Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51

REPLY COMMENTS OF PUBLIC KNOWLEDGE

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Public Knowledge submits the following comments in the above captioned proceeding. The opportunity to shape our nations' first National Broadband Plan drew hundreds of comments producing thousands of pages of recommendations and evidence. Public Knowledge (PK) could not hope to cover in detail every comment deserving of support or requiring refutation. As the Commission continues to develop its broadband plan in cooperation with the public, PK anticipates that it will provide more detailed additional comments and responses. To maximize impact at this early stage, PK focuses these reply comments on a set of foundational issues that, in combination with the initial comments, provide a framework for moving forward. Specifically:

- ***The Commission Should Reject Calls for Copyright Filtering, or Any Other Discriminatory "Network Management Techniques".*** The Commission should reject arguments from the entertainment industry to require or encourage ISPs to filter content in the name of preventing the unauthorized distribution of copyrighted material. As detailed in the attached Public Knowledge whitepaper, "Forcing the Net Through a Sieve," copyright filtering simultaneously blocks non-infringing material while failing to stop a significant amount of infringing material from being distributed. This quest for a copyright filtering silver bullet threatens the First Amendment rights of users, imposes huge costs on providers, and potentially undermines the "safe harbor" provisions of the Digital Millennium Copyright Act. In the absence of any evidence that could justify these costs, the Commission should reject calls to include recommendations for copyright filtering in the National Broadband Plan.

Similarly, the Commission should reject the false dichotomy between "non-discrimination" and "network management." Providers offer no convincing rationale as to why they cannot engage in reasonable network management in a non-discriminatory way. To the contrary, the Commission's lengthy proceeding involving Comcast and its degrading of peer-to-peer (P2P) protocols proved that absent Commission enforcement, providers will discriminate among applications without concern for their customers but when ordered to do so by the Commission, can and will manage their networks in a non-discriminatory manner.

- ***The Commission Has an Obligation to Protect Consumers, Particularly With Regard to Consumer Privacy***. While best practices and principles for industry self-regulation have a distinct role to play in the development of online privacy protections, the incredibly diverse number and type of interested business entities will make such processes toothless without effective enforcement mechanisms from the relevant agencies. The Commission should reject the self-serving arguments that consumers are so sophisticated that they do not need protection, or that privacy protection comes at too high a cost to the industry. The Commission's history with telecommunications and cable demonstrates that strong privacy protection is both necessary and affordable for the industry.

- ***The Deregulation of the Last Ten Years Broke the Broadband Market, and Only Aggressive Competition Policy Can Fix It.*** Outside the circle of incumbent providers and their traditional supporters, a surprisingly diverse set of commenters support PK's initial analysis that the FCC's ideologically-driven deregulatory policies have created a market lacking in competition. As a result, all sectors of the economy pay a "market power tax" in

the form of higher prices, slower speeds, and poorer coverage. As the comments submitted by the Government of Japan show, only a national broadband policy that gives competitors access to necessary facilities such as unbundled access and interconnection can create a robustly competitive environment.

- ***The FCC Has Broad Discretion To Reform USF***. Over 50 commentors supported reforming the Universal Service Fund (USF) to facilitate broadband deployment. The FCC has broad authority to restructure the program to facilitate broadband even without further Congressional action.

- ***The National Broadband Plan should reflect the valuable role of state and local government***. Several commenters asked the Commission to focus on preemption of state and local government as a means of facilitating national broadband deployment. Although PK takes no position on pending proceedings, a focus on preemption as the basis for the National Broadband Plan would ill serve our digital future. Instead, the focus of the National Broadband Plan should be to engage government at every level in the challenge of universal deployment and adoption.

ARGUMENT

I. ISPS SHOULD NOT BE ALLOWED OR ENCOURAGED TO ENGAGE IN COPYRIGHT FILTERING

The National Broadband Plan should not permit or encourage Internet Service Providers (ISPs) to use automated technologies in order to "filter" their networks for copyright infringement. Such techniques would adversely affect the free speech interests of ordinary Americans, undermine the safe harbors available to ISPs under copyright law, and harm the open nature of the Internet. Furthermore, no filtering technology currently in existence or likely to be developed in the future will effectively prevent copyright infringement. Contrary to claims made by some commenters in these proceedings, filtering networks for copyright infringement is not a form of "network management;" instead, it is a form of content management.

Some commenters urge that the National Broadband Plan should permit and even encourage broadband service providers to use "network management" techniques to prevent the infringement of copyrighted works,[1] citing purported benefits such as stemming the allegedly massive tide of copyright infringement,[2] reducing the network congestion that illegal content supposedly creates,[3] and facilitating greater broadband adoption.[4] Several of these commenters

[1] *Joint Comments of American Federation of Television and Radio Artists, AFL-CIO, MPAA et al.*, *In the Matter of A National Broadband Plan for Our Future,* GN Docket No. 09-51 (All comments referenced henceforth are contained in this docket unless otherwise noted) (henceforth referenced as "*Comments of the MPAA*"); *Comments of Songwriters Guild of America*; *Comments of Arts+Labs* at 6 (urging the commission to "stand by its existing four principles, including the right to reasonably manage the networks" to among other things prevent copyright infringement); *Comments of the Entertainment Software Association* at 4 (urging the Commission to clarify that the *Internet Policy Statement* permits network operators to use "reasonable network management to combat online piracy"); *Comments of Walt Disney Company.*

[2] *Comments of the MPAA*, *supra* note 1.

[3] *Comments of the MPAA*; *Comments of the Songwriters Guild of America*, *supra* note 1, at 2; *Comments of Entertainment Software Association*, *supra* note 1, at 3-4.

[4] *Comments of Arts+Labs*, *supra* note 1.

also argue that such practices are consistent with the FCC's *Internet Policy Statement* and with the federal policy of discouraging illegal activity on the Internet.[5]

While these commenters are vague about what these "network management" techniques would entail, joint comments filed by American Federation of Television and Radio Artists *et al.* identify blocking illegal sites, watermarking and acoustic and video fingerprinting as some examples of "network management" techniques.[6] As the attached whitepaper on copyright filtering explains, watermarking and fingerprinting are methods that can be used to mark certain content as proprietary.[7] In order to prevent copyright infringement, ISPs would then have to compare these identifying marks against every bit of information travelling over the Internet, and either prevent matching content from reaching its destination or apply some other policy based on the copyright owner's preference.[8] ISPs might also employ another method known as traffic inspection to block all content using certain protocols from reaching its destination.[9] These techniques are designed to manage the flow of content rather than traffic on the Internet and thus, constitute content management, rather than network management techniques, despite the claims of some commenters.

While preventing copyright infringement is an important objective, using copyright filtering to achieve that goal would be counterproductive to that purpose and harmful to businesses and ordinary Americans.

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[5] *Comments of the MPAA*, *supra* note 1.
[6] *Ibid.* at n. 11.
[7] *See* attached: Mehan Jayasuriya, Rob Topolski, Michael Weinberg, Jef Pearlman, Sherwin Siy, *Forcing the Net Through a Sieve: Why Copyright Filtering is not a Viable Solution for U.S. ISPs,* July 21, 2009, p. 13-17.
[8] *Ibid.* at 18-20.
[9] *Ibid.* at 11-13.

