

BEFORE THE FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

April 26, 2010

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

**Reply Comments of the BroadBand Institute of California  
and the  
Broadband Regulatory Clinic**

The **BroadBand Institute of California (BBIC)** and the **Broadband Regulatory Clinic (BRC)** hereby submit their reply comments in the above captioned proceeding. The **BBIC** is a law and public policy institute at the Santa Clara University School of Law, engaging in applied research and education in the areas of technology regulation and public policy. The **BBIC** identifies, documents, addresses and publicizes the broadband and advanced network technology needs of California and the nation, and the impact of state and federal policies on these needs. The **BBIC** collaborates with traditional civil rights and disability rights organizations, urban and rural community-oriented organizations, as well as foundations and businesses in the pursuit of its mission. The **BRC** is a regulatory policy clinic at the Santa Clara University School of Law and the **BBIC**, assisting civil rights and disability rights organizations, urban and rural community-oriented organizations addressing broadband issues and policies.

The **BBIC** and **BRC** (hereinafter Commenters) provide these reply comments in response to the Federal Communications Commission's invitation to address its proposals to facilitate the preservation of an open Internet through the identification, establishment and enforcement of reasonable broadband industry practices.

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## I. SUMMARY OF JANUARY 2010 COMMENTS OF THE BBIC AND BRC

In opening comments filed in response to the Open Internet Notice of Proposed Rulemaking,<sup>1</sup> Commenters have submitted that in fashioning a definition of “reasonable network management,” the Commission should focus on *how* and *why* a network management practice is employed.<sup>2</sup> Commenters also urged the Commission to consider how Internet access providers communicate their network management practices to the public.<sup>3</sup> Commenters proposed a requirement that providers file notice of their network management policies with the Commission, as well as include the policies in users’ service agreement contracts.<sup>4</sup> Finally, Commenters proposed giving users “standing to file and prosecute a complaint before the Commission should it appear that a network management practice has been misused.”<sup>5</sup>

## II. SUMMARY OF REPLY COMMENT OF THE BBIC AND BRC

Commenters first take note of the decision in *Comcast v. FCC*.<sup>6</sup> Second, in the event that the Commission elects not to appeal this decision,<sup>7</sup> Commenters suggest that the Commission consider reclassifying Internet access providers as telecommunications service providers. The Commission may reclassify because the circumstances and assumptions under which the Commission originally deregulated have changed. The Commission’s own analysis suggests that

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<sup>1</sup> Fed. Commc’ns Comm’n, *In re Preserving the Open Internet Broadband Industry Practices*, GN Docket No. 09-191, WC Docket No. 07-52 (Oct. 22, 2009) [hereinafter NPRM].

<sup>2</sup> See Comments of the BroadBand Institute of California and the Broadband Regulatory Clinic, *In re Preserving the Open Internet Broadband Industry Practices*, GN Docket No. 09-191, WC Docket No. 07-52, at 2-3 (filed Jan. 14, 2010), available at <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020378859> [hereinafter Comments of BBIC and BRC]. Commenters submitted that reasonable network management practices “do not include discrimination against content, users or providers which are singled out while the provider allows others within the same class to proceed unimpeded.” *Id.* at 4.

<sup>3</sup> *Id.* at 7.

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

<sup>6</sup> *Comcast v. FCC*, No. 08-1291 (D.C. Cir. 2010).

<sup>7</sup> Commenters are aware that Chairman Genachowski has suggested the Commission will not appeal. See Edward Wyatt, *Despite Ruling, F.C.C. Says It Will Move Forward on Expanding Broadband*, N.Y. TIMES, Apr. 14, 2010, available at <http://www.nytimes.com/2010/04/15/technology/15broadband.html?src=busin>.

deregulation has not encouraged competition in the broadband market. Third, Commenters observe that the Commission’s six open network principles are consistent with Title II regulation. Fourth, Commenters suggest the Commission exercise regulatory forbearance under Title II where necessary. Finally, Commenters address the Commission’s proposals for measuring the reasonableness of network management practices and propose a two-prong test for determining reasonable network management.

### **III. THE COMMISSION SHOULD CONSIDER RECLASSIFICATION OF INTERNET ACCESS PROVIDERS UNDER TITLE II.**

The Commission can regulate Internet access providers under Title II by resorting to limited reclassification of Internet access providers as telecommunications providers.<sup>8</sup> The Commission has the statutory authority do so, and circumstances have changed such that reclassification is appropriate. Additionally, the Commission’s proposed principles are consistent with its previous goals and address subject matter historically regulated under Title II. Finally, the Commission retains the ability to forbear from regulation where necessary.

