation at the edge of the network and cause some end users to decide not to subscribe to broadband Internet access service. [43]

While acknowledging that it "has traditionally focused on providers of broadband Internet access service," [44] the FCC nevertheless invited comments on the merits of "phrasing one or more of the

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[41] "[E]ven if there is competition among broadband Internet access service providers, once an end-user customer has chosen to subscribe to a particular broadband Internet access service provider, this may give that broadband Internet access service provider the ability, at least in theory, to favor or disfavor any traffic destined for that subscriber." *Open Internet NPRM*, 24 F.C.C.R. at 13094.

[42] *Id*. at 13067. The Commission also noted: "The evolution in Internet usage, and associated developments in network technology, have respectively motivated and enabled network operators to differentiate price and service for end users and for providers of content, applications, and services. A significant debate has developed over how best to preserve the Internet's openness. We thus find it appropriate at this time to evaluate the need for oversight of broadband Internet access service providers' practices." *Id*. at 13084.

[43] *Id*. at 13093.

[44] *Id*. at 13103 (*citing* Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, 20 F.C.C.R. 14986, 14988 (2005); 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; Computer III Further Remand Proceedings: Bell Operating

Internet openness principles as obligations of other entities, in addition to providers of broadband Internet access service." [45]

Simply put, the FCC lacks any jurisdictional basis or compelling public interest need to impose Internet openness principles or network neutrality rules on providers of content. Even regulation of lower-layer functions will require the Commission to explain how Internet access has become the functional equivalent to essential public utility-type telecommunications service and not optional and presumably competitive information services. None of the statutory clauses cited by the Commission to support its assertion of jurisdiction over ISPs can stretch further to include content providers. The D.C. Circuit Court of Appeals did not consider them the basis for even lower layer regulation. [46] The FCC does not have open-ended jurisdiction to regulate content, nor

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Company Provision of Enhanced Services; 1998 Biennial Regulatory Review—Review of Computer III and ONA Safeguards and Requirements; Conditional Petition of the Verizon Telephone Companies for Forbearance Under 47 U.S.C. § 160(c) with Regard to Broadband Services Provided Via Fiber to the Premises; Petition of the Verizon Telephone Companies for Declaratory Ruling or, Alternatively, for Interim Waiver with Regard to Broadband Services Provided Via Fiber to the Premises; Consumer Protection in the Broadband Era, CC Docket Nos. 02-33, 95-20, 98-10, 01-337, WC Docket Nos. 04-242, 05-271, Report and Order and Notice of Proposed Rulemaking, 20 F.C.C.R. 14853, 14904 (2005), *aff'd*, Time Warner Telecom, Inc. v. FCC., 507 F.3d 205 (3d Cir. 2007).

[45] *Open Internet NPRM*, 24 F.C.C.R. at 13104. The FCC appears to make this request at the recommendation of a single ISP even though the Commission acknowledges that the *2005 Internet Policy Statement*, which contains principles the Commission now wants to establish as rules, "was placed in five already-opened dockets dealing with issues relating to Internet access service providers, but it was not placed in the docket most likely to address content, applications, and services—the *IP-Enabled Services* [19 F.C.C.R. 4863 (2004)] docket." *Id*. at n.223.

[46] "We have ancillary jurisdiction over matters not directly addressed in the Act when the subject matter falls within the agency's general statutory grant of jurisdiction and the regulation is 'reasonably ancillary to the effective performance of the Commission's various responsibilities.' That test is met with respect to broadband Internet access service." *Open Internet NPRM*, 24 F.C.C.R. at 13099 (*quoting* United States v. Sw. Cable Co., 392 U.S. 157, 172–73 (1968) (citing United States v. Midwest Video Corp., 406 U.S. 649, 662 (1972)). *See also* Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-

does a claim to regulate aspects of Internet-mediated communications and information services automatically extend to content carried via Internet conduits.

Similarly, the FCC cannot credibly read the language in Sections 230(b) and 201(b) of Communications Act, as amended, and Section 706(a) [47] of the Telecommunications Act of 1996 [48] as extending the Commission's regulatory wingspan over any Internet-mediated content. Section 230(b)(1) states that it "is the policy of the United States . . . to promote the continued development of the Internet and other interactive computer services and other interactive media . . . ." [49] Section 230(b)(2) states that it "is the policy of the United States . . . to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, " [50] which is hardly an explicit or implicit endorsement of FCC regulation that could impact adversely the currently vibrant and free marketplace of ideas available via the Internet. [51] Section 201(b) of the Communications Act authorizes the FCC to "prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this

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Peer Applications, 23 F.C.C.R. 13028, 13033-44 (2008). But *cf.* Comcast Corp., *supra* n. 3. (rejecting the FCC's extension of ancillary jurisdiction absent a direct statutory link).

[47] *Codified at* 47 U.S.C. § 1302(a).

[48] Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996).

[49] 47 U.S.C. § 230(b)(1).

[50] 47 U.S.C. §230(b)(2).

[51] "The dramatic expansion of this new marketplace of ideas . . . demonstrates that the growth of the Internet has been and continues to be phenomenal. As a matter of constitutional tradition, in the absence of evidence to the contrary, we presume that governmental regulation of the content of speech is more likely to interfere with the free exchange of ideas than to encourage it. The interest in encouraging freedom of expression in a democratic society outweighs any theoretical but unproven benefit of censorship." Reno v. ACLU, 521 U.S. 844, 885 (1997).

chapter." [52] The FCC cannot lawfully bootstrap a statutory grant of authority to establish rules for any substantive area outside the Commission's jurisdiction.

Section 706(a) of the Telecommunications Act of 1996 directs the FCC and state public utility commissions to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest, convenience and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment." [53] Congress defined advanced telecommunications capability "without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics and video telecommunications using any technology." [54] The statute clearly focuses on promoting access to the Internet, i.e., the wire and radio facilities used by ISPs to provide first and last mile Internet access to end users and to provide these users with the upstream links into the Internet cloud for accessing content, applications and services. Any statutory mandate that the FCC may construe as authorizing it to regulate the Internet has explicit limits designed to narrow FCC oversight to enhancing public access to Internet conduits, whether classified as telecommunications services or information services.

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[52] 47 U.S.C. § 201(b). *See also* Alliance for Community Media v. FCC, 529 F.3d 763, 772–74 (6th Cir. 2008), *cert. denied*, 129 S. Ct. 2821 (2009); AT&T Corp. v. Iowa Utilities Bd., 525 U.S. 366 (1999).

[53] 47 U.S.C. § 1302(a).

[54] 47 U.S.C. § 1302(d)(1).

B. The D.C. Circuit Court of Appeals Rejected the FCC's Ancillary Jurisdiction Rationale.

In rejecting the FCC's attempt to sanction Comcast for interfering with subscribers' peer-to-peer traffic absent legitimate network management requirements, the D.C. Circuit Court of Appeals severely sidetracked the Commission's attempt to establish binding network neutrality policies, rules and regulations absent an explicit legislative mandate. Noting that the Commission invoked no express statutory authority, the court considered whether "barring Comcast from interfering with its customers' use of peer-to-peer networking applications is 'reasonably ancillary to the . . . effective performance of its statutorily mandated responsibilities.'" [55] Notwithstanding the Supreme Court's broad deference to the FCC's assertion of ancillary jurisdiction in the *Brand X* case, [56] where the Court affirmed the FCC's determination that cable modem-provided Internet access constitutes a lightly regulated information service, the D.C. Circuit required evidence that the FCC's regulatory action had a direct link to its statutorily mandated responsibilities. [57] The

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[55] Comcast Corp. 600 F.3d at 644 (*citing* Am. Library Ass'n v. FCC, 406 F.3d 689, 692 (D.C. Cir. 2005)).