A. Filters Would Be Ineffective in Preventing Copyright Infringement:

Filtering technologies currently available or likely to be developed in the future would be both overinclusive and underinclusive.[10] Filters would be overinclusive because they would block a significant amount of lawful content along with any infringing content. They would be underinclusive because they would inevitably allow infringing content to pass through unmolested.

In order to be effective, filters would have to identify infringing content, check it against a database of protected content made available by rights holders and then determine if a particular user was authorized to send or receive that content. While in some situations, filters may be able to prevent users from sending or receiving content they did not license, they would fail to identify whether that content is being used under an exception to copyright law that would allow for legal, unlicensed use. The prime example of this is fair use. Because fair use is a case-by-case determination and involves nuances in the application of law, no automated filter would be able to effectively determine whether a particular use is fair. Thus, filters would inevitably block legal uses of content.

Filters would also be underinclusive. For example, complexities in copyright licenses are likely to make it difficult for filters to determine the existence of a license in many situations. This may be the case where the license specifies the number of copies a user is allowed to make and distribute.[11] In addition, users will undoubtedly devise methods for circumventing copyright filters. For example, if a filter is designed to block specific protocols, protocol obfuscation[12] would allow a user to escape the filter. Similarly, encryption could be used to prevent detection

[10] *Ibid.* at 26-39
[11] *Ibid.* at 8.
[12] Protocol obfuscation refers to a technique where data is rearranged to create a more complicated layout that requires additional analysis to decode the data. For a more in-depth discussion *see Ibid.* at 35-37.

by filters that utilize content inspection technology.[13] Because it takes relatively little effort on the part of end users to use these techniques, such practices are likely to become common if ISPs were to start filtering their networks, thereby undermining the efficacy of the filters.[14]

B. Filters Would Harm Users' Free Speech Rights:

Both copyright law and communications law seek to regulate certain aspects of speech while also promoting free speech. Copyright filtering would disturb this structure by endangering fair use and imposing a prior restraint on speech.

Under copyright law, a copyright holder is never granted complete control over a copyrighted work.[15] Limitations on and exceptions to copyright prevent copyright law from conflicting with the First Amendment rights of citizens. Fair use and other limitations such as the requirement of originality, the idea/expression dichotomy, and the doctrine of thin copyright[16] allow for free expression in many forms, including protected forms of speech like parody and criticism. As the Supreme Court has explained, "Copyright … does not impermissibly restrict free speech, for it grants the author an exclusive right only to the specific form of expression … and it allows for 'fair use' even of the expression itself."[17]

A fair use of copyrighted work is therefore protected free speech. Proponents of copyright filtering suggest that the filtering of copyrighted material would be a straightforward and entirely legal process. However, the nuances of copyright law make distinguishing between a lawful and infringing use of a piece of copyrighted content challenging even for courts. As such, no filtering technology, no matter how advanced, would ever be able to make fair use determinations with

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[13] *Ibid.* at 33-35.
[14] *Ibid.* at 37-39.
[15] Exclusive rights "do[] not give a copyright holder control over all uses." Fortnightly Corp. v. United Artists, 392 U.S. 390, 393 (1963).
[16] "Thin copyright" refers to the lower level of copyright protection for compilations of fact. The doctrine was first explained by the Supreme Court in *Feist Publications, Inc. v. Rural Telephone Service Company, Inc.* 499 U.S. 340 (1991).
[17] *Eldred v. Ashcroft*, 537 U.S. 186, 197 (2003).

100 percent accuracy. Furthermore, because filters would operate in the middle of the network, users will find it difficult to determine whether or not their transmission was blocked. Thus, the user would be precluded from presenting any fair use defense.

Additionally, by prescreening content before it can ever reach its destination, filtering would act as a prior restraint on speech, in violation of principles of copyright and communications law. In *Suntrust Bank v. Houghton Mifflin Co.*[18] the 11th Circuit Court of Appeals refused to grant a preliminary injunction because the court felt that the defendant presented a viable fair use defense and the copyright owner suffered only monetary harm. The Court explained that the "public interest is always served in promoting First Amendment values…"[19]

Like the Copyright Act, the Communications Act seeks to protect and promote free speech. Section 326 of the Act prohibits the censorship of radio communications. As the Supreme Court has explained in *FCC v. Pacifica*,[20] while sanctioning indecent broadcasts after the fact is permissible under the Communications Act, prescreening content would be a violation of section 326. While this provision pertains to radio communications, it reflects federal policy against censorship, a policy that Congress sought not to disturb when it passed the Communications Act.[21]

In *Houghton Mifflin* and in *Pacifica,* courts refused to sanction a prior restraint on speech even though a court or an administrative agency would have imposed the restraint after reaching reasoned decisions. These concerns would become even more acute in the case of copyright filtering conducted by private corporations that would not have to provide any justification for

[18] 268 F.3d 1257 (11th Cir. 2001).
[19] *Ibid.* at 1276.
[20] 438 U.S. 726
[21] Max D. Paglin, ed., *A Legislative History of the Communications Act of 1934*, Oxford University Press, 1989.

their actions. Thus, contrary to claims by proponents, filtering would contradict federal policy.

C. Copyright Filters Might Undermine the Safe Harbor Provisions Provided by the DMCA

The safe harbor provisions of the Digital Millennium Copyright Act (DMCA) codified in section 512 of the Copyright Act protect ISPs from monetary liability for the infringement of their users. Congress enacted these provisions as a means to protect ISPs from the specter of uncertain copyright infringement liability, in order to allow the nascent Internet to develop.[22] These provisions represent a carefully crafted balance between the rights of copyright owners and ISPs, a balance that should not be disturbed by the National Broadband Plan. Because copyright filtering could undermine these safe harbors, the National Broadband Plan should not encourage or condone copyright filtering.

The DMCA's safe harbor provisions are based on the premise that ISPs act as mere conduits for information.[23] Thus, in order to qualify for the safe harbors, ISPs are required to meet certain conditions. The first of these conditions is that all material that travels over the network must be "initiated by or at the direction of a person other than the service provider."[24] This means that any transaction that takes place on the network must be initiated by someone at the edge of the network--either a client or a server--but may not be initiated by someone in the middle of the network. If an ISP implemented a copyright filter, that ISP could arguably become an active participant in the chain of transmission. Instead of merely passing a bit of data along, the ISP would inspect, categorize, and possibly interrupt, delay or discard that bit of data. In so doing, the ISP could potentially be disqualified from the DMCA's safe harbor protections and therefore, would be exposed to liability for any infringement that takes place over its network.

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[22] S. Rep.105-190, at 8 (1998)
[23] *Ibid.* at 41.
[24] 17 USC § 512(a)(1)(2007)

The second requirement that an ISP must meet in order to qualify for DMCA safe harbor protection could similarly be jeopardized by filtering. This requirement states that the transmission of data must occur "through an automatic technical process without selection of the material by the service provider."[25] This use of the word "selection" is not further clarified in the statute, creating an open question as to what degree of filtering would qualify as "selection". Depending on the level of sophistication of the prioritization process, certain packet management techniques could be interpreted as constituting a "selection" of material. If an ISP could be described as actively selecting what material is allowed to travel over its network, its safe harbor protection could be jeopardized. Furthermore, this selection process could quickly rise to the level of an "editorial function" (i.e. choosing to prioritize data from a preferred source over a non-preferred source), which would indisputably disqualify an ISP from DMCA safe harbor protection.[26]

D. Filters Would Harm the Open Nature of the Internet

The open nature of the Internet has fostered innovation and creativity and has allowed the Internet to become the democratic medium that it is today. Copyright filtering would change all of this. Contrary to claims made by proponents,[27] filtering would not be consistent with either the *Internet Policy Statement* adopted by the Commission or the *Comcast Order*.