#### **A. The Commission Has the Authority to Regulate Internet Access Providers Under Title II.**

##### **1. Classification of Internet Access Providers is Properly the Province of the Commission.**

The Commission can reclassify in light of the deference given to agencies in reasonably interpreting and implementing statutory language under the Chevron standard.<sup>9</sup> The Chevron standard applies to the Commission’s classification of Internet access services as “information” or “telecommunications” services because the degree of integration or separateness of services is

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<sup>8</sup> In addition to telephone-based broadband service, cable broadband service can be considered a telecommunications service subject to the provisions of Title II. “Beyond the domain of cable-specific regulation, the definition of cable broadband as a telecommunications service coheres with the overall structure of the Communications Act as amended by the Telecommunications Act of 1996, and the FCC’s existing regulatory regime.” *AT&T Corp. v. City of Portland*, 216 F.3d 871, 879 (2000). The Supreme Court’s ruling in *Brand X* did not overrule that holding; rather, it held that the Commission’s decisions regarding how to define cable broadband were entitled to Chevron deference. *Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 982 (2005).

<sup>9</sup> Robert M. Frieden, *Neither Fish nor Fowl: New Strategies for Selective Regulation of Information Services*, 6 J. TELECOMM. & HIGH TECH. L. 373, 382 (2008); *see also* *Chevron U.S.A. Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 857–58 (1984).

ambiguous.<sup>10</sup> Determining the “nature and scope of integration between telecommunications and information processing”<sup>11</sup> is based on “the factual particulars of how Internet technology works and how it is provided,” issues properly left to the Commission to decide.<sup>12</sup> The Commission “retains authority over communications facilities, equipment, or services even when it has chosen previously to regulate them under Title I.”<sup>13</sup> Accordingly, deciding whether a service constitutes “telecommunication” or “information” is well within the Commission’s authority.

## **2. The Commission May Properly Change its Policy Where Circumstances Have Changed.**

Administrative flexibility permits valuable experimentation and allows administrative policies to reflect changing policy views.<sup>14</sup> Regulatory agencies are expected to “adapt their rules and practices to the Nation’s needs in a volatile, changing economy,” not to “regulate the present and the future within the inflexible limits of yesterday.”<sup>15</sup> Thus, agencies generally may change rules and apply rules retroactively, provided the change is consistent with the Administrative Procedures Act.<sup>16</sup>

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<sup>10</sup> *Brand X*, 545 U.S. at 991 – 92 (noting that “the question may not always be straightforward whether, on the one hand, an entity is providing a single information service with communications and computing components, or, on the other hand, is providing two distinct services, one of which is a telecommunications service. . . . Because the term ‘offer’ can sometimes refer to a single, finished product and sometimes to the individual components in a package being offered . . . the statute fail[ed] unambiguously to classify the telecommunications component of cable modem service as a distinct offering.”)

<sup>11</sup> Frieden, *supra* note 9, at 385.

<sup>12</sup> *Brand X*, 545 U.S. at 992 (“[F]ederal telecommunications policy in this technical and complex area . . . [should] be set by the Commission, not by warring analogies”).

<sup>13</sup> Comments of Public Interest Commenters, *In re Preserving the Open Internet Broadband Industry Practices*, GN Docket No. 09-191, WC Docket No. 07-52, at 37 (filed Jan. 14, 2010) [hereinafter Comments of PIC].

<sup>14</sup> *Leedom v. Int’l Bhd. of Elec. Workers*, 278 F.2d 237 (D.C. Cir. 1960).

<sup>15</sup> *Am. Trucking Ass’n v. Atchison Topeka & Santa Fe Ry. Co.*, 387 U.S. 397, 416 (1967) (“Regulatory agencies do not establish rules of conduct to last forever; they are supposed, within the limits of the law and of fair and prudent administration, to adapt their rules and practices to the Nation’s needs in a volatile, changing economy. They are neither required nor supposed to regulate the present and the future within the inflexible limits of yesterday.”).

<sup>16</sup> *See Leedom*, 278 F.2d at 237.

The Commission has the power to modify, or even overrule, long-standing precedent.<sup>17</sup> As an administrative agency concerned with furtherance of the public interest, the Commission is not bound by rigid adherence to its prior rulings.<sup>18</sup> For example, courts have upheld the Commission's discretion to alter its interpretation of “operate in the public interest” in light of changed circumstances,<sup>19</sup> as well as change its interpretation of what constitutes indecent material.<sup>20</sup> Accordingly, the Commission can properly reclassify Internet access services as telecommunications services where changes justify that reclassification.

**B. The Commission Has Historically Sought to Facilitate Competition by Encouraging Non-Discrimination, Consumer Protection, And Transparency.**

Historically, the Commission has struggled to facilitate competition in different ways. In its *Computer Inquiry* decisions, the Commission imposed requirements on wireline broadband providers to encourage competition.<sup>21</sup> Several years later, however, the Commission removed those requirements in its Wireline Broadband Order,<sup>22</sup> after taking steps to deregulate in its Cable Modem Order.<sup>23</sup> This deregulation was intended to encourage competition in the broadband access market.<sup>24</sup> However, in the Wireline Broadband Order and the Cable Modem Order, the Commission’s asserted goal was to reclassify wireline and cable broadband providers

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<sup>17</sup> *United Church of Christ v. FCC*, 707 F.2d 1413, 1425–1426 (1983).