[56] The court does not interpret the *Brand X* case as precedent for the imposition of plenary authority over any matter involving cable television company provided Internet access. "By leaping from *Brand X*'s observation that the Commission's ancillary authority may allow it to impose *some* kinds of obligations on cable Internet providers to a claim of plenary authority over such providers, the Commission runs afoul of *Southwestern Cable* and *Midwest Video I*." Comcast Corp., 600 F. 3d at 650. "The Commission's exercise of ancillary authority over Comcast's network management practices must, to repeat, 'be independently justified.'" *Id*. at 651 (*citing* Nat'l Ass'n of Regulatory Util. Comm'rs v. FCC, 533 F.2d 601, 612 (D.C. Cir. 1976) (rejecting the FCC's preemption of state and local regulation of two-way, intrastate, non-video cable transmissions)).

[57] The Commission therefore rests its assertion of authority over Comcast's network management practices on the broad language of section 4(i) of the Act: "The Commission may perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this chapter, as may be necessary in the execution of its functions . . . ." Comcast Corp., 600 F. 3d at 644 (*citing* 47 U.S.C. § 154(i); Formal Complaint of Free Press & Public Knowledge Against

court vacated the FCC's sanctioning order of Comcast based on the view that the FCC could only refer to congressional statements of policy which do not provide a precedent for creating such responsibilities and to various sections of the Communications Act that the court deemed inapplicable for substantive and procedural reasons.

The D.C. Circuit Court of Appeals vacated the Commission's reprimand of Comcast based on the court's refusal to accept the Commission's claim of ancillary jurisdiction. The court referred to the three major cable television cases [58] where the Supreme Court had affirmed the FCC's ancillary jurisdictional claim "at a time when, as with the Internet today, the Communications Act gave the Commission no express authority to regulate such systems."[59] As it had done in the case rejecting the FCC's attempt to require television set manufacturers to build units capable of processing digital rights management, "broadcast flags," [60] the court distilled the precedent for ancillary jurisdiction established by these cases into a two part test whether: "(1) the Commission's general jurisdictional grant under Title I [of the Communications Act] covers the regulated subject and (2) the regulations are reasonably ancillary to the Commission's effective

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Comcast Corporation for Secretly Degrading Peer-to-Peer Applications, 23 F.C.C.R. 13028, 13036 (2008)).

[58] *See* FCC v. Midwest Video Corp., 440 U.S. 689 (1979) (Midwest Video II); United States v. Midwest Video Corp., 406 U.S. 649 (1972) (Midwest Video I); United States v. Sw. Cable Co., 392 U.S. 157 (1968).

[59] Comcast Corp., 600 F.3d at 646.

[60] Broadcast flags are instructions transmitted from content sources that limit or prohibit redistribution by receiving devices. "One of the leading proposals for a . . . [digital television] broadcast content protection mechanism involves the use of a redistribution control descriptor or flag to signal DTV reception equipment to limit the indiscriminate redistribution of digital broadcast content." Digital Broadcast Content Protection, MB Docket 02-230, Report and Order and Further Notice of Proposed Rulemaking, 18 F.C.C.R. 23550, 23556 (2003), *vacated in part and reversed in part,* American Library Ass'n. v. F.C.C., 406 F.3d 689 (2005).

performance of its statutorily mandated responsibilities . . .." [61] The court determined that the FCC had not satisfied the second part of the test.[62]

The court flatly rejected the FCC's attempt to infer congressional intent for the Commission to extend its regulatory wingspan to include Internet access. In a series of references to provisions of the Communications Act,[63] the Commission expansively read congressional policy as sufficient ground for undertaking regulatory policy:

> Instead, the Commission maintains that congressional policy by itself creates 'statutorily mandated responsibilities' sufficient to support the exercise of section 4(i) ancillary authority. Not only is this argument flatly inconsistent with *Southwestern Cable*, *Midwest Video I*, *Midwest Video II*, and *NARUC II*, but if accepted it would virtually free the Commission from its congressional tether.[64]

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[61] Comcast Corp., 600 F.3d at 646.

[62] The court noted that Comcast had conceded "that the Commission's action here satisfies the first requirement because the company's Internet service qualifies as 'interstate and foreign communication by wire' within the meaning of Title I of the Communications Act." *Id.* 600 F.3d at 646 (*citing* 47 U.S.C. § 152(a)). The court also rejected the Commission's claim that because Comcast had used the existence of FCC jurisdiction in another case the company should be judicially stopped from challenging the Commission's jurisdiction now. The court interpreted Comcast's position in the other case as simply acknowledging the FCC's jurisdiction over wire and radio services, which includes what Comcast offers. "Because Comcast never clearly argued in the California litigation that the Commission's assertion of authority over the company's network management practices would be 'reasonably ancillary to the Commission's effective performance of its statutorily mandated responsibilities' . . . , that question remains for us to answer." *Id.* 600 F.3d at 649.

[63] The Commission cited to §§ 1, 230(b), 706, 257, 201 and 623 of the Communications Act.

[64] Comcast Corp. 600 F.3d at 655.

The court concluded that the FCC could attempt unlawfully to invoke ancillary jurisdiction to apply any number of regulatory requirements to cable modem provided Internet access without explicit congressional authority to do so.[65]

C. Network Neutrality Rules Can Only Apply to Conduit Providers.

If the FCC extended binding regulatory obligations on content, application and service providers, the Commission surely would have engaged in an unlawful mission creep, based on "an implausible reading of the statute, . . . [thereby] exceed[ing] the authority given it by Congress." [66] Supreme Court Justice Scalia presciently warned that the FCC as an "experienced agency can (with some assistance from credulous courts) turn statutory constraints into bureaucratic discretions," [67] reserving, for example, the option of regulating Internet content based on statutes offering absolutely no basis for anything beyond promoting Internet access. Nowhere in its previous involvement with the Internet, or in its regulatory classification of telecommunications services and information services, has the Commission ever sought to expand its regulatory mission and the scope of oversight to include content, software and services that traverse networks operated by ISPs. Similarly, nothing in the objectives of network neutrality articulated by the FCC and others requires that the Commission make an unprecedented expansion of its jurisdiction

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[65] "Were we to accept that theory of ancillary authority, we see no reason why the Commission would have to stop [at imposing regulation of Internet Service Providers' rates], for we can think of few examples of regulations that apply to Title II common carrier services, Title III broadcast services, or Title VI cable services that the Commission, relying on the broad policies articulated in section 230(b) and section 1, would be unable to impose upon Internet service providers." Comcast Corp., 600 F.3d at 655.

[66] Brand X, 545 U.S. at 1005 (2005) (Scalia, J. dissenting).

[67] *Id.* at 1013.

ostensibly to achieve the goals articulated by the Commission in its *2005 Internet Policy Statement* [68] and the *Open Internet Order*.

II. Ample Case Law Forecloses the FCC from Leveraging a Public Interest Argument to Regulate Content, Application and Software Providers.

Providers of content, applications and services having no affiliation with downstream ISPs qualify for maximum protection from FCC regulation because these ventures do not operate wire or radio networks, and only use telecommunications bit transport services to deliver their content and services to end users. The Commission has developed a long record of establishing a "bright line" regulatory demarcation between regulated carriers providing telecommunications services and more broadly wire or radio access on one hand, and unregulated ventures providing content, applications and software that ride on top of the transport services provided by facilities-based operators.