While the *Comcast Order* observes that blocking certain content may be justified in some circumstances, it goes on to observe that network management techniques that are not application- or content-neutral pose a danger to the open nature of the Internet and that the

[25] 17 USC § 512(a)(2)(2007)
[26] S. Rep. No. 105-190, at 42 (1998).
[27] *Comments of the Entertainment Software Association*, *supra* note 1, at 3.

"danger of network management techniques being used for anticompetitive ends is acute."[28] Further, the order's justification for blocking infringing content cannot be read to condone the blocking of all content regardless of legality. As explained above, copyright filtering would indiscriminately block content, without regard to the lawful, unlicensed uses and other rights guaranteed by copyright law.

Proponents of filtering seek to justify filtering on the grounds that illegal content causes networks to be congested and that, as such, filtering would "ensure ease of access and the provision of greater services, including entertainment services."[29] Network providers have not provided sufficient bandwidth usage data to evaluate this claim and there are indications that peer-to-peer traffic may not be consuming nearly as much bandwidth as is suggested by these proponents.[30] Furthermore, filters based on content inspection technology would have to download a substantial amount of any one piece of content in order to inspect it for infringement.[31] The process will inevitably slow networks. Thus, instead of reducing congestion and thereby increasing speed, filtering would reduce speed and introduce greater latency, thereby undermining the goals of the National Broadband Plan.

E. Conclusion

The purpose of the National Broadband Plan is to create a roadmap that will facilitate greater broadband speeds and encourage widespread adoption of broadband services throughout the country. These goals cannot be achieved if ISPs are allowed to utilize techniques like copyright filtering, which would reduce speeds and harm the fundamental rights of citizens. While preventing copyright infringement is important, any attempt to address this problem

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[28] *Formal Complaint of Free Press and Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications*, 23 FCCR 13028, 13058 (Aug. 20, 2008) (Henceforth referred to as "*Comcast Order*").
[29] *Comments of the MPAA*, *supra* note 1, at 4
[30] "Shocking: New Facts About P2P and Broadband Usage," *GigaOm*, April 22, 2008.
[31] *Forcing the Net Through a Sieve, supra* note 8, at. 10-11.

should not be made at the expense of users, innovators and legitimate businesses. Therefore, the undersigned organizations urge the Commission not to recommend that Congress encourage or permit copyright filtering as part of a National Broadband Plan.

II. ANY SERVICE PROVIDER WHO CONNECTS TO THE INTERNET SHOULD NOT BE ALLOWED TO ENGAGE IN DISCRIMINATORY BEHAVIOR

Several content providers have argued that the Commission must allow ISPs to discriminate, monitor user communications, and block those communications in order to deter online copyright infringement.[32] As we have explained in these reply comments[33] and the attached whitepaper on copyright filtering,[34] this approach will increase Internet congestion, decrease innovation and adoption, and have little to no effect on copyright infringement. While the Songwriters Guild of America attempts to justify filtering by claiming that "easily 90% of [peer-to-peer] traffic is unlawful" and that "[n]eutral applications, such as P2P and other file-sharing programs, have been taken over by illegal file traffickers," the opposite appears to be true: lawful uses of these technologies are growing far faster than unlawful ones.[35] This demonstrates exactly why the innovation that occurs within the Internet's open architecture must not be hampered by those who would cripple tomorrow's innovative lawful uses while reacting to yesterday's bad actors.

Several parties conflate the idea that the Commission should only protect lawful communications with the idea that the Commission should allow network operators to search all communications for unlawful activities. Congress has given copyright owners numerous legal

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[32] *See, e.g.*, *Comments of the Songwriters Guild* at 2-3; *Comments of the MPAA* at 6.
[33] *See supra* § I.
[34] *See Forcing the Net Through a Sieve.*
[35] *See* "Forecast: Legal P2P Uses Growing 10x Faster Than Illegal Ones," *Ars Technica,* October 22, 2008 (http://arstechnica.com/old/content/2008/10/forecast-legal-p2p-uses-growing-10x-faster-than-illegal-ones.ars).

tools to combat copyright infringement, including online infringement. From statutory damages which can reach up to $150,000 *for a single copy of a single work*[36] to service provider takedown notices backed by that same potential liability,[37] copyright owners have no shortage of tools with which to enforce their rights. Law enforcement has tools at their disposal, including lawful interception of data with appropriate Fourth Amendment safeguards, to address child pornography, fraud, and other kinds of online crime.

What the Commission and the law have never done, and should never do, is allow private interests to search everyone's data for unlawful content. Although there are no doubt people who drive around playing unlawfully copied CDs, we do not allow private interests to set up checkpoints at highway onramps, in order to search every vehicle and its occupants for evidence of unlawful activity. While fraud inevitably occurs on phone networks, we do not allow phone carriers to listen in on all phone calls to ensure that no one is engaging in any illegal activity. We should not allow these interests to set up checkpoints on the onramps to our communications networks, in order to search every message for potentially infringing material. As much as an entity must give up discrimination in order to reap the benefits of connecting to the national phone network,[38] it should give up discrimination in order to provide access to the global network that is the Internet.

A. Allowing Service Providers to Discriminate is Dangerous and Unnecessary

The danger of allowing continuous monitoring of our nations' communications goes far beyond overzealous copyright enforcement. These same technologies are used by governments to monitor the communications of their citizens.[39] In fact, during the recent events

[36] *See* 17 U.S.C. § 504(c)(2).
[37] *See* 17 U.S.C. § 512(c).
[38] *See* 47 U.S.C. §§ 202, 332.
[39] *See Forcing the Net Through a Sieve,* Section 3.I.F.

surrounding Iranian elections, it was easy for the Iranian government to take a filtering infrastructure that had been purportedly put in place for law enforcement purposes and leverage it for political purposes and the suppression of speech.[40] Even our own government is not immune from the allure of joining forces with private parties to monitor their citizens.[41] In fact, the U.S. government sought and received the cooperation of a private company in order to monitor the communications of its citizens.[42] Building these capabilities directly into the networks makes it far easier for both private and governmental parties to abuse them; a National Broadband Plan must take into account the full implications of allowing or encouraging technologies whose primary purpose is to monitor and interfere with the public's communications.

Even if the public could ultimately discipline any monitoring and filtering which harmed the network, these types of interference are extremely difficult to detect. Comcast engaged in targeted, potentially anticompetitive interference with customer communications as well as the forgery of data for an unknown period of time before being discovered by a network engineer trying to utilize the BitTorrent protocol – for lawful purposes – on his home Comcast connection. Perhaps worse, when he and other researchers identified the nature and source of the problem and made evidence of Comcast's activities public, Comcast denied them completely. In fact, for months after a legal proceeding had been initiated at the Commission, Comcast denied its activities or attempted to obfuscate the consequences of those activities. For *more than a year* after those activities had been made public by third parties,[43] Comcast neither disclosed nor

[40] *See Ibid.*
[41] *See Forcing the Net Through a Sieve,* Section 3.1.F.
[42] *See* Electronic Frontier Foundation, *NSA Spying*, *at* http://www.eff.org/issues/nsa-spying.
[43] *See* Robb Topolski, *Comcast is Using Sandvine to Manage P2P Connections,* May 12, 2007 *at* http://www.dslreports.com/forum/r18323368-Comcast-is-using-Sandvine-to-manage-P2P-Connections (describing the analysis of Comcast's system); *Comcast Order* at 13032 (explaining that after repeatedly changing its story and being contradicted by independent research, on July 10, 2008, "Comcast changed its story yet again.").

changed its basic behavior,[44] and change was only forthcoming after the Commission stepped in and ordered it.[45] As technology advances, interference is likely to become even more difficult to recognize, and discriminatory, anticompetitive, or otherwise unfair practices even harder to identify and correct without regulatory protections.