<sup>18</sup> *Columbia Broad. Sys., Inc. v. FCC*, 454 F.2d 1018, 1026 (1971).

<sup>19</sup> *AFL-CIO v. FCC*, 11 F.3d 1430, 1441 (1993).

<sup>20</sup> *FCC v. Fox Television Stations, Inc.*, 129 S. Ct. 1800, 1811 (2009).

<sup>21</sup> *See* Amendment of Section 64.702 of the Commission’s Rules and Regulations, 77 F.C.C.2d 384 (1980) [hereinafter *Computer II*]; Amendment of Section 64.702 of the Commission’s Rules and Regulations, CC Docket No. 85-229, Phase I, 104 F.C.C.2d 958 (1986) [hereinafter *Computer III*] (the Commission “created a framework in *Computer II* that defined and distinguished between ‘basic services’ and ‘enhanced services.’”)

<sup>22</sup> *See* Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Report and Order and Notice of Proposed Rulemaking, 20 F.C.C.R. 14853, ¶ 42 (2005) [hereinafter *Wireline Broadband Order*].

<sup>23</sup> *In re* Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities, 17 F.C.C.R. 4798, GN Docket No. 00-185, CS Docket No. 02-52, ¶ 1 (Mar. 14, 2002) [hereinafter *Cable Modem Order*].

<sup>24</sup> *Id.* ¶ 57.

under Title I in order to facilitate that competition.<sup>25</sup> The resulting market developments have shown that this reclassification has not encouraged the desired competition.

### **1. The Commission's Efforts to Encourage Competition Through the *Computer Inquiry* Requirements**

In the *Computer Inquiries*, the Commission imposed a number of requirements for facilities-based providers of wireline broadband Internet access services.<sup>26</sup> These requirements included nondiscriminatory access to transmission,<sup>27</sup> comparably efficient interconnection requirements,<sup>28</sup> and open network architecture plans.<sup>29</sup> The Commission's requirements for comparably efficient interconnection "were intended to be an interim measure,"<sup>30</sup> necessary only until the dominant access providers (the Bell Operating Companies) had implemented the Commission's Open Network Architecture (ONA) plans, which required dominant access providers to open their networks to competition in significant ways.<sup>31</sup>

Moreover, the Commission imposed a "core nondiscriminatory access obligation."<sup>32</sup> Under *Computer II*, facilities-based common carriers were required to "provide the basic transmission services underlying their enhanced services on a nondiscriminatory basis pursuant to tariffs."<sup>33</sup> By requiring carriers to offer "basic service at the same prices, terms, and conditions, to all enhanced service providers,"<sup>34</sup> the Commission sought to encourage competition and ease market entry for new providers.

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<sup>25</sup> *Id.* ¶ 5.

<sup>26</sup> *Id.* ¶ 43.

<sup>27</sup> *Id.* ¶ 27.

<sup>28</sup> *Id.* ¶ 26.

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

<sup>31</sup> See Wireline Broadband Order, *supra* note 22, at ¶ 28.

<sup>32</sup> *Id.* ¶ 42.

<sup>33</sup> *Id.* ¶ 27.

<sup>34</sup> *Id.*

## **2. The Commission’s Efforts to Encourage Competition Through Deregulation in the Wireline Broadband Order**

In the Wireline Broadband Order, the Commission rejected the *Computer Inquiry* requirements as “outmoded.”<sup>35</sup> In considering whether to continue applying the *Computer Inquiry* requirements to the wireline broadband market, the Commission focused on four factors: “the increasing integration of innovative broadband technology into the existing wireline platform; the growth and development of entirely new broadband platforms; the flexibility to respond more rapidly and effectively to new consumer demands; and...[the] expectation of the availability of alternative competitive broadband transmission to the currently required wireline broadband common carrier offerings.”<sup>36</sup>

## **3. The Commission’s Efforts to Encourage Competition Through Deregulation in the Cable Modem Order**

In its 2002 decision to classify cable Internet access as an information service the Commission stated its primary goal to promote “timely deployment of advanced telecommunications capability to all Americans.”<sup>37</sup> The Commission intended to achieve this goal by, in part, preserving the then-competitive broadband market. At that time, the broadband market was still evolving. Business models for broadband providers were diverse; some providers provided their own service, while others provided service in conjunction with affiliated or unaffiliated companies.<sup>38</sup> Some cable modem providers took a “multiple-ISP” approach, allowing consumers to choose between several Internet access providers.<sup>39</sup> In 2003, fourteen different companies provided approximately 97 percent of residential broadband connections in the United States.<sup>40</sup>

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<sup>35</sup> *Id.* ¶ 42.

<sup>36</sup> *Id.* ¶ 79.

<sup>37</sup> Cable Modem Order, *supra* note 23, at ¶ 4.