In its *Second Computer Inquiry*,[69] the FCC established a regulatory dichotomy between regulated basic telecommunications services and unregulated enhanced services based on the potential for facilities-based carriers to abuse their bottleneck control over access to enhanced facilities. The Commission created structural safeguards that required separation between a facility-based carrier's Title II regulated common carrier services and unregulated services provided by corporate affiliates.[70] The Commission subsequently concluded in the *Third*

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[68] Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, *Policy Statement*, 20 F.C.C.R. 14986 (2005) [hereinafter *2005 Internet Policy Statement*].

[69] Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), *Final Decision*, 77 F.C.C.2d 384 (1980), *aff'd sub nom*. Computer and Communications Indus. Ass'n. v. FCC, 693 F.2d 198 (D.C. Cir. 1982).

[70] "In the *Computer II* rules, the Commission subjected facilities-based providers to common-carrier duties not because of the nature of the 'offering' made by those carriers, but rather because of the concern that local telephone companies would abuse the monopoly power they

Computer Inquiry [71] that a single firm could achieve operational efficiencies without anticompetitive harm by jointly providing basic and enhanced services. However, this relaxation of structural and functional separation requirements did not eliminate the dichotomy between regulated telecommunications services provided by network carriers and unregulated services.

With enactment of the Telecommunications Act of 1996,[72] Congress mandated continuation of this regulatory dichotomy. The FCC must continue to apply Title II common carriage requirements on telecommunications service providers,[73] subject to some regulatory forbearance opportunities where the public interest supports partial deregulation.[74] The Commission has limited regulatory oversight responsibilities for information service providers, the replacement classification for enhanced services.[75] Neither the Telecommunications Act of 1996

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possessed by virtue of the 'bottleneck' local telephone facilities they owned." Brand X, 545 U.S. at 996.

[71] Amendment of Sections 64.702 of the Commission's Rules & Regulations (Third Computer Inquiry), Report and Order, 104 F.C.C.2d 958 (1986), *vacated sub nom*. California v. FCC, 905 F.2d 1217 (9th Cir. 1990), *on remand*, Computer III Remand Proceedings: Bell Operating Co. Safeguards, Notice of Proposed Rulemaking & Order, 6 F.C.C.R. 174 (1990), *rule modification*, 6 F.C.C.R. 7571 (1991), *vacated in part and remanded*, California v. F.C.C., 39 F.3d 919 (9th Cir. 1994), *on remand*, Computer III Further Remand Proceedings: Bell Operating Co. Provision of Enhanced Servs., *Order*, 10 F.C.C.R., 5692 (1995).

[72] Telecommunications Act of 1996, Pub. L. No. 104-104, § 401, 110 Stat. 56, 128-29 (codified as amended at 47 U.S.C. § 151 *et seq.* (2008)).

[73] *See, e.g.*, Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, *Report and Order and Further Notice of Proposed Rulemaking*, 22 F.C.C.R. 15817 (2007) (clarifying that automatic roaming is a common carrier obligation for commercial mobile radio service carriers that requires them to provide roaming services to other carriers upon reasonable request and on a just, reasonable, and non-discriminatory basis pursuant to Sections 201 and 202 of the Communications Act).

[74] 47 U.S.C. § 160 (2010).

[75] "Under its *Computer Inquiry* rules, which foreshadowed the definitions of 'information' and 'telecommunications' services, . . . the Commission forbore from regulating as common

nor any other law provides the FCC with statutory authority to regulate the content, applications and software that traverse the networks operated by carriers subject to the Commission's jurisdiction.

The holding in *American Library Ass'n v. FCC* [76] provides solid precedent for the premise that the FCC cannot leverage its ample statutory authority over facilities-based network operators to extend its regulatory wingspan to include content and applications that these carriers deliver. The D.C. Circuit Court of Appeals held that the FCC ignored consumers' rights to be free of government intrusion when the Commission sought to extend its regulatory wingspan to include electronic devices on consumer premises that receive content and may be remotely programmed by carriers to process Digital Rights Management instructions (broadcast flags) that would limit the copying, reformatting and redistribution options available to consumers.

Characterizing the FCC's action as the most sweeping assertion of authority in the Commission's seven decades of existence, the court rejected the use of ancillary jurisdiction under Title I in lieu of explicit congressional authorization:

> The Commission recognized that it may exercise ancillary jurisdiction only when two conditions are satisfied: (1) the Commission's general jurisdictional grant under Title I covers the regulated subject and (2) the regulations are reasonably ancillary to the Commission's effective performance of its statutorily mandated responsibilities. The Commission's general jurisdictional grant under Title I plainly encompasses the regulation of apparatus that can receive television

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carriers 'value-added networks'--non-facilities-based providers who leased basic services from common carriers and bundled them with enhanced services; it said that they, unlike facilities-based providers, would be deemed to provide only enhanced services." *Brand X*, 545 U.S. at 1011.

[76] 406 F.3d 689 (D.C. Cir. 2005)[hereinafter ALA v. FCC]. "In this case, all relevant materials concerning the FCC's jurisdiction - including the words of the Communications Act of 1934, its legislative history, subsequent legislation, relevant case law, and Commission practice - confirm that the FCC has no authority to regulate consumer electronic devices that can be used for receipt of wire or radio communication when those devices are not engaged in the process of radio or wire transmission." *Id*. at 798.

> broadcast content, but only while those apparatus are engaged in the process of receiving a television broadcast. Title I does not authorize the Commission to regulate receiver apparatus after a transmission is complete. As a result, the FCC's purported exercise of ancillary authority founders on the first condition. There is no statutory foundation for the broadcast flag rules, and consequently the rules are ancillary to nothing. Therefore, we hold that the Commission acted outside the scope of its delegated authority when it adopted the disputed broadcast flag regulations.[77]

The court determined that broadcast flags operate as a curb on the ability of digital television reception equipment to redistribute digital broadcast content after having received the content and not during the actual broadcast transmission.[78] Finding no congressional authority for the FCC to regulate consumers' use of already received broadcast content, the court refused to defer to agency expertise.[79] The court reasoned that absent the need for explicit congressional authority the FCC would have plenary authority to regulate any consumer electronics and computer devices.

The court also rejected the Commission's ancillary jurisdiction rationale based on the Communications Act. With references to several communications cases having a judicial

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[77] *Id*. at 691-692.

[78] "The effectiveness of the broadcast flag regime is dependent on programming being flagged *and* on devices capable of receiving broadcast DTV signals (collectively "demodulator products") being able to recognize and give effect to the flag. Under the rule, new demodulator products (*e.g.*, televisions, computers, etc.) must include flag-recognition technology. This technology, in combination with broadcasters' use of the flag, would prevent redistribution of broadcast programming."*Id*. at 693.

