

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)	
)	
Preserving the Open Internet)	GN Docket No. 09-191
)	
Broadband Industry Practices)	WC Docket No. 07-52

COMMENTS OF PUBLIC INTEREST COMMENTERS

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SUMMARY[†]

The rules proposed by the Commission are both necessary and narrow in scope. They focus on protecting subscribers from harms caused by the unique position occupied by broadband access providers. The rule thus would maintain the benefits of an open Internet not merely for subscribers, but for everyone using what has become critical infrastructure on which we all to some degree depend. Accordingly, while PIC concur with the conclusion in the *NPRM* that the Commission has more than adequate authority to adopt the proposed rules,¹ PIC propose alternative theories of Commission authority more consistent with the purpose of those rules, linking the exercise of authority directly to the underlying transmission component of broadband access service. This narrower theory of Commission authority has the added advantage of addressing the concerns expressed by some that rules to preserve an open Internet must invariably confer power to regulate content. By placing the Commission's exercise of authority clearly and unambiguously within the scope of Title I ancillary authority as ancillary to Title II due to the transmission component, as previously affirmed by the D.C. Circuit,² the exercise of ancillary authority in this case will sit squarely within the traditional framework for information services, yet bounded by equally well-established First Amendment jurisprudence governing telecommunications.³

While fully supporting the general framework outlined by the Commission for the proposed rules, these comments suggest certain modifications to the definitions and draft rules set forth in the *NPRM*. The Commission should narrow the definition of “reasonable network

[†] Commenters would like to acknowledge the assistance of Christopher Reilly, John Bergmayer, Michael Weinberg, Mehan Jayasuriya, Jef Pearlman, and Rashmi Rangnath in the preparation of these comments.

¹ In the Matter of Preserving the Open Internet; Broadband Industry Practices, GN Docket No. 09-191, WC Docket No. 07-52, *Notice of Proposed Rulemaking*, FCC 09-93, 24 FCC Rcd. 13064 ¶¶ 83-87 (rel. Oct. 22, 2009) (“*NPRM*”).

² See *Computer and Communications Industry Association v. FCC*, 693 F.2d 198 (D.C. Cir. 1982) (“*CCIA*”).

³ See *Sable Commc'ns California, Inc. v. FCC*, 492 U.S. 115 (1989).

management” to its technical origins, and recognize that “managed services” are not Internet services. PIC respectfully submit that adoption of these modifications, among others, would result in final rules more readily suited to preserving the open Internet while promoting network owners’ flexibility to manage their networks in a reasonable and nondiscriminatory manner. PIC also specifically urge the Commission to exclude copyright enforcement from the scope of “Reasonable Network Management,” and recommend frameworks for evaluating several commonly discussed types of prioritization.

Meaningful enforcement of open Internet rules requires an effective enforcement mechanism. The existing common carrier complaint process does not provide a useful model for such a process. Rather, the Commission should adopt a simple yet fair two-step complaint process so that the initial burden on complainants is not overly high. There should be streamlined timelines with a “shot clock” to insure that agency inaction does not benefit ISPs engaged in discriminatory network management practices. The Commission also should provide for interim relief in the form of a stay when complainants can demonstrate that they face imminent harm from such discriminatory practices.

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Five public interest organizations⁴ (“Public Interest Commenters” or “PIC”) respectfully submit these comments in response to the Commission’s *Notice of Proposed Rulemaking* (the “*NPRM*”) in the above-captioned docket.⁵ PIC emphatically endorse the Commission’s proposal to promulgate rules to preserve the open Internet.⁶

INTRODUCTION

No one could credibly dispute the vital importance of the open Internet for all manner of political discourse, societal interactions, commercial transactions, innovative entrepreneurship, and continued economic development in the United States.⁷ Some parties do complain, however – and undoubtedly will continue to do so in this proceeding – that there is no need for Commission rules designed to ensure the open nature of this vital piece of twenty-first century infrastructure. Yet, as the comments that follow make clear, rules founded upon the codified principles set out in the *NPRM* are undeniably necessary for preserving the essential character of the open Internet and the tremendous value it engenders.

⁴ In alphabetical order, they are Center for Media Justice, Consumers Union, Media Access Project, New America Foundation, and Public Knowledge.

⁵ *NPRM*.

⁶ See, e.g., *id.* ¶¶ 2, 11, 50, 55; see also *id.* ¶¶ 89 (codifying existing Internet principles), 104 (proposing nondiscrimination rule), 119 (proposing transparency rule).

⁷ See, e.g., *id.* ¶¶ 3-4, 17-23.

The multitude of public interest benefits created and augmented by the Internet are far too important to risk in view of the present and potential threats to the Internet's open architecture. These threats arise from the current structure of the market for broadband services, and economic incentives that naturally would lead incumbent, facilities-based Internet service providers ("ISPs") to discriminate against content flowing over their networks. Moreover, threats to the open Internet are not limited to anticompetitive behavior. Detrimental changes to the open architecture and standards under which the Internet has flourished – including network owners' use of technologies designed to invade, inspect, block, filter, slow, or degrade lawful content transmitted over their networks – would harm not just competition among ISPs and commercial providers of content, applications, and services delivered over the Internet, but innovation as well.

Any such changes also would invariably and irrevocably diminish the freedom of expression of all Americans, who already have and increasingly will come to rely on this most accessible and democratic communications medium. The loss of such freedoms would be especially devastating to typically marginalized demographic groups, such as low-income individuals, rural populations, and people of color. Members of these groups look forward to the day when they are able to share fully in the benefits of the dynamic political, economic, and social engine that affordable broadband Internet activity represents. They look forward to demand-driven deployment and expansion of advanced facilities in their communities. They do not look forward, conversely, to unenforceable ISP promises that deployment is just around the corner, but only so long as those ISPs have the ability to alter the very nature of the Internet by favoring, prioritizing, or discriminating against certain types of lawful speech, content, and applications.

Part I of these comments responds to specific inquiries in the *NPRM* and addresses the Commission’s authority to adopt open Internet rules, largely as proposed in the *NPRM*, that would regulate the transmission component underlying any and all Internet access services. It also discusses the proper application of such rules to all broadband Internet access service providers, regardless of the wireline or wireless platform utilized by such providers to deliver Internet access services. Part II of the comments describe in somewhat greater detail the benefits and vast promise of the open Internet. The Commission and likely all of the commenters in this proceeding recognize these benefits, but they are too important to omit entirely from this discussion – just as the threats the open Internet requiring Commission action at this time are too obvious to ignore. Part III offers specific suggestions regarding the six principles proposed to be codified as the open Internet rules, along with comments regarding “Reasonable Network Management” (or “RNM”) practices and other aspects of the proposed rules. Finally, Part IV offers a framework for simple and effective enforcement of these rules to provide for continued flexibility in ISPs’ network maintenance while guarding against discriminatory practices.

DISCUSSION

I. THE COMMISSION HAS AMPLE AUTHORITY TO PROMULGATE OPEN INTERNET RULES

As the Commission has noted, it may use ancillary authority to “regulate the network practices of facilities-based broadband Internet access service providers.”⁸ Indeed, even since it classified the provision of both basic transmission and information service as an “information service” in the *Cable Modem Declaratory Ruling*, the Commission has consistently asserted that

⁸ *NPRM* ¶ 83.

it retains the authority to regulate the combined service through its ancillary jurisdiction.⁹ The Commission subsequently asserted this general theory of ancillary jurisdiction on several occasions, including by unanimous vote of the Commission in the *Notice of Inquiry* which began this proceeding.¹⁰

In the *Comcast/BitTorrent Order*,¹¹ the Commission explored the nature of its ancillary authority in considerable depth. Comcast appealed that order, and its challenge remains pending. Furthermore, considerable confusion appears to remain as to the relationship between the presence or absence of competition and the Commission's authority to act, a distinction most often invoked to distinguish between regulation of wireless and wireline broadband platforms. Accordingly, the *NPRM* invites comment on the nature of the Commission's authority to adopt rules that protect an open Internet.¹²

PIC concur with the Commission's assertion of authority set forth in the *NPRM*.¹³ However, PIC also suggests an alternate Title I framework that focuses on the Commission's continued, uncontroversial assertion of authority to regulate the transmission component of information services. Such a framework could have several advantages over the Commission's existing framework. First, it would center the Commission's authority firmly within longstanding precedent on regulation of information services and exercise of ancillary authority for that purpose. Second, a revised framework would provide clear limits to the Commission's authority by placing it within a suitable First Amendment framework defined by *Sable Communications*

⁹ *Inquiry Concerning High-Speed Access to the Internet over Cable and Other Facilities, Internet Over Cable Declaratory Ruling*, 17 FCC Rcd. 4798, 4841-42 (2002) [hereinafter "*Cable Modem Order*"].

¹⁰ See, e.g., *Broadband Industry Practices, Notice of Inquiry*, 22 FCC Rcd. 7894 (2007). In this regard, it is noteworthy the Commissioner McDowell, who expressed skepticism as to Commission jurisdiction in his separate statement to the *NPRM*, voted in favor of this general statement of jurisdiction in the initial *Notice of Inquiry*.

¹¹ *Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-To-Peer Applications, Memorandum Opinion & Order*, 23 FCC Rcd. 13,028 (2008).

¹² See *NPRM* ¶ 87.

¹³ See *id.* ¶¶ 83-86.

and *Reno v. ACLU*.¹⁴ Finally, centering the Commission’s exercise of authority around the core function of basic transmission would clarify that the Commission’s authority rests on its core responsibilities to ensure interconnection and facilitate the continued evolution of “a rapid, efficient, Nation-wide and world-wide wire and radio communication” network.¹⁵

Ultimately, if the Commission cannot satisfy itself that it has sufficient authority via ancillary jurisdiction to ensure an open Internet, the Commission must take immediate action to preserve its power to protect consumers and the open Internet – including consideration of reclassification of facilities-based broadband access as a Title II service. Without the power to protect a consumer’s ability to access the lawful content of their choice over the Internet, the Commission should pursue all options available to ensure the nation has a regulator capable of intervening to protect the nature of our telecommunications infrastructure.

The Commission predicated its decision to classify facilities-based broadband as an information service on the assumption that it retained sufficient authority to protect the open Internet.¹⁶ In addition, the Commission relied on judgments with regard to the integration of transmission and information service and its predictive judgment that deregulation would encourage the creation of a robustly-competitive facilities based broadband market.¹⁷ Recent events have raised doubts about the veracity of these predictions,¹⁸ and, as noted, challenge to the Commission’s underlying ancillary authority remains pending. Given the enormous importance of maintaining an open Internet, as set forth in Part II below, in the absence of sufficient

¹⁴ *Reno v. American Civil Liberties Union*, 521 U.S. 844 (1997); *Sable Commc’ns of California v. FCC*, 492 U.S. 115 (1989).

¹⁵ 47 U.S.C. § 151.

¹⁶ *Appropriate Framework for Broadband Access Over Wireline Facilities, Report & Order & Notice of Proposed Rulemaking*, 20 FCC Rcd. 14,855, 14,904 (2005) (“*Wireline Framework Order*”); *Cable Modem Order*, 17 FCC Rcd. at 4841.

¹⁷ *Wireline Framework Order*, 20 FCC Rcd. at 14880.

¹⁸ *See Ex Parte Submission of the United States Department of Justice in A National Broadband Plan for Our Future*, GN Docket No. 09-51, at 13-14 (Jan. 4, 2010).

authority under its ancillary jurisdiction, the Commission can and should reconsider either requiring facilities-based broadband providers to offer the telecommunications component separately or should reclassify facilities-based broadband service as a Title II service.

A. Existing Commission Authority Provides Sufficient Jurisdiction for Adoption of the Proposed Open Internet Rules

The Commission needs no new grant of authority to engage in this open Internet rulemaking under the ancillary authority granted by Title I of the Communications Act. The proposed rules focus on preserving users' *access* to the Internet, not on "regulating the Internet" in terms of the content, services, or applications made available thereon.¹⁹ Instead of focusing on specific services such as email or web hosting, the proposed rules focus on the ability of a user to choose *any* application and attach *any* non-harmful device to the ISP's network, and to transmit data that will be subject to nondiscriminatory network management practices disclosed in a transparent manner.²⁰ In doing so, the rules address the type of communication and transmission functions that the Commission has long regulated under Title II. Whether continuing to regulate broadband Internet access services under Title I or expressly reiterating and reaffirming the telecommunications underpinnings of these offerings, the Commission should recognize that Title II provides authority and direction to apply open Internet rules to the basic transmission elements of broadband Internet access service.

Courts have recognized that the Commission retains authority over communications facilities, equipment, or services even when it has chosen previously to regulate them under Title I. In *Computer and Communications Industry Association v. FCC* ("CCIA"),²¹ the court upheld the Commission's use of preemptory powers to regulate consumer premises equipment ("CPE")

¹⁹ See *Draft Proposed Rules for Public Input*, NPRM Appendix A.

²⁰ NPRM Appendix A.

²¹ *Computer and Communications Industry Association v. FCC*, 693 F.2d 198 (D.C. Cir. 1982).

even though the Commission had chosen to engage in “limited forbearance” from Title II for CPE by reclassifying it and regulating it under Title I.²² In *CCIA*, as here, “[a]lthough the Commission has discontinued Title II regulation of CPE, it has substituted a different, affirmative regulatory scheme through its ancillary jurisdiction.”²³ The *CCIA* court recognized that “[i]n a statutory scheme in which Congress has given an agency various bases of jurisdiction and various tools with which to protect the public interest, the agency is entitled to some leeway in choosing which jurisdictional base and which regulatory tools will be most effective in advancing the Congressional objective.”²⁴ Ultimately, the court found that Congress intended to “endow the Commission with sufficiently elastic powers such that it could readily accommodate dynamic new developments in the field of communications,” and therefore “the Commission’s judgment on how the public interest is best served is entitled to substantial judicial deference....”²⁵

Fortunately, here the Commission need not test the boundaries of its “elastic powers” to accommodate developments in Internet access. Instead, in applying the open Internet rules proposed in the *NPRM*, the Commission should continue its traditional approach of regulating the basic transmission element that facilities-based providers use to deliver information services.

B. The Commission Has Traditionally Regulated the Transmission Element of Facilities-Based Providers, and Should Use This as the Focus of Its Title I Authority

Review of the lengthy history of Commission regulation of information services (previously called “enhanced services”) demonstrates that focus on the transmission element of facilities-based providers appropriately frames the use of ancillary authority for the regulation of

²² *CCIA* at 213-14.

²³ *Id.* at 217.

²⁴ *Id.* at 212.

²⁵ *Id.* at 213-14 (internal citations omitted).

broadband services, subject to the traditional limits on Title II regulation. Indeed, the Supreme Court explicitly endorsed this framework for the exercise of ancillary authority in the *Brand X* decision, with the Court concluding that “the Commission remains free to impose special regulatory duties on *facilities-based* ISPs under its Title I ancillary jurisdiction.”²⁶ Accordingly, PIC briefly review here the relevant history and its implications for Commission authority.

1. The Computer Inquiries Recognized that There are Two Distinct Components of Internet Access

Beginning with the *Computer Inquiries*, the Commission recognized that computer-based communications consist of two distinct components: basic transmission services and enhanced services.²⁷ The Commission limited basic transmission service to “the offering of transmission capacity between two or more points suitable for a user’s transmission needs and subject only to the technical parameters of fidelity or distortion criteria, or other conditioning,” and further stated that “once information is given to the communication facility, its progress towards the destination is subject to only those delays caused by congestion within the network or transmission priorities given by the originator.”²⁸

Critically, a provider of basic transmission maintained flexibility “to structure its communications network such that the network efficiently functions as the basic building block [used] to perform myriad combinations and permutations of information processing, data processing, process control, and other enhanced services.”²⁹ These enhanced services consisted of “any offering over the telecommunications network which is more than a basic transmission

²⁶ *National Cable & Telecommunications Ass’n v. Brand X Internet Services*, 545 U.S. 967, 996 (2005) (emphasis added).

²⁷ Second Computer Inquiry, *Final Decision*, 77 F.C.C.2d 384, ¶¶ 93-97, 47 Rad. Reg.2d (P & F) 669 (1980) [*hereinafter Computer II*].

²⁸ *Computer II* ¶ 95.