<sup>38</sup> *Id.* ¶ 21.

<sup>39</sup> *Id.* ¶ 26.

<sup>40</sup> Rouzbeh Yassini, Stewart Schley, Leslie Ellis and Roger Brown, *PLANET BROADBAND* (Cisco Press) (2004).

It appears the Commission contemplated a market where consumers would have the freedom to choose from among several broadband providers and would be allowed to choose content and applications free of providers' restrictions. The Commission believed that the changes it adopted would "promote the goal of achieving reasonable charges"<sup>41</sup> and encourage "competition among network providers, application and service providers, and content providers."<sup>42</sup>

#### **4. The 706 Reports and the Commission's Efforts to Examine Competition in the Market**

In the 706 Reports, the Commission contended that "[h]aving multiple advanced networks [would] promote competition in price, features, and quality-of-service among broadband-access providers."<sup>43</sup> The Commission saw parallel advances in broadband-based services and applications, as well as devices.<sup>44</sup> To this end, the Commission noted increases in fiber deployments,<sup>45</sup> Wi-Fi access,<sup>46</sup> WiMAX,<sup>47</sup> and WPANs<sup>48</sup> since its earlier reports. The

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<sup>41</sup> Cable Modem Order, *supra* note 23, at ¶ 10 ("Finally, we find that exercising jurisdiction over the complaint would promote the goal of achieving "reasonable charges." For example, if cable companies such as Comcast are barred from inhibiting consumer access to high-definition on-line video content, then, as discussed above, consumers with cable modem service will have available a source of video programming (much of it free) that could rapidly become an alternative to cable television. The competition provided by this alternative should result in downward pressure on cable television prices, which have increased rapidly in recent years.").

<sup>42</sup> *Id.* ¶ 43.

<sup>43</sup> *Id.* ¶ 11.

<sup>44</sup> *Id.* ¶ 25.

<sup>45</sup> *In re Inquiry Concerning the Deployment of Advanced Telecommunications Capability to all Americans in a Reasonable and Timely Fashion*, GN Docket No. 07-45, Fifth Report to Congress, ¶ 14 (rel. June 12, 2008) [hereinafter Fifth Section 706 Report]. The Commission based this observation on a report concerning the speeds of Verizon's FiOS fiber-to-the-home (FTTH) network, as well as an example of AT&T's "U-Verse" offering. It also noted that "many small providers are deploying FTTH networks," citing an update issued by the FTTH Council.

<sup>46</sup> *Id.* ¶ 15. The Commission noted the expansion of cities offering municipal Wi-Fi, citing estimates from MuniWireless and JiWire, Inc. *Id.*

<sup>47</sup> *Id.* ¶ 17. The Commission attributed this growth to the adoption of the IEEE 802.16e-2005 standard, which defines the air interface for fixed WiMAX stations. The Commission notes that activities on WiMAX deployments in terms of products shipped have accelerated, noting Intel's release of a WiMAX system-on-chip. *See id.*

<sup>48</sup> *Id.* ¶ 18. The Commission credited this growth based on the advent of wireless USB, noting In-Stat estimates that by late 2007, computers and high-end multi-media devices would have certified wireless USB devices built into them (as opposed to the traditional wired USB connection port).

Commission also noted that broadband over power line<sup>49</sup> and satellite offerings<sup>50</sup> had continued to evolve.

## **5. Efforts of Providers to Petition for Forbearance from the *Computer Inquiry* Requirements**

The Commission employed the Forbearance Standard articulated in section 10 of the 1996 Telecommunication Act in granting the Bell Operating Companies forbearance from unbundling requirements.<sup>51</sup> The Commission reviewed “the wholesale market in conjunction with competitive conditions in the downstream retail broadband market,”<sup>52</sup> and forbore from regulation because the broadband market was “still an emerging and changing market . . . [and] preconditions for monopoly [were] not present.”<sup>53</sup> The Commission noted the existence of emerging technologies and emerging broadband competitors, and it hypothesized that they would eventually replace wire line broadband services.<sup>54</sup> Releasing BellSouth and other BOCs from unbundling obligations would “encourage the deployment of new fiber technologies” and “increase the broadband services being offered.”<sup>55</sup> This investment would, in turn, prevent prices from ballooning, consequently benefiting the public interest.<sup>56</sup> Without the disincentives to investment, “just and reasonable charges” would be promoted through “the operation of market forces.”<sup>57</sup>

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<sup>49</sup> *Id.* ¶ 22 (noting there are “approximately 36 BPL deployments around the country in both rural and suburban areas, nine of which are commercial deployments and the remaining 27 of which are either pilot or trial deployments”).

<sup>50</sup> *Id.* ¶ 24.

<sup>52</sup> *In re* Petition for Forbearance of the Verizon Telephone Companies Pursuant to 47 U.S.C. § 160(c), 19 F.C.C.R. 21,496, 21,505 ¶ 21 (2004) (mem. opinion and order) [hereinafter Petition for Forbearance].

