Do Conduit Neutrality Mandates Promote or Hinder Trust in Internet-mediated Transactions?

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As the Internet evolves and matures, Internet Service Providers (“ISPs”) have begun to create increasingly diversified business models that deviate from plain vanilla, one-size fits all terms and conditions. Increasing subscriber demand for broadband connections necessitates ISP efforts to identify and serve new profit centers and to differentiate retail and wholesale users on the basis of subscriber bandwidth requirements and other customer-specific demand characteristics. ISPs have identified new strategies to differentiate their offerings on the basis of price, quality of service, transmission speeds, permissible amount of capacity uploaded and downloaded, legitimate network management objectives and the demand for customer-specified network features.

Changing market conditions support ISP efforts to customize and differentiate service, but the technical means used to achieve this goal has proven controversial. Advocates for limiting price and service discrimination contend that absent a “network neutrality” \(^1\) mandate, ISPs will discriminate in ways that harm competitors by favoring corporate affiliates and selected third parties. Network neutrality supporters claim that ISPs have both the incentive and

\(^1\) 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).
ability to engage in harmful discrimination, typically framed as necessary network management, or a legitimate response to the specific requirements of a customer.

It has become apparent that ISP service differentiation can achieve both legitimate and unlawful strategies. In the former category, ISPs have available network management techniques that can reduce the risk that subscribers will receive harmful content, e.g., malware, denial of service attacks designed to overwhelm an ISP or specific subscriber with computer-generated requests for content and services and deteriorating service caused by congestion. In the latter category, ISPs have resorted to network management tactics, such as deep packet inspection, to block or throttle (delay) traffic that provide subscribers with alternatives to services offered by the ISP. For example, in the United States Comcast Corporation identified and blocked subscribers’ peer-to-peer traffic, such as the file sharing service provided via

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3 “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.” 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 cited as Comcast Sanction], reversed, Comcast Corp. v. F.C.C., 600 F.3d 642 (D.C. Cir. 2010) (holding that the FCC lacked jurisdiction to remedy even proven instances of traffic meddling by an ISP).

“The Internet allows creators to deliver programming through a mesh of peer-to-peer servers, rather than a central archive. Further, the Internet empowers users to exchange content
BitTorrent software, without having determined whether actual network congestion required such intervention. The company may have engaged in such a practice not to achieve legitimate network management objectives, but instead to handicap competitive alternatives to its pay-per-view/video-on-demand offerings.

In the context of trust, network management techniques can enhance subscribers’ confidence that their ISP uses tactics designed to safeguard privacy, authentication mechanisms to verify identities and network reliability. For example Deep Packet Inspection (“DPI”) can identify and filter out harmful content, just as it can expedite the transmission of “mission critical” traffic, such as streaming video requiring immediate, “real time” transmission and delivery to subscriber terminals. But DPI also enhances the ability of an ISP to identify traffic that it may want to degrade, or even prevent delivery, solely to convince consumers that an alternative source of content or service to that offered by ISP, or an affiliate, is too risky and unreliable. Such anticompetitive and discriminatory conduct can occur without easy detection.

directly rather than rely on traditional commercial distribution chains. In countless other areas, the Internet sweeps away traditional gatekeepers and places productive capacity in the hands of individuals.” Kevin Werbach, The Centripetal Network: How the Internet Holds Itself Together, and the Forces Tearing It Apart, 42 U.C. DAVIS L. Rev. 343, 351 (Dec. 2008).


5 “Content owners, not without success, have been selling the idea that broadband operators can help themselves manage network congestion by helping rights owners combat infringement. Comcast’s highly controversial use of DPI [Deep Packet Inspection] in 2007 to throttle BitTorrent traffic is one manifestation of the coincidental community of interest that has developed between rights owners and network operators with respect to the use of smart network technology to manage bandwidth-intensive P2P [peer-to-peer] traffic. In late 2007, Comcast was discovered to have been blocking BitTorrent transfers as a means of congestion management. In 2008, Comcast was sanctioned for this conduct by the FCC, though it argued in the proceedings that it was simply engaged in ‘legitimate network management.’” Annemarie Bridy, Graduated Response and the Turn to Private Ordering in Online Copyright Enforcement, 89 OR. L. Rev. 8, 105-06 (2010).
and end users may not know why or how an ISP alternative service has become inferior. End users may blame the content source for service disruption even though one or more intermediary carriers deliberately caused the problem to occur.