²⁹ *Id.* ¶ 96.

service.”³⁰ Basic transmission services were regulated as common carrier services under Title II.³¹

The dichotomy between basic services and enhanced services effectively separated out the distinct components that make up broadband Internet access service even today. Enhanced services make up the Internet’s content – today it would be web pages, video streams, and even tweets. Basic services still do the hard work of moving that content between two computers. In these terms, basic service providers such as ISPs move content between computers and users, routing bits as necessary to deliver them to their destination. In order to assure that this “basic building block” of communications functions reliably, the Commission previously defined basic service as defined by the Commission as a “a pure transmission capability over a communications path that is virtually transparent in terms of interaction with customer supplied information.”³²

The assurance of a reliable and stable platform for basic services was critical to the development of the “myriad combinations and permutations”³³ of enhanced services that flourished and rode over these transmission facilities. To further safeguard the openness of the Internet, the Commission required that the telephone companies, as dominant facilities based providers of transmission services, could not offer combined information services and telecommunications service offerings. Initially, the Commission prohibited incumbent telephone companies from providing information services at all.³⁴ Subsequently, however, the Commission relaxed this rule to allow telephone companies to offer enhanced services through a separate

³⁰ *Id.* ¶ 97.

³¹ *See id.* ¶ 114.

³² *Id.* ¶ 96.

³³ *Id.*

³⁴ *Computer I*, 28 F.C.C.2d at 270-271.

affiliate, subject to a requirement to make basic transmission service available to other enhanced service providers on equal terms.³⁵

As a result, until the arrival of cable modem broadband access service, neither the Communications Act nor Commission rules addressed the classification of a facilities-based provider offering a service that combined both basic transmission and enhanced services. In determining the regulatory classification of this new service, the Commission embarked on a change in regulatory policy that eliminated these traditional protections and placed the open internet at risk.

2. *The Cable Modem Order Established a New Regulatory Regime for Facilities-Based Providers of Combined Services.*

Until the Commission addressed questions arising from cable modem broadband access service, neither the Communications Act nor Commission rules squarely addressed the proper regulatory classification of a facilities-based provider's offering combining basic components and enhanced service components. In determining the regulatory classification of such a combined service, the Commission embarked on a change in regulatory policy that eliminated traditional protections and placed the open Internet at risk. The Telecommunications Act of 1996,³⁶ although generally embracing the basic transmission/enhanced service dichotomy, redefined these terms as "telecommunication services" and "information services."³⁷

Telecommunications services were defined as services that provided "transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information sent and received."³⁸ The telecommunications service

³⁵ See generally *Amendment of Sections 64.702 of the Comm'n Rules and Regs (Third Computer Inquiry)*, 104 F.C.C. 2nd 958 ("Computer III").

³⁶ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996).

³⁷ See 47 U.S.C. § 153 (46); *id.* § 153(20).

³⁸ *Id.* § 153 (43) (defining "telecommunications"), as incorporated by 47 U.S.C. § 153(46) (defining "telecommunications service").

definition, like the old basic services definition, focused on the underlying transmission of information. Information services, in contrast, were defined as “a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications.”³⁹ Just as with the enhanced services of the *Computer Inquiries*, information services were the content that was transmitted by the underlying telecommunications services. Critically, however, the 1996 Act did not address the question of whether a facilities-based provider of such information processing capabilities would be classified as a provider of information service or telecommunications service.

In the 2002 *Cable Modem Order*,⁴⁰ the Commission addressed this question and determined to classify such service as an “information service” when a facilities-based provider offers the transmission component and the information services as an “integrated offering.” Looking to the language of the 1996 Telecommunications Act, the Commission declared that broadband Internet service (as provided over cable modems) was an “Internet access service.”⁴¹ Although such a service combined “the transmission of data” (telecommunications services) with “computer processing” (information services), the Commission elected to regulate broadband Internet access service delivered via cable modems exclusively as an information service under Title I rather than directly utilizing Title II to continue regulating the acknowledged transmission component of this service.⁴²

In coming to this conclusion, the Commission explored what service providers were offering consumers.⁴³ Citing an earlier *Universal Service Report*,⁴⁴ the Commission described

³⁹ *Id.* § 153 (20).

⁴⁰ *Cable Modem Order*, 17 FCC Rcd. 4798.

⁴¹ *See Cable Modem Order* at 38.

⁴² *See id.*; *cf. NCTA v. Brand X Internet Services*, 545 U.S. at 1008 (Scalia, J., dissenting) (“[T]he telecommunications component of cable-modem service retains such ample independent identity that it must be regarded as being on offer....”).

⁴³ *See Cable Modem Order* at 36-40.

what it understood to be “a single, integrated service” offered to consumers.⁴⁵ In addition to the transmission of data, the Commission pointed to services such as “[e]-mail, newsgroups, the ability for the user to create a web page that is accessible by other Internet users, and the DNS [domain name system]” provided by ISPs in a single, integrated offering.⁴⁶ The Commission stressed that the classification of these Internet access services turned “on the nature of the functions that the end user is *offered*.”⁴⁷ It was the content of the offering that determined the classification status, “regardless of whether subscribers use all of the functions provided as part of the service, such as e-mail or web-hosting, and regardless of whether every cable modem service provider offers each function that could be included in the service.”⁴⁸

Importantly, in the *Cable Modem Order*, the Commission nonetheless recognized that ISPs provide distinct “Internet connectivity functions” (“at the most basic level . . . establishing a physical connection between the cable system and the Internet by operating or interconnecting with Internet backbone facilities”)⁴⁹ and “Internet applications” including “e-mail, access to online newsgroups, . . . creating or obtaining and aggregating content, . . . a ‘first screen’ or ‘home page’ and the ability to create a personal web page.” being offered by ISPs.⁵⁰

The Supreme Court affirmed this interpretation of the statute and its application to cable modem service.⁵¹ In doing so, the Supreme Court repeatedly noted that the Commission’s previous exercise of Title I authority relied on regulating the transmission component of

⁴⁴ See Federal-State Joint Board on Universal Service, *Report to Congress*, 13 FCC Rcd. 11501 (1998).

⁴⁵ See *Cable Modem Order* at 36.

⁴⁶ See *id.* at 38.

⁴⁷ See *id.* (emphasis added).

⁴⁸ See *id.*

⁴⁹ See *id.* at 17.

⁵⁰ *Id.* at 18.

⁵¹ *Brand X*, 545 U.S. 967.

facilities-based providers,⁵² and that the FCC “remains free to impose special regulatory duties on facilities-based ISPs under its Title I ancillary jurisdiction”⁵³

As this history suggests, the combination of a facilities-based provision of transmission and the unique concerns present when a facilities-based provider offers combined transmission and information services has always served as the focus of the Commission’s exercise of ancillary authority in this context. Where the telecommunications and information service are inextricably bound, so that the Commission cannot easily separate the two, it may regulate the combined service through its ancillary authority. As the D.C. Circuit explained in *CCIA*:

We agree with the Commission that even if some enhanced services could be classified as common carrier communications activities, the Commission is not required to subject them to Title II regulation where, as here, it finds that it cannot feasibly separate regulable from nonregulable services. To the extent that certain enhanced services could lawfully be regulated under Title II once they were identified as common carrier services, we sanction the Commission's forbearance from Title II regulation. We emphasize, however, that our sanction is a very narrow one, given in light of the peculiar nature of the communications and data processing industries and the alternative regulatory scheme adopted by the Commission. . . .

Once the difficulty of isolating activities subject to Title II regulation outweighs the benefits to be gained by that regulation, then the Commission is justified in conserving its energies for more efficacious undertakings, at least *when it establishes an alternative regulatory scheme under its ancillary jurisdiction*.⁵⁴

3. *The Telecommunications Service and Information Service Components of Internet Access Service Continue to Exist and Provide a Basis for Ancillary Jurisdiction.*

As the Commission has repeatedly found in its various classification orders, broadband Internet access providers made subject to the proposed regulation in the *NPRM* are facilities based providers of services that may combine telecommunications and non-telecommunications

⁵² *Id.* at 993-94.

⁵³ *Id.* at 996 and at 1002.

⁵⁴ *CCIA*, 693 F.2d at 210-11 (emphasis added).

components in an integrated fashion. Indeed, the Commission has explained that, in certain situations, it is important to recognize that Internet service comprises separate telecommunications and information service offerings. For example, for purposes of CALEA, the Commission saw fit to classify providers of broadband access as “telecommunications carriers” based on the presence of the transmission element mingled with, but distinct from, the information services.⁵⁵ Courts also have recognized that the facilities used to provide broadband access qualify as telecommunications facilities under the Communications Act.⁵⁶

No matter what terms are used, the distinction between Internet access functions and Internet applications, or between telecommunications services and information services, mirrors the original distinction between basic and enhanced services. All three regulatory constructs recognize that broadband Internet access service is made up of two distinct (although connected) services. As such, the ancillary authority to regulate facilities-based providers as described in *CCIA* remains.

The first service, no matter what name is used to describe it, is the basic underpinning of the Internet. It provides a reliable and neutral system for connecting computers and transferring information between them. The second service uses that basic underpinning to provide the “myriad combinations and permutations”⁵⁷ of applications and content that constitute the rich online ecosystem.

The proposed open Internet regulations impact only the first service. The rules would preserve the open character of this basic transport system of the Internet, ensuring that the transmission functions integrated into any broadband Internet access service continue to enable, not reduce, the diversity and growth of the second service, while not affecting the regulatory

⁵⁵ See *American Council on Educ. v. FCC*, 451 F.3d 226, 232 (D.C. Cir. 2006).

⁵⁶ See *MediaOne Group, Inc. v. County of Henrico, Virginia*, 257 F.3d 356, 363-65 (4th Cir. 2001).

⁵⁷ *Computer II* at 96.

treatment of that second service. In the words of *CCIA*, rather than leave a “vacuum of deregulation,” the Commission has properly used its ancillary jurisdiction to create “an *affirmative* regulatory scheme” that protects the public interest.⁵⁸

4. *A Limited Application of Title II Authority May Be Used to Address Concerns Related to Fast Lanes and Third Party Purchasers*

Separately, the Commission may also support use of its Title II authority with regard to the proposed non-discrimination rule to prevent ISPs from selling fast lane access to third party purchasers. ISPs have suggested that they would like to offer Internet application providers (for example Yahoo or Hulu) priority access to the ISPs’ customers.⁵⁹ This fast lane service is wholly distinct from the traditional Internet access services. This would put ISPs in a position to pick winners and losers in the competition between Internet application providers, create barriers that would reduce the ability of small businesses or new companies to compete online, and (if, for example, applied to video sites that compete with ISPs’ own television offerings) raise the specter of anticompetitive activity.

More importantly, permitting this would fundamentally alter the nature of the broadband access market. At present, the broadband access market is a one-sided single-product market in which broadband access providers primarily sell broadband access (often bundled with video and voice service) directly to consumers. Permitting the sale of prioritization to third parties would transform the market into a market in which the broadband access provider sells an entirely separate product to third party content producers and application providers *in addition* to the sale of broadband access service to consumer, and without regard to the preferences of the consumer customers. This creates an entirely different set of incentives for the broadband access provider, imposes new costs on both third-party access providers and on consumers (who cannot reach

⁵⁸ *CCIA*, 693 F.2d at 217 (emphasis in original).

⁵⁹ See, e.g. Jonathan Krim, *Executive Wants to Charge for Web Speed*, WASH. POST, Dec. 1, 2005.

desired content with the same facility as undesired content) and radically alters the nature of the broadband value chain.⁶⁰

Such a radical restructuring of markets impacting critical infrastructure should give the Commission pause. A recent study⁶¹ by the Institute for Policy Integrity demonstrates the damage to the overall broadband value chain from allowing the sale of “fast lane” services.

In order to regulate this type of fast lane offering, the Commission could recognize and regulate it for what it is: a Title II telecommunications service. The 1996 Act states that a telecommunications service is “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.”⁶² Telecommunications is defined as “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.”⁶³

By offering to transmit, “between or among” an Internet application provider and an ISP’s customers, content of the Internet application provider’s choosing “without change in the form or content” of that content, at a higher speed than competing Internet applications, ISPs are offering telecommunications. By charging a fee to get these higher delivery speeds, and by

⁶⁰ PIC recognize that broadband access providers engage in limited sale of such services now in the form of edge-based caching and through various routing schemes that effectively move content closer to subscribers. These behaviors have limited impact, however, for several reasons. First, they do not depend on scarcity in the same way as prioritization. As explained in Part III, prioritization is only profitable where capacity constraints make the ability to receive “favored treatment” valuable. By contrast, edge based caching will always provide some limited benefit because it moves content physically closer. Second, the impact of strategies such as edge-based caching to advantage content is limited because it depends on eliminating modest delay based on physical distance and congestion in intervening networks. These are factors beyond the control of any broadband access provider, limiting the utility of caching. By contrast, prioritization service has a consistent, predictable, and effectively unlimited capacity to advantage or disadvantage third party providers because the broadband access provider can control the extent to which it enhances or degrades speed for all customers at all times. Finally, competing providers can hope to overcome caching advantages in other ways that cut transmission lag. It is impossible for a third party provider to “route around” a decision by a broadband access provider to prioritize or degrade service.

⁶¹ Institute for Policy Integrity, *Free to Invest: The Economic Benefits of Net Neutrality* (2010).

⁶² 47 U.S.C. § 153 (46).

⁶³ *Id.* § 153 (43).

offering them to any Internet application provider willing to pay for them (thus making them “effectively available to the public”) ISPs are offering a telecommunications service. This service is fundamentally different from the residential and commercial Internet access service that ISPs provide.

While this approach does not allow the Commission to regulate all practices that justify the implementation of the proposed open Internet rules, it does provide an opportunity to directly regulate one of the most problematic potential violations motivating those rules. In particular, it does so in a way that would not require reclassification of the existing broadband access service as a Title II service.

5. Impact of the Proposed Framework on First Amendment Concerns

Reframing the Commission’s jurisdiction around its traditional focus on the transmission element of facilities based providers has several salutary advantages with regard to First Amendment concerns expressed by some. To the contrary, as the Commission and the courts have repeatedly found, such requirements serve the values of the First Amendment by facilitating the free flow of information on which a self-governing society depends.⁶⁴

Of equal importance, limiting the Commission’s exercise of authority to its traditional Title II framework equally prohibits the allegation that authority to protect the open internet would convey authority to interfere with content or to dictate content choices. Wild accusations of an “internet Fairness Doctrine” would be clearly and irrefutably rebutted by adopting the Title

⁶⁴ *Turner Broadcasting System, Inc. v. FCC*, 512 U.S. 622, 663 (1994) (finding that “assuring that the public has access to a multiplicity of information sources is a governmental purpose of the highest order, for it promotes values central to the First Amendment”); *United States v. Midwest Video Corp.*, 406 U.S. 649, 668 n. 27 (1972); *Associated Press v. United States*, 326 U.S. 1, 20 (The First Amendment “rests on the assumption that the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public....”).

II framework because the Title II framework provides full First Amendment protection for the speech of subscribers and prohibits any government interference in their choice of content.⁶⁵

C. The Open Internet rules in the *NPRM* Should Apply to Wireline and Wireless Broadband Internet Access Service Providers

PIC concur with the scope and applicability of the open Internet rules, with respect to the definitions and exceptions proposed for broadband Internet access service in the *NPRM*.⁶⁶ This proposed definition limits application of the rules to those entities with the ability and incentives potentially to block, prioritize, or degrade Internet traffic flowing to and from end users of the network owner's physical access layer facilities. The definition thus connotes no Commission jurisdiction over content, applications, and services provided over the Internet, but rather regulates the transmission of data over this network of networks.

The legal justification for the open Internet rules is platform agnostic, and the definition of broadband Internet access services should indeed include wireline and wireless services as the *NPRM* proposes. The attributes of broadband Internet service hold true regardless of the platform used to deliver access to customers. No matter how broadband service providers (as defined in the proposed rule) transport data, they use telecommunications to link customers with enhanced services.⁶⁷ Furthermore, the Commission has previously determined that establishing a common framework for all broadband access providers serves the public interest.⁶⁸ While the metes and bounds of what constitutes reasonable network management may and likely will differ depending on the broadband platform, the larger open Internet framework should not.

⁶⁵ *Reno v. American Civil Liberties Union*, 521 U.S. 844 (1997); *Sable Commc'ns of California v. FCC*, 492 U.S. 115 (1989).

⁶⁶ *See id.* ¶ 55.

⁶⁷ *See* Appropriate Regulatory Treatment for Broadband Access to Internet Over Wireless Networks, *Declaratory Ruling*, 22 FCC Rcd. 5901, 5901-02 (2007) ("*Wireless Classification Order*"); United Power Line Council's Petition For Declaratory Ruling Regarding the Classification of Broadband Over Power Line Internet Access Service As An Information Service, 21 FCC Rcd. 13281, 13281-82 (2006) ("*BPL Classification Order*").