[79] *See* Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837, (1984). The Supreme Court supported deferral to the expertise of a regulating agency "if the intent of Congress is clear." 467 U.S. at 842-43. If "Congress has not directly addressed the precise question at issue," and the agency has acted pursuant to an express or implied delegation of authority, the agency's statutory interpretation is entitled to deference, as long as it is reasonable. *Id.* at 843-44. *See also* United States v. Mead Corp., 533 U.S. 218, 226-27 (2001).

endorsement of ancillary jurisdiction, the court noted that all prior cases with precedential value involved entities engaged in "communication by wire or radio":

> The Court's decisions in *Southwestern Cable*, *Midwest Video I*, and *Midwest Video II* were principally focused on the second prong of the ancillary jurisdiction test. This is unsurprising, because the subject matter of the regulations at issue in those cases--cable television--constituted interstate communication by wire or radio, and thus fell within the scope of the Commission's general jurisdictional grant under Title I of the Communications Act. However, these cases leave no doubt that the Commission may not invoke its ancillary jurisdiction under Title I to regulate matters outside of the compass of communication by wire or radio.[80]

The court also rejected the FCC's rationale that broadcast flag processing regulations could lawfully fit within the Commission's congressionally authorized responsibility for promulgating technical requirements for television receiving equipment as part of its implementation of rules relating to the transition from analog to digital television.[81]

III. The FCC Has Never Stated It Has Statutory Authority to Regulate Internet-mediated Content and Services, Except for Instances Where the Carrier Offers a Related Telecommunications Service or in Special Circumstances Provides Telecommunications to End Users.

Nothing in the FCC's growing involvement with matters pertaining to the Internet evidences an intention on the Commission's part to extend its regulatory wingspan to include Internet-mediated content and services. The Communications Act of 1934, as amended, expressly limits the FCC's substantive jurisdiction to wire and radio services, such as broadcasting, telecommunications and cable television services. Mindful that the information services

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[80] ALA v. FCC, 406 F.3d at 702.

[81] "It is enough here for us to find that the Communications Act of 1934 does not indicate a legislative intent to delegate authority to the Commission to regulate consumer electronic devices that can be used for receipt of wire or radio communication when those devices are not engaged in the process of radio or wire transmission. That is the end of the matter. It turns out, however, that subsequent legislation enacted by Congress *confirms* the limited scope of the agency's ancillary jurisdiction and makes it clear that the broadcast flag regulations exceed the agency's delegated authority under the statute." *Id*. at 706.

classification significantly constrains what it can do to serve the public interest and aware of the artificial competitive advantages that accrue from incorrect regulatory classification, the FCC has appreciated the need, on occasion, to clarify what regulatory obligations apply to particular types of operators.

For example, the FCC determined that wireless telecommunications service providers needed to be reminded of their still applicable Title II common carrier obligations, including the duty to provide "roaming" subscribers with access to their networks, on cost-based and nondiscriminatory terms.[82] Similarly, the Commission determined that routing telecommunications services via the Internet does not automatically convert these services into information services.[83] Additionally, the Commission has asserted ancillary jurisdiction and has applied selective regulatory requirements on Voice over the Internet Protocol ("VoIP") service providers, primarily limited to VoIP operators that provide service to and from the conventional, dial up, public switched telephone network ("PSTN"). [84] Selective FCC regulation of information

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[82] Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, Report and Order and Further Notice of Proposed Rulemaking, 22 F.C.C.R. 15817 (2007).

[83] *See e.g.*, Regulation of Prepaid Calling Card Services, Declaratory Ruling and Report and Order, 21 F.C.C.R. 7290, (2006), *rev'd in part*, Qwest Services Corp. v. FCC, 509 F.3d 531, (D.C. Cir. 2007) (affirming the FCC's regulatory determination but reversing the Commission's different treatment of calling cards that provide access to VoIP versus ones that provide a menu of services and options).

[84] VoIP service providers that can receive or deliver calls to conventional wired and wireless networks must contribute to universal service funding programs designed to promote affordable dial up telephone service. Universal Serv. Contribution Methodology, Report and Order and Notice of Proposed Rulemaking, 21 F.C.C.R. 7518, 7538 (2006) (extending section 254(d) permissive authority to require interconnected VoIP providers to contribute to the USF), *reh'g denied, vacated in part on other grounds*, Vonage Holding Corp. v. FCC, 489 F.3d 1232 (D.C. Cir. 2007). Additionally they must make arrangements to support subscriber access to emergency 911 service, cooperate with law enforcement authorities, incorporate the technical accommodations telephone companies provide persons with disabilities, such as deaf callers, and support the ability of existing subscribers to keep their existing telephone numbers when switching service. IP-Enabled Servs.,

services and VoIP offer no foundation for supporting an expansion of FCC oversight to any other type of Internet-mediated content, application, or service.

IV. The FCC's Network Neutrality Concerns Address Instances Where Conduit Providers Unnecessarily Impede End User Internet Access to Content, Applications and Software.

The FCC has never stated that the goals of preserving an open Internet and safeguarding consumers require the Commission to extend legacy regulation onto content, applications and software. Simply put, the factors supporting the creation of enforceable openness rules to ISPs do not exist for extending any such rules to Internet-mediated content and applications. ISPs operate a bottleneck in their capacity as intermediaries between end users downstream and content and applications providers upstream. The Commission must safeguard end user access to the Internet in light of the ability of ISPs to exploit their bottlenecks in ways that disserve the public interest through anticompetitive conduct, but also through unnecessarily restrictive, discriminatory and

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E911 Requirements for IP-Enabled Service Providers, First Report and Order and Notice of Proposed Rulemaking, 20 F.C.C.R. 10245 (2005), *petition for review denied*, 473 F.3d 302 (D.C. Cir. 2006); Communications Assistance for Law Enforcement Act & Broadband Access & Servs., First Report and Order and Further Notice of Proposed Rulemaking, 20 F.C.C.R. 14989 (2005), *petition for review denied*, 451 F.3d 226 (D.C. Cir. 2006); IP-Enabled Servs., Implementation of Sections 255 and 251(A)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996: Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities Telecommunications, *Report and Order*, 22 F.C.C.R. 11275 (2007), Order and Public Notice Seeking Comment, 22 F.C.C.R. 18319 (2007) (granting in part and denying in part waivers of the FCC order). *See also*, Contributions to the Telecommunications Relay Services Fund, CG Docket No. 11-47, Notice of Proposed Rulemaking, FCC 11-38, 2011 WL 742268 (rel. March 3, 2011); Telephone Number Requirements for IP Enabled Services Providers; Local Number Portability Porting Interval and Validation Requirements; IP-Enabled Services; Telephone Number Portability; CTIA Petitions for Declaratory Ruling on Wireline-Wireless Porting Issues; Final Regulatory Flexibility Analysis; Number Resource Optimization, WC Docket Nos. 07-243, 07-244, 04-36; CC Docket Nos. 95-116, 99-200, Report and Order, Declaratory Ruling, Order on Remand, and Notice of Proposed Rulemaking, 22 F.C.C.R. 19531 (2007); Matters of Local Number Portability Porting Interval and Validation, WC Docket No. 07-244, Report and Order, 25 F.C.C.R. 6953 (May 20, 2010)(establishing fast deadlines for conversions).

intrusive service terms and conditions that are unnecessary to achieve legitimate network management objectives.

Absent vastly changed circumstances and compelling reasons, the Commission has expressly stated the intention to maintain "an established policy of minimal regulation of the Internet and the services provided over it."[85] In the context of promoting network neutrality, the Commission's concern about content derives not from an interest in regulating it to remedy some apparent market failure, but to ensure that end users can freely access Internet-mediated content and that content creators operate on a level competitive playing field when vying for consumers.

The extensive scholarly and advocacy literature on network neutrality has concentrated on the ISPs and their relationship downstream with end users and upstream with content, applications and service providers.[86] Authors debate whether these carriers have the incentive and ability to

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[85] IP-Enabled Services, Notice of Proposed Rulemaking, 19 F.C.C.R. at 4865.