In helping to design a National Broadband Plan, the Commission must not conflate "network management" with "content management." ISPs can manage their networks to ensure fair distribution of bandwidth *without* choosing between different types, protocols, or providers of data – activity which really constitutes the management of content, not of the network. Suggestions that there is only a choice between discrimination and reasonable network management are a red herring; reasonable, non-discriminatory network management can and should be the requirement.

B. The Market Does Not Solve the Problems Created by Discrimination

In its comments, Time-Warner Cable argues that "recent history confirms that network operators will be responsive to consumer demands, including in particular when their business practices are perceived as unreasonable,"[46] pointing to Verizon Wireless' reversal of its blocking of NARAL's SMS messages as evidence that the market solves these problems, and others have reiterated the claim that the market will fix potential problems.[47] That example is inapposite at best and misleading at worst. In the NARAL case, there was a politically powerful victim[48] and

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[44] *See, e.g.*, *In the Matters of Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications, Petition of Free Press et al. for Declaratory Ruling that Degrading an Internet Application Violates the FCC's Internet Policy Statement and Does Not Meet an Exception for "Reasonable Network Management," Memorandum Opinion and Order*, 23 F.C.C.R. 13028, 13032 (Aug. 20, 2008) (explaining that after repeatedly changing its story and being contradicted by independent research, on July 10, 2008, "Comcast changed its story yet again.").

[45] *See Ibid.* at 13061.

[46] *Comments of Time Warner Cable* at 27 (citing *Timer Warner Comments* 7, WC Docket No. 07-52 (Feb. 13, 2008)).

[47] *See Ibid.*

[48] "Verizon Blocks Messages of Abortion Rights Group," *the New York Times*, September 27, 2007 (http://www.nytimes.com/2007/09/27/us/27verizon.html).

the background threat of a regulatory remedy.[49] Further, despite that single party finding a public remedy, Verizon Wireless *continues* to publicly discriminate against other parties who wish to engage in lawful communications.[50]

Other carriers, like AT&T, explicitly forbid their users from using lawful video services such a SlingBox[51] that might compete with their own offerings. Carriers attempt to justify these restrictions as blunt instruments for "network management" to prevent congestion caused by bandwidth-intensive applications. But while they restrict some applications, those same carriers continue to allow comparable services on the network, as long as those services are from corporate partners like Major League Baseball.[52] Further, while they restrict competing applications, they impose bandwidth caps, which more directly address concerns about "too much use" of the network and artificially reduce the demand for competing products.[53]

Time-Warner also completely ignores the events surrounding Comcast's throttling of BitTorrent traffic, where no amount of public outcry and Commission attention could reverse (or even force Comcast to admit its conduct) until the Commission *ordered* Comcast to respond and subsequently to cease.[54] For over one year, as Comcast interfered with BitTorrent traffic, subscribers and innovators suffered. This serves as proof positive that the non-competitive broadband market and the high switching costs for broadband customers simply do not constrain such behavior, which threatens the very innovation and creativity that made the Internet the most

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[49] *See* Public Knowledge *et al.*, *In the Matter of the Petition of Public Knowledge et al. for Declaratory Ruling Stating that Text Messaging and Short Codes are Title II Services or are Title I Services Subject to Section 202 Nondiscrimination Rules*, WT Docket 08-7 (Dec. 11, 2007), *available at* http://www.publicknowledge.org/pdf/text-message-petition-20071211.pdf.

[50] *See* Public Knowledge, *Letter to Chairman Kevin Martin* 1-2, WT Docket 08-7 (Dec. 15, 2008) (describing ongoing discrimination against lawful services offered by *Rebtel* and Verizon's explicitly discriminatory "content policy"), *available at* http://www.publicknowledge.org/pdf/pk-textmesg-letter-20081215.pdf .

[51] *See* Sling Media website (http://www.slingbox.com/).

[52] *"* AT&T Slammed for Wireless Streaming 'Double Standard'," *DSL Reports*, June 30, 2009 (http://www.dslreports.com/shownews/ATT-Slammed-For-Wireless-Streaming-Double-Standard-103192).

[53] *See, e.g.*, "AT&T Slingbox 3G Fine Print Returns," April 29, 2009 (http://www.dslreports.com/shownews/ATT-Slingbox-3G-Fine-Print-Returns-102184).

[54] *See supra* § II.A.

important communications medium of our time. Further, even in cases where – after extensive litigation – ISPs worked with application providers to find solutions to problems, these solutions have occurred at the application layer without requiring ISP discrimination, pointing to the need for standards-driven, application-side solutions rather than unfettered ISP "management."[55]

C. Nondiscrimination is Compatible With Edge-Based Security and Parental Control Solutions

It is also important to distinguish between "no discrimination by service providers" and "no discrimination by users and applications." We need not foreclose the possibility of *standards-based*, *user-requested* prioritization of a user's *own traffic*,[56] which is supported by at least one Internet Engineering Task Force Standard.[57] Nor should we read a nondiscrimination requirement, as some suggest, to prevent ISPs and others from offering services that allow users to "shield themselves or their children from certain sites or from online security threats"[58] through activities at the edge of the network. ISPs are welcome and encouraged both to participate in the standards processes and to provide subscribers with access to tools to help them choose which data they want or prefer – but not to choose for the customer by applying filters at the network level.

D. Nondiscrimination Protects and Encourages Innovation

Rather than "threaten[ing] to harm consumers by thwarting the continued deployment of broadband networks,"[59] nondiscrimination principles prevent service providers from choosing which data they prefer. It is discrimination that suppresses innovation on the Internet, discourages the adoption of new services, and restricts the very demand which makes broadband

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[55] *See Comments of Verizon Communications* at 126-127 (discussing Comcast's participation in the P4P initiative).
[56] *Cf., e.g.*, *Comments of the National Exchange Carrier Association* at 16; *Comments of Cisco Systems* at 19-20.
[57] *See, e.g.*, The Internet Society, *RFC 2474: Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers* (Dec. 1998), *available at* http://rfc.dotsrc.org/rfc/rfc2474.html.
[58] *See, e.g.*, *Comments of Verizon Communications and Verizon Wireless* at 37; *Comments of the United States Telecom Association* at 29-31.
[59] *Comments of Time Warner Cable, Inc.* 29.

providers deploy and improve their networks.

Verizon argues that "there is no reason to assume that alternative platforms and environments that are more managed cannot also foster innovation."[60] Whether or not alternative platforms which compete with the Internet might foster innovation is irrelevant to our national broadband plan; to protect the innovation which the open Internet has brought, our national broadband infrastructure must continue to be open and attempts to close it must be resisted.[61] To this end, service providers must not be allowed to leverage their control of access to the Internet to competitively favor their own offerings. If "alternative platforms and environments" are to compete with the Internet, they must compete with the Internet as the democratic platform it is now – not with an Internet selectively crippled to favor other offerings.