⁶⁸ *Wireless Classification Order* at 5902; *BPL Classification Order* at 13282.

Additionally, PIC note that application of the proposed rules to wireless platforms serves the vital policy goal of ensuring that end users can have largely the same expectations and experiences no matter how they access the Internet. This consistency of experiences across platforms is especially important for typically marginalized populations such as people of color, as well as the younger generations of Internet users more generally. Studies show that members of these groups tend to rely on mobile devices to connect to the Internet more often than the population at large relies on mobile devices to do so.⁶⁹ More strikingly, these studies show that members of these socio-economic groups tend to have access to the Internet *solely* through mobile devices more often than their peers, owing to the digital divide and the lagging wireline broadband penetration rates in historically underserved regions and populations.⁷⁰ The Commission has the authority to promulgate open Internet access rules that apply to wireline and wireless technologies both, and it has ample reason to do so, mindful of the fact that what constitutes a Reasonable Network Management practices may differ on these different platforms.

D. The Commission Has a Statutory Obligation to Preserve the Open Nature of the Internet

As the Commission rightly points out in the *NPRM*, it has a statutory obligation to secure an open and nondiscriminatory Internet for the public. The Communications Act reflects Congress's intent to secure the benefit of advanced communications technologies to all Americans. Section 230(b)(3) of the Act expresses the policy that users should be in control of information received over the Internet. Securing such user control is incompatible with discrimination by ISPs among content, application, and service providers. Similarly, in provisioning universal service support, Section 254(b)(2) provides that the Commission should

⁶⁹ See, e.g., John Horrigan, Pew Internet & American Life Project, *Wireless Internet Use* 18 (2009).

⁷⁰ See, e.g., John Horrigan, Pew Internet & American Life Project *Home Broadband Adoption 2009* 32 (2009).

strive to advance access to advanced telecommunications and information services to all Americans.

The principle of requiring basic communications networks, such as the Internet, to be non-discriminatory is not new. Requiring general purpose communications technologies to be non-discriminatory has been a hallmark of U.S. communications law for the past 150 years.⁷¹ Scholars point out that the “essential, utilitarian, social nature” of these networks necessitated such requirements.⁷²

E. If the Commission Determines It Lacks Sufficient Title I Authority, It Cannot Leave Consumers Without Protection

If the Commission determines that it lacks authority under its ancillary jurisdiction, it cannot leave consumers without protection. The Commission can reconsider the application of the proposed rules to the basic underlying telecommunications component provided by ISPs.⁷³ This does not lead to reclassification of everything related to the Internet as a Title II service. The open Internet only would apply to the underlying transmission of data, not to the “information services” that utilize that transmission. The Commission has long regulated in just this manner under Title II the common carrier functions of transporting data between users.⁷⁴

If the Commission becomes unsatisfied with the assertion of ancillary authority it proposes in the NPRM to protect the open Internet under Title I, that determination would have dire consequences to the future of America’s communications infrastructure. As provided in greater detail in Part II below, our social and economic well-being as a nation depends on maintaining an open and functioning Internet. If the Commission’s Title I authority does not

⁷¹ Susan Crawford, *Transporting Communications*, 89 B.U.L. Rev. 871, 874 (2009).

⁷² *Id.* at 876.

⁷³ The Commission has previously applied its rules to the telecommunications component of broadband access service under the existing framework. For example, in the *Wireline Reclassification Order* permitted facilities based providers to offer the telecommunications component separately on a common carrier basis, but on a competitive detarrffed basis. *Wireline Framework*, 20 FCC Rcd. at 14900-01.

⁷⁴ *See Computer II* at 114.

suffice to impose even such limited regulations as these, the Commission cannot possibly fulfill its obligations to safeguard this critical platform for civic discourse, commerce, and education.

For example, as the *NPRM* notes, there is already “some conduct ... occurring in the marketplace that warrants closer attention and could call for additional action by the Commission, including instances in which some Internet access service providers have been blocking or degrading Internet traffic, and doing so without disclosing those practices to users.”⁷⁵ The prospect that the Commission has no authority to monitor and prohibit such activities – no matter how blatantly discriminatory, anticompetitive, and expression-dampening such practices may be – is not an acceptable result within the context of the Commission’s mandate to promote deployment of advanced communications facilities.

If the Commission is unable to use its ancillary jurisdiction to stop ISPs from unduly blocking consumers’ access to Internet content, applications and services, there will be drastic implications for the open Internet. The Commission must pursue all available options to avoid this unpalatable result. For example, if the Commission were to reclassify Internet access as a Title II telecommunications service, it would retain the jurisdiction needed to protect consumers, innovation and the open Internet. Such reclassification would not, and should not, entail a return to rate regulation or other antiquated sections of Title II that should not be applied to the Internet. Indeed, many of the regulations under Title II have not existed even for core Title II telecommunications services for many years. The Commission has the flexibility to employ the “light touch” available to it under Title II. Through proper use of its power to forbear from enforcement of statutory regulation under Section 10 of the Communications Act and Section 706 of the Telecommunications Act of 1996, the Commission could craft a flexible regime suited to the realities of today’s broadband market.

⁷⁵ *NPRM* ¶ 50.

II. THE COMMISSION MUST TAKE ACTION NOW TO PRESERVE THE OPEN INTERNET

While the Commission has the authority to act, it must also consider whether there is a necessity to act. Because of events that have occurred since the Commission reclassified broadband as an information service and eliminated the previous nondiscrimination requirements, and because of the vital importance of the interests at stake, the Commission must adopt rules that will create regulatory certainty and promote a national policy with regard to telecommunications and information services. As mandated by Section 257(b), the Commission is required “to promote the policies and purposes of this Act favoring diversity of media voices, vigorous economic competition, technological advancement, and promotion of the public interest, convenience, and necessity.”

The Internet is a general-purpose technology, and is well suited to that role precisely because of its open architecture and non-proprietary standards.⁷⁶ Because of its myriad uses and supported applications, the Internet has become the basic communications medium of the digital age. As the *NPRM* points out, the Internet is a platform for “speech, democratic engagement, and cultural development.”⁷⁷ It is also a vehicle for innovation and social interaction and a vital source of information. These benefits and others have been made possible by, and continue to depend upon, the open, end-to-end architecture of the Internet. It is the Commission’s responsibility to promote the public interest by protecting speech and innovation as well as competition on this platform.

The *NPRM* asks whether arguments for the adoption of rules to preserve the open Internet are “independent of competitive conclusions regarding particular markets for broadband Internet

⁷⁶ See *NPRM* ¶¶ 3-4.

⁷⁷ *Id.* ¶ 23.

access services,” and also, whether “application of the generally applicable antitrust laws is sufficient to address the concerns” articulated by the Commission.⁷⁸ In short, the answers are yes and no, respectively. Competitive concerns are an important motivation for such rules, but by no means the only justification for Commission action. The cumbersome and lengthy process plaintiffs face when enforcing the law against various antitrust violations is unwieldy for disputes arising in the dynamic Internet space. Antitrust litigation is also inadequate to address all of the various harms that a less open Internet would cause to political, social and economic public interest benefits that are not solely derived from or dependent upon competition among providers.

PIC therefore urge the Commission to conclude that abuse of market power is not the only justification for open Internet rules. Certain anti-consumer and anti-competitive practices may persist in a market for wireline or wireless broadband Internet access services, no matter the number of competitors, because of the unique relationship between a network operator and its end users.⁷⁹ Once a customer has chosen a network, she is locked into that service and cannot readily switch to another without incurring some consumer switching fees⁸⁰ – a problem that is exacerbated when ISPs have the ability or incentive to increase such costs in order to retain customers and charge higher rates to these captive end users.

The highly technical nature of discriminatory practices will also hinder the effectiveness of market policing of discrimination. While for certain abuses, press reports and public outrage may prompt a corrective exodus from a discriminating provider, more nuanced violations may escape consumers’ collective notice. Although Time Warner Cable’s attempt to establish

⁷⁸ See *id.* ¶ 81.

⁷⁹ See Barbara van Schewick, *Towards an Economic Framework for Network Neutrality Regulation*, 5 J. on Telecomm. & High Tech. L. 329, 380 (2007) (hereinafter “van Schewick, *Economic Framework*”).

⁸⁰ See, e.g., Patrick Xavier and Dimitri Ypsilanti, *Switching costs and consumer behaviour: implications for telecommunications regulation*, 10 Info 13 (2008).

bandwidth caps met resistance in North Carolina,⁸¹ Comcast was able to conceal the nature of its blocking of applications for months,⁸² due both to its lack of forthrightness and the technical nature of the complaints.

Solutions that depend solely upon market competition are also inadequate because of the market power exercised by dominant ISPs and the perverse incentives these incumbents have to discriminate against unaffiliated content and services, or to monetize scarcity as described below. Effective competition alone – if it even existed in the current marketplace for broadband services – would not obviate the need for the proposed rules. Neither effective competition nor general laws against anticompetitive behavior would be sufficient on their own to preserve the open Internet and its many benefits. The need to promote and protect all of the outgrowths of the open architecture and accessibility of the medium should guide the Commission in its development of rules preserving that openness.

A. The Internet is a Source of Information and a Platform for Free Speech, Democratic Participation and Social Engagement

Preserving the open Internet will promote free expression, political discourse and social interaction for all Americans. The Commission’s adoption of the proposed rules will be especially important for augmenting self-expression and civil rights for typically marginalized groups. The Internet is not only a means of innovation and eCommerce but also a platform for political participation, cultural creation and social engagement, as well as a vital source of information.⁸³ While the value of these interactions is hard to quantify in economic terms, their

⁸¹ See, e.g., Harold Feld, *Time Warner Customers Less than Pleased with Usage Caps*, Public Knowledge Blog, April 12, 2009, <http://www.publicknowledge.org/node/2080>.

⁸² Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications, *Memorandum Opinion and Order*, 23 FCC Rcd. 13028, 13030-2 (2008) (hereinafter “Comcast Order”).

⁸³ See Brett M. Frischmann, *An Economic Theory of Infrastructure and Commons Management*, 89 Minn. L. Rev. 917, 1004-1022 (2005) (hereinafter “Frischmann, *Economic Theory*”); Susan P. Crawford, *Transporting*

importance to a democratic society is immense. Discriminatory behavior by ISPs poses the threat of jeopardizing these crucial interactions.

Internet-based systems such as email, social networking applications, blogs and video sharing sites not only allow people to stay connected with their family and friends, but also allow citizens to engage in civic and political discourse. The 2008 presidential election served as a prime example of the greater use of Internet applications both by candidates and citizens. Both of the major parties' general election candidates posted numerous campaign videos on video sharing sites like YouTube, where they were viewed by millions of people.⁸⁴ President-elect Obama launched a new website, Change.gov, soliciting citizens' suggestions on governance and requesting their direct participation in the governing process.⁸⁵

One study found that 15 percent of Internet users have participated in political discussions online, engaging in activities such as commenting on blogs or posting photos or video content related to social or political issues. The percentage of such participants almost doubles among users in the 18 to 24 age group.⁸⁶ Such political discourse and cultural production on the Internet has spillover benefits even for those who do not participate in the activity.⁸⁷ For instance, those who did not comment on a blog still derive the benefit of discussion among those who did.

In addition to facilitating political and civic participation, the Internet has become a vital source of information for more and more Americans. The *NPRM* cites to a study conducted by

Communications, 89 B.U. L. Rev. 871, 873 (2009) (hereinafter Crawford, "Transporting Communications") (describing the Internet as a general purpose technology).

⁸⁴ See Political Communications Lab, Stanford University, Campaign 2008, Presidential General Election Ads: Obama vs. McCain, <http://pcl.stanford.edu/campaigns/2008/>.

⁸⁵ See Julian Sanchez, *Change.gov You Can Believe in?*, Nov. 6, 2008, available at <http://arstechnica.com/old/content/2008/11/change-gov-you-can-believe-in.ars>.

⁸⁶ See Aaron Smith, Kay L. Schlozman, Sidney Verba, and Henry Brady, Pew Internet and American Life Project, *The Internet and Civic Engagement* (2009), available at <http://www.pewInternet.org/Reports/2009/15--The-Internet-and-Civic-Engagement.aspx>.

⁸⁷ See Frischmann, *Economic Theory* at 1018.

the Pew Internet and American Life Project, which found that a majority of Americans use the Internet to obtain health related information.⁸⁸ The *NPRM* also notes that students use the Internet to gain access to “educational material that would otherwise be unreachable.”⁸⁹ Another study finds that about 69 percent of Americans have used the Internet to seek financial information, look for jobs, and compare prices online in order to cope with the economic recession.⁹⁰ The Commission must preserve unfettered access to such information, protecting against restrictions by ISP gatekeepers that would limit access and thereby hinder the ability of information-providers and citizens to communicate.

The *NPRM* seeks comment regarding the impact that open Internet rules would have on “minorities and other socially and economically disadvantaged groups.”⁹¹ The Commission should affirm the conclusion that members of these groups do “face unique or particularly high barriers to innovation, communication, and civic participation on the Internet, and may be susceptible to discrimination,” making open Internet protections “particularly important for these groups.”⁹² Market competition protects the interests of minority groups poorly, precisely because such groups, as numerical minorities, can bring to bear less market pressure to discipline discriminatory behavior. The lessened ability for an economically disadvantaged group to police market actors through consumption should be even more of a tautology. Yet numerical or economic disadvantage should not deny these groups the invaluable political and social benefits that nondiscriminatory access to open networks grants.

⁸⁸ Susannah Fox and Sydney Jones, Pew Internet and American Life Project, *The Social Life of Health Information 2* (2009), available at http://www.pewInternet.org/~media/Files/reports/2009/PIP_Health_2009.pdf.

⁸⁹ *NPRM* ¶ 22.

⁹⁰ Lee Rainie and Aaron Smith, Pew Internet and American Life Project, *The Internet and The Recession* 3,6-7 (2009), available at <http://www.pewInternet.org/Reports/2009/11-The-Internet-and-the-Recession.aspx>.

⁹¹ *NPRM* ¶ 82.

⁹² *Id.*

The Commission must therefore protect against ISP practices that would change the open character of the Internet and diminish the transformative power it holds for historically disadvantaged socio-economic groups, urban and rural regions, ethnic and racial minorities and other such underserved demographic groups and areas. The open Internet has tremendous potential to increase equity in media access as well as political participation for typically marginalized communities. Due to high barriers to entry in the broadcast television, radio, and cable markets, traditional media outlets have not included a great enough diversity of voices, nor have they provided content that is significant for and relevant to these under-represented groups.

The Internet's lower barriers to entry foster an environment in which members of these groups can speak for themselves and on behalf of their communities, reaching wider audiences both within those communities and across cultural and geographic divides. Nondiscriminatory networks grant equal opportunity to every idea, and can help ensure that marginalized communities do not experience the same lack of representation that they have experienced in other media. Nondiscriminatory networks also lower traditional barriers to the full political engagement and economic participation that has so often been denied to these communities in other settings. They allow individuals to search for and apply for jobs, start small businesses, seek out political information or engage in any number of business transactions and civic activities that have historically been more difficult for members of disadvantaged communities to access. Furthermore, many of these activities are increasingly becoming online-only, a trend that will make Internet access even more of a basic necessity.

However, it is insufficient to rely solely on market forces to provide fair and reasonable prices for access to networks.⁹³ Incumbents motivated purely by market forces have every

⁹³ See, e.g., Comments of Minority Media and Telecommunications Council, *et al.*, MB Docket No. 05-311, at 6 (filed Feb. 13, 2006) (hereinafter "MMTC Comments") ("[T]he Commission nonetheless has concluded that it is

incentive to build out to and discriminate in favor of their most profitable customers. Those customers are rarely the economically disadvantaged, nor any of the disadvantaged groups whose members correlate with the economically disadvantaged.

B. The Open and Nondiscriminatory Nature of the Internet Promotes Innovation and Economic Growth

Preserving the open Internet also will promote, rather than hinder, broadband deployment, innovation, and economic development. This is true of innovation and deployment at the edges of the network, but also within the network itself. At the edges of the dynamic Internet ecosystem, application developers and providers of products and services rely on the end-to-end principle and open architecture of the Internet to reach end users. If ISPs were free to discriminate against certain content, application, and service providers, innovators unaffiliated with the ISP would either reap lower profits from their offerings or would experience more uncertainty about the profitability of their offerings because they would be acting at a disadvantage to ISP-affiliated competitors. Even if ISPs were permitted to manage or “optimize” Internet traffic in ways that do not necessarily advantage the ISPs’ present offerings, the open architecture of the Internet would nonetheless be fundamentally changed and innovators would be forced to shape development of new technologies and services to fit within the contours predetermined by network operators. In either case, innovation would be discouraged, as creators of new technologies and services would be unable to predict the success of their ideas based solely on the merits of or the potential demand for their offerings.⁹⁴

important to continue monitoring the availability of advanced services to low-income consumers and other groups – urban and rural – identified as vulnerable to not receiving timely access.”) (citing 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, *Third Report*, 17 FCC Rcd. 2844, 2884-85, ¶ 101 (2002)); see MMTTC Comments at 7 (“Consequently, absent effective measures to prohibit the practice, redlining will very likely occur even in a competitive cable and video services market.”).