[86] *See* Marvin Ammori, *Beyond Content Neutrality: Understanding Content-Based Promotion of Democratic Speech*, 61 FED. COMM. L.J. 273 (March 2009); Dan G. Barry, *The Effect of Video Franchising Reform on Net Neutrality: Does the Beginning of IP Convergence Mean That It Is Time for Net Neutrality Regulation*, 24 SANTA CLARA COMPUTER & HIGH TECH. L.J. 421 (Jan. 2008); Sascha D. Meinrath & Victor W. Pickard, *Transcending Net Neutrality: Ten Steps Toward an Open Internet*, 12 J. INTERNET L., No. 6, 1 (Dec. 2008); Jennifer L. Newman, *Keeping the Internet Neutral: Net Neutrality and Its Role in Protecting Political Expression on the Internet*, 31 HASTINGS COMM. & ENT. L.J. 153 (Fall 2008); T. Randolph Beard, *Network Neutrality and Industry Structure*, 29 HASTINGS COMM. & ENT L.J. 149 (Winter 2007); Jerry Brito, *A Tale of Two Commissions: Net Neutrality and Regulatory Analysis*, 16 COMMLAW CONSPECTUS 1 (2007); Brett Frischmann & Barbara van Schewick, *Yoo's Frame and What It Ignores: Network Neutrality and the Economics of an Information Superhighway*, 47 JURIMETRICS J. 383 (2007); Tim Wu and Christopher S. Yoo, *Keeping the Internet Neutral? Tim Wu and Christopher Yoo Debate*, 59 FED. COMM. L.J. 575 (June 2007); Robert E. Litan, *Unintended Consequences of Net Neutrality Regulation*, 5 J. TELECOMM. & HIGH TECH. L. 533 (Spring 2007); Randolph J. May, *Net Neutrality Mandates: Neutering the First Amendment in the Digital Age*, I/S: J. L. & POL'Y FOR INFO. SOC'Y 197 (Spring, 2007); Amit M. Schejter, *"Justice, and Only Justice, You Shall Pursue": Network Neutrality, the First Amendment and John Rawls's Theory of Justice*, 14 MICH. TELECOMM. & TECH. L. REV. 137 (Fall 2007); Howard A. Shelanski, *Network Neutrality: Regulating with More Questions Than Answers*, 6 J. TELECOMM. & HIGH TECH. L. 23 (Fall 2007); Barbara A. Cherry, *Misusing Network Neutrality to Eliminate Common Carriage Threatens Free Speech and the*

discriminate, what they can do under the rubric of network management and whether consumers and content/applications providers need FCC safeguards to guard against anticompetitive conduct and other harmful practices. The matter of ISPs' relationship with upstream ventures raises questions whether the FCC needs to establish rules that prevent prioritization and other preferential treatment of specific content, e.g., supplied by affiliates, and not whether the Internet has sufficient supply or competitiveness in the marketplace for content, applications and services. [87]

Postal System, 33 N. KY. L. REV. 483 (2006); Christopher S. Yoo, *Network Neutrality and the Economics of Congestion*, 94 GEO. L.J. 1847 (June 2006); Bill D. Herman, *Opening Bottlenecks: On Behalf of Mandated Network Neutrality*, 59 FED. COMM. L.J. 103 (Dec. 2006); William G. Laxton, Jr., *The End of Net Neutrality*, 2006 DUKE L. & TECH. REV. 15 (July 18, 2006); Lawrence Lessig, *In Support of Network Neutrality*, I/S: J. L. & POL'Y FOR INFO. SOC'Y 185 (Spring 2007); J. Gregory Sidak, *A Consumer-Welfare Approach to Network Neutrality Regulation of the Internet*, 2 J. COMP. L. & ECON., No. 3, 349 (2006); Adam Thierer, *Are "Dumb Pipe" Mandates Smart Public Policy? Vertical Integration, Net Neutrality, and the Network Layers Model*, 3 J. TELECOMM. & HIGH TECH. L. 275 (2005); Tim Wu, *Network Neutrality, Broadband Discrimination*, 2 J. TELECOMM. & HIGH TECH L. 141 (2005), Christopher S. Yoo, *Beyond Network Neutrality*, 19 HARVARD J. L. & TECH. (Fall 2005); Christopher S. Yoo, *Would Mandating Broadband Network Neutrality Help or Hurt Competition? A Comment on the End-to-End Debate*, 3 J. ON TELECOMM. & HIGH TECH. L. 23 (2004); Mark A. Lemley & Lawrence Lessig, *The End of End-to-End: Preserving the Architecture of the Internet in the Broadband Era*, 48 UCLA L. REV. 925 (2001).

[87] "In the absence of network neutrality regulation, there is a real threat that network providers will discriminate against independent producers of applications, content or portals or exclude them from their network." Barbara van Schewick, *Towards an Economic Framework for Network Neutrality Regulation*, 5 J. ON TELECOMM. & HIGH TECH. L. 329, 390 (2007). "Like cable television operators, the telephone company and cable modem duopolists in the broadband marketplace in almost all cases provide the sole interactive 'data pipe' into subscribers' homes. They thus have the incentive, given their integration with broadband content providers, to act as 'gatekeepers' who can 'flick the switch' on competitors or any other online speakers whom they disfavor." Anthony E. Varona, *Toward a Broadband Public Interest Standard*, 61 ADMIN. L. REV. 1, 123 (Winter, 2009).

A. The *2005 Internet Policy Statement* and the *Open Internet Order* Concentrate on Users' Rights of Access Vis a Vis Conduit Providers.

Absent the two sentences contained in paragraph 101 of the *Open Internet NPRM*, the FCC consistently has considered Internet openness and the need for regulatory intervention to preserve it solely in terms of "users' ability to *access* the Internet . . . [with no] intent[] to regulate the Internet itself or create a different Internet experience from the one that users have come to expect." [87] For each of the rules the FCC proposes to enforce, the Commission expressly limits the scope of enforcement to "a provider of broadband Internet access service." [88] The Commission properly limits its focus to the ventures able to affect consumer access to the Internet.

B. The Potential for Consumer Harm is Acute When ISPs Seek to Tilt the Competitive Playing Field by Favoring Affiliated Content Providers and Services.

The marketplace for Internet-mediated content and services operates competitively, but runs the risk of becoming less so if ISPs can favor affiliated content providers. When the FCC sanctioned Comcast for unnecessarily meddling with subscriber traffic, the Commission identified a situation where an ISP acted on its incentive and ability to tilt the competitively playing field to disadvantage a competitive alternative to the company's video on demand services:

> Peer-to-peer applications, including those relying on BitTorrent, have become a competitive threat to cable operators such as Comcast because Internet users have the opportunity to view high-quality video with BitTorrent that they might otherwise watch (and pay for) on cable television. Such video distribution poses a particular competitive threat to Comcast's video-on-demand ("VOD") service. VOD . . . operates much like online video, where Internet users can select and download or stream any available

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87 *Open Internet NPRM*, 24 F.C.C.R. at 13068.

88 *Id*. 24 F.C.C.C.R. at 13128, Appendix A, Part 8, Sec. 8.5-8.23.

> program without a schedule and watch it any time, generally with the ability to fast-forward, rewind, or pause the programming. [89]

More generally, the Commission has acknowledged that:

> a broadband Internet access service provider that is also a pay television provider could charge providers or end users more to transmit or receive video programming over the Internet in order to protect the broadband Internet access service provider's own pay television service. Alternatively, such a broadband Internet access service provider could seek to protect its pay television service by degrading the performance of video programming delivered over the Internet by third parties. The result may be higher prices or worse service for some content and applications and inefficiently low investment in some content and application markets. [90]

C. ISPs Can Combine Vertical Integration of Conduit and Content with the Power to Inspect, Drop, Prioritize and Otherwise Differentiate Bit Streams for Both Lawful Network Management Reasons and to Pursue Anticompetitive and Other Strategies that Harm Consumers.