In addition to the debate about what ISPs can do to manage their networks and provide service enhancements are legislatively conferred opportunities to avoid liability for harms resulting from the content ISPs carry. In the United States, ISPs can avoid liability for the carriage of harmful content generated by others, as well as copyright infringing content. To qualify for these free from liability “safe harbors,” an ISP need only eschew the use of network

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6 The “the anticompetitive harm perpetuated by discriminatory network management practices is clearly compounded by failing to disclose such practices to consumers. 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.” Comcast Sanction, 23 F.C.C.R. at 13058-59.

7 “No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider.” Communications Decency Act, codified at 47 U.S.C §230(c)(1)(2010). Courts have construed the immunity provisions in §230 broadly in all cases arising from the publication of user-generated content. See, e.g., Green v. Am. Online (AOL), 318 F.3d 465, 471 (3d Cir.2003); Carafano v. Metrosplash.com, Inc., 339 F.3d 1119, 1123-24 (9th Cir.2003); Batzel v. Smith, 333 F.3d 1018, 1030-31 & n. 19 (9th Cir.2003); Ben Ezra, Weinstein, & Co. v. Am. Online Inc., 206 F.3d 980, 984-86 (10th Cir.2000); Zeran v. Am. Online, Inc., 129 F.3d 327, 330-31 (4th Cir.1997).


9 A safe harbor constitutes “[a]n area or means of protection [or a] provision (as in a statute or regulation) that affords protection from liability or penalty.” BLACK’S LAW DICTIONARY 1363 (8th ed. 2004). In light of the lack of a bright line distinction between regulated telecommunications services and largely unregulated information services, ventures possibly can secure a competitive advantage through regulatory arbitrage where ventures seek reduced regulatory oversight by characterizing telecommunications services as information services. The FCC defined regulatory arbitrage as “businesses making decisions based on regulatory classifications rather than on customers’ preferences and innovative and sustainable business
management techniques so that it can claim to operate as a neutral conduit. ISPs that do not induce copyright infringement by subscribers, or lack knowledge that a subscriber is engaging in copyright infringement will not incur secondary liability in the United States. 10 The Digital Millennium Copyright Act creates incentives for ISPs not to actively manage their networks or to install techniques that would support Digital Rights Management. Similarly a law also provides the basis for ISPs to avoid liability for harmful content that they unknowingly deliver. Provided an ISP refrains from installing techniques that might provide notice that harmful content is being carried, it can claim conduit neutrality to avoid liability.

This paper will consider ISP conduit neutrality in the context of whether and how legislatures and national regulatory authorities can enhance trust and network reliability. The paper assesses how network management techniques can offer both quality of service improvements and deliberately inferior service. Because technological innovations provide the ability to build trust in Internet-mediated transactions, the paper will identify legislative and regulatory strategies that promote network management that enhances cloud computing, 11


10 See, e.g., MGM Studios, Inc. v. Grokster, Ltd. 545 U.S. 913 (2005) (file sharing web sites deemed to have induced subscribers to infringe copyrights).

11 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).
electronic commerce and other transactions without according ISPs unconditional opportunities also to harm competition and consumers.

I. How Conduit Neutrality Impacts Trust

In a nutshell the advocates for network neutrality seek laws and regulations requiring ISPs to operate primarily as neutral conduits with conditional authority to deviate from this standard where compelling network management requirements exist and to provide specialized services. Opponents to network neutrality argue that the concept imposes the functional equivalent of common carriage 12 on ventures that offer information services. 13 Advocates for network neutrality assert that ISPs should operate in a non-discriminatory and transparent manner regardless of the services that reach subscribers. The potential for discrimination and intracorporate favoritism is perceived as justifying limited government intervention. 14

12 Traditional public utility law and regulation requires providers of essential and typically not fully competitive services to operate in a transparent and nondiscriminatory manner. Common carrier requirements have applied to telephone companies and not providers of enhanced, value adding and information services. In the United States, the Federal Communications Commission can The FCC can abandon most 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. 47 U.S.C. § 160(a) (2009).