<sup>53</sup> *Id.* at 21,505 ¶ 22. In other words, “[t]he presence of robust, facilities-based competition means that there are various alternative suppliers of these inputs.” Comments of Verizon Communications, *In re* Broadband Networks and Advanced Telecommunications, Docket No. 011109273-1273-01 (Dec. 19, 2001), *available at* <http://www.ntia.doc.gov/ntiahome/broadband/comments/verizon/verizon.htm>.

<sup>54</sup> Petition for Forbearance, *supra* note 52, at 21,506–507 ¶ 22. For support, the Commission cited the D.C. Circuit in *USTA II*, where the court noted the “presence of robust intermodal competition from cable operators” and that the “emerging nature of the broadband market, along with the availability of alternative loop facilities, mitigated any potential harm from removing access to these facilities.” *Id.* at 21,507 (citing 359 F.3d 554, 578–85).

<sup>55</sup> *Id.* at 21,508 ¶ 24.

<sup>56</sup> *Id.*

<sup>57</sup> *Id.* at 21,508 ¶ 25.

The Commission assumed that competition in the retail broadband market would force “reasonable and nondiscriminatory rates, terms and conditions” upon the BOCs in the wholesale market to retain their business.<sup>58</sup> Furthermore, the Commission expected intermodal competition to make the market more competitive, since BOCs would have increased incentives to invest if faced with competition, “given their position with respect to cable modem providers and others in the emerging broadband market.”<sup>59</sup>

## **6. In the Cable Modem Order, the Commission Relied on the Alleged Inseparability of Telecommunications Services and Information Services of Internet Access Service Offers.**

In both its Cable Modem Order and Wireline Broadband Order, the Commission determined that the Internet service was an integrated information service<sup>60</sup> with an underlying transmission component,<sup>61</sup> which justified regulation under Title I.<sup>62</sup> At that time, the Commission was “not aware of any cable modem service provider that ha[d] made a stand-alone offering of transmission for a fee directly to the public, or to such classes of users as to be effectively available directly to the public.”<sup>63</sup> Further, the Commission found the telecommunications aspect was not “separable from the data processing capabilities of the service.”<sup>64</sup> The Commission determined that Internet service was properly classified as an information service

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<sup>58</sup> *Id.* at 21,510 ¶ 29.

<sup>59</sup> *Id.* at 21,510 ¶ 30.

<sup>60</sup> An “information service” is defined as “the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include capabilities for the management, control, or operation of a telecommunications system or the management of a telecommunications service.” *See* 47 U.S.C. § 153(20) (2006). In terms of content on the Internet, information services include applications such as email, web pages, and DNS.

<sup>61</sup> “Telecommunications” is “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.” *See* 47 U.S.C. § 153(43). The Act differentiates “telecommunications” from “telecommunications services.” *See* § 153(46).

<sup>62</sup> Cable Modem Order, *supra* note 23, at ¶ 40; *see also* Wireline Broadband Order, *supra* note 22, at ¶ 14 (concluding that internet access was “appropriately classified as an information service *because* its providers offer a single, integrated service (*i.e.*, Internet access) to end users,” thus focusing on the degree of integration of the service).

<sup>63</sup> Cable Modem Order, *supra* note 23, at ¶ 40.

<sup>64</sup> *Id.*

because Internet access providers included many features in their offerings which were properly classified as information services—such as “e-mail, newsgroups, and the ability to create a web page that is accessible by other Internet users,”<sup>65</sup> as well as DNS service<sup>66</sup>—and because it is not unusual for information services to flow over an underlying telecommunications connection.<sup>67</sup>

### **C. Circumstances Have Changed, Thus Reclassification Is Justified.**

Competition has not developed as predicted by the Commission. Although the Commission has not clearly defined what it considers adequate competition in the broadband market, it has examined competition generally. To that end, the Commission’s reliance on the integration of telecommunications and information has not encouraged competition. Additionally, the Wireline Broadband Order’s four factors suggest that deregulation has not encouraged competition.

#### **1. The Commission Has Not Clearly Defined What Constitutes Adequate Competition in the Broadband Market; However, It Examined Competition In Other Contexts.**

The Commission did not define its standards for acceptable levels of competition in a market in the Wireline Broadband Order; however, it did examine competition in other contexts. In its Competitive Common Carrier Services Order, the Commission examined standards for competition.<sup>68</sup> Here, it differentiated dominant firms and non-dominant firms, classifying as dominant “a carrier that possesses market power.”<sup>69</sup> In determining what constitutes market power, the Commission set forth “certain clearly identifiable market features,” including “number and size distribution of competing firms, the nature of barriers to entry, . . . the availability of reasonably substitutable services,”<sup>70</sup> as well a firm’s power to control price.<sup>71</sup>

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<sup>65</sup> *Id.* at ¶ 37; *see also* Wireline Broadband Order, *supra* note 22, at ¶ 14 (stressing the combination of data transport with the provision of “e-mail, web pages, and newsgroups”).