Unlike content providers upstream, an ISP can operate as "a gatekeeper to the content, applications and services offered on the Internet." [91] The Commission acknowledges that ISPs "have an incentive to use this gatekeeper role to make it more difficult or expensive for end users to access services competing with those offered by the network operator or its affiliates." [92] This gatekeeper power provides ISPs with the capacity to constrain, prioritize, discriminate and otherwise shape traffic to achieve proper or improper objectives. If the Commission does not rein

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[89] Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications, 23 F.C.C.R. 13028, 13030 (2008) [hereinafter Comcast Investigation].

[90] Open Internet NPRM, 24 F.C.C.R. at 13094.

[91] *Id*.

[92] *Id*.

in such anticompetitive practices, recent decisions by the Supreme Court severely restrict the relief available through judicial appeals. [93]

The ISP gatekeeper function grows more powerful in light of the ability to use packet inspection techniques to "sniff" and identify types of traffic that the ISP wants to favor or handicap. "An ISP able to examine packets for purposes of assigning bitstreams into various tiers of service also provides an ISP with greater knowledge about the nature and type of the traffic it handles. Arguably, an ISP engaging in quality of service . . . and price discrimination through deep packet inspection no longer operates as a neutral conduit lacking actual or constructive knowledge of what the packets represent. ISPs that sniff packets actively examine the header of packets that provide traffic routing information, but also can identify characteristics of the content 'payload' contained in the packet." [94]

ISPs have found it commercially advantageous to combine their conduit role with various activities relating to the creation, packaging and offering of content via the Internet. For example, cable television companies blend their Internet access conduit function as a provider of cable modem service, with various video program services that the companies own or have an affiliate relationship. Similarly, wireless mobile telephone companies, provide both Internet access, but

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[93] The Supreme Court has concluded that because industry sector-specific legislation provides the FCC with authority to craft regulatory remedies, when the Commission refuses to act, appellate courts have no legal basis for imposing additional antitrust safeguards. *See* Pac. Bell Tel. Co., v. Linkline Commc'ns., Inc., 129 S. Ct. 1109 (2009) (holding that where the FCC has failed to investigate and remedy an instance where the wholesale price exceeds the retail price of service, courts have a severely limited basis to investigate further); Verizon Commc'ns., Inc. v. Law Office of Curtis V. Trinko, LLP, 540 U.S. 398 (2004) (holding that antitrust laws offer no additional safeguards when the FCC refuses to apply more aggressive safeguards available in the Communications Act, as amended).

[94] Rob Frieden, *Internet Packet Sniffing and Its Impact on the Network Neutrality Debate and the Balance of Power Between Intellectual Property Creators and Consumers*, 18 FORDHAM INTELL. PROP. MEDIA & ENT. L.J., 633, 644 (2008).

also showcase and provide easier access to a packaged collection of Internet-mediated content in what is commonly referred to as a "walled garden." The Commission appreciates the potentially adverse impact on consumers and competition arising from such vertical integration. [95] For example, the Commission extensively regulates cable television ventures that combine content and conduit based on finding the potential for competitive and consumer harm:

> [W]e conclude that there are no good substitutes for some satellite-delivered vertically integrated programming and that such programming therefore remains necessary for viable competition in the video distribution market. Based on this finding, we conclude that vertically integrated programmers continue to have the ability to favor their affiliated cable operators over competitive MVPDs [multichannel video programming distributors] such that competition and diversity in the distribution of video programming would not be preserved and protected absent the rule. . . . [W]e also find some trends that increase their incentive to withhold programming, such as the increase in horizontal consolidation of the cable industry, the increase in cable clustering, and the recent emergence of new competitors. We also find specific factual evidence that, where the exclusive contract prohibition does not apply, such as in the case of terrestrially delivered programming, vertically integrated programmers have withheld and continue to withhold programming from competitive MVPDs. [96]

Because cable television companies generate much of the desired video content and control the major medium for distributing it, the FCC has expressed concern [97] that the cable companies

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[95] *See* Open Internet NPRM, 24 F.C.C.R. at 13094 ("Where broadband Internet access service providers have market power and are vertically integrated or affiliated with content, application, or service providers, additional concerns may arise.").

[96] In the Matter of Implementation of the Cable Television Consumer Protection and Competition Act of 1992; Development of Competition and Diversity in Video Programming Distribution: Section 628(c)(5) of the Communications Act: Sunset of Exclusive Contract Prohibition; Review of the Commission's Program Access Rules and Examination of Programming Tying Arrangements, 22 F.C.C.R. 17791, 17810 (2007).

[97] *See Id*. at 17816 ("Despite the increase in available programming over the past five years, we find that cable operators still own popular programming for which there are no close substitutes. The availability of new, non-integrated networks does not mitigate the adverse impact on

can stifle competition, extract rates above competitive levels from subscribers, favor affiliated content providers and prevent the development of new content sources. Note, however, that the Commission does not subject independent, stand-alone content providers to such regulations.

D. Discrimination at the Network Level Can Adversely Affect the Degree of Competition, Innovation and Investment in Applications and Services that Run "Over the Top."

Just as the FCC has acted to prevent vertically integrated cable television operators from thwarting video programming competition, the Commission should use its limited jurisdiction to establish rules that promote open access to content, applications and services that travel via ("over the top") ISP network links. ISPs can exploit some of the same gatekeeper roles as cable television operators by resorting to tactics, masquerading as legitimate network management, that block, delay, degrade and otherwise interfere with end user access to content.

Unlike the European Union, [98] the FCC has not adopted a layered model to identify what Internet functions constitute regulated and unregulated services. However, both the Communications Act and the Commission's regulations calibrate the scope of government oversight in a manner that parallels the OSI model with extensive regulation primarily applied to

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competition of a competitive MVPD's inability to access popular vertically integrated programming. The record reflects that numerous national programming networks, RSNs, premium programming networks, and VOD networks are cable-affiliated programming networks that are demanded by MVPD subscribers and for which there are no adequate substitutes.").

[98] *See* John T. Nakahata, *Regulating Information Platforms: The Challenge of Rewriting Communications Regulation from the Bottom Up, 1* J. TELECOMM. & HIGH TECH. L. 95 (2002); Douglas C. Sicker & Joshua L. Mindel, *Refinements of a Layered Model for Telecommunications Policy*, 1 J. TELECOMM. & HIGH TECH. L. 69 (2002); Philip J. Weiser, *Law and Information Platforms*, 1 J. TELECOMM. & HIGH TECH. L. 1 (2002); Kevin Werbach, *A Layered Model for Internet Policy*, 1 J. TELECOMM. & HIGH TECH. L. 37, 39-40 (2002); Richard S. Whitt, *A Horizontal Leap Forward: Formulating a New Communications Public Policy Framework Based on the Network Layers Model*, 56 FED. COMM. L.J. 587 (2004).

facilities-based network providers, in light of their significant market power over first and last mile Internet access.

In contrast, the content and applications layers evidence no marketplace concentration or lack of competitive options. So long as ISPs do not interfere, consumers have complete sovereignty in selecting what content, applications and services to access. Unlike the network level, where subscribers lock into one service provider and may have limited facilities-based operator options, the content/applications layers evidence robust competition and boundless consumer choice. While consumers may incur significant costs in changing which network operator provides service, the switching costs at the applications and content layers approach zero. Without constant innovation and acute sensitivity to consumer wants, needs and desires a currently successful content or applications provider is just one click away from declining market share and insignificance.