⁹⁴ van Schewick, *Economic Framework* at 380.

Some parties may attempt to justify such discrimination or prioritization on the grounds that it allows ISPs to take greater advantage of the value of their networks, and thus provides an incentive for network upgrades. However, as academics and consumer groups alike have explained, the benefit of providing ISPs with this incentive is outweighed significantly by the harms such practices cause to innovation.⁹⁵ They point out that application developers are numerous, dispersed, and satisfy niche needs. By contrast, ISPs are few, and would be interested in few innovations beyond improvements to their networks. The ability of ISPs to discriminate would therefore help only universally used or partnered applications, at the expense of the ecosystem of varied, small, and niche developers that have driven the Internet's expansion.

Competition would again be ineffective to police such activity, as the concentrated market power of larger application developers would allow them to reach agreements with incumbent providers. Small developers lack the finances or the guaranteed user base that would allow them to alter the behavior of discriminatory networks to allow their products to flourish. The inability of discriminating incumbents to predict the future success of a small developer could thereby stifle potential innovation.

Furthermore, the theory that allowing discrimination would provide an incentive to the ISP to innovate might itself be based on nothing more than speculation.⁹⁶ Discriminatory network management practices and prioritization attempts could just as easily discourage innovation in the network and the expansion of capacity. For instance, rather than reinvesting in additional deployment to putatively less-profitable service territories such as low-income and

⁹⁵ Brett M. Frischmann and Mark A. Lemley, *Spillovers*, 107 Colum. L. Rev. 257, 297-299 (2007) (hereinafter "Frischmann and Lemley"); van Schewick, *Economic Framework* at 386-390; Institute for Policy Integrity, *Free to Invest: The Economic Benefits of Net Neutrality*, 24-32 (2010), available at http://policyintegrity.org/documents/Free_to_Invest.pdf; S. Derek Turner, *Finding the Bottom Line: The Truth About Network Neutrality and Investment* (2009), available at http://www.freepress.net/files/Finding_the_Bottom_Line_The_Truth_About_NN_and_Investment_0.pdf.

⁹⁶ Frischmann and Lemley at 296-297.

rural communities, ISPs governed by no buildout requirements might simply pocket the additional (and likely supracompetitive) profits that might be derived from discrimination and prioritization. Discriminatory practices and prioritization schemes could allow ISPs to reap higher profits on the basis of scarcity itself, so long as any network operator can realize greater margins by limiting bandwidth, freezing current technology in place and charging higher prices for artificially constrained capacity than it can by building out to meet demand.

By contrast, in addition to encouraging innovation, the open Internet as presently constituted and maintained also provides a powerful platform for eCommerce. That platform would be adversely affected by discrimination on the network. Commerce is most beneficial when transaction costs are low and information is widely and readily available. If ISPs were able to insert themselves into the commercial activity that takes place over the Internet and somehow monetize their involvement by charging premiums for certain information, products, or services, transaction costs would increase for all commercial actors, large and small and inefficiencies in the information sharing that is critical to the Internet economy would be introduced. PIC thus submit that permitting ISPs to prioritize, degrade, or otherwise interfere with their customers' Internet transactions would make far less free the many marketplaces for goods, services, and ideas that the Internet facilitates.

III. THE COMMISSION SHOULD ADOPT AS RULES THE SIX PRINCIPLES PROPOSED IN THE NPRM, SUBJECT TO CERTAIN CHANGES AND CLARIFICATIONS

A. The Commission Should Adopt the Nondiscrimination Rule Proposed in the NPRM

PIC support the Commission’s adoption of the proposed nondiscrimination rule set forth for comment in the *NPRM*,⁹⁷ subject only to certain modifications and clarifications. As the Commission has observed, network operators’ ability to discriminate, either among different types of traffic or different content, application, and service providers, “may impose significant social costs.”⁹⁸ The proposed nondiscrimination principle is essential for the preservation of the open Internet, and for the avoidance of the social costs and myriad harms discussed in Part II of these comments.

PIC endorse the language that the Commission has proposed for the nondiscrimination principle, insofar as the draft rule stipulates that “a provider of broadband Internet access service must treat lawful content, applications, and services in a nondiscriminatory manner.”⁹⁹ As described in greater detail below, however, PIC propose deletion of the repetitive reference to “reasonable network management” in each of the six principles proposed to be codified. Inclusion of the phrase “[s]ubject to reasonable network management” at the beginning of each new rule is unnecessary, and simply treating RNM in its own section of the rules would help to eliminate the potential for confusion over the scope of the exception.

The second and final suggestion PIC make with respect to the nondiscrimination principle is for clarification of the language appearing in the *NPRM* regarding the Commission’s

⁹⁷ See *NPRM* ¶ 104.

⁹⁸ *Id.* ¶ 103.

⁹⁹ *Id.* ¶ 104.

understanding of the term “nondiscriminatory” in the context of the proposed rule.¹⁰⁰ The *NPRM* quite correctly suggests that, under the proposed rule, “a broadband Internet access service provider may not charge a content, application, or service provider for enhanced or prioritized access to the subscribers of the broadband Internet access service provider.”¹⁰¹ Such a practice undoubtedly would constitute discrimination in violation of the proposed fifth principle. Nevertheless, the practice of charging content, application, or service providers for such enhanced or prioritized access is not the only practice that would violate the nondiscrimination rule. Consequently, the Commission should clarify that the example of discrimination set out in the *NPRM* is just that: an example only, and an illustration of the types of practices that would violate the nondiscrimination rule, *not* a comprehensive, exhaustive, or exclusive list of all such practices prohibited by this rule.¹⁰²

B. “Managed Services” Are Undefined at Present, Are Not Internet Services, and Should Be Dealt With in a Subsequent Proceeding

At present, the Commission should not define or classify such managed services because the record is not yet clear on what types of services would fall under this category. To avoid creating an open-ended and undefined exception to the rules, PIC suggest that this is not the proceeding in which to make that determination. However, in the interest of clarifying certain issues upon which the Commission has requested comment, PIC submit the following.

Furthermore, “Managed Service” is not a regulatory category unto itself. The Commission should not treat services differently based only on their underlying technology.

¹⁰⁰ *See id.* ¶ 106.

¹⁰¹ *Id.*

¹⁰² *See* Letter from Open Internet Coalition to Marlene Dortch, Secretary, FCC, GN Docket No. 09-191, WC Docket No. 07-52 (filed Nov. 5, 2009); *see also* Letter from Professor Jack Balkin *et al.* to Julius Genachowski, Chairman, FCC, GN Docket Nos. 09-51, 09-47, 09-137, 09-157, 09-191, at 2 (filed Nov. 2, 2009) (“The important question is whether this language in Paragraph 106 is meant to be an exclusive or partial definition of non-discrimination. . . . For our part, we presume that this language is meant to be a partial definition, based on the FCC’s own stated policy goals, . . .”).

Services should be regulated based on their functions and on how they are presented to consumers. The fact that a managed service uses Internet protocol or any other technology should not change its regulatory treatment.

For example, the Commission notes that managed services might include “voice and subscription video services.”¹⁰³ Notwithstanding such pronouncements, the Commission should regulate a managed telephony service under Title II as a common carrier service,¹⁰⁴ and it should regulate a provider of video subscription services under Title VI as a multichannel video programming distributor.¹⁰⁵ Other kinds of managed services should be considered Title I communications services: forms of communication by wire or radio¹⁰⁶ within the Commission’s general jurisdiction but not singled out for specific regulatory treatment. The fact that a service can be described as a “managed service” offers no regulatory guidance to the Commission.

It would violate the open Internet rule against discrimination for a managed service to “borrow” bandwidth from the provider’s Internet access service. Some of the services that the Commission recognizes as “managed services,” while not themselves Internet services, are delivered over the same pipe as broadband Internet access. An entity offering managed services, therefore, may also be a broadband Internet access service provider, subject to the open Internet rules. It is possible for a broadband Internet access service provider to run afoul of the proposed open Internet rules by allowing managed services to interfere with its Internet offering.

¹⁰³ *NPRM* ¶ 148.

¹⁰⁴ *Cf.* Petition for Declaratory Ruling That AT&T’s Phone-To-Phone IP Telephony Services Are Exempt from Access Charges, *Order*, 19 FCC Rcd. 7457, ¶ 12 (2004) (hereinafter “IP-in-the-Middle Order”). *See also* Letter from Dana R. Shaffer, Chief, Wireline Competition Bureau, and Matthew Berry, General Counsel, FCC, to Katherine A. Zachem, Vice President, Regulatory Affairs, Comcast Corporation, File No. EB-08-IH-1518, WC Docket No. 07-52 (Jan. 19, 2009); Letter from Kathryn A. Zachem, Vice President, Regulatory and State Legislative Affairs, Comcast, to Dana R. Shaffer, Chief, Wireline Competition Bureau, and Matthew Berry, General Counsel, FCC, File No. EB-08-IH-1518, WC Docket No. 07-52 (Jan. 30, 2009).

¹⁰⁵ Indeed, the statutory definitions of “cable service,” 47 U.S.C. § 522(6) (2007), and “cable system,” apply on their face to IP-based MVPD services such as AT&T’s U-Verse or Verizon’s FiOS TV.

¹⁰⁶ *See* 47 U.S.C. § 152(a) (2007).

Provided that both services have their own dedicated bandwidth and one service cannot interfere with or take precedence over the other, the mere fact that Internet access and other services are delivered over the same wire or fiber does not violate the rule against discrimination. However, a provider of broadband Internet access would violate the rule against nondiscrimination if it allowed a managed service to dynamically “borrow” bandwidth from its broadband Internet offering, thereby reducing the quality of service available to Internet applications in favor of its own.¹⁰⁷ This sort of dynamic sharing of capacity between broadband Internet access and non-Internet managed services would effectively be a form of prioritization, and would create an incentive for broadband Internet access service providers to “skim the cream” off of the top of Internet services and repackage them as managed services, without having to invest in additional dedicated capacity for those new managed services. However, as this form of discrimination already violates the proposed rules, no additional rule is required to prevent it.

A broadband Internet access service provider that also offers managed services might also violate the competitive options rule by disadvantaging broadband Internet as a whole. The broadband Internet access service provider might be tempted to discriminate against its broadband capacity in favor of investing in managed services, where it faces less competition. In general, PIC believe that consumer demand for fast broadband should, in most cases, be enough to ensure that this temptation is resisted, and that both consumers and broadband Internet access service providers are best served when as many services as possible are offered “over the top,” that is, as Internet services subject to the competition and choice preserved by the open Internet rules.

¹⁰⁷ It might violate the rule against discrimination if an ISP permanently dedicated more bandwidth than needed to a managed service as a way of disadvantaging Internet access generally. These kinds of competition concerns, however, are better dealt with as potential violations of proposed rule § 8.11 (Competitive Options).

However, if it does become apparent that a broadband Internet access service provider is “starving” broadband in order to increase the attractiveness of its managed services offerings, additional rules still would not be necessary to prevent this behavior. By leveraging its control over infrastructure to unfairly benefit its own managed services over Internet services generally, a broadband Internet access service provider would violate the competitive options rule. That rule states that a broadband provider “may not deprive any of its users of the user’s entitlement to competition among network providers, application providers, service providers, and content providers.”¹⁰⁸

Approval of a “managed service” should be determined by the Commission on a case-by-case basis, with a requirement that the ISP disclose how the service functions, allocated capacity for the managed service and any impact the service will have on Internet traffic on the ISP’s network. In addition, ISPs should not be permitted to require the bundling of “managed services” with broadband access.

C. ISPs Seeking to Implement Network Management Practices That Violate the Nondiscrimination Principle Must Show That the Practice Furthers a Legitimate Purpose Intended to Ensure the Proper Functioning of the Network, and That it is Narrowly Tailored to Address That Purpose

The *NPRM* poses several questions regarding the nature of the proposed Reasonable Network Management (“RNM”) exception to the open Internet rules.¹⁰⁹ The proposed exceptions for Reasonable Network Management acknowledge the necessity for network providers to engage in practices that ensure the proper operation of networks. However, read too broadly, these exceptions risk swallowing the rules the Commission has otherwise carefully crafted to promote speech, competition, creativity, and communication online.

¹⁰⁸ *NPRM* at 66 (appendix A, § 8.11).

¹⁰⁹ *See, e.g., NPRM* ¶¶ 133-141.

Part of the potential problem with the proposed rules' treatment of RNM comes from the *NPRM*'s fairly broad, circular, and open-ended definition of RNM. For instance, the draft rule set forth for comment in the *NPRM* proposes to define RNM as various types of "reasonable practices" or "other reasonable network management practices."¹¹⁰ This broad catchall within the definition of RNM provides little to no clarity as to the limits of the concept, or to what is and what is not included within the scope of RNM, potentially expanding the set of RNM practices to include any and all practices. For this reason, PIC recommend at minimum removing part (b) of the proposed definition.

Another related problem arises from the *NPRM*'s utilization of an indistinct boundary for the concept of RNM. The *NPRM*'s definition encompasses not only the traditional technical definitions of the term, but also entirely different considerations, such as preventing the transfer of unlawful content or the unlawful transfer of content. Censorship and copyright enforcement are new and unwanted tasks for ISPs and would redefine RNM to include activities not considered by anyone to be part of network management today. Including such disparate goals within the definition of RNM will create uncertainty and confusion in the application of the rules, allowing potential violations to escape enforcement.

PIC propose that the distinct realms of network management and legal obligation remain separate within the structure of the proposed rules. This will allow implementation and enforcement to proceed apace in each realm, without legal determinations that are irrelevant to a particular RNM question clouding good technical judgment, and without technically sound rules generating detrimental, unintended consequences for existing legal obligations and paradigms. PIC thus recommend narrowing the definition of Reasonable Network Management to prevent "mission creep" and uncertainty as to the practices that are allowed and prohibited.

¹¹⁰ *Id.* ¶ 135.

1. A Reasonable Network Management Practice is One Designed to Address Only Legitimate Congestion and Traffic Management Issues

Narrowing the Commission's proposed definition of RNM is consistent with the history of network management as a technical term and a technical consideration. Though "network management" has been defined by a variety of parties in a variety of ways, there is a commonality in these definitions: the function and purpose of network management is to maintain, protect, and ensure the efficient operation of a network, not to scrutinize the quality, source, content, or legality of the data that flows on the network.

In 1993, the National Telecommunications and Information Administration issued a paper providing an overview of network management, stating that the purpose of network management is "to help users efficiently and effectively use their diverse telecommunication resources so as to receive maximum service benefits and to help providers use their resources efficiently so as to enhance profitability."¹¹¹ That technically-focused definition has earlier roots: over twenty-five years ago, in *Engineering and Operations in the Bell System*, network management was described as the "function that keeps the network operating near maximum efficiency when unusual traffic patterns or equipment failures would otherwise cause network congestion and inefficiency."¹¹² Six years later, Kornel Terplan defined network management as "deploying and coordinating resources in order to plan, operate, administer, analyze, evaluate, design and expand communication networks to meet service levels at all times, at a reasonable cost, and with optimum capacity."¹¹³

¹¹¹ R.D. Jennings, R.F. Linfield & M.D. Meister, Inst. for Telecomm. Sciences, Nat'l Telecomm. and Info. Admin., U.S. Dep't of Commerce, *Network Management: A Review of Emerging Concepts Standards, and Products 20* (1993) (hereinafter "R.D. Jennings").

¹¹² R.D. Jennings at 2 (paraphrasing R.F. Rey, *Engineering and Operations in the Bell System* (2d ed. 1983)).

¹¹³ R.D. Jennings at 2 (quoting Kornel Terplan, *Integrated Network Management*, Proceedings of the Network Management and Control Workshop, September 19-21, 1989, Tarrytown, NY, at 31-57 (Aaron Kershenbaum et al. eds., 1990)).