Most importantly, we must not allow service providers to interfere with the functioning of the network itself, in an attempt to turn back the clock to eliminate the Internet as a competitive service platform. A service provider might attempt to do this by engaging in behavior that creates winners and losers at the edge of the network.[62] By virtue of their special placement in between users and application providers, ISPs are uniquely positioned to engage in this sort of behavior. If "[s]ome services – such as backing up data online – may require lots of capacity, but be less time sensitive or less affected by latency or jitter [while] [o]ther services – such as VoIP – may not require much bandwidth, but may suffer if network conditions result in latency," we should continue to allow innovation to address these problems at the application level and standards

[60] *Comments of Verizon Communications* at 39.
[61] *See, e.g.*, Lawrence Lessig, *The Future of Ideas* 138 (2001) ("The innovations that I have described flow from the environment the Net is. . . . If the constraints on the content layer are increased, innovation that depends on free content will be restricted. If the access guaranteed by a commons at the code layer becomes conditioned or restricted, then innovation that depends upon this access will be threatened.")
[62] Some commenters have gone so far as to suggest that it would be of benefit to allow application providers to pay service providers for better access to their Internet subscribers, *see, e.g.*, *Comments of AT&T* at 12, despite the fact that many of the innovations which have grown the Internet to what it is today came from those entities who would have too small to "pay to play" under such a regime.

level – not to allow service providers to make the Internet behave differently for users of different providers and make it *harder* for application providers to solve these challenges. And while "all bits" may not be "created equal,"[63] users – not service providers – should decide which bits are more important or time-sensitive.

If Verizon Wireless degraded your phone connection to Comcast's customer service center, you might be more likely to order Verizon FiOS broadband services. If they degraded all your calls to the family and friends on and unlimited calling plan, you might use less minutes, costing Verizon less money. If they delayed calls to a business customer's overloaded call center– essentially making a value judgment that the call center was too congested and calls needed to be managed by the provider–they would actually hinder that center's ability to increase its capacity and provide better service to the customer. And even if you somehow knew these things were happening – which is by no means a given – depending on where you live and work, you might have few or no options even if you were willing to accept the high transaction cost of switching carriers. We do not allow this type of discrimination on the phone network, and we should not allow it on the Internet either.

E. The Problem of Open Networks and Nondiscrimination Has Not Been Solved by the Market or the Commission's Current Rules

Several parties wish to dial back the clock, arguing that the Commission's *Internet Policy Statement* does not or should not apply to wireless broadband providers.[64] The assertion that this policy was designed only for wired networks is without support beyond the fact that it was originally released in a proceeding regarding wireline providers.[65] Nothing in the text of the statement indicates any relationship between the type of network and the users' rights; to the

[63] *See Comments of Ericcson* at 13.
[64] *See, e.g.*, *Comments of AT&T* at 120; *Comments of U.S. Chamber of Commerce* at 5.
[65] *See* Federal Communications Commission, *Policy Statement*, 20 F.C.C.R. 14986 (2005) ("*Internet Policy Statement*").

contrary, the allowance for "reasonable network management" is deliberately platform-neutral and flexible. Further, as none of the characteristics of wireless networks mandate that those networks must be "managed" by engaging in content- or type-based discrimination, wireless networks should be equally subject to nondiscrimination principles.

Nor are networks already open, as some parties suggest.[66] The examples provided prove that the opposite is true. For instance, while Google's Android platform will "soon be available from Verizon,"[67] phones built on that platform for Verizon will not be offered on or transferrable to Sprint, despite the fact that Sprint uses the same network technologies. Further, while the iPhone does allow third-party applications, those applications must be approved and the phone itself is not available on any U.S. carrier but AT&T.[68] These are hardly the hallmarks of "open networks."

In fact, the current state of the wireless industry demonstrates why the open model currently enjoyed by the Internet world fosters far more innovation than the closed, fragmented model that the wireless carriers seek to preserve. Although there is undoubtedly *some* innovation in the wireless world, it is hindered by exclusive contracts and extensive permission-based approvals processes for devices and software. Imagine a world in which a Comcast broadband customer (a) could only buy an Apple computer (b) couldn't bring their Apple computer to Time-Warner Cable and (c) needed permission from Comcast in order to use the web browser, chat program, or email program of their choice. Such a fragmented Internet would never have produced the explosion of innovation and wealth that the standardized Internet has, yet this is the wireless market that many Americans are forced to navigate. The National Broadband Plan is an opportunity to ensure that that we continue to work toward the goal of an open broadband

[66] *See, e.g.*, *Comments of Ericsson* 14.
[67] *See Ibid.*
[68] *See Ibid.*

ecosystem and all that that offers.

The Commission should not be distracted by red-herring arguments that openness principles would require every device to run every application and force devices like the Amazon Kindle off of shelves or that every application provider would be forced into untenable situations.[69] Openness is about preventing *broadband access providers* from restricting which devices attach to the network and which applications can run on those devices, either directly or through alleged "network management" techniques. It is not about controlling how devices are made or telling application providers--who are users of the Internet just like broadband subscribers--how to act. When the Commission held that AT&T had to allow non-AT&T devices on the phone network, AT&T was not then forced to design and offer every device that its competitor did, nor were other companies who used the phone network forced to behave any differently. AT&T simply was not allowed to exclude their competitors or deny them access to the network.[70] As it did for the wireline phone market in the past, a cross-platform "open access requirement would promote customer choice without inhibiting market forces."[71]

Far from "produc[ing] uncertainty and potentially undermin[ing] future private investment in broadband deployment,"[72] non-discrimination rules provide certainty about how an ISP may act, and more importantly provide certainty that innovative new applications will receive a fair chance to succeed in the market, driving investment in the application space that that has been the source of true economic growth in the Internet economy.

[69] *See Comments of AT&T* at 121; *Comments of Qwest* at 24.
[70] *See Hush-a-Phone Corporation v. U.S.A. and F.C.C.*, 238 F.2d 266 (D.C. Cir. 1956).
[71] *Comments of the Consumer Electronics Association* 12.
[72] *See, e.g.*, *Comments of the Independent Telephone & Telecommunications Alliance* at 22.

III. A NATIONAL BROADBAND PLAN NEEDS MEANINGFUL ISP PRIVACY REGULATIONS

Some commenters have asserted that it is in the consumers' interest for regulators to do nothing further in the realm of regulating privacy. The U.S. Chamber of Commerce, for instance, has cited privacy regulation as a potential cost to providers, which might raise prices for certain products and services.[73] However, consumers, as citizens, have rights more fundamental than low prices, and the need for regulation to protect communications privacy has been recognized in America from the inception of the United States.[74] The right to privacy in telecommunications has evolved in various statutes and regulations through the centuries, but it is either naive or disingenuous to claim that these require no updating to reflect the technological and social changes of the past decades. Existing laws may vary widely depending upon the outdated distinctions between different types of infrastructure. The very inconsistency and loophole-filled nature of the law widely lamented in other areas of communications law is present in privacy protections as well.

While best practices and principles for industry self-regulation have a distinct role to play in the development of online privacy protections, the incredibly diverse number and type of interested business entities will make such processes toothless without effective enforcement mechanisms from the relevant agencies. New market niches are constantly developing, and within new niches, competition would be insufficient to police bad actors. Even in more mature markets, such as last-mile Internet service, a paucity of competitors means that competition for privacy would have little effect on consumers voting with their wallets.