Because the FCC has abandoned functional separation safeguards, [99] even as other nations embrace them as necessary and workable, [100] the Commission relies heavily on ISP self-regulation

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[99] *See* n. 71, *supra*.

[100] *See* Government of the United Kingdom, Office of Communications, *The International Communications Market 2007*, Sec.1.3.6 Functional separation (Dec. 2007); available at: http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr07/cm07_print/. "In most of Europe the connections between customers' premises and telephone exchanges are provided by the incumbent fixed-line telecoms operator. A key objective of the regulation of fixed-line networks is to enable fair competition by ensuring that alternative operators can get non-discriminatory access to the incumbent's access network. Under the existing EU regulatory framework, this problem is addressed through a range of regulatory access remedies. In particular, the incumbent telecom operator is often required to supply wholesale services to rival communications providers and to itself on a non-discriminatory basis in order to facilitate fair competition in the provision of retail services to homes and businesses. 'Functional separation' complements these existing measures by placing the monopoly element in a separate business unit. This allows any wholesale products and any associated services to be offered to both the incumbent's own retail businesses and to those of rivals, on equal terms."

and competitive necessity to prevent content discrimination. Remarkably, while the FCC remains skeptical about the viability of cable television self-regulation and competition, the Commission may have overstated the level of true facilities-based broadband Internet access competition.

In light of real or perceived broadband competition, the FCC has undertaken an aggressive deregulatory campaign based on its assumptions and statistical compilations that support an inference of robust market penetration and competition in broadband markets. Advocates for even more deregulation regularly cite the Commission's statistics as evidence that the unfettered marketplace can achieve broadband access and affordability goals as well as foreclose the need for Internet regulation. [101] The prospect of regulating Internet-mediated content, applications and

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While regulators in other EU Member States are considering the merits of functional separation, the UK has had more than two years of experience in implementing the remedy. Ofcom accepted undertakings under national competition law in September 2005 from BT to place its access and backhaul businesses in a separate business unit called 'Openreach.' . . . New Zealand has since also introduced functional separation and it is under active consideration by several national regulators within the EU including those in Italy, Sweden and Poland."); *see also* Openreach, *Keeping the UK Connected*; available at: http://www.openreach.co.uk/orpg/aboutus/Downloads/web_corp_ brochure.pdf.

[101] *See* Federal Trade Commission, *Broadband Connectivity Competition Policy*, FTC Staff Report, 8 (June, 2007); available at: http://www.ftc.gov/reports/broadband/v070000report.pdf ("We note that opponents of net neutrality regulation have pointed to evidence on a national scale that (1) access speeds are increasing, (2) prices (particularly speed-adjusted or quality adjusted prices) are falling, and (3) new entrants, including wireless and other competitors, are poised to challenge the incumbent cable and telephone companies. We note, too, that statistical research conducted by the FCC has tended to confirm these general trends."). However, this report did acknowledge that "[b]ecause alternative broadband providers are not perfect substitutes for cable or DSL broadband providers, the mere counting of providers using new technologies does not answer the question of whether or not they are effective competitive alternatives to cable and DSL." *Id.* at 104; *see also*, J. Gregory Sidak, *A Consumer-Welfare Approach to Network Neutrality Regulation of the Internet*, 2 J. COMPETITION L. & ECON. 349 (2006); Cabletechtalk, The Trouble with Broadband Deployment Statistics; available at: http://www.cabletechtalk.com/news-items/2008/02/06/the-trouble-with-broadband-deployment-statistics/.

software juxtaposes with frequent FCC conclusions that the consumers benefit from a robustly competitive and unregulated Internet marketplace. [102]

Both the FCC and many stakeholders assume the frequently cited statistics present a true picture of the marketplace, but even the Commission has acknowledged that its data collection, based on zip codes, lacks granularity,[103] and defining broadband using a floor of 200 kilobits per second understates the bit rate needed for many broadband services. [104] Rather than expand its

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[102] *See* AT&T Inc. and BellSouth Corporation, Application for Transfer of Control, 22 F.C.C.R. 5662, 5724-25 (2007) ("[T]here is substantial competition in the provision of Internet access services. Broadband penetration has increased rapidly over the last year with more Americans relying on high-speed connections to the Internet for access to news, entertainment, and communication. Increased penetration has been accompanied by more vigorous competition. Greater competition limits the ability of providers to engage in anticompetitive conduct since subscribers would have the option of switching to alternative providers if their access to content were blocked or degraded. In particular, cable providers collectively continue to retain the largest share of the mass market high speed, Internet access market. Additionally, consumers have gained access to more choice in broadband providers."). John Kneuer, Former Assistant Secretary for Communications and Information and Administrator at the Commerce Department's National Telecommunications and Information Administration claimed in 2008 that the United States "has the most effective multiplatform broadband in the world." John Kneuer, *True or False: U.S.'s Broadband Penetration Is Lower Than Even Estonia's; Answer: True*, NEWSWEEK, July 9, 2007, at 58, *available at* http://www.newsweek.com/id/33456/page/2.

[103] *See* Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice Over Internet Protocol (VoIP) Subscribership, 22 F.C.C.R. 7760, 7765-66 (2007) ("In sparsely populated rural Zip Codes this could mean that a given provider has just one broadband subscriber who is located in a small town or at some other location convenient to telephone or cable facilities. Broadband "'availability'" could be non-existent for that carrier's other customers located a few blocks or many miles away from that single customer. In other words, and notwithstanding the value of data currently submitted on the Form 477, there is more precise information that we could gather to give us a more accurate picture of current broadband deployment.") , 23 F.C.C.R. 9691(2008), *on recon*., 23 F.C.C.R. 9800 (2008).

[104] *See* Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice Over Internet Protocol (VoIP) Subscribership, 23 F.C.C.R. 9691, 9700 (2008) ("As many commenters noted, the range of information transfer capacities included in the current lowest tier of 200 kbps to 2.5 mbps captures

regulatory mission to address phantom issues related to upstream providers of content, the Commission would better allocate its time and resources to resolving real Internet access problems.

Regardless of whether consumers have multiple broadband options available, most subscribe to, and are locked into the services of only one carrier. In the case of wireless broadband access, consumers typically agree to one or two year service contracts with financial penalties for early termination. For both wireline and wireless broadband access, subscribers may not have many service options and may incur significant switching costs should they learn of discriminatory service. But as the Commission stated in its investigation of Comcast, [105] subscribers may not easily detect the source of service degradation even when the underlying carrier engages in anticompetitive conduct.

V. Ample Case Law Forecloses the FCC from Leveraging a Public Interest Argument to Regulate Content and Application Providers.

Providers of content and applications, having no affiliation with downstream ISPs, [106] qualify for maximum protection from FCC regulation based on traditional First Amendment

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a wide variety of services, ranging from services capable of transmitting real time video to simple always-on connections not suitable for more than basic email or web browsing activities. We find that requiring providers to report data in more detailed speed tiers will better identify services that support advanced applications, creating distinctions that reflect different capacities for transmitting high quality video and similar high bandwidth communications. We also find that, as technologies and services evolve, upload speeds are an increasingly significant aspect of broadband services, and increased granularity in reporting both download and upload speed data will assist us in understanding the broadband services market.”), *on recon*., 23 F.C.C.R. 9800 (2008).