This technical definition of network management remains in place today. Cisco Systems, in its *Internetworking Technologies Handbook*, identifies the five conceptual areas of network management promulgated by the International Organization for Standardization (“ISO”) that are “the primary means for understanding the major functions of network management systems.”¹¹⁴ The ISO’s five conceptual areas are: performance management, configuration management, accounting management, fault management, and security management.¹¹⁵ These functions are each technical in nature and relate to maintaining and monitoring the infrastructure and operation of the network, not to appraising the character of the content that travels over the network. This framework of network management is further embodied in the definition developed by the Alliance for Telecommunications Industry Solutions (“ATIS”), in its *ATIS Telecom Glossary 2007*. The glossary lists the five ISO functions of network management, and also includes a handful of additional technical network management functions: “initial network planning, frequency allocation, predetermined traffic routing to support load balancing, [and] cryptographic key distribution authorization.”¹¹⁶ Performance of each of these network management functions necessitates technical knowledge and expertise that is – and should remain – completely distinct from practices and technologies that block, degrade, or prioritize data based on its source, application, or content. Likewise, reasonable network management should not include technical practices purporting to exercise the judgment required to scrutinize the legality of network content.

It is clear from the history of network management that this concept, when properly construed, is altogether technical in nature, and that its primary purpose is maintaining the

¹¹⁴ Cisco Systems, *Internetworking Technologies Handbook* 6-2 (4th ed. 2004), available at http://www.cisco.com/en/US/docs/Internetworking/technology/handbook/ito_doc.html.

¹¹⁵ *Id.* at 6-2-6-4.

¹¹⁶ Network Management, ATIS Telecom Glossary 2007, <http://www.atis.org/glossary/definition.aspx?id=3491> (last visited Jan. 6, 2010).

efficient operation of a network. Furthermore, it is evident that the role of network management is not to judge the quality or legality of content, but instead to organize and regulate the flow of content to ensure the fair and efficient allocation of network resources in a nondiscriminatory manner – a purely technical endeavor.

To further these policies, PIC urge the Commission to remove the non-technical aspects and the broad catchall language from the definition of RNM and consolidate the scattered references to RNM throughout the several sections into a single section, entitled “Exceptions for Reasonable Network Management.”

Consolidating RNM into a generally applicable exception would allow it to be considered holistically within the context of all of the interrelated principles of the proposed rules, instead of being applied piecemeal. This should allow for a more consistent application of the exception, especially in areas where the lines between content, applications, services and devices may be blurred. This would also remove ambiguity and potential contradictions in those principles for which “network management” may not be the best fit. For example, the principle of transparency proposed to be codified in the rules should be universal, and not qualified or itself subjected to a Reasonable Network Management exception.¹¹⁷ The transparency principle ensures that network management practices employed by broadband Internet access service providers and applied to content or applications are actually reasonable. A network management practice that affects content should not escape disclosure merely because the ISP deems it reasonable. Such an exception would swallow whole the sixth principle and the proposed transparency rule.¹¹⁸

¹¹⁷ See *NPRM* ¶ 119.

¹¹⁸ PIC also urge the Commission to consider the potential inapplicability of an RNM exception to other principles, such as the device principle. Network management traditionally excludes the management of equipment at the edges at the network, to the extent that such devices are not harmful—a condition already included within the proposed § 8.9. See *Network Management*, ATIS Telecom Glossary 2007, <http://www.atis.org/glossary/definition.aspx?id=3491> (last visited Jan. 6, 2010) (“*Note*: Network management does not include user terminal equipment.”).

In order to evaluate whether a particular provider's practice meets this definition of RNM, the Commission should consider a number of criteria in order to ensure that a legitimate technical network management purpose – narrowly construed, and both reasonably related and proportional in relation to the traffic or congestion issue claimed as justification– is in fact the motivation for the practice. Furthermore, the Commission must ensure that purportedly reasonable practices are not merely a pretense to excuse anticompetitive or otherwise invidious behavior.

The Commission should therefore ensure that the practice is designed to address a specific need enumerated within the definition of RNM. In other words, the practice must have been designed to reduce or mitigate congestion, address traffic that is unwanted by users, or address traffic that is harmful to the network. The practice should also be designed to achieve *only* the stated purpose and effect. Thus, a practice that had a disproportionate impact on lawful content, applications, services, or devices and that was not intimately tied to the needs of maintaining the network would not be considered RNM.

Furthermore, the practice should result in as little discrimination or preference as reasonably possible, and should minimize harm to competitors, users, or any other party. These criteria are necessary to ensure that providers will not engage in methods that, while achieving the legitimate purpose of RNM, also create an unnecessary and illegitimate harm to competition, consumer interests, or other stakeholders' interests.

Finally, network management practices should never be used as a substitute for deployment of facilities and expansion of capacity. For this reason, the Commission should also consider whether network investment or economic action alone might address the same need for the network management practice claimed by the broadband Internet access service provider. If

this is the case, or if permitting the practice will deter subsequent network investment or economic approaches, the practice should not be deemed RNM.

2. ISP Compliance With Existing Legal Obligations Must be Permitted by the Open Internet Rules, but Such Steps Required for Such Compliance Should Not be Defined as “Reasonable Network Management” Practices

PIC propose that RNM be defined to reflect its origins in the technical term “network management,” while legal considerations such as the lawfulness of content or transmissions should be considered in a separate framework based entirely on the needs of law enforcement and public safety. This latter category could be referred to as “legal obligations.”

A broadband Internet access service provider’s legitimate network management needs and its compliance with existing legal obligations have little in common. On a basic level, network engineers are best situated to assess the technical needs of network management, as these engineers make informed determinations regarding the requirements and vulnerabilities of the network, the availability of capacity, and the particular patterns of traffic on the network. By contrast, the provider’s general counsel is best positioned to determine its legal obligations, advising the provider on compliance with laws that govern a wide range of issues, from competition to privacy to copyright.

Another major difference between network and legal requirements is that the latter rarely impact the prioritization of content, applications, services and devices, and involve the blocking of such only very occasionally. For instance, the needs of law enforcement agencies with regard to the Internet and communications services would more frequently involve the interception, not blocking, of content. As such, these practices are unlikely to interfere with the proposed rules, even without recourse to the specific law enforcement exception.

Preserving a distinction between these two purposes in the rules would therefore lead to greater certainty and clarity in formulating standards for each category of exception. Providers

would be better able to formulate policies on managing traffic and congestion without having to ensure that they simultaneously accommodate the demands of separate legal obligations.

Meanwhile, policies complying with statutory and court-ordered requirements could be created independently of technical considerations.

Separating legal considerations from RNM does not give network users carte blanche to engage in illegal conduct. Aside from the fact that the relevant laws themselves would contain prohibitions on unlawful content and transmissions, the proposed rules explicitly protect only *lawful* content, devices, applications and services. If a provider's practice only blocks or degrades *unlawful* content, devices, applications or services, then the provider has not violated the rules. A practice precise enough to block child pornography while not interfering with lawful content would be perfectly permissible without any need for recourse to exceptions to the proposed rules in the *NPRM*. The same could be true of practices that block infringement of copyrights or defamatory speech, though in such cases, the subjectivity inherent in determining lawfulness often does not admit of a technical solution.¹¹⁹

Such a formulation also reaffirms the proper boundaries of the Commission's subject matter jurisdiction, leaving determinations of contents' legality to the courts and other agencies. The "needs of law enforcement" or "complying with other laws" are far clearer standards for behavior interfacing with other laws and regulations than "reasonable network management," which naturally contains the built-in flexibility necessary to accommodate changing technical solutions. However, that native flexibility, if extended to justifications beyond the technical, could easily expand the exception to swallow the rule.

¹¹⁹ See Mehan Jayasuriya *et al.*, *Forcing the Net Through a Sieve: Why Copyright Filtering is Not a Viable Solution for U.S. ISPs*, Public Knowledge, <http://www.publicknowledge.org/paper/pk-filtering-whitepaper>.

Furthermore, any exceptions necessary for providers to comply with legal obligations can be covered in a separate determination under the already-provided-for exceptions in the proposed rules' §§ 8.19-23.

This bifurcated structure also aligns the legal obligations of providers, whether such obligations come from federal criminal law, public safety regulations, state law, or the rules of civil procedure. Any affirmative obligations that a provider might have to engage in practices that involve the blocking of content, applications, services or devices is already accounted for in the proposed § 8.19, which explicitly allows providers to meet these obligations. Since the proposed § 8.23 stipulates that none of the proposed rules should prevent a provider from complying with “other laws,” this presumably includes not just criminal laws, but also civil law statutes and regulations, including copyright law and the rules of civil procedure. For instance, the proposed rules would neither expand nor limit the obligations and responsibilities of a provider under the Digital Millennium Copyright Act’s safe harbor provisions, nor would they alter a provider’s obligation to respond to a search warrant or civil subpoena.

PIC also recommend that the various legal obligations—whether to law enforcement, public safety, national or homeland security or any other laws—be consolidated into one exception. As noted in Section III.D.4 below, this exception should also be limited to the needs of the relevant authorities, and should not allow broadband Internet access service providers to make these broad public policy determinations in the absence of relevant authority.

In dealing with legal obligations, a provider will be crafting policies to deal with a wide-ranging set of conditions, motivated by disparate public policy goals. The number of such obligations and their variability could too easily provide latitude for abusive practices, unless there is a tight nexus between the legal obligation and the particular practice implemented.

Therefore, PIC recommend that any practice that is to fall under the exception for legal obligations should be narrowly tailored to meet a legal obligation established by statute, rule, court order, or other relevant authority.

This stricter scrutiny results from the need to ensure that the important interests of public policy, and their attendant power to implicate fundamental rights, are not left to the discretion of broadband Internet access service providers, but are instead informed by the democratic process that created the legal obligations in the first place.

D. Prioritization of Traffic Includes a Wide Range of Activities and Practices, Only Some of Which May be Reasonable Network Management or Necessary to Comply With Legal Obligations

The *NPRM* solicits comment on the propriety of particular types of prioritization or discrimination in reference to two different areas of the proposed rules: the exceptions for Reasonable Network Management, law enforcement and public safety and national security;¹²⁰ and the principle against discrimination.¹²¹ Rather than artificially splitting discussion of network practices among these two topics, PIC here address several types of prioritization raised in the *NPRM* and elsewhere, suggesting a framework by which they should be evaluated.

Prioritization of certain types of traffic is neither reasonable nor unreasonable per se, as prioritization and practices regarding different types of traffic may alternately be discriminatory measures that violate the open Internet rules; Reasonable Network Management practices; or, rarely, steps taken to comply with legal obligations. Although the proposed open Internet rules deal broadly with prioritization and nondiscrimination, the Commission must recognize that these are broad terms that can encompass a range of different activities. When developing open Internet rules, the Commission must be mindful of these differences and distinguish between

¹²⁰ *NPRM* ¶¶ 141, 144, 147.

¹²¹ *NPRM* ¶¶ 111-17

beneficial and harmful discrimination, exercising the flexibility afforded by the proposed exceptions for reasonable network management and legal obligations.

Ultimately, the goal of the Commission should be to balance the limited utility of prioritization against the potential harms that prioritization introduces. While prioritization of certain, very specific and limited types of control traffic is necessary for the network to function or recover as efficiently as possible,¹²² this control traffic is not user traffic and does not represent any kind of competitive advantage or harm. Prioritization of users' traffic can raise competitive concerns, introduce incentives to increase scarcity and collaterally damage the free flow of speech.

While all of these dangers are important for the Commission to consider, in light of the Commission's goal to increase build-out and utilization of high speed broadband,¹²³ prioritization's threat of incentivizing the creation of increased bandwidth scarcity should be of particular concern. Simply put, prioritization is only necessary if existing bandwidth is inadequate. Unlike caching, which is a potentially attractive service regardless of the amount of bandwidth available because it brings content closer to consumers,¹²⁴ prioritization is only a viable offering when bandwidth is limited. By allowing ISPs to monetize this scarcity, the Commission works at cross-purposes to the critical goal of fostering the deployment of accessible, high-speed broadband access for as many Americans as possible.¹²⁵ To this end, PIC recommend that any prioritization should be either *essential* to the network's operation or

¹²² RFC 1266 section 9.2 discusses how BGP routers may prioritize BGP traffic in order to provide routing updates. Sending routing updates ahead of user traffic makes sense as the traffic waiting may benefit from the updated routing instructions, among other reasons discussed in the RFC. See The Internet Engineering Task Force, Networking Group, Request for Comments: 1266 § 9.2 (1991), available at <http://www.ietf.org/rfc/rfc1266.txt> (hereinafter "RFC 1266").

¹²³ See generally Julius Genaschowski, Chairman, FCC, Prepared Remarks on National Broadband Plan (Dec. 16, 2009) (hereinafter "Genaschowski Dec. 16, 2009 Remarks").

¹²⁴ Although caching may potentially introduce other issues worthy of the Commission's attention, those issues are outside the bounds of the current network neutrality rules.

¹²⁵ See generally Genaschowski Dec. 16, 2009 Remarks.

undertaken in compliance with legal obligations – and in this latter case, pursuant only to the direction of courts, appropriate governmental agencies or law enforcement authorities. To the extent that a broadband Internet access providers’ end users request prioritization, that request may only be fulfilled up to the point in the network that it would begin to disproportionately degrade another user’s content, services, applications, devices or other aspects of access.

1. Control Traffic

Generally speaking, control traffic consists of instructions used by the network itself to route information packets. This traffic identifies congestion and determines efficient pathways. It is necessary to give the network the information it needs in order to efficiently move data from one point to another. If this traffic is delayed or degraded, the network is at risk of sending traffic along a less-efficient or discontinued route, causing it to slow, grind to a halt or recover from an outage more slowly. As a result, control traffic such as Border Gateway Protocol¹²⁶ is allowed priority by Internet standards over data actually being transferred between end user computers and servers in times of congestion. Giving this type of data priority is a paradigmatic example of reasonable network management, as it is explicitly designed to address a specific need for proper network operation.

In prioritizing this internal traffic, the network does not make a judgment as to which user sent the packet or where the packet is going. It does not explicitly consider the contents of the packet itself, creating little, if any, discrimination or preference. The packets are automatically generated by elements of the system, not by users at the edge of the system. The network simply prioritizes all control traffic over other forms of traffic, regardless of the specific information contained in the control traffic.

¹²⁶ RFC 1266 §§ 9.2 – 9.3.

Another aspect of control traffic is that its importance to network functionality is independent of the types of users or the uses of the network. No matter who is using the network, or for what purpose, control traffic is a necessary element of a functioning network. Without necessary control traffic, data will not arrive at its destination and the network will simply cease to function—network investment would not realistically obviate the need for control traffic’s prioritization.

When developing final open Internet rules, the Commission should therefore be clear that prioritizing control traffic is well within the bounds of reasonable network management. More importantly, as the paradigmatic example of reasonable network management, the Commission should look to control traffic as a benchmark in evaluating other practices under reasonable network management. Where traffic management does not share the critical characteristics described above, the Commission should regard it with suspicion.

2. Quality of Service (QoS) Customer Prioritization

Giving customers the ability to prioritize their packets over the packets of other customers undermines the fundamental architecture of the best effort public Internet. Broadband Internet access service providers typically accept and forward customer traffic in the order in which it is received, and do not offer QoS differentiation on their network to anyone except for those businesses who contract to set up virtual (tunneled) “circuits.”

If service providers wish to empower users to select a prioritization scheme over the usual best-effort model, QoS, as properly interpreted, construed and limited, would deal only with consumers prioritizing how data is rearranged over their own connection to the Internet. In this case, the ISP furnishes the consumer with a connection to the Internet and empowers the consumer to decide how to use it. In accordance with the principle that the proposed rules are intended to benefit the consumer, the power to select some data over other data should be

exclusively vested in the customer. The consumer may choose to always prioritize some types of time sensitive data (such as VOIP or streaming video) over other types (such as bulk file transfers) on her own network.¹²⁷ These choices may be applied in various ways. Typically, traffic with non-default handling instructions will be marked with flags in the headers of the packets to be forwarded. ISPs and upstream transit providers have the option to either honor the handling instructions on the traffic or relay the traffic in the order in which it is received. However, ISPs may not interpose their own will upon the traffic.

If ISPs are allowed to control QoS, and handle the traffic according to their own prioritization lists instead, there may be a temptation to prioritize their own offerings, or to de-prioritize competing Internet-based services. For example, an ISP that also provides traditional MVPD services will have an incentive to de-prioritize any Internet-based streaming video content that competes with its own offering. If the Commission does decide to allow this type of user-driven prioritization, it should be attentive to the ability of default settings and automatic configurations offered by ISPs and third parties to shape customer decision making.¹²⁸

Decisions by a consumer cannot be a justification for blocking, degrading or otherwise discriminating against another user's ability to access the Internet. While consumers should be free to dictate how they receive their services, no consumers may be allowed to enforce their preferences over those of their neighbors. To the extent that technical solutions prevent consumer-directed QoS from working without degrading other consumers' connections, these types of prioritization would violate the nondiscrimination rule.