13 In the United States, 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). These services qualify for a largely unregulated status.

14 See Marvin Ammori, Beyond Content Neutrality: Understanding Content-Based Promotion of Democratic Speech, 61 FED. COMM. L.J. 273 (March 2009); Sascha D. Meinrath & Victor W. Pickard, Transcending Net Neutrality: Ten Steps Toward an Open Internet, 12 J.
An absolute or purist notion of network neutrality might severely restrict what ISPs can do to promote a more reliable, secure and trusted Internet, because ISPs might have to abandon non-neutral tactics that could benefit subscribers without harming competition. Reasonable network management arguably should include safeguards against excessive and largely undesirable commercial messages, common referred to as spam, as well as artificially induced network congestion with the goal of so clogging routers and servers that an ISP cannot provide reliable service. Some deviations from absolute neutrality can guard against harmful and possible criminal use of an ISP’s network. Proactive efforts to guard against spamming, denial of service attacks and other practices can promote greater reliability and trust in the Internet.

Network neutrality advocates and opponents have framed the debate in ways that foreclose compromise. Opponents view any form of network neutrality as unlawful regulation that illegally robs ISPs of freedom and revenues. 15 Advocates for network neutrality claim a


need for a light-handed government referee to resolve predictable disputes and ISP attempts to
tilt the competitive playing field against unaffiliated competitors who might offer the next “killer
application.” So long as polar opposites frame the debate, most national legislatures and national
regulatory authorities will fail to act one way or the other, thereby foreclosing the possibility of a
more sophisticated and nuanced analysis.

A. Deep Packet Inspection and Network Management

DPI provides the basis for ISPs to offer many types of network management functions. With DPI, ISPs can examine the packet headers that contain information needed to route traffic as well as guidance on what kind of content is contained in the packet payload. DPI provides the basis for ISPs to single out traffic for expedited and favored treatment, or just the opposite. Rather than offer all subscribers and all traffic streams the same “best efforts” routing, ISPs can use DPI to identify specific traffic for “better than best efforts” expedited treatment, or to block, drop, delay, throttle and otherwise degrade specific traffic.

Providing better than best efforts routing means that an ISP can use techniques such as DPI to prioritize traffic, so that even in the absence of congestion certain types of traffic can receive priority status. For “mission critical” traffic, such as the real time, immediate delivery of packets corresponding to the transmission of a “live” full motion video program, the ISP can offer a superior service and receive a financial premium for guaranteeing a higher quality of service and reliability that the packets will arrive on time. Companies such as Akamai offer

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); 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).
content providers ways to deliver content with greater reliability and quality by reducing the
number of intervening routers that handle the traffic and by distributing even live content to
many geographically dispersed proxy services so that the number of routers and the geographical
length of the transmitted bitstream is reduced.

Better than best efforts, priority handling of mission critical content can result in a
mutually beneficial arrangement for content providers, consumers and ISPs. The most doctrinal
view of network neutrality might oppose such prioritization of traffic, because of the likely
potential for abuse. If an ISP can charge a premium for expedited service, the possibility exists
that it can so partition its network between regular and premium service in ways that penalize
non-premium service subscribers. An ISP could so narrow regular service bandwidth so that
congestion and degraded service becomes a certainty for regular service subscribers, thereby
forcing them to migrate to the more costly premium service tier. While offering the option of
offering such priority service on a specialized basis, the United States Federal Communications
Commission (“FCC”) implies that paid prioritization of service might violate its sense of what
constitutes an open and non-discriminatory Internet. 16

Even in the absence of bandwidth partitioning, DPI provides the basis for an ISP to
categorize traffic and then to prioritize, degrade or block carriage. DPI provides unscrupulous
ISPs the opportunity to extract additional and possibly unwarranted payment from subscribers

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16 The FCC defines paid prioritization as a commercial arrangement between a broadband
provider and a third party to directly or indirectly favor some traffic over other traffic in the
connection to a subscriber of the broadband provider. (¶ 76). The FCC’s rule prohibiting
unreasonable discrimination, which only applies to fixed providers of broadband Internet access,
does not impose a per se prohibition on paid prioritization. Nonetheless, because paid
prioritization arrangements raise "significant cause for concern," according to the Commission, it
is unlikely that paid prioritization arrangements will satisfy its "no unreasonable discrimination"
standard. (¶ 76). Paid priority arrangements will be evaluated through the FCC's complaint
process, which is discussed below. (¶ 76).
content with the current quality of service. By degrading the current regular service, an ISP might force migration to more expensive service tiers, not because a particular subscriber wants or needs better service, but because the regular service has become so degraded.