[105] Comcast Investigation, 23 F.C.C.R. 13028, 13058-59 (2008)(“Many consumers experiencing difficulty using only certain applications will not place blame on the broadband Internet access service provider, where it belongs, but rather on the applications themselves, thus further disadvantaging those applications in the marketplace.”).

[106] ISPs that package content in a walled garden have claimed First Amendment speaker status even as these carriers also profess to be nothing more than neutral conduits, particularly when they can qualify for a “safe harbor” exemption from tort and copyright liability.

analysis and the lack of any basis for the Commission to apply the information service classification which it has used to justify selective regulatory intervention. In *Reno v. ACLU*, [107] the Supreme Court considered the Internet a vast medium for the publication of content worthy of substantial protection from government regulation even when government presents a compelling reason for intervening, e.g., protecting children from the potential harm resulting from access to obscene or indecent material. [108] On several occasions, the Internet's importance as a mass medium of expression trumped legislative efforts to protect children from harmful Internet-mediated content.[109] These cases offer clear precedent mandating close scrutiny of content-based regulations with government bearing a substantial burden of demonstrating that content-affecting regulations are narrowly drawn and do not unduly restrict First Amendment protected rights of both content providers and consumers. [110]

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[107] Reno v. ACLU, 521 U.S. 844 (1997)[hereinafter cited as Reno].

[108] The Supreme Court considers Internet communications as a publishing activity and therefore a core element of First Amendment speaker/publisher rights. "Any person or organization with a computer connected to the Internet can 'publish' information." *Id.* at 853.

[109] *See, e.g.*, Ashcroft v. ACLU, 542 U.S. 656 (2004) (holding that prohibition of commercial transmission of material harmful to minors was unconstitutionally overbroad when less restrictive alternatives, such as filtering, are readily available).

[110] The Supreme Court also stated: "The dramatic expansion of this new marketplace of ideas contradicts the factual basis of this contention. The record demonstrates that the growth of the Internet has been and continues to be phenomenal. As a matter of constitutional tradition, in the absence of evidence to the contrary, we presume that governmental regulation of the content of speech is more likely to interfere with the free exchange of ideas than to encourage it. The interest in encouraging freedom of expression in a democratic society outweighs any theoretical but unproven benefit of censorship." *Reno*, 521 U.S. at 885.

The Supreme Court has not imposed such a high burden on government when seeking to regulate other media such as cable television and broadcasting. [111] First, the Court has evidenced greater willingness to consider regulation in terms of achieving economic public policy goals as opposed to whether and how they affect speech. The Court accepted the duty to balance speaker rights against other public policy objectives such as promoting widespread access to certain types of media, e.g., commercial, advertiser-supported broadcasting. Second, the Court has acknowledged that media have different characteristics that affect accessibility and competitiveness.

Unlike the Internet, which heretofore has evidenced low barriers to market entry by content providers, other media have higher market entry barriers, e.g., the need to install costly infrastructure, or to secure a government-granted franchise or license to use public spectrum and rights of way. For these types of media, courts will examine laws that require FCC interpretation and the creation of regulations in the broader context of supporting public policy goals, especially ones articulated by Congress, as opposed to a narrower view that the resulting regulations directly affect content and the rights of a particular type of speaker, e.g., cable network operators versus television broadcasters.

The FCC has attempted to frame its regulation of ISPs as having no First Amendment consequences whatsoever. By avoiding any First Amendment analysis, the FCC does not have to address whether any form of Internet regulation impacts content providers and their speaker rights.

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[111] "[U]nlike the Internet, the broadcast medium has traditionally 'received the most limited First Amendment protection.'" Complaints Against Various Licensees Regarding Their Broadcast of the Fox Television Network Program "Married By America" on April 7, 2003, Forfeiture Order, 23 F.C.C.R. 3222 n.74 (2008) (*quoting* Reno, 521 U.S. at 867). In the *Reno* case, which addressed the lawfulness of Internet content regulation designed to protect children from harm, the Court supported maximum First Amendment freedom for Internet-based speakers as compared to the comparatively less freedom available to broadcasters.

Such avoidance also supports the FCC's goal of having maximum flexibility to justify regulatory forbearance in most instances, but conversely to apply selective regulation on an as needed basis, even for information service providers. This pursuit of regulatory options supports the FCC's predisposition not to regulate the Internet while nevertheless reserving the right to do so whenever the Commission deems it necessary, despite the First Amendment and case law precedent that clearly prohibits such government intervention. While the FCC might be able to leverage Title I ancillary jurisdiction to regulate ISPs under compelling circumstances, the Commission has no lawful means to extend such jurisdiction upstream to content providers.

When confronted with ISP claims that FCC regulation thwarts their First Amendment speaker rights, the Commission has sought to frame the matter as lawful extension of a regulatory mandate that has no impact on anyone's First Amendment freedom:

> Nor do we find Time Warner Cable's analogy of a broadband provider to a newspaper to be apt. For one, the Commission is not dictating the content of any speech. Nor are we persuaded that Comcast's customers would attribute the content delivered by peer-to-peer applications to Comcast, rather than attributing them to the other parties with whom they have chosen to interact through those applications. Under these circumstances, we find that our actions do not raise First Amendment concerns. [112]

The Commission may ignore the First Amendment implications of ISP regulation, but it surely must appreciate that "the other parties with whom [consumers] have chosen to interact through those applications" [113] do qualify for First Amendment protection from expanding government oversight.

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[112] Comcast Investigation, 23 F.C.C.R. at 13053 n.203.

[113] *Id*.

VI. Conclusions

Consistent with the FCC's examination of potential Internet regulatory issues, including the *Open Internet Order*, the network neutrality debate has focused on ISPs and their relationship downstream to end users and upstream to content, application and service providers. While stakeholders and researchers differ significantly about whether and how the Commission should act, the debate never has included whether the Commission should become a content regulator. No one can credibly claim that the FCC has to remedy some public harm in what has become a quite robust marketplace of ideas. The public harm exists at the ISP level where manipulation of packets can occur leading to potential harm to the marketplace of ideas upstream.

End users have unlimited choices of options, subject to downstream constraints imposed by ISPs. Legitimate ISP network management can and should address instances where specific types of content and applications can cause harm to networks, or to individual consumers. But the need to protect a network from spam and congestion, as well as the desire to protect individual subscribers from harmful content, does not elevate either an ISP or the FCC into a position of censor and content regulator.

The FCC should take affirmative steps to regulate ISPs in their capacity as gatekeepers, bottleneck operators and intermediaries. The Commission should operate as a referee able to resolve disputes and to determine, based on compulsory traffic reports and its own investigative powers, whether congestion and legitimate network management, or deliberate and unnecessary meddling of subscribers' traffic has resulted in service degradation. The FCC should not permit ISPs to drop subscribers' traffic packets to achieve anticompetitive objectives. However, legitimate network management, national security and tiering of customer service might justify some type of quality of service and price discrimination.

The proper and lawful concern about end user access to the Internet *via* ISPs does not justify a further extension of regulatory oversight to include content and applications. Doing so would reduce the individual and societal benefits that accrue from an open, innovative and robustly competitive marketplace for Internet-mediated content and applications.

The network neutrality debate seems to encourage provocateurs to raise and legitimize outlandish interpretations of law and policy. The FCC inadvertently may have contributed to confusion and uncertainty simply by acting on AT&T's invitation to consider extending Internet policies to content, applications and service providers. The Commission can contribute to clarity and certainty by expressly confirming that its jurisdiction is limited to matters pertaining to Internet access and the telecommunications services delivered by ISPs.