<sup>66</sup> *Id.*

<sup>67</sup> *See* Implementation of the Non-Accounting Safeguards of Section 271 and 272 of the Communications Act of 1934, as amended, CC Docket No. 96-149, 16 F.C.C.R. 9751, ¶ 16 (2001) (order on remand) [hereinafter Non-Accounting Safeguards Remand].

<sup>68</sup> *See generally In re* Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Therefor, 85 F.C.C.2d 1 (1980) [hereinafter Competitive Common Carrier Services Order].

<sup>69</sup> *Id.* ¶ 56.

<sup>70</sup> *Id.* ¶ 57.

Additionally, dominant firms have the ability to act in anticompetitive ways “inconsistent with the public interest.”<sup>72</sup>

Moreover, the Commission focused on “the control of bottleneck facilities,” which allows a firm to “impede access of its competitors to those facilities.”<sup>73</sup> Control of bottleneck facilities “describes the structural characteristic of a market [in which] new entrants must either be allowed to share the bottleneck facility or fail.”<sup>74</sup> This degree of control “is present when a firm or group of firms has sufficient command over some essential commodity or facility in its industry or trade to be able to impede new entrants.”<sup>75</sup> The control of bottleneck facilities is prima facie evidence of market power that “requires regulatory scrutiny.”<sup>76</sup> The classification of dominance or non-dominance is determined not by the individual carrier but by consumer need and demand.<sup>77</sup> In curtailing market dominance, the Commission’s goal is to ensure that the consumer obtains the best possible service, and that consumer demand is satisfied.<sup>78</sup>

The identifiable market features mentioned in the Competitive Common Carrier Services Order are the Commission’s original foundations of dominance and non-dominance in a telecommunications marketplace. When the Commission addressed this issue in its Competitive Common Carrier Services Order, it was dealing with transition from a monopoly to competition.<sup>79</sup> Since that time, the broadband market has experienced periods of growth and competition. Since the deregulation begun in the Wireline Broadband Order, however, reliance

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<sup>71</sup> See *id.* ¶¶ 54, 56.

<sup>72</sup> See *id.* ¶ 56.

<sup>73</sup> *Id.* ¶ 58.

<sup>74</sup> Competitive Common Carrier Services Order, *supra* note 68, at ¶ 59.

<sup>75</sup> *Id.*

<sup>76</sup> *Id.* ¶ 58.

<sup>77</sup> See *id.* ¶ 60.

<sup>78</sup> See *id.*

<sup>79</sup> The Competitive Common Carrier Services Order was issued in 1980, during the Commission’s break-up of AT&T. In 1996, the Commission added Section 271 to the Telecommunications Act, granting the Commission oversight authority to ensure that the Bell Operating Companies were complying with market opening requirements. See Section 271 Enforcement, Federal Communications Commission, <http://www.fcc.gov/eb/LoTelComp/271.html>.

on unregulated intermodal competition and the allowance of entrenched facilities-based providers to use contracts to limit consumer mobility have accomplished a situation similar to the market dominance addressed in the Competitive Common Carrier Services Order. While the underlying dynamic is different, the net result is a “group of firms” with clearly definable market power that “has sufficient command over some essential commodity or facility in its industry or trade to be able to impede new entrants.”<sup>80</sup> Therefore, the Commission should regulate to require nondiscrimination.

## **2. The Commission’s Reliance on the Integration of Telecommunications and Information Has Not Encouraged Competition.**

Today, circumstances have changed so as to justify reclassification because, although information services use telecommunication services as part of Internet access, the offering is no longer inseparably integrated. Internet access providers no longer provide newsgroups or web page hosting;<sup>81</sup> instead, these are provided by independent content providers on the Internet.<sup>82</sup> Email is also often provided by a content provider other than the user’s Internet access provider.<sup>83</sup> Further, even DNS, once a core function of an Internet access provider and an information service relied on by the Commission as justification for classifying Internet access providers under Title I, is no longer exclusively provided by Internet access providers.<sup>84</sup> Instead, Internet access providers primarily compete on the basis of the quality of their connectivity,

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<sup>80</sup> *Id.* ¶ 59.

<sup>81</sup> See AT&T High Speed Internet Elite, AT&T, <http://www.att.com/gen/general?pid=10938> (last visited Apr. 6, 2010); Comcast High-Speed Internet Service, <http://www.comcast.com/Corporate/Learn/HighSpeedInternet/highspeedinternet.html> (last visited Apr. 6, 2010).

<sup>82</sup> See Webs.com, Create your own website for FREE!, <http://www.webs.com/> (last visited Apr. 6, 2010); Yahoo! Web Hosting, Yahoo! Small Business, <http://smallbusiness.yahoo.com/webhosting> (last visited Apr. 6, 2010); TheFreeSite.com: Free Web Site Hosting Services, [http://www.thefreesite.com/Free\\_Web\\_Space/](http://www.thefreesite.com/Free_Web_Space/) (last visited Apr. 6, 2010).