On the other hand DPI provides the basis for a variety of mutually beneficial network management features that can enhance reliability and trust. A conscientious ISP can use DPI, not to extort additional revenues from subscribers, but to identify and thwart potential threats to network security and reliability before a virus, denial of service attack and other harm gets delivered to end users. DPI and other network management techniques can target, identify and neutralize harmful content before it can harm users and ISPs’ networks. No application of network neutrality safeguards should prevent ISPs from using technology to provide vigilance against the transmission of harmful content.

II. Network Neutrality in the Context of Trust Building

As the Internet evolves and diversifies, technological innovations will provide ever increasing ways for criminal and harmful conduct. Not a week goes by without significant press accounts on new ways, even popular web operators can use to violate a reasonable person’s sense of privacy. 17 Similarly, criminals find new and hard to stop ways to defraud and steal

17 “Privacy worries have bedeviled Facebook since its early days, from the introduction of the endless scroll of data known as the news feed to, most recently, the use of facial recognition technology to identify people in photographs.

At the nub of all those worries, of course, is how much people share on Facebook, with whom and — perhaps most important — how well they understand the potential consequences.

The back and forth between Facebook and its users over privacy is gaining importance as the company's growth continues unabated. Facebook’s policies, more than those of any other company, are helping to define standards for privacy in the Internet age.” Facebook, THE NEW YORK TIMES, undated profile available at: http://topics.nytimes.com/top/news/business/companies/facebook_inc/index.html.
one’s identity and monetary funds. Without a doubt network operators, such as ISPs, can provide users with a first line of protection against criminal conduct, and actions that violate one’s reasonable expectation of that of trust, privacy and reliability. Accordingly network neutrality should not foreclose ISPs from having the ability to apply network management functions that can enhance authentication, reliability and consumer trust.

A. **In the United States Concerns About Open Access May Diminish Trust as Can Safe Harbor Insulation from Liability for What ISPs Deliver**

The United States may provide a case study in how well intentioned concerns about open Internet access and conduit neutrality may adversely impact the level of trust consumers have towards the Internet. In the worst case scenario the FCC’s network neutrality rules can create disincentives if not penalties for network management tactics that may promote trust, but also facilitate unreasonable discrimination. Additionally legislatively conferred safe harbors from liability for the carriage of harmful content provide ISPs with further incentives to operate as neutral conduits without using proactive network management techniques that could preempt and prevent harm to both ISPs’ networks and consumers.

1) **Open Internet Access Rules**

Despite questions whether it has lawful authority to mandate network neutrality, the FCC has established a number of enforceable “Open Internet” rules designed to foreclose anticompetitive and discriminatory conduct. 18 The FCC has decided to proceed even though a federal appellate court determined that the Commission lacked jurisdiction to sanction Comcast for interfering with subscribers’ peer-to-peer traffic absent legitimate network management

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requirements. This decision questions whether the FCC can establish binding network neutrality policies, rules and regulations on ISPs 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.’” Notwithstanding the Supreme Court’s broad deference to the FCC’s assertion of ancillary jurisdiction in the Brand X case, 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. The court vacated the FCC’s sanctioning


20 Id. 600 F.3d at 644 citing Am.Library Ass’n v. F.C.C., 406 F.3d 689, 692 (D.C. Cir. 2005).

21 Nat'l Cable & Telecomms. Ass’n v. Brand X Internet Servs., 545 U.S. 967, 125 S.Ct. 2688, (2005). 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.” Id. 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 National Ass’n of Regulatory Utility Commissioners v. FCC, 533 F.2d 601, 613 (D.C. Cir. 1976)(rejecting the FCC’s preemption of state and local regulation of two-way, intrastate, non-video cable transmissions).