This way, when a consumer is using his maximum allowance of bandwidth, she can be more confident that the time sensitive data, as selected by her and not by any other party, will

¹²⁷ Prioritized information can be marked in a number of ways, for example by application, application type or file type.

¹²⁸ See generally Richard Thaler & Cass R. Sunstein, *Nudge* (Yale University Press, 2008).

flow uninterrupted. However, because such prioritization should not impact other consumers disproportionately, QoS only works if consumers use it selectively. If all packets are marked with a high priority, none will be favored over another and all will be treated equally.¹²⁹

Of course, this control only extends over the consumer's own connection to her ISP. Once the traffic has reached the broadband Internet access service provider's network, the data must obtain equal treatment with all other customer's traffic in accordance with the nondiscrimination principle.

Very few, if any, applications absolutely depend on QoS. Even VOIP and video services, which the Commission has suggested may require special regulatory classification,¹³⁰ are fully functional over today's nondiscriminatory public Internet. Neither Skype, a provider of VOIP; nor Netflix or Amazon.com, providers of high-definition digital video content; nor providers of highly interactive and graphics intensive games such as Blizzard; require special prioritization in order to provide their services online.

While some customers may prefer to have the ability to assign priority to some applications over others, there is no evidence that any applications that reasonably rely on the public best effort Internet require special prioritization in order to function. To the contrary, because the Internet has always been a "best effort" network, Internet service contracts never absolutely guarantee delivery. Developers have long taken this fact into account when designing applications. If the Commission were to allow ISPs to automatically prioritize a certain type of traffic over another, it would inevitably distort the development of new applications by giving developers an incentive to build applications reliant on prioritized traffic. Over time, this would

¹²⁹ As a result, QoS may also implicate consumer protection concerns. If the Commission does elect to allow ISPs to offer QoS, it should create rules that assures that consumers understand that their power to prioritize is limited only to their connection to the ISP's network, and that setting "high" priority on all packets will do nothing.

¹³⁰ See *NPRM ¶¶ 148-9*.

undermine any advantage granted to the privileged traffic type. This process would be further complicated by the challenges of defining prioritized file types in a way that will be meaningful as Internet protocols, applications, and file types evolve.

3. *Allowing Third Parties to Purchase Prioritized Access to ISP Customers*

This type of prioritization would allow ISPs to sell prioritized access to parts or all of its customer base of end user consumers to third party services.¹³¹ Essentially, ISPs would charge third party purchasers (such as Google, Netflix or Hulu) for access to a “fast lane,” guaranteeing that the third party’s offering would be prioritized over others, including the third party’s competitors (such as Yahoo, Amazon Unbox, or Vuze). This service is fundamentally different from traditional Internet access services provided by ISPs, including resale of capacity. PIC recognize that ISPs often buy capacity from carriers to offer virtual T1 and other services. While such practices may involve prioritization of a sort to achieve advertised capacity, such services fall outside the definition of "broadband Internet access service provider" as set forth in the *NPRM*.

If putatively offered as a type of Internet access service, this type of activity would be categorically discriminatory and thus not permissible. Prioritizing one third party purchaser’s packets over all others inevitably degrades all other packets. This is never reasonable. While a customer should be free to degrade her own packets (as with QoS discussed above), it is unreasonable to allow a third party purchaser to degrade the packets of others.

Furthermore, allowing third party purchasers to pay for prioritization distorts competition in a number of ways. First, it advantages wealthy incumbents and disadvantages startups who may be unable to pay for prioritization. This will result in the ossification of the Internet and

¹³¹ Although this service is not known to be offered as of today, it has been the subject of a great deal of discussion within the industry. *See, e.g.* Jonathan Krim, *Executive Wants to Charge for Web Speed*, The Washington Post, Dec. 1, 2005.

significantly reduce the type of rapid innovation that has thus far characterized its growth. It also advantages incumbents because it is unlikely that new entrants will have the ability (both financially and with regard to information) to negotiate with every ISP that serves the markets that they are interested in. The Commission should not pursue a policy that will require market entrants to negotiate separate prioritization deals with the hundreds of ISPs that serve the United States before having an opportunity to be nationally competitive.

Second, this type of practice could be used by ISPs with other interests to act in an anticompetitive manner. For example, an ISP might invest in one video service, contract with the service for fast lane access and then prevent competing video sites from even negotiating for such access. ISPs should not be put in a position that allows them to prioritize their content over the content of their competitors or to become the gatekeepers blessing winners and losers in the marketplace.

Third, allowing prioritization at the expense of others creates an incentive for a two-tier Internet. Large, established and well-funded Internet application providers will operate at a high speed, while local, startup providers will languish in the “slow lane.” As ISPs grow fat on prioritization fees, the incentive to maintain this segregated service, and to protect those already paying for prioritization, will grow.

4. Emergency Services

a. Disaster Areas and First Responders

First responders and disaster relief personnel often have problems communicating in impacted areas. However, this is often a function of a lack of coordination on the part of different agencies or problems related to network *access*, and not a congestion/prioritization issue. During the 9/11 attacks, communication largely failed because first responders did not have access to the relevant radio frequencies (either because they were on the wrong channel or did not have a

radio), not because traffic on those frequencies was not prioritized correctly.¹³² Similarly, cellular telephone network access was not fully functional because of physical damage to cell sites preventing network access, not system overload.¹³³ To address these issues, first responders already have dedicated links to local ISPs, ensuring that their data is not impeded by consumer broadband congestion. Since these dedicated links do not compete for bandwidth in residential last-mile networks, the subject of this proceeding, first responders' access would not be affected by the proposed rules.¹³⁴

Because of this, the ability to prioritize data on networks is unlikely to be necessary to ensure that first responders and disaster responders have the tools required to accomplish their mission. Nonetheless, precedent identifiers already exist in the Internet standards TCP/IP protocol such as the Flash Override, which used with Delay, Throughput and Reliability indications, will increase the performance and delivery of packets from government agencies during an emergency in the middle-mile and backhaul networks.¹³⁵

b. Only the Government, Not Private ISPs, Should be Empowered to Invoke Emergency Prioritization

Government agencies, not ISPs, are best positioned to determine when to invoke disaster-related prioritization. Oftentimes in a disaster, civilian communications networks are critical systems for distributing information to the public and tracking the spread of the disaster. An errant decision by an ISP to de-prioritize non-emergency information could slow down the distribution of critical information to the public. Improper de-prioritization could also hamper crowdsourced data such as email, phone and twitter updates that can provide valuable

¹³² See *The 9/11 Commission Report* 278-325 (2004).

¹³³ See Lisa Guernsey, *An Unimaginable Emergency Put Communications to the Test*, N.Y. Times, Sept. 20, 2001.

¹³⁴ See Overview, EtherStream, <http://www.easynetconnect.net/products/etherstream.aspx>.

¹³⁵ See <http://www.ietf.org/rfc/rfc791.txt> Page 11 .

information and insight to officials.¹³⁶ In many cases, unnecessarily disrupting the general flow of information and news in an emergency situation could cause just as much panic as the disaster itself.

As it will be first responders, not ISPs, who are in the best position to gauge their needs in an emergency, the Commission should make it clear that only the relevant authorities have the power to activate emergency response related prioritization. To that end, the Commission should work with ISPs and first responders to create a universal mechanism to activate this ability. Until and unless ISPs receive official word to prioritize emergency traffic, they should continue to function in their normal, neutral, manner.

E. Copyright Filtering Should Not be Contemplated Within the Proposed Rules

A prominent discussion regarding copyright enforcement has accompanied the relevant discussions in this proceeding. For instance, the blocking of copyright infringement has been proposed as a specific example of “reasonable network management.” Although similar objections apply to classifying refusals to transmit other unlawful content, this proposal deserves particular attention and analysis because it demonstrates both how removing legal considerations and maintaining the technical nature of RNM prevents ambiguity and jurisdictional conflicts, and the cost of trying to further policy considerations—such as reducing the availability of illegal content—in the guise of “reasonable network management” rather than addressing such considerations properly through the rules.

A statement that the rules designed to protect an open network do not apply to illegal content is both consistent with Commission telecommunications precedent¹³⁷ and provides

¹³⁶ Famously, news of US Airways Flight 1549’s crash landing in the Hudson river was first reported on Twitter. See Shira Ovide, *Twittering the USAirways Plane Crash*, WSJ Digits, Jan. 15, 2009, available at <http://blogs.wsj.com/digits/2009/01/15/twittering-the-usairways-plane-crash/>. Similarly, eyewitness reports of the Mumbai terrorist attacks appeared on Twitter as it unfolded. See David Sarno, *Mumbai news fished from Twitter’s rapids*, Dec. 2, 2008, available at <http://latimesblogs.latimes.com/technology/2008/12/mumbai-news-fis.html>.

adequate recourse to consumers and others whose lawful content is mistakenly blocked. By contrast, a statement that ISPs may engage in “reasonable network management” to block potentially illegal content would provide subscribers with no recourse, and will impermissibly require that subscribers prove the legality of content as a pre-requisite of transmission. This is particularly troubling for efforts to filter for infringing material, where questions of fair use or complex licensing disputes make it nearly impossible for consumers to prove the legality of transmission and where copyright law has firmly placed the burden on the rights holder to make a prima facie case of infringement.

Finally, the inclusion of steps to reduce the availability of infringing content as a reasonable network management practice creates an exception to the rules that threatens to render them ineffective. Given the breadth of what the Commission currently proposes to consider “reasonable,” any measure that purported to have some impact on reducing the availability of infringing content could survive scrutiny no matter its broader impact on the open Internet. For example, an ISP that announced it would block all peer-to-peer applications as a means of reducing illegal file sharing would arguably be engaged in “reasonable network management,” despite the significant negative impact the Commission found in the Comcast/BitTorrent case.¹³⁸

1. Copyright Filtering is Not Reasonable Network Management

The *NPRM* states that “it appears reasonable for a broadband Internet access service provider to refuse to transmit copyrighted material if the transfer of that material would violate applicable laws.”¹³⁹ While such a refusal would be reasonable in the common sense definition of

¹³⁷ *Sable Commc’ns of California v. FCC*, 492 U.S. 115, 124 (1989).

¹³⁸ Comcast Order, ¶¶ 42-47.

¹³⁹ *NPRM* ¶ 139.

the word, it would be problematic if the Commission were to classify such practices as RNM.¹⁴⁰

First, the practice of copyright filtering would create technical problems within the administration of the network, running counter to the goal of reasonable network management, which is to keep the network functionally operational. Secondly, while there are legitimate motivations for copyright enforcement, these are purely legal considerations, with little, if any, relevance to the proper functioning of the network that underpins the established definitions of network management.¹⁴¹ The complexities of determining legality are of an altogether different type from the complexities of network management, and attempting to fit one within the scope of the other will literally fail to do justice to either.

a. Copyright Filtering Actively Hampers Network Management

To the extent that copyright enforcement practices would rely upon an ISP filtering content passing over the network for copyrighted material, such practices would require the network to sequester data for analysis while the system made a decision on its legitimacy. The time and processing power required for such an undertaking would decrease the speed and efficiency of the network, acting precisely against the interests of customers, the network operator and indeed, of good network management.

While ISPs are occasionally required to inspect traffic, they generally do not analyze any part of the packet other than the header.¹⁴² However, an ISP implementing a copyright filter would need to scrutinize all traffic from all subscribers, or a significant portion thereof. The filter would then have to determine the type of content associated with the data intercepted, and check

¹⁴⁰ As noted above, none of the proposed rules extend to the protection of unlawful content. As such, practices that prevent unlawful content transfers are eminently permissible under the proposed rules.

¹⁴¹ For example, although it could be argued that reducing the flow of infringing content would reduce congestion, the Commission rejected the notion of blocking to manage congestion in the Comcast/BitTorrent decision because management of congestion by such means would undermine the openness of the Internet.

¹⁴² See Mehan Jayasuriya *et al.*, *Forcing the Net Through a Sieve: Why Copyright Filtering is Not a Viable Solution for U.S. ISPs* 7, Public Knowledge, http://www.publicknowledge.org/paper/pk-filtering-whitepaper_2.

it against whatever criteria it used to determine copyright status. If the filter is to operate on the network in real time, Internet traffic running over the filtered network would be significantly slowed.¹⁴³ Even minor delays of a few hundred milliseconds will cause substantial drops in traffic and revenue.¹⁴⁴ Such a result would not only be inconsistent with reasonable network management, but nearly antithetical.

Other methods of enforcing copyright through interdiction at the last-mile network would generate other problems. Inspecting traffic patterns, whether through connection pattern analysis or geographic patterns, would serve as an imperfect proxy for identifying infringement at best, and at worst, would block large amounts of lawful content. The overbroad actions of Comcast in its blocking of BitTorrent are one salient example of the shortcomings of such a process.

b. Legal considerations are a poor fit for network management

The legal status of a given packet of content does not alter its size, origin, destination, or ability to harm the network. A packet of data that infringes copyright requires no different technical treatment in its transit of the network than a packet that does not infringe copyright. As noted previously, RNM should be restricted to technical considerations, leaving network management policies to determine traffic management and questions of unlawful content to legal policies. The need for the separation between these two realms is well illustrated by the example of copyright law, which is particularly difficult to articulate through technical network processes.

Whereas a provider may be well placed to determine what practices may best reduce congestion, increase network speed or resolve network failures, a provider is ill-equipped to determine what content is lawful or unlawful. Such a determination can in many cases require

¹⁴³ *Id.* at 11, 43.

¹⁴⁴ *Id.* at 43-44 (noting an additional 100 ms of delay translated into a 1 percent drop in sales for Amazon.com, and that a 500ms delay resulted in a 20 percent drop in traffic for Google).

years of litigation and judicial expertise to determine, and will *always* require more contextual information than is readily available in real time to a provider.

Determining the status of a given piece of data under copyright law involves a multitude of factors, some difficult or impossible to determine, others simply subjective. Even if a provider can determine that a given piece of data constitutes a part of a copyrighted work, the provider would also have to determine whether the transfer of that portion of the work was authorized by the copyright holder, a non-trivial task even when not conducted at the speeds necessary for proper network functioning.¹⁴⁵

In the frequent case where a copyright holder has not explicitly or implicitly granted permission for a transfer,¹⁴⁶ Sections 107 through 122 of Title 17 provide a multitude of exceptions and limitations to copyright, each providing a set of conditions under which that transfer is not an infringement, and is therefore lawful.

To take just one such limitation by way of example, Section 107 provides that fair use of a copyrighted work is not an infringement. The metes and bounds of what constitutes fair use are notoriously difficult to determine algorithmically; in making a decision, a court must consider four factors, none of which alone, or in any specified combination, is entirely or predictably dispositive. Those four factors are: (1) the purpose and character of the use, (2) the nature of the copyrighted work, (3) the amount and substantiality of the portion used in relation to the

¹⁴⁵ Consent and permission can be given through any number of methods. Even when the transfer of copyrighted information and a grant of permission are both made online (which is often not the case), the applications used for the two transactions will differ. Even the use of the same endpoints and application will not make it particularly likely that the same point on the network will have the chance to even view the relevant data, to say nothing of the technical problems of the storage required to make such a comparison, or the legality of so thoroughly intercepting, interpreting and analyzing users' data.

¹⁴⁶ For the sake of simplicity, Commenters will refrain from distinguishing between which transfers of a work would be implicated by the specific rights listed in 17 U.S.C. §106, and which would fall outside of consideration under copyright law, assuming for the purposes of this argument that each transfer of a work would constitute a reproduction, public performance, or display. However, it should be noted that not all transfers of copyrighted works are even within the scope of copyright law. *See, e.g., Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121 (2d Cir. 2008) *cert. denied*, *Cable News Network, Inc. v. CSC Holdings, Inc.*, 129 S.Ct. 2890 (2009); *CoStar Group Inc. v. LoopNet, Inc.*, 373 F.3d 544, 551 (4th Cir. 2004).

copyrighted work as a whole, and (4) the effect of the use upon the potential market for or value of the copyrighted work. Each of these factors is susceptible to extremely fact-specific valuations, leading to different legal rulings on superficially similar behaviors. Nor are these four factors the only criteria a court may consider – they are merely the minimum starting point for a court’s analysis of the legality of a particular use. Because of all of these considerations, the unpredictability of fair use is such that commentators have frequently noted, “we don’t know what a fair use decision is going to be until it goes to court”¹⁴⁷ or that “fair use in America simply means the right to hire a lawyer....”¹⁴⁸

Any errors in a system attempting to judge fair use would have a profound impact on users’ experience of the Internet. Fair use of copyrighted material is not a rare occurrence. The Copyright Act itself indicates that fair use is intended to safeguard criticism, comment, news reporting, teaching, scholarship and research. These necessary daily activities all implicate copyright in some way, and all, without fair use, would face a far less certain future.¹⁴⁹ As every single original expression that is fixed in a tangible medium is copyrighted, any quotation of that expression would risk calling the consequences of civil and criminal penalties down upon the quoting writer. Fair use is in large part a reason why ordinary cultural conversation may continue.