<sup>83</sup> Mark Brownlow, Email and webmail user statistics, EMAIL MARKETING REPORTS, Oct. 2009, <http://www.email-marketing-reports.com/metrics/email-statistics.htm>.

<sup>84</sup> See Reply Comments of Public Knowledge, *In re A National Broadband Plan for Our Future*, GN Docket No. 09-51, at 2 (filed Jan. 26, 2010) [hereinafter Public Knowledge Reply Comments] (discussing Google Public DNS and OpenDNS).

speed, coverage, and consistency.<sup>85</sup> Today, Internet service providers focus on the ability to transfer data at high speeds reliably.<sup>86</sup> Providers “compete on their ability to move packets to and from the Internet – which is the essence of the provision of basic telecommunications services.”<sup>87</sup> Therefore, the circumstances on which the Commission relied in issuing its Cable Modem Order and Wireline Broadband Order—an inseparable integration of telecommunications and data processing by the Internet access providers, in which the data processing services were paramount—are no longer valid, and justify reclassification.

### **3. The Wireline Broadband Order’s Four Factors Suggest That Deregulation Has Not Encouraged Competition.**

The four factors that served as the Commission’s guides in the Wireline Broadband Order remain instructive today in determining whether or not the Commission’s deregulation served its intended goals. Commenters find that, weighing costs and benefits with an understanding of today’s broadband Internet access market and a revised predictive judgment about how that market is likely to develop, the deregulation implemented in the Wireline Broadband Order did not serve the Commission’s goals.

#### **a. Increasing Integration of Innovative Broadband Technology Into the Existing Wireline Platform**

The Commission sought to encourage “the increasing integration of innovative broadband technology into the existing wireline platform.”<sup>88</sup> The Commission acknowledged that, at the time of the Wireline Broadband Order, “not all American households [could] choose between cable modem and DSL-based Internet access service”; however, “a wide variety of competitive

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<sup>85</sup> See Verizon, Verizon Has The Speed You Need, <http://www22.verizon.com/Residential/Internet/Overview> (last visited Apr. 6, 2010); Comcast High-Speed Internet Service, <http://www.comcast.com/Corporate/Learn/HighSpeedInternet/highspeedinternet.html> (last visited Apr. 6, 2010).

<sup>86</sup> See Verizon FiOS Internet: FiOS vs. Cable, <http://www22.verizon.com/Residential/FiOSInternet/FiOSvsCable/FiOSvsCable.htm> (last visited Apr. 6, 2010); Comcast High Speed Internet Service: Broadband Internet Service, <http://www/comcast.com/Corporate/Learn/HighSpeedInternet/highspeedinternet.html> (last visited Apr. 6, 2010).

<sup>87</sup> Public Knowledge Reply Comments, *supra* note 84, at 9.

<sup>88</sup> *Id.* at ¶ 79.

and potentially competitive providers and offerings [were] emerging in this marketplace.”<sup>89</sup> The Commission identified the rise of “satellite and wireless, and even broadband over power line in certain locations, indicating that broadband Internet access services in the future will not be limited to cable modem and DSL service.”<sup>90</sup> Indeed, the Commission believed that these emerging technologies would gain market share, especially in “specialized geographic parts of the market not served by DSL or cable modems.”<sup>91</sup> However, five years later, innovation and competition have stalled. Intermodal competition is unable to create competition in the broadband market because there is not “as much competitive facilities-based competition for broadband service as would be needed to discipline this market using competitive forces.”<sup>92</sup> While wireless service is on the rise, it is generally provided by the same access carriers delivering cable modem and DSL-based Internet service. There has been no great increased integration of innovative non wireline broadband technology into the existing wireline platform as a result of the Wireline Broadband Order’s deregulation.

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<sup>89</sup> *Id.* at ¶ 50.

<sup>90</sup> *Id.*

<sup>91</sup> *Id.* at ¶ 59.

<sup>92</sup> Cecilia Kang, *Vint Cerf, early Web technologists show support for net neutrality*, WASH. POST, Oct. 19, 2009, [http://voices.washingtonpost.com/posttech/2009/10/vint\\_cerf\\_early\\_web\\_technologi.html](http://voices.washingtonpost.com/posttech/2009/10/vint_cerf_early_web_technologi.html). For instance, consumers in countries that leave competition to develop through intermodal competition, such as the United States and Canada, experienced the slowest speeds for the highest prices. See Yochai Benkler, *Next Generation Connectivity: A review of broadband Internet transitions and policy from around the world*, Oct. 2009, <http://cyber.law.harvard.edu/node/5751>.