22 “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,” Id. at 6, citing 47 U.S.C. § 154(i) and In re Formal Compl. of Free Press & Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications, 23 F.C.C.R.
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 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 23 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.” 24 As it had done in the case rejecting the FCC’s attempt to require television set manufacturers to build units capable of processing digital right management, “broadcast flags,” 25 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


24 Id. at 6.

effective performance of its statutorily mandated responsibilities.” 26 The court determined that the FCC had not satisfied the second part of the test. 27

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, 28 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. 29

The court concluded that the FCC could invoke ancillary jurisdiction to apply any number of regulatory requirements to cable modem provided Internet access without explicit congressional authority to do so. 30

26 Id. at 7.

27 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. at 7-8 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’ (American Library’s second requirement), 406 F.3d at 692, that question remains for us to answer.” Id. at 12.

28 The Commission cited to Secs. 1, 230(b), 706, 257, 201 and 623 of the Communications Act.

29 Id. at 23.
The D.C. Circuit Court of Appeal’s reversal in the Comcast case means that the FCC failed in its quest to stretch Title I ancillary jurisdiction so that the Commission can apply selective regulations to information service providers and provide both safeguards and remedies for instances where ISPs engage in unreasonable practices that harm the public interest. Had the court determined that a sufficient link to statutory authority existed, the FCC would have had ample flexibility to apply whatever regulatory safeguards it deemed necessary to prevent ISPs from engaging in anticompetitive, discriminatory, nontransparent and other conduct potentially harmful to the public. Because the court did not accept the FCC’s legal rationale, the Commission must rethink whether and how it can provide the public safeguards it deems necessary.

The FCC quickly responded to the judicial reversal with the issuance of a Notice of Inquiry designed to begin “an open, public process to consider the adequacy of the current legal framework within which the Commission promotes investment and innovation in, and protects consumers of, broadband Internet service.” The FCC posed three primary questions the answers of which would steer the Commission to maintain the limited, if any, regulatory foundation available from Title I, to reclassify wired Internet access, e.g., Digital Subscriber Line and Cable Modem service, as telecommunications services, subject to Title II, common carrier

30 “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.” Id. at 23-24.

regulation, or to pursue a “Third Way” where the Commission would target selective portions of Title II regulation solely to the portions of Internet access that involves the actual connection using telecommunications lines. 32

The FCC’s NOI evidences strong opposition by FCC management to the D.C. Circuit Court’s analysis and the belief that Internet access “networks are within the Commission’s subject-matter jurisdiction over communications by wire and radio and historically have been supervised by the Commission.” 33 The NOI stated that until the Comcast decision few observers doubted whether the Commission had lawful authority to regulate broadband Internet services. 34

The FCC devoted substantial space in the NOI reasserting why it believes it has a direct statutory authority to regulate Internet access. Even as the FCC persists in making possibly

32 “First addressing the wired service offered by telephone and cable companies and other providers, we seek comment on whether our “information service” classification of broadband Internet service remains adequate to support effective performance of the Commission’s responsibilities. We then ask for comment on the legal and practical consequences of classifying Internet connectivity service as a “telecommunications service” to which all the requirements of Title II of the Communications Act would apply. Finally, we identify and invite comment on a third way under which the Commission would: (i) reaffirm that Internet information services should remain generally unregulated; (ii) identify the Internet connectivity service that is offered as part of wired broadband Internet service (and only this connectivity service) as a telecommunications service; and (iii) forbear under section 10 of the Communications Act from applying all provisions of Title II other than the small number that are needed to implement the fundamental universal service, competition and small business opportunity, and consumer protection policies that have received broad support.” Id. at ¶2.

33 Id. at ¶10. See also, Framework for Broadband Internet Service, Notice of Inquiry Powerpoint summary available at: http://reboot.fcc.gov/e/document_library/get_file?uuid=366e0dc4-c4ef-4525-bc36-d6a8dd75da4e&groupId=19001.