The necessity of fair use is heightened in a digital environment. Computers do not transfer information in the same way as envisioned by the original drafters of copyright law. Instead, any information that is transferred is, in essence, copied to some extent. As information

¹⁴⁷ William J. Maher, Society of American Archivists, at DePaul University School of Law Section 108 Study Group Public Roundtable, January 31, 2007, *available at* <http://www.section108.gov/docs/jan07transcript-topicB.pdf>

¹⁴⁸ Lawrence Lessig, *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity* 187 (2004).

¹⁴⁹ See John Tehranian, *Infringement Nation: Copyright Reform and the Law/Norm Gap*, 2007 UTAH L. REV. 537.

is buffered and cached in its movement, potential copyright implications apply. Unfortunately for users, the uncertainty inherent in fair use means that there is no bright line rule as to the length of time a temporary copy may exist before its existence ceases to be fair. Thus, the question of whether or not a particular use of a copyrighted work is fair is a difficult, daily question, which could be asked of almost every packet of data on the Internet. This means that an improperly calibrated system for identifying infringing data would subject a significant amount of lawful content, communication, and speech to interference by a carrier.

All of the complex considerations involved in determining fair use thus serve to illustrate the fact that even in this one area of copyright, the ability to determine lawfulness is fraught with potential error. Any attempt by a service provider to make such judgments accurately would essentially require the provider to stand in the place of a federal court. To the extent that such judgments would need to be made quickly, providers would have to rely upon an automated system to serve as a sort of “judge-in-a-box,” a feat currently beyond any conceivable technology. The adaptive and flexible nature of copyright law means that any attempt to automate its processes would fall prey to error and uncertainty. Relying upon reports of infringement from individuals or agents of copyright holders may not fare much better – again, in responding to complaints from third parties, the provider would be left to act in the capacity of a court, a role for which it is ill-suited.

Such a regime, resulting in such harms and so far removed from the necessity of network operation, should not be classified under the banner of “reasonable network management.”

2. *Copyright Enforcement Exceptions Burden Users with Proving the Lawfulness of their Communications*

Any attempt to specifically carve out an exception to the proposed rules for copyright enforcement — whether excused as RNM or merely as an attempt to block only unlawful content

— will lead to consequences at odds with the Commission’s goals of preserving an open Internet and benefitting consumers. Simply removing copyright enforcement from RNM does not eliminate the problems posed by its potential application. Permitting copyright filtering will necessarily allow a carrier to block, degrade or otherwise discriminate against *lawful* content, in direct contravention of with the purpose of this proceeding. Indeed, it is predictable to the point of certainty that ISPs seeking to block infringing content will block legal content. If a key goal of this proceeding is to ensure that lawful transmissions are protected from interference, then the Commission cannot allow copyright controversies to impede that goal. While the blocking of unlawful content should not be hampered by the rules, it is an entirely different, and less acceptable, proposition to suggest that it is reasonable to block *lawful* content simply as an unintended consequence of enforcing copyright law.

The effect of such a classification would be to burden users with the peculiar onus of proving that their communications are legal. Should copyright enforcement be included within RNM, a provider that blocked or degraded a given message sent from a user would remain free from any consequence absent a user’s assertion of legality. Such a system is plainly unworkable. Given the importance placed on transporting the data and content sent over the network by users, the burden of showing unlawfulness should properly reside with the party who wishes to block that communication. In the ordinary course of a copyright infringement case, or indeed any case where a communication is allegedly unlawful (such as defamation, false advertising, or trademark infringement), the party wishing to enjoin the communication bears the burden of making a *prima facie* showing of unlawfulness.

3. Overinclusive Copyright Enforcement Exceptions Render the Rules Ineffective

Given the uncertainties detailed in part above, attempts to filter a data stream for copyright will inevitably result in either underinclusive blocking (in which prohibited content is

not blocked) or overinclusive blocking (in which legitimate content is blocked). The most likely scenario is that both will occur.¹⁵⁰ Should a filter mistake legitimate content as infringing copyright, any blocking or degradation of that content by that filter would result in the blocking of lawful content, in direct opposition to the proposed rules. With a broad exception to the rules for copyright enforcement, providers would lack incentives to minimize the unintended harmful effects of their enforcement mechanisms.

Such effects are almost certainly inevitable — examples of the overinclusive identification of alleged infringement are not difficult to come by. In 2008, researchers at the University of Washington documented hundreds of false positive allegations of infringement sent to the university, including notices alleging infringement at IP addresses that belonged to devices that did not engage in any infringement, including networked printers.¹⁵¹ A researcher at Princeton also received numerous infringement notices alleging that infringing Bit Torrent file sharing occurred on a system that contained no BitTorrent client software.¹⁵² In light of the errors a copyright enforcement system will produce, the Commission should refrain from encouraging their implementation by excluding them from the scope of its principles on content.¹⁵³

Furthermore, the uncertain landscape of copyright law could result in attempted copyright enforcement mechanisms acting discriminatorily or anticompetitively. A provider that disfavored particular content, services, or applications could more easily target them for discrimination through a claim of copyright enforcement than by claiming a technical need for the network to

¹⁵⁰ Jayasuriya *et al.*, *supra* at 47, http://www.publicknowledge.org/paper/pk-filtering-whitepaper_5

¹⁵¹ Michael Piatek *et al.*, *Challenges and Directions for Monitoring P2P File Sharing Networks, or, Why My Printer Received a DMCA Takedown Notice* (2008), available at http://dmca.cs.washington.edu/dmca_hotsec08.pdf

¹⁵² Mike Freedman, *Inaccurate Copyright Enforcement: Questionable “best” practices and BitTorrent specification flaws*, Freedom To Tinker blog, Nov. 23, 2009, <http://www.freedom-to-tinker.com/blog/mfreed/inaccurate-copyright-enforcement-questionable-best-practices-and-bittorrent-specificatio>.

¹⁵³ It is occasionally posited that without explicit exceptions for copyright filtering, the proposed rules would penalize even a system that returned but one false positive while processing millions of works. However, there is no evidence that such discerning systems are in use or even exist. As noted above, the practices at issue today have a far less impressive record for accuracy.

target specific content, services, or applications. For instance, the Commission's own enforcement action against Comcast for its blocking of Bit Torrent might easily have been decided differently under the proposed rules. While the Commission found that Comcast's practices were discriminatory, under the proposed rules, Comcast could simply have stated that its practices were intended to curtail copyright infringement to escape scrutiny. The complexities of copyright law and attempts to identify and curb infringement will also give less scrupulous providers ample opportunity to disguise anticompetitive or discriminatory behavior as attempts at copyright enforcement. Even good faith providers would have little incentive to expend resources to minimize unintended discriminatory effects if a broad exception were in place. As carriers become increasingly integrated with copyright holders and distributors such as MVPDs, their ability to restrain Internet-based methods of content distribution will have increasing appeal if it is not properly contained by the Commission's regulations.

4. Legal Means for Addressing Copyright Infringement Should Exist Independently of the Proposed Open Internet Rules

Copyright holders are not and should not be powerless to address copyright infringement on the Internet. However, the rights of individual users of the Internet, users of copyrighted works and the realities of operating an Internet access service provider must be balanced with the needs of copyright enforcement. The proper forum for the determination of this balance lies not within a provider's boardroom nor within the Commission, but in copyright law, where Congress has struck such a balance in crafting the safe harbor provisions of the Digital Millennium Copyright Act.¹⁵⁴ That statute provides a framework establishing the scope of a provider's liability for copyright infringement by its customers. The requirements of the statute outline the

¹⁵⁴ *Codified at 17 U.S.C. § 512 et seq.*

obligations of the provider, which would be excepted from the proposed rules as the statute requires.

Any practices undertaken by a provider to address copyright infringement beyond its legal obligations, however, should be scrutinized carefully, to ensure that they do not result in the impermissible blocking of or discrimination against lawful content. An intent of combating infringement should not serve as an excuse for violating the principles by blocking lawful speech.

Copyright filtering is not a reasonable network management practice. As with other legal obligations, ISPs should comply with existing copyright law, as required by statute and directed by courts. ISPs and content owners should not engage in self-help or filtering schemes that would be hopelessly ineffective and overinclusive in attempting to screen out unlawful or unlawfully transmitted content.

F. Disclosure Guidelines for Network Management Procedures

Transparency lies at the heart of an open Internet. Therefore it is imperative the Commission rules require ISPs to actively disclose network management practices. Such disclosures speak to the reasonableness of a network management practice. Users and the FCC should be provided with meaningful information about any and all actions conducted by ISPs that monitor, manage or interfere with a subscriber's Internet traffic.

1. Disclosures to Users

In previous comment to the FCC, the New America Foundation recommended that the Commission require ISPs to provide a standardized disclosure form for broadband customers.¹⁵⁵

¹⁵⁵ Comments of the New America Foundation - NBP Public Notice #24, GN Docket Nos. 09-47, 09-51, and 09-137 at 7-8 (file Dec. 14, 2009), available at http://oti.newamerica.net/sites/newamerica.net/files/profiles/attachments/OTI_Comments_Public_Notice_24.pdf (hereinafter "New America Transparency Comments").

In those comments, NAF proposed a sample Broadband Truth-in-Labeling form to inform potential and existing customers about the broadband services they are subscribing to, including technical capabilities, service guaranteed, prices, service limits and other related elements. Among those disclosures was a requirement for ISPs to provide information on any service limitations that may be applied to the service offering including usage caps and subsequent overage charges, as well as traffic or network management practices that can influence how a consumer will be able to utilize and interact with the service. If a service offering has a cap on how much data can be consumed within a given period, this must be clear and disclosed up front, along with any fees associated with exceeding the cap.

With the exception of Comcast, which was compelled to disclose its practices by the Commission,¹⁵⁶ the majority of ISPs have provided relatively little information regarding their network management practices and the capacity limitations of their broadband networks. Even so, in its Acceptable Use Policy, Comcast only offers that it may lower “the priority of traffic for users who are the top contributors to current network congestion.”¹⁵⁷ Both consumers and developers would benefit from a *full* disclosure of network management practices with a clear explanation of how the system works. Sufficient disclosure of the network management tools used by ISPs is critical to the designers of Internet applications, as it allows them to predict whether their application will work on a given network.¹⁵⁸

Beyond the standardized disclosure form, ISPs should provide easily accessible, specific information regarding any traffic management practices which may affect a consumer’s usage or experience of the service or applications. Such information must be easily accessible before purchase. For example, if the use of certain applications or exceeding a certain amount of

¹⁵⁶ Comcast Order ¶ 1.

¹⁵⁷ See *Comcast Acceptable Use Policy*, available at www.comcast.net/terms/use.

¹⁵⁸ See *In re Broadband Industry Practices*, *supra* note 5, app. at 46.

bandwidth consumption will result in a lower prioritization of traffic or a different experience of the service, these types of limitations must be disclosed as part of the service offering. Often such information is buried in a terms of service or acceptable use policy. Broadband Internet access service providers should prominently and clearly display network management practices on their website. A recent decision by the Canadian Radio-television and Telecommunications Commission (“CRTC”) provides a useful model for the FCC to follow.¹⁵⁹ The CRTC required online disclosures of network management to include the following information:

- why the [practice] is being introduced;
- who is affected by the [practice];
- when the [management] will occur;
- what type of Internet traffic (e.g. application, class of application, protocol) is subject to management; and,
- how the [practice] will affect a user’s Internet experience, including the specific impact on speeds.¹⁶⁰

Beyond these basic disclosures, ISPs should provide specific and detailed disclosures regarding network management practices, including:

- Details of all thresholds, such as exact levels of congestion or bandwidth consumption that will trigger any traffic shaping, and the duration of the practice;
- The specific impact on the performance on a user’s connection as a result of a network management practice, including throughput and latency;
- To what extent and how a user’s traffic is monitored; the type of data collected; the dates, times, and duration, how that information is used and stored and with whom it is shared.

All of the above information should be prominently and clearly displayed on a provider’s website. In line with the CRTC decision, clear and prominent disclosure of network management

¹⁵⁹ *Review of the Internet Traffic Management Practices of Internet Service Providers*, Telecom Regulatory Policy CRTC 2009-657 (Canadian Radio-television and Telecommunications Commission, Oct. 21 2009), available at <http://www.crtc.gc.ca/eng/archive/2009/2009-657.htm> (“CRTC”).

¹⁶⁰ See CRTC ¶ 60.

practices on the websites of ISPs must be made a minimum of 30 days in advance of a new practice being implemented or an existing one being modified.¹⁶¹ Existing ISP customers should be notified via e-mail of any changes to network management practices. This does not include any short-term network management practices to protect network security or integrity. However, if such day-to-day practices substantially affect access to a lawful application or website, providers should disclose, as soon as possible and with sufficient detail, why a particular application or website was blocked or limited, for what duration and any future limitations that may be placed on access.

ISPs should further be required to notify application and website owners affected by the above practice of why access was blocked or limited, for what duration and any future limitation that may be placed on access. In addition, specific lawful application and website owners affected by changes in an ISP's network management practices should be notified a minimum of 30 days in advance. The above disclosure requirements will help to facilitate collaborative solutions among ISPs and application and web developers.

2. Disclosures to the Commission

All of the above disclosures to users should further be filed with the Commission. Ideally, the Commission could serve as a clearinghouse for such information, allowing consumers to compare network management practices and help facilitate best practices and collaborative solutions among all users of the Internet. In line with the CRTC framework, ISPs should further disclose the following to the FCC:

- Describe the practice being employed, as well as the need for it and its purpose and effect, and identify whether or not it results in any discrimination or preference.
- In the case of a practice that results in any degree of discrimination or preference:

¹⁶¹ See *id.* ¶ 61.

- Demonstrate that the practice is designed to address the need and achieve the purpose and effect in question, and nothing else;
- Establish that the practice results in discrimination or preference as little as reasonably possible;
- Demonstrate that any harm to an end user, or any other party, is as little as reasonably possible; and
- Explain why, in the case of a technical practice, network investment or economic approaches alone would not reasonably address the need and effectively achieve the same purpose as the practice.¹⁶²

These disclosures should be as detailed as possible, including detailed technical discussions that will allow FCC engineers to evaluate the impact of the practice on the network and users. These disclosures should also be made publically available.

IV. CONSUMER COMPLAINT PROCEDURES

The current process for consumers to report issues with a broadband service to the Commission is insufficient. As the Commission is well aware, a Government Accountability Office survey suggests that many consumers do not know that they can submit complaints to the Commission or how they can do so.¹⁶³ As NAF suggested in previous comments, the Commission should take immediate steps to improve consumer awareness of the complaint process. With some minor changes, the existing consumer complaint process could serve as a way for broadband consumers and all users to alert the Commission of inaccurate ISP network management practices or a failure to disclose certain practices.

Active measurement tools can empower consumers to test the actual performance capabilities of their broadband connections, as well as provide diagnostic tools to determine the cause of problems with a broadband connection or network-dependent application.¹⁶⁴ Tests are

¹⁶² See *Id.* ¶ 43.

¹⁶³ See Customer Information and Disclosure, *Notice of Inquiry*, 24 FCC Rcd. 11380, 11397-8 (2009).

¹⁶⁴ See New America Transparency Comments at 14.

initiated by an end user, such as a broadband subscriber, and evaluate the network during a specific task. Examples include basic speed tests such as those provided by websites such as Speedtest.net¹⁶⁵ and others, but they can also include measuring more sophisticated performance and diagnostic tests to determine if an ISP is throttling or blocking specific applications.¹⁶⁶ An example of a measurement system for consumers and researchers is Measurement Lab (M-Lab).¹⁶⁷ It is an open, distributed server platform for researchers to deploy Internet measurement tools. M-Lab differs from a number of other active measurement efforts by providing: 1) an open platform that assists scientific research by provisioning widely-distributed servers and ample connectivity for researchers' use; 2) server-side tools that are open-sourced, and which allow third-parties to develop their own client-side measurement software; and, 3) open and publicly accessible data about Internet measurements for the research community, policymakers, and the public.¹⁶⁸

As the Commission considers developing enforcement mechanisms, consumers can become a part of the process, utilizing testing to improve transparency on broadband services and the Internet. When filing complaints, consumers should be encouraged to append diagnostic test results that determine if an ISP is throttling or blocking specific applications or engaging in network management practices that they have not properly disclosed to subscribers or the Commission. Key to the success of this process is collecting accurate data, which is dependent upon the validity of the measurement tool. Thus, it will be necessary to ensure openness and transparency of the measurements. Open-source tools would allow for all parties to truly

¹⁶⁵ See <http://www.speedtest.net/>. See also <http://www.speakeasy.net/speedtest/> and <http://www.dsreports.com/speedtest?flash=1>.