For example, it would be entirely unhelpful if all of the competitors in an industry

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[73] *See e.g.*, *Comments of the U.S. Chamber of Commerce* at 8.
[74] Robert Ellis Smith, *Ben Franklin's Web Site: Privacy and Curiosity from Plymouth Rock to the Internet*, Privacy Journal Publishing, 2004.

adopted the same policy protecting their interests at the expense of the consumer. Unlike in applications, such as Facebook, where consumers can easily migrate to different platforms and a user revolt has real teeth, consumers cannot shop for ISP based on privacy policy. This is especially true where (a) consumers have little choice of provider to start with, (b) consumers are generally informed of privacy policies immediately before signing (after they have already invested significant time and effort into making a choice), and (c) providers can change privacy policy at will, requiring consumers to remain vigilant for changes and overcome research costs and significant switching costs to try to find another provider with better privacy terms—who may change those terms at will.

A number of comments, mostly from major information service providers and the groups that represent them, have opined that "notice and choice" regimes are sufficient to protect privacy. Citing the increasing sophistication of their customers, these commenters maintain that, given adequate notice and choice, consumers will opt for a sensible, customized balance of privacy and disclosure.

For instance, Time Warner cites the fact that consumers expect providers to post privacy policies as a sign of sophistication.[75] However, the more relevant question of how well the consumers understand that language of those policies is not addressed in its comments.[76] Researchers have found that large percentages of consumers believe that the mere existence of a privacy policy prevents such commonplace activities as affiliate sharing and online behavioral analysis. Such results clearly show that the marketplace and existing regulations have failed to

[75] *Comments of Time Warner* at 25.

[76] In fact, as pointed out in other comments, consumers often vastly overestimate the protection that a privacy policy in fact provides. *See Comments of the Center for Digital Democracy* at 4; *Comments of Public Knowledge* at 15 (citing Joseph Turow, Deirdre K. Mulligan & Chris Jay Hoofnagle, Univ. of Pa.'s Annenberg Sch. for Commc'n & U.C.-Berkeley Law's Samuelson Law, Tech. and Pub. Policy Clinic, *Research Report: Consumers Fundamentally Misunderstand The Online Advertising Marketplace*, 1, Oct. 2007, *available at* http://groups.ischool.berkeley.edu/samuelsonclinic/files/annenberg_samuelson_advertising.pdf.).

provide consumers with the tools necessary for them to make informed decisions.

Mere transparency is not enough for informed decisions. An incredible amount of information flows over broadband networks. This information can be categorized into varying levels of privacy sensitivity with nearly infinite granularity. The number of entities interested in varying layers of this information is vast and continually growing. Add to this the lack of standard interfaces or methods for managing preferences, and even a hypothetical, ideally knowledgeable consumer would have to invest a great deal of time and energy to exercise his right to privacy.

Within its section on privacy, Verizon comments on the need for regulation to "apply to all businesses and all technologies."[77] Certainly, a difference in the devices or the type of cabling that carries information should not affect the principles protecting users' legal rights. However, Verizon's examples of two different technologies—cookies and deep packet inspection—may not be the best illustration for technological neutrality.

Communications privacy is at its core about the flow of information. If, regardless of the technology, the information is processed, stored, and disclosed in the same way, there should be no difference in its regulatory treatment. However, to the extent that different technologies handle information differently, different rules are necessary.

Verizon claims, for instance, that the difference between gathering data via cookies and via deep packet inspection is not so wide as it might at first appear. In both cases, a large amount of data regarding browsing preferences and online behavior can be compiled. However, Verizon seems to assume that DPI, in this case, is being used solely for the advertising purposes claimed by its proponents to date.

One of several major differences between cookie and DPI-based behavioral analysis is

[77] *Comments of Verizon and Verizon Wireless* at 59.

the information that is accessible to the party collecting consumer data.[78] While a legitimate advertiser may only have an interest in the same sort of data available from a cookie-based behavioral advertising network, that is cold comfort to the consumer whose every packet is subject to interception by a third party.

Verizon says, and we agree, that it is not technologies themselves but the uses to which they are put that should be of concern to regulators. However, this does not require that regulators turn a blind eye to the practical differences between technologies, or their differing potentials for abuse.

IV. THE NATIONAL BROADBAND PLAN SHOULD REVERSE THE COMMISSION'S POLICY OF DEREGULATION

The first round of comments in this proceeding made one point abundantly clear: The broadband market is broken and needs fixing. This repair work begins with the recognition that the policy of vigorous deregulation set forth most explicitly in the *2005 Wireline Framework.*[79] The Commission has authority to reexamine the classification of residential broadband access and reclassify it as a Title II "telecommunications" service, or to impose sufficient structural separation requirements, interconnection requirements and other safeguards as it deems necessary to enhance the current moribund state of competition. But unless the National

[78] As an FTC filing by several consumer groups notes:

> The main difference between these new ad networks – which we will call "DPI-based behavioral ad networks" for lack of a better term – and traditional third-party ad networks is that DPI-based behavioral ad networks may potentially gain access to all or substantially all of an individual's Web traffic as it traverses the ISP's infrastructure, including traffic to all political, religious, and other non-commercial sites. A traditional ad network generally can collect data about a user's behavior only when the user visits the Web sites participating in the network. While today's ad networks may be large, they still do not provide the opportunity to collect information about an individual's online activities as comprehensively as in the DPI model, particularly with respect to activities involving non-commercial content.

Comments of the Center for Democracy and Technology et al. In regards to the FTC Staff Statement, "Online Behavioral Advertising: Moving the Discussion Forward to Possible Self-Regulatory Principles" 16 (April 11, 2008), *available at* http://www.cdt.org/privacy/20080411bt_comments.pdf.

[79] *See Framework for Wireline Broadband*, 20 F.C.C.R. 14853 (2005).

Broadband Plan recognizes the current dysfunctional state of the market and attacks the problem at its root, the effort to develop a universally accessible, affordable national broadband infrastructure will remain equally dysfunctional and ineffective.

A. The Comments Clearly Document A Broken Broadband Market That Fails To Provide For Our National Broadband Needs

In numerous comments, parties outside of the orbit of the incumbent carriers told story after story about a situation that favors incumbents but leaves out businesses, consumers and competitors, with the attendant ills that are brought on by a market failure and a lack of competition. Comptel summarized the matter as succinctly as possible:

> The short answer is that Congress would not have needed to allocate 7.2 billion dollars of taxpayer money to increase broadband deployment and affordability if existing mechanisms had been effective and efficient at ensuring broadband access for all Americans.[80]

The lack of affordable, high-speed access that arises from the current concentrated market structure acts as a restraint and a "duopoly tax" on businesses well beyond the traditional telecommunications and technology sectors. For example, small business is often cited as the mainstay of the U.S. economy. The inability of many small businesses to get broadband access at affordable prices and useful speeds therefore restrains the broader economy and depresses its ability to create jobs and expand business opportunities. The Broadband Institute of California summarized this predicament clearly:

> Access to broadband at appropriate upload speeds is essential to small urban and rural businesses. However, the lack of significant competition in the market for broadband services provided to small businesses has resulted in higher prices and lower speeds for small businesses. As a result, either due to a lack of affordability or availability most small businesses do not subscribe to the types of broadband technologies (T-1 lines) best suited to their needs.[81]

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[80] *Comments of Comptel* at 5.
[81] *Comments of the Broadband Institute of California* at 2.