34 “Before the Comcast case, most stakeholders—including major communications service providers—shared the Commission’s view that the information service classification allowed the Commission to exercise jurisdiction over broadband Internet services when required.” Id. at ¶8.
reasonable inferences to statutory language containing no specific regulatory mandate, the Commission stated that:

“[t] Throughout the last decade, the Commission has stated its consistent understanding that Title I provided the Commission adequate authority to support effective performance of its core responsibilities. Commissioners, including the two former Chairmen who urged the information service approach, as well as cable and telephone companies and other interested parties, individually expressed this understanding. In Brand X, the Supreme Court appeared to confirm this widely held view, stating that “the Commission remains free to impose special regulatory duties on facilities-based ISPs under its Title I ancillary jurisdiction.” 35

The FCC did acknowledge that the Comcast decision “causes us to reexamine our ability to rely on Title I as the legal basis for implementing broadband policies.” 36 Accordingly the Commission asked whether in the wake of that decision what overall scope of authority remains available should the Commission retain the information service classification for Internet access. The Commission’s second regulatory alternative considered a reclassification of Internet access so that all aspects of Title II common carrier regulatory could apply and enable the Commission to establish “rules furthering universal service, privacy, access for persons with disabilities, and basic consumer protection, among other federal policies.” 37 ISPs universally revile this option claiming that it would impose unnecessary regulatory burdens and create disincentives for investment in infrastructure and expanded staff hiring.

35 Id. at ¶30 (citation omitted).
36 Id.
37 Id. at ¶52.
The FCC offered a third alternative that proposes to finetune the scope of Title II coverage, limiting it to the telecommunications links used to provide Internet access, while also having the Commission forbear from applying all elements of common carrier regulation. “This third way would involve classifying wired broadband Internet connectivity as a telecommunications service . . ., but simultaneously forbearing from applying most requirements of Title II to that connectivity service, save for a small number of provisions.” 38 The Commission has applied this streamlined common carrier model to wireless cellular radiotelephone carriers, under an explicit statutory mandate.

Chairman Genachowski and his staff expressed a clear preference for this Third Way option. 39 However even with the immediate and extensive forbearance from regulation, this option does entail a re-classification of statutory service definitions. Shifting from information service to telecommunication service, subject to regulatory forbearance nominally vests greater regulatory authority in the FCC. Stakeholders and reviewing courts welcome reclassifications that result in less regulatory authority and commensurately less regulation. The Third Way

38 Id. at ¶67. “Specifically, if the Commission decided, after appropriate analysis, to classify wired broadband Internet connectivity (and no other component of wired broadband Internet service) as a telecommunications service, it could simultaneously forbear from applying all but a handful of core statutory provisions—sections 201, 202, 208, and 254—to the service. Two other provisions that have attracted longstanding and broad support in the broadband context—sections 222 and 255—might also be implemented for the connectivity service, perhaps after the Commission provides guidance in subsequent proceedings as to how they will apply in this context.” Id. at ¶68.

39 See, e.g., Federal Communications Commission, 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 (rejecting a renewed attempt to find a way to extend Title I ancillary jurisdiction or reclassifying Internet access as a telecommunications service); Austin Schlick, 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).
option in effect re-regulates a service that either never qualified for regulation, e.g., cable modem information service, or had previously qualified for deregulation, e.g., DSL service that the FCC initially classified as an information service, but later reclassified it as an information service. Should the FCC adopt and apply the Third Way option, the Commission will have explicitly stated that ISPs, like cellular telephone companies, trigger two or more regulatory classifications when offering a retail service. The Commission has evidenced a preference for applying a single, least regulatory classification to convergent services. When obligated to apply two or more classifications, as currently applies to wireless telephone calls, Title II common carriage, and wireless Internet access, Title I information service, jointly provided by cellular telephone companies, the Commission largely defaults to the less regulatory classification, which perhaps should provide some indication that the Commission will seeks to regulate aggressively. Nevertheless carriers subject to even the prospect of triggering a potentially more expansive regulatory regime have launched a costly campaign to convince Congress to preempt the FCC from undertaking a Third Way reclassification of Internet access.