¹⁶⁶ <http://www.measurementlab.net/measurement-lab-tools>

¹⁶⁷ Measurement Lab was founded by the NAF, the PlanetLab Consortium, Google Inc. and academic researchers. See <http://www.measurementlab.net>.

¹⁶⁸ Data from two of M-Lab's tools is publicly available on via Amazon Web Services, allowing anyone to make use of this information without restriction, under a "no rights reserved" Creative Commons Zero waiver. See <http://www.measurementlab.net/news/2009/dec/10/calling-all-researchers-m-lab-data-now-available-amazon-ec2>

understand the methodology of a particular measurement tool. Unlike closed, proprietary tools, open-source tools would allow all affected parties, including service providers, to examine the code and assess the validity of the measurement instrument.

A. The Commission Should Provide for Enforcement of the Open Internet Rules in a Streamlined, Two-Step Process, with Low Barriers to the Filing of Complaints

The Commission has asked whether it “should adopt procedural rules specifically governing complaints involving alleged violations of any Internet principles we codify in our regulations.”¹⁶⁹ In Appendix B, PIC provide one example of a simple complaint procedure that will effectively ensure compliance with the open Internet rules. This procedure contains sufficient procedural safeguards to prevent misuse of the complaints process while being clear enough to allow all parties, and not only those with legal expertise or significant resources, to file a complaint.

B. The Commission Has the Authority to Enforce the Open Internet Rules, and Should Adopt New, Uniform Complaint Procedures to Do So

1. Commission Enforcement Authority and Procedures

In paragraph 175 of the *NPRM*, the Commission rightly concludes that it has the authority to enforce the proposed open Internet rules. The PIC write to emphasize that the enforcement authority flowing from rules adopted under ancillary authority is identical to the authority to enforce rules adopted under other provisions of the Communications Act. For example, in addition to the authority the Commission cites in the *NPRM*, the Commission recently imposed fines on retailers for failing to comply with DTV labeling rules that it had adopted under ancillary authority.¹⁷⁰

¹⁶⁹ *NPRM*, at ¶ 176.

¹⁷⁰ Best Buy Co., *Notice of Apparent Liability for Forfeiture*, 23 FCC Rcd. 6249 (2008), available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-08-104A1.pdf. The order adopting the labeling requirement is

The Commission also seeks comment on whether some of its existing complaints procedures (codified at 47 C.F.R. §§ 1.711 *et seq.*, 76.7 and 76.1003) should provide a model for developing new procedures. While some of the language in those rules may offer a model for specific provisions of the new rules, the complaint procedures the Commission identifies should not be copied to provide an enforcement mechanism for the Open Internet rules.

The informal common carrier complaint procedure described in Sections 1.711 through 1.719 does not contain a requirement that a complaint make a *prima facie* showing that a violation of the rules occurred. Rather, it only requires that a complaint state facts “tending to show” that a violation occurred. “Tending to show” is a legal term of art applied to specific evidence, as opposed to a complaint as a whole. To prevent a complaint system from becoming bogged down by complaints of little merit, it is not enough that a complaint contain specific evidence tending to show that a violation occurred; the complaint as a whole must make out a *prima facie* showing that a violation occurred. Additionally, the informal complaint system does not, by itself, provide a mechanism for the FCC to resolve disputes. Rather, complaints are merely forwarded to a carrier, and if a complainant is unsatisfied with the carrier’s informal response, it must file a formal complaint.

A goal of the enforcement mechanism must be to allow the average consumer to file complaints alleging violations of the open Internet rules. However, by contrast with the too-loose pleading standards of the informal complaint system, the formal complaint system described in Sections 1.720 through 1.736 is far too burdensome for the average consumer. While the

Second Periodic Review of the Commission’s Rules and Policies Affecting the Conversion To Digital Television, *Second Report & Order*, 22 FCC Rcd. 8776 (2007), available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-07-69A1.pdf, with the discussion of the legal basis of the Commission’s action at ¶¶ 15-20.

pleading standard for formal complaints is, properly, that they make out a prima facie case,¹⁷¹ the rest of the court-like procedures described are overly burdensome for complainants. Similarly, the cable complaint procedures identified by the Commission are both too burdensome for ordinary consumers, and too specific to the cable industry, to provide the Commission a good model in this proceeding.

2. *Uniformity of Procedures*

The Commission asks whether “the procedural rules [should] differ depending on characteristics of the defendant (e.g., common carrier, cable provider)?” They should not. Just as the open Internet rules apply to all broadband Internet providers, regardless of their technological platform or regulatory treatment, the enforcement mechanism should apply to all broadband Internet providers equally. Parallel enforcement mechanisms would create undue confusion for consumers who may wish to file a complaint.

C. The Commission Should Adopt a Simple Yet Fair, Two-Step Complaint Process, With Streamlined Timeframes for the Resolution of Complaints and Stay of Practices That Violate the Open Internet Rules

As described in the complaint procedure outlined in Appendix B to these comments, parties aggrieved should be required to make a prima facie showing that an ISP has engaged in a practice in violation of the open Internet rules. Upon this prima facie showing, the ISP should bear the burden of demonstrating that its practice qualifies as a reasonable network management practice, as defined by these rules. The Commission should make a provision for strict “shot clocks” and timeframes for issuing decisions on complaints, in order to foster regulatory certainty and the efficient resolution of disputes. To that end, the Commission should issue decisions on complaints within 90 days, issuing injunctive relief or imposing sanctions where appropriate. The Commission also should upon request grant expedited relief within 10 days of

¹⁷¹ 47 C.F.R. § 1.720(b) (“Pleadings must contain facts which, if true, are sufficient to constitute a violation...”).

the submission of a complaint and should order the discontinuance of the complained of practice, if the complainant demonstrates material harm and a likelihood of succeeding on the merits.

CONCLUSION

Pursuant to the foregoing, PIC urge the Commission to protect consumers, competition, and innovators by implementing and enforcing effective open Internet rules.

Respectfully submitted,

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APPENDIX A

Draft Proposed Rules

Part 8 of Title 47 of the Code of Federal Regulations is added as follows:

PART 8 – PRESERVING THE OPEN INTERNET

Sec.

- 8.1 Purpose.
- 8.3 Definitions.
- 8.5 Content.
- 8.7 Applications and Services.
- 8.9 Devices.
- 8.11 Competitive Options.
- 8.13 Nondiscrimination.
- 8.15 Transparency.
- 8.17 Reasonable Network Management.
- 8.19 Law Enforcement.
- 8.21 Public Safety and Homeland and National Security.
- 8.23 Other Laws.

AUTHORITY: 47 U.S.C. 151, 152, 154(i)–(j), 201(b), 230, 257, 303(r), 503, 1302.

§ 8.1 Purpose and Scope.

The purpose of these rules is to preserve the open Internet. These rules apply to broadband Internet access service providers only to the extent they are providing broadband Internet access services.

§ 8.3 Definitions.

Internet. The system of interconnected networks that use the Internet Protocol for communication with resources or endpoints reachable, directly or through a proxy, via a globally unique Internet address assigned by the Internet Assigned Numbers Authority.

Broadband Internet access. Internet Protocol data transmission between an end user and the Internet. For purposes of this definition, dial-up access requiring an end user to initiate a call across the public switched telephone network to establish a connection shall not constitute broadband Internet access.

Broadband Internet access service. Any communication service by wire or radio that provides broadband Internet access directly to the public, or to such classes of users as to be effectively available directly to the public.

Reasonable network management. Reasonable network management consists of:

- (a) reasonable practices employed by a provider of broadband Internet access service to:
- (i) reduce or mitigate the effects of congestion on its network ~~or to address quality-of-service concerns;~~
 - (ii) address traffic that is unwanted by users or harmful; *or*
 - (iii) *address traffic that is harmful to the network* ~~prevent the transfer of unlawful content; or~~
 - (iv) ~~prevent the unlawful transfer of content; and~~
- (b) ~~other reasonable network management practices.~~

§ 8.5 Content.

~~Subject to reasonable network management,~~ a **A** provider of broadband Internet access service may not prevent any of its users from sending or receiving the lawful content of the user's choice over the Internet.

§ 8.7 Applications and Services.

~~Subject to reasonable network management,~~ a **A** provider of broadband Internet access service may not prevent any of its users from running the lawful applications or using the lawful services of the user's choice.

§ 8.9 Devices.

~~Subject to reasonable network management,~~ a **A** provider of broadband Internet access service may not prevent any of its users from connecting to and using on its network the user's choice of lawful devices that do not harm the network.

§ 8.11 Competitive Options.

~~Subject to reasonable network management,~~ a **A** provider of broadband Internet access service may not deprive any of its users of the user's entitlement to competition among network providers, application providers, service providers, and content providers.

§ 8.13 Nondiscrimination.

~~Subject to reasonable network management,~~ a **A** provider of broadband Internet access service must treat lawful content, applications, and services in a nondiscriminatory manner.

§ 8.15 Transparency.

~~Subject to reasonable network management,~~ a **A** provider of broadband Internet access service must disclose such information concerning network management and other practices as is reasonably required for users and content, application, and service providers to enjoy the protections specified in this part.

§ 8.19 Law Enforcement *Exceptions for Legal Obligations.*

(a) Nothing in this part supersedes any obligation a provider of broadband Internet access service may have—~~or limits its ability~~—to address the needs of law enforcement, *public safety, or national or homeland security authorities*, consistent with applicable law.

(b) Nothing in this part is intended to prevent a provider of broadband Internet access service from complying with other laws.

Note: This section of the rules is intended to ensure that providers may meet their existing legal obligations. It is not intended to grant providers the authority to make their own determinations of the needs of law enforcement, public safety, and national and homeland security. While Congress and the Commission have long recognized the potential need for emergency communication prioritization, they have also consistently held that such determinations of the public interest are properly made by the competent executive powers. While existing statutes and regulations allow prioritization of certain communications in cases of war,¹⁷² emergency alert communications,¹⁷³ and the Homeland Security's National Communications System,¹⁷⁴ each of these instances places discretion within the appropriate government agency, and not the provider.

§ 8.21 Exceptions for Reasonable Network Management.

(a) Nothing in this part shall interfere with the ability of a provider of broadband Internet access service to engage in reasonable network management.

(b) In order to find that a practice constitutes reasonable network management, the following criteria must be met:

- (i) the practice is designed to address a specific need enumerated in the definition of reasonable network management under §8.3 of this part;
- (ii) the practice is designed to achieve the purpose and effect in question, and nothing else;
- (iii) the practice results in discrimination or preference as little as reasonably possible;
- (iv) the practice minimizes any harm to competitors, users, or any other person.

(c) In order for a practice to be considered reasonable network management, a provider of broadband Internet access service must show:

- (i) that network investment or economic approaches alone could not have addressed the need and achieve the same purpose as the practice; and
- (ii) that permitting the practice does not deter subsequent network investment or economic approaches.

§ 8.21 Public Safety and Homeland and National Security.

¹⁷² 47 U.S.C. §606.

¹⁷³ 47 C.F.R. §11.44; 47 C.F.R. §73.1250(b).

¹⁷⁴ Exec. Order No. 12,472 (1984).

~~Nothing in this part supersedes any obligation a provider of broadband Internet access service may have or limits its ability to deliver emergency communications or to address the needs of public safety or national or homeland security authorities, consistent with applicable law.~~

~~**§ 8.23 Other laws.**~~

APPENDIX B

Outline of a Complaint Process for Violations of Net Neutrality

1. Any consumer, user, applications provider, content provider or service provider, or a non-profit organization that has as one of its purposes to promote the openness of the Internet, may file a complaint alleging a violation of the FCC's rules or policies.

[EXPLANATION: Virtually anyone who uses the Internet should have standing to file a complaint, including consumers, companies that use the Internet, and public interest organizations such as members of PIC, and other similarly situated public interest organizations. However, as discussed below, such party must make a prima facie showing of harm.]

2. Once the complaining party makes a prima facie showing of a violation (including actual harm to the complainant), the burden of proving that the activity does not violate the FCC's rule or policy will shift to the broadband provider, including the duty to submit documentation to support its position.

[EXPLANATION: The complaining party often does not have the information concerning the management of the broadband network. It may not be possible for the complaining party to "prove" the violation (for instance, proving that the activity is not "reasonable"). The responsibility of the complaining party should be only to show the blockage, delay, interference, etc. as the traffic by comparing how the traffic originates to how it is received. The complaining party should not be expected to know how the traffic is treated/routed/manipulated after it is sent. So the burden should be on the broadband provider to demonstrate either that the interference did not occur or to show that its treatment of the traffic is "reasonable". To do so, the broadband provider must submit any documentation to

the FCC and these documents must be available for review, subject to proprietary concerns, by the complaining party.]

3. A complaining party may request expedited relief within 10 days of submitting the complaint. Within 10 days, and after the broadband provider has an opportunity to respond, the Commission will decide whether or not the complaining party is likely to succeed on the merits and would suffer a “material” (or “substantial”) harm from the violation of the FCC’s rules or policies. If so, then the FCC shall immediately order the broadband provider to remove the interference or blockage.

[EXPLANATION: This provision would operate similar to the way a request for an injunction operates today. The Internet has become a fast-paced and essential medium for commerce, networking, etc. and some businesses can be put out of business if there is a substantial delay in the administrative process, even if they are ultimately proven correct. An expedited review is necessary to prevent broadband providers from arbitrarily blocking competitors for no good reason. This provision would not take effect for every complaint – the complaining party would have to demonstrate a likelihood of success in the complaint, and the harm would have to be “material” (or “substantial”) to show actual harm.

4. The FCC shall notify the broadband provider of the complaint immediately and shall afford the broadband provider an opportunity to respond before making a decision on both the expedited relief (if requested) and on the complaint itself.

[EXPLANATION: The FCC should not make any decision before giving the broadband provider an opportunity to be heard.]

5. The FCC shall rule on the complaint within 90 days, unless all parties to the complaint agree to extend the time for a decision. The FCC may extend the time for decision by an additional

90 days. However, each time the FCC extends the decision, the FCC must notify Congress of the extension.

[EXPLANATION: Parties deserve to have a quick ruling. However, it may at times take the Commission additional time to gather the evidence to rule on the complaint. Requiring the FCC to notify Congress will act as a restraint on the number of times the FCC will grant itself an extension.]

6. The FCC may issue injunctive relief, penalties and damages to an injured party.

Notwithstanding Section 230, a broadband provider may be liable for damage caused to the complaining party as a result of the actions of the broadband provider.

[EXPLANATION: The FCC should have all remedies available to it to deter broadband providers from violating its policies or rules.]

7. If the activity is one that has not been specifically ruled on before, the FCC may nonetheless find the broadband provider to be in violation and issue a cease and desist order, but may not issue penalties or damages unless the illegal action by the broadband provider is one that the FCC has identified in prior rules, policies or adjudications as a violation.

[EXPLANATION: The complaint process will operate much like common law developed on a case-by-case basis. In other words, it is expected that the rule or policy requiring openness will be somewhat general at first but will be clarified over time as parties file complaints.

(This is in contrast to having a large rulemaking where the FCC attempts to anticipate in advance whether or not each network management practice is or is not permissible.) If a complaint is a case of first impression, then the FCC should be able to order injunctive relief right away, but should not be permitted to order punitive damages or penalties. If, on the other hand, the violation occurs after the FCC has previously identified that particular

behavior as illegal, the FCC should have the power to order penalties and damages to the complaining party.]

8. The FCC shall issue rules to govern this complaint process.
9. The FCC shall encourage the parties to use mediation or arbitration in lieu of reaching a regulatory decision. However, such mediation or arbitration shall only be used if all parties to the complaint agree to do so.
10. The FCC shall report to Congress annually concerning the number of complaints filed, the timeliness of the FCC's resolution, and the FCC's decisions.
11. A violation of the FCC's rule or policies shall be considered a violation of the Communications Act, including Titles IV and V.