The New Jersey Division of Rate Counsel, speaking on behalf of ratepayers of that state and, by extension, of consumers across the country, accurately portrayed the kind of pseudo-competitive environment that exists even in areas considered well-served, and the harm this imposes on consumers:

> *In some locations, two suppliers are present, but this duopoly does not equate to effective competition:* although it is preferable that consumers can choose between two suppliers (as opposed to having a single option), a duopoly does not represent effective competition.[82]

Comptel placed a dollar value on this "duopoly tax" in terms of direct impact to retail customers. In California, the adoption of deregulatory policies similar to those adopted by the Commission resulted in ever-increasing rates for local service that cost consumers more than $100 million annually, while other charges have increased as well.[83]

How did this appalling situation come about? As PK and others documented in the initial comments, this environment is the inevitable consequence of the Commission's determination to abandon proven regulatory means used by Congress and the Commission to promote competition in the past, such as line sharing and the regulation of dominant providers. Instead, the Commission pursued the untested and unsubstantiated theory that requiring potential competitors to create redundant networks would somehow spur "intermodal" competition superior to the already existing "intramodal" competition brought about by structural and behavioral regulation. While ideologically appealing, this method proved an utter failure in addressing the realities of the costs of network construction. The ability of incumbents to use their existing assets and market power to thwart competitive entry and raise the cost to competitors doomed this approach

[82] *Comments of the New Jersey Division of Rate Counsel* at 43 (emphasis in original).
[83] *Comments of Comptel* at 9.

from the beginning. Only a reversal of these policies can restore a competitive environment. As industry veteran Fred Goldstein told the Commission in the first round of comments:

> The Commission over the past eight years essentially gutted over two decades of procompetitive, pro-consumer policies. It destroyed workable elements of the regulatory structure and created instead an unworkable mess.[84]

B. Open Access, Either by Reclassification or Other Means, is a Necessary Pre-Requisite to Fixing the Existing Dysfunctional Dynamic

Many commenters agreed not only with PK's diagnosis of market failure, but also with PK's prescription for a better future: reclassification of broadband access as a Title II service and/or a return to proven pro-competitive policies of structural separation. For example, the Consumer Federation of America (CFA) and Consumers Union (CU) argued:

> The FCC must change course, if it is to advance the nation toward universal broadband service by adopting the following principles and specific measures.
>
> The FCC must get back to basics and define broadband as Title II service eligible for universal service support as the means to ensure that all people of the United States have adequate facilities at charges that are just, reasonable, affordable and nondiscriminatory. The Commission should adopt an experiential approach to defining broadband, with any technology capable of supporting the range of activities in which broadband users engage being eligible for support with universal service funds.[85]

The National Association of Telecommunications Officers and Advisers (NATOA) likewise observed that open network policies would provide numerous consumer benefits through increased competition and increased efficiency overall.[86] PK echoes NATOA's arguments that open network regulation would dramatically improve the market to the advantage of the public in the following ways:

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[84] *Comments of Ionary Consulting* at 1.
[85] *Comments of CFA and CU* at 2.
[86] *Comments of NATOA* at 1.

• Multiple service providers competing head to head over a common platform is a more efficient use of resources and will fuel innovation in broadband services, which will accelerate economic growth and benefit local communities.

• Open access can enable network neutrality through the benefits of competition and consumer choice, without requiring complex regulatory oversight of neutrality compliance.

• Open access negates the inherent monopoly nature of next generation fiber networks.

• In open networks, new service providers will market the network.

• Open access will maximize utilization of network capacity, allowing full realization of the incredible potential of technologies such as fiber optics for providing tremendous amounts of bandwidth.[87]

The Government of Japan provided a stark, if embarrassing, example of what the proper regulatory structure can accomplish in contrast to our supposedly "vibrantly competitive free market." In 1999 and 2000, the government made certain that copper-based local loop unbundling and line-sharing were established, that collocation rules and followed that by unbundling the fiber network as well.[88] Earlier this year, Japan made certain that even that nation's most advanced networks would be unbundled. Similar policies are also in place for wireless networks in Japan. The result is that consumers pay a mere six cents per hundred kilobits.[89] Further, despite the prediction by proponents of deregulation that such a regulatory framework would discourage investment in capacity and slow adoption, speeds for service have increased[90] and market penetration has as well.[91]

Japan is not alone in taking action to improve its broadband through sensible, pro-competitive regulation. Viviane Reding, the European Union's commissioner for information society and media, recently announced a new regulatory proposal aimed at building on the

[87] *Ibid.*
[88] *Comments of the Government of Japan* at 9.
[89] *Comments of the Government of Japan*, Appendix 1-1.
[90] *Comments of the Government of Japan*, Appendix 1-2.
[91] *Comments of the Government of Japan*, Appendix 1-4.

unbundling rules she helped to institute in the EU. In a June 25 speech entitled, "Towards a European Strategy of High Speed Broadband for All: How to Reward the Risk of Investment into Fibre in a Competitive Environment,"[92] Reding said of the new proposed rule (known there as a Recommendation):

> From the one side, I have heard the criticism that the Recommendation does not recommend a generalized roll-back or even a dismantlement of *ex ante* regulation. Firms, it is said, need to be given regulatory holidays – by means of the law, by means of overly broadly defined markets, by means of new markets or by means of a dogmatic preference for passive over active remedies – otherwise they will simply not invest.
>
> We all know that this is a criticism which simply is not going to fly. I have spent the last years fighting for effective competition in telecoms markets. I am not going to turn my back on our policy of liberalization and pro-competitive *ex ante* regulation. After all, this policy has led to successful and often deep market entry in the past, and it has contributed to wide usage and take-up of services. The last thing we need is new monopolies, and the poverty and artificial scarcity of services that would inevitably go with it.

Other nations have learned the lessons that we have forgotten, to their benefit and to our detriment. Now is the time, as the FCC considers a national broadband plan, to take a focused, fact-based, experience-based, clear-eyed look at what works and what doesn't. The dismal experience in our own country with deregulation, contrasted with the experiences of our global competitors under a regulatory regime better calibrated to ensure affordable high-speed broadband access, should provide us with both a clear path forward and a warning, if we should fail to act while other nations move ahead.

[92] "Towards a European Strategy of High Speed Broadband for All: How to Reward the Risk of Investment into Fibre in a Competitive Environment," Viviane Reding, June 25, 2009 (http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/09/312&format=HTML&aged=0&language=EN&guiLanguage=en).

V. MEANINGFUL UNIVERSAL ACCESS REQUIRES AFFIRMATIVE GOVERNMENT ACTION AT EVERY LEVEL

As is recognized by many commenters, a successful National Broadband Plan will fully engage government at every level and in a variety of roles. Understandably, commenters in the NBP focus on the federal role and how the federal government can make meaningful broadband access available to all citizens of the United States in a timely manner.[93] In particular, a broad consensus emerged around the prospect of universal service reform, with well over 50 sets of comments supporting reforming the existing Universal Service Fund (USF) for broadband–-a position PK also supported in its initial comments.

PK fully supports adopting mechanisms that would shift existing USF funds from supporting legacy services to providing support for broadband infrastructure, network operation, and digital inclusion programs. As is discussed below, the language of Section 254 provides the Commission with considerable flexibility to shape the USF to embrace these objectives. When read in concert with other provisions of the Act, it is clear that the Commission has the necessary statutory authority to pursue USF reform along the recommended lines, even absent new authorization from Congress.