Even as DSL and cable modem service provider act to prevent the Commission from considering a reclassification of service, curiously no one disputed the FCC’s jurisdiction and authority, to sanction the Madison River telephone company when the company blocked DSL subscriber access to VoIP services. \(^40\) The matter resulted in a voluntary forfeiture of $15,000 by the company instead of litigation without a complete examination of the jurisdictional basis for claiming jurisdiction over a DSL information service. However the Commission did expressly state that it reserved the option of reviewing any complaints against the company—presumably retroactively and prospectively—under its authority in Sec. 208 (Title II) of the

\(^{40}\) Madison River Communications, LLC and affiliated companies, Consent Decree, 20 F.C.C. Rcd. 4295 (2005).
Communications Act. Madison River provides some basis for FCC intervention to safeguard the public interest and assert jurisdiction over the telecommunications links used to provide DSL Internet access.

In a split decision, likely to face congressional and judicial review, the FCC issued rules designed to promote transparent, unblocked and nondiscriminatory Internet access. Ostensibly structured to offer an acceptable compromise the Report and Order imposes basic network neutrality obligations on ISPs with exceptions made for reasonable network management, specialized services and wireless access. The FCC reiterated that to ensure

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43 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.” Id. at ¶44.

44 “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.

45 “[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
an open Internet the Commission must establish clear and certain rules applicable to both fixed. i.e., wire-based and mobile, i.e., wireless, ISPs.

The transparency requirement obligates all ISPs to disclose their network management practices, performance characteristics, and terms and conditions of their broadband services. \(^{47}\) The FCC adopted different requirements for fixed and 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 lawful websites, or block applications that compete with their voice or video telephony services. \(^{48}\) On the other key 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’

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.” \(\text{Id. at } \S\ 114.\)

\(^{46}\) 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.” \(\text{Id. at } \S\ 99.\)

\(^{47}\) \(\text{Id. at } \S\ 1.\) “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.” \(\text{Id. at } \S\ 54.\)

\(^{48}\) “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.” \(\text{Id. at } \S\ 63.\)
access to the web and protects against mobile broadband providers’ blocking applications that compete with their other primary service offering—voice and video telephony. 49

The Report and 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. 50

In light of strident dissents from the two Republican Commissioners, the Report and Order appears to emphasize that the final rules logically follow from the nonpartisan consensus reached in documents created in 2005 and 2007, 51 and do not violate the Constitution, 52

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49 Id. at ¶99.

50 Id. at ¶1.

51 “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).

52 See Id. at ¶¶138-150.
particularly First Amendment expression rights of ISPs and the prohibition on government takings in the Fifth Amendment.

Additionally the Report and 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. 53 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. 54

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. 55

53 See Id. at ¶¶115-137.

54 “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.

55 “[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 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
despite having previously concluded that the technologies providing such access constitute an insignificant factor when the Commission determined that cable modem service constituted an information service and not a telecommunications service. 56 Second, the FCC now has to elevate the significance of the telecommunications bit transmission function in Internet access 57 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, 58 Digital Subscriber Lines, 59 Broadband over Power Lines 60 and wireless services. 61 Now the FCC wants to validate the telecommunications component as the driver for public interest regulatory safeguards.

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57 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 FCC Rcd. 24012, 24029-30 (1998).


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.  

Additionally the FCC invokes elements of Title II, III and Title VI regulatory authority to ISPs that qualify for the largely unregulated statutory classification of information service providers and not telecommunications service providers for which Title II customarily applies. Instead of stating that ISPs operate as telecommunications service providers when they provide essential first and last mile access to the Internet—a scenario suggested by FCC Chairman Julius Genachowski and now apparently rejected—the Report and Order states that because some Internet-based services compete with traditional telephone, broadcast and video services, the

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62 Id. at ¶123.
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.” 63

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.” 64

63  Id. at ¶21.
64  Id. at ¶24.
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. 65

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 network management concerns. Similarly the Commission states that the benefits in guarding against such anticompetitive practices outweighs the costs. 66

2) Safe Harbor Exemption from Tort and Copyright Liability

Before the FCC’s open Internet initiative, the United States Congress enacted two laws that provide safe harbor exemption from liability for ISPs when they operate as neutral conduits and carry harmful content. Section 230 of the Communications Decency Act exempts ISPs from liability for carriage of harmful content that, for example, defames an individual. The Digital

65 Id. at ¶29.

66 “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.
Millennium Copyright Act contains a provision that insulates an ISP from secondary liability for the copyright infringement of subscribers provided the ISP had no notice of the infringement and takes down the offending content from the Internet in a timely manner upon notification.