In addition to this positive role of supporting broadband through USF, several commenters have urged the Commission to preempt state authority in a number of areas.[94] The unfortunate impression gleaned from these comments and from previous FCC action preempting local franchising, is that local governments are invariably a hindrance to broadband deployment.

While taking no position on the specific proceedings cited by various parties, PK therefore emphasizes in these replies that a successful National Broadband Policy must engage government at every level–-Federal, state and local. While some situations may require federal

[93] *See* 47 U.S.C. §§151, 1302.
[94] *See, e.g., Comments of Level 3* at 17-20; *Comments of AT&T* at 35.

standards and preemption, these should be regarded as the exception, rather than the rule. As the Commission's experience in preempting local franchising authority has demonstrated, the preemption of local authority can have unanticipated consequences, such as the negative impact on Public Educational and Governmental Access Channels ("PEG channels").

As PK observed in its initial comments, the National Broadband Plan should ensure that all levels of government play a positive role in ensuring not only universal coverage but also effective outreach and training sufficient to make access meaningful. Rather than view local governments with suspicion, a successful national broadband plan will include genuine efforts to engage local and state governments as partners in the greatest infrastructure investment in the history of our country since the development of the federal highway system. While the Commission should certainly move expeditiously to resolve outstanding proceedings on preemption of local authority, it would be a mistake to regard preemption as the sole focus of the National Broadband Plan and its relationship with state and local government.

A. The Commission Has Authority To Act On USF Reform

The Commission has broad authority to create, manage and operate the USF. Although the roots of the USF are older than the Communications Act itself, the FCC created the antecedent to the existing USF in response to the break up of the AT&T monopoly.[95] Concerned that the considerable changes occasioned by the creation of a competitive long distance market and the replacement of a national monopoly with seven Regional Bell Operating Companies ("RBOCs") would make phone service unaffordable in high-cost areas or for the poor, the Commission created a "Universal Service Fund . . . to ensure that telephone rates are within the means of the average subscriber in all areas of the country."[96] The D.C. Circuit upheld this

[95] *See Rural Telephone Coalition v. FCC,* 838 F.2nd 1307, 1311-12 (D.C. Cir. 1988).
[96] *Ibid.*

unilateral creation of USF as a valid exercise of the Commission's authority "to make available, so far as possible, to all people of the United States, a rapid, efficient, Nation-wide, wire and radio communication service with adequate facilities at reasonable charges."[97]

As part of the Telecommunications Act of 1996, Congress explicitly codified the Universal Service Fund and provided direction to the FCC on how to structure and administer the fund.[98] While Congress limited eligibility for the existing Universal Service Fund to "eligible communications carriers,"[99] the statute also directs the FCC to ensure that access to advanced telecommunications services and information services should be available at just, reasonable and affordable rates,"[100] and defines universal service as "an evolving level of telecommunications services . . . taking into account advances in telecommunications and information technologies and services."[101]

The Telecommunications Act of 1996 also directed the Commission to "encourage the deployment, on a reasonable and timely basis, of advanced telecommunications capability to all Americans."[102] As the D.C. Circuit recently observed, "the general and generous phrasing of § 706 means that the FCC possesses significant, albeit not unfettered, authority and discretion to settle on the best regulatory or deregulatory approach to broadband."[103] The Court also found that "Congress intended the FCC to make major policy decisions and to select the mix of regulatory and deregulatory rules the Commission deems most appropriate in the public interest to facilitate broadband deployment."[104]

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[97] *Ibid.* at 1315-16 (citing 47 U.S.C. § 151).
[98] Telecommunication Act of 1996, Pub. L. 104-104, § 101(a).
[99] *Ibid*. § 254(e).
[100] *Ibid.* § 254(b)(2).
[101] *Ibid*. § 254(c)(1).i
[102] 47 U.S.C. § 157 nt.
[103] *Ad Hoc Telecommunications Users Committee v. FCC*, D.C. Cir. Docket No. 07-1426, slip op at 7-8 (released July 17, 2009).
[104] *Ibid.* slip op. at 10.

Taking Section 254 and Section 706 of the Telecommunications Act together and in light of the historic role of the USF, which is to fulfill the broad purpose of Section 1 of the Communications Act, the Commission has broad discretion to reshape the USF to facilitate broadband deployment and adoption. While the Commission can and should ask Congress to bless fundamental changes to the USF to resolve regulatory uncertainty, the Commission has ample existing authority to transition the USF from its current focus on voice to residential subscribers and limited support for schools and libraries to a fund designed to provide meaningful universal access to broadband Internet services–-including access to the necessary Customer-Premises Equipment (CPE) and training.

B. Local Governments Have A Positive Role To Play In Universal Access

As noted in the initial comments of PK, a truly successful federal broadband policy should engage all levels of government in the deployment of broadband and digital inclusion programs. Local governments can clearly play a positive role, whether as a direct provider of services or through other means.

The Commission has pending before it several proceedings in which industry providers have asked the Commission to use its preemption power to limit the authority of local government. PK takes no position with regard to any of these specific proceedings. PK does, however, urge the Commission to resolve these proceedings expeditiously on the basis of the records developed in those proceedings rather than focusing on these and other preemption proceedings as part of the National Broadband Plan.

As a general rule, preemption should be used sparingly, where the record clearly supports such a broad remedy as absolutely necessary to achieve the goals of the Communications Act. The history of cable regulation, for example, demonstrates that broadly applying federal preemption can produce unfortunate consequences. The need to counteract possible local

protectionism or to achieve national coverage must be balanced against the traditional role of local government as a manager of local resources and the most accessible consumer protection authority. Considering preemption as part of the NBP therefore elevates what should be the most exceptional aspect of the Federal/state/local government relationship to a primary aspect of the relationship.

Instead, the National Broadband Plan should focus on how to effectively engage state and local government as partners in broadband deployment and broadband adoption. Congress has taken a significant step toward reaffirming that role by requiring consultation with the states as part of Broadband Technologies opportunity Program (BTOP), and by making state and local government entities automatically eligible for BTOP grants.[105] It would be profoundly unfortunate if, in the formulation of our first National Broadband Plan, the consideration of preemption became the dominant theme of the relationship between federal, state and local governments.

VI. CONCLUSION

The volume of comments already received by the Commission in this proceeding demonstrates the keen level of interest in developing a sound National Broadband Plan. In sorting through this vast array of policy recommendations, the Commission should reject the demands of content providers and network operators to permit them to act as intermediaries between users and the lawful content or applications those users seek to use. Nor should the Commission permit the arguments against privacy protection weighed and rejected in the telecommunications and cable context to carry the day to the detriment of consumers.

In considering the proper role of federal policy in fostering meaningful universal access, the Commission should pay heed to the results of the last eight years of deregulatory policy and

[105] The American Recovery and Reinvestment Act of 2009, § 6001.

the concentrated market it has produced. The Commission should note that countries that have adopted the rules on interconnection and unbundling that the FCC repealed now enjoy more competitive markets that give subscribers higher speeds at lower prices. A return to a regulatory regime designed to enhance competition, combined with a revision of the USF and an effort to engage state and local governments in a positive way, can form the cornerstone of a successful, sustainable, National Broadband Plan.

Respectfully submitted,

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