These two liability avoidance opportunities create strong incentives for ISPs to eschew any technique that would trigger the loss of liability safe harbors, even if subscribers would benefit from greater vigilance. While ISPs do not want to be characterized as operators of “dumb pipes” they can maintain strong insulation from liability by operating as neutral conduits purposefully oblivious to the nature and type of content they carry. Similarly while technological innovations provide new opportunities to monitor, manage and shape traffic, ISPs have to balance the potential for new revenue opportunities with the potential loss of liability exemption. Safe harbors translate into significant operating cost savings as ISPs do not have to install technology and hire staff to monitor their networks and to investigate and remedy quickly complaints that the ISP has transmitted harmful content.

The collective impact of regulator-compelled open access and legislature-created liability safe harbors create strong incentives for ISPs to avoid installing devices and software capable of identifying particular bitstreams. These techniques can provide a safer, more reliable and trust enhancing Internet, but they also can provide the basis for ISPs to target specific bitstreams and types of traffic for inferior service. Currently no legislature or regulatory authority has come up with a means to encourage the use of trust enhancing technology without to the exclusion of anticompetitive practices that the very same technology can facilitate.

III. The Way Forward

National Regulatory Authorities, such as the FCC, face a daunting quandary in calibrating the scope of Internet oversight and intervention. A hands-off approach, consistent
with the view that the Internet has thrived in the absence of government meddling, risks giving ISPs unfettered opportunities to act on the incentive and ability to engage in anticompetitive and discriminatory practices. When and if an ISP tilts the competitive playing field in its favor, consumers may well difficulty identifying what has caused competitors’ service to become slow, unresponsive and unreliable. Should the truth become know, as when Comcast recanted its initial claim not to have meddled with subscribers’ traffic, the general level of trust and confidence in the Internet can diminish.

On the other hand, excessive or premature government intervention risks short-circuiting market-driven solutions to inter-carrier disputes, replacing them with a third-party estimate of a fair solution. Government in its capacity as judge or arbitrator may not find a solution that properly balances the growing need for ISP quality of service differentiation with necessary safeguards to prevent easily-executed, but not easily discovered tactics that handicap competitors.

If the matter of consumer trust in the Internet were to become a part of the network neutrality debate advocates of polar opposite positions probably could not reach a compromise solution. One camp sees no problem necessitating government intervention while the other sees inaction as foreclosing much of the future benefits the Internet can deliver. A middle ground solution legitimizes government dispute resolution without authorizing proactive rulemaking to resolve problems that may not exist, or ones that the parties can resolve through negotiation or litigation. National Regulatory Authorities should have lawful authority to respond to complaints and lend their expertise and “good offices” to find solutions, If a market-driven solution cannot occur and if litigation provides a delayed remedy far after harm to individual
companies, the marketplace and the level of consumer trust, then time dispute resolution appears appropriate.

Agencies such as the FCC have in-house expertise to fashion appropriate remedies after having generated a factual record. Few consumers would accept the premise that an ISP, such as Comcast, should have total freedom to meddle with customer traffic, not just to safeguard subscribers and manage their networks, but also to handicap competitors who rely on ISPs to originate and terminate service. Traditional public utility, common carrier regulation should not apply to ISPs, because they do not now operate essential facilities with no prospect for competition to achieve self-regulation. However, the power to investigate and resolve disputes triggered by a formal complaint to the regulator, appropriately positions an expert government agency to serve as an unbiased referee.

The need for dispute resolution becomes more essential in light of the fact that competition may not exist at a sufficient level to eliminate ISP incentives to handicap competitors or to offer superior connections only to content suppliers willing to part with the most money. Unless and until the ISP marketplace becomes so competitive as to guarantee self-regulation, the potential exists for individual ISPs to use the need to manage their networks as a ruse to handicap competition. A net reduction in consumer trust in the Internet results when ISPs can engaged in undetected, unresolved and unsanctioned network discrimination.