## 1. Broadband over Power Lines

The Commission assumed that broadband over power lines would become a legitimate competitor to wireline broadband.<sup>93</sup> Since the Commission released its Memorandum and Order in October 2004, broadband over power lines is not widely available and has not been widely adopted among U.S. subscribers.<sup>94</sup> There were 5,000 reported subscriber connections over 200 kbps in at least one direction in June 2005.<sup>95</sup> The number of fixed wireline broadband subscribers almost doubled from June 2005 to December 2008, going from 42,000 to 73,000 subscribers.<sup>96</sup> During that same period, broadband over power lines remained constant at with 5,000 subscribers.<sup>97</sup>

## 2. Satellite Broadband

Satellite broadband has not been a sufficient competitor to cable and DSL broadband services due to limitations in technology, fair access policies, and adoption rates. Rain and other airborne moisture may affect transmission quality and limit performance.<sup>98</sup> Additionally, satellite technology is not easily upgradable in an incremental fashion<sup>99</sup>; therefore, providers impose bandwidth caps that affect satellite Internet performance.<sup>100</sup> Providers also impose fair access policies that may result in severe throttling of a user's satellite connection.<sup>101</sup> Satellite adoption

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<sup>93</sup> See Petition for Forbearance, *supra* note 52, at 21,506.

<sup>94</sup> See 2008 High-Speed Services for Internet Access, FCC, at 13, *available at* [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-296239A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296239A1.pdf). (March 16, 2010) [hereinafter 2008 High-Speed Services].

<sup>95</sup> *Id.*

<sup>96</sup> *Id.*

<sup>97</sup> *Id.*

<sup>98</sup> See Satellite Broadband: Is It a Viable Option?, High Speed Experts, <http://www.highspeedexperts.com/satellite-broadband> (last visited Apr. 6, 2010).

<sup>99</sup> *Wild Blue Adds More Capacity*, BroadbandDSLReports.com, Aug. 11, 2009, <http://www.dslreports.com/shownews/WildBlue-Adds-More-Capacity-103893>.

<sup>100</sup> See *id.* (“WildBlue offers data caps ranging from 7,500 megabytes per month to 17,000 megabytes per month.”).

<sup>101</sup> See *id.* (“WildBlue caps users with what they call a ‘fair access policy’ (FAP). According to WildBlue’s FAP each tier comes with a thirty day usage limit, which, if crossed, results in users being throttled back to 128kbps downstream and an astonishingly painful 28kbps upstream. Select customers can consume 7,500MB downstream and 2,300MB per month, while Select and Pro customers are restricted to 12,000MB/3,000MB and 17,000/5,000 respectively.”) HughesNet, one of the biggest satellite broadband subscriber base, has an FAP that reminds consumers, “[s]tated speeds are not guaranteed. Actual upload speed will likely be lower than speed indicated,

rates are low: as of December 31, 2008, satellite broadband consisted of only 938,000 out of 102,000,000, or 0.9% of high-speed connection subscribers (connections over 200 kbps in at least one direction).<sup>102</sup>

### 3. Third Generation Wireless

Third generation wireless broadband has also failed to apply pressure to incumbent access providers because of its technological limitations and because of market domination by incumbent wireline access providers. While 62.8% of all broadband connections offer at least 3 mbps, only .27% of these connections are mobile broadband.<sup>103</sup> This discrepancy becomes more of an issue as Internet services become more interactive and bandwidth heavy, and leave mobile broadband unable to offer comparable access. Mobile broadband is also unable to keep up with current broadband usage; the majority of mobile broadband providers cap their data plans at 5 GB per month, while the average American Internet user uses 14.25 GB per month.<sup>104</sup> Currently mobile broadband makes up 13% of the broadband market, but this number ignores the fact that incumbent broadband providers—Verizon and AT&T—currently hold 61% of the mobile wireless market and that researchers predict further increases in ownership in the near future.<sup>105</sup>

#### b. The Growth And Development Of Entirely New Broadband Platforms

Secondly, the Commission wished to support “the growth and development of entirely new broadband platforms.”<sup>106</sup> This, too, has not come to fruition; while there has been a great deal of development in the area of wireless technology, there has been no growth or development of new wireline broadband platforms since the deregulation of the Wireline Broadband Order.

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during peak hours. Download speeds may also be temporarily slowed in cases when patterns of system usage exceed the download threshold for an extended period of time.”

<sup>102</sup> FCC Industry Analysis and Technology Division Wireline Competition Bureau, *High Speed Services for Internet Access: Status as of December 31, 2008* (Feb. 2010).

<sup>103</sup> 2008 High-Speed Services, *supra* note 94, at 16.

<sup>104</sup> Larry Dignan, *Wireless data caps: Are usage based pricing schemes here to stay?*, ZDNet.com, Mar. 10, 2009 <http://blogs.zdnet.com/BTL/?p=14097>. See also Portia Krebs, *Connected Americans Among World Leaders in Internet Use*, Dec. 22, 2009, <http://www.ustelecom.org/News/NewsItem/Connected-Americans-Among-World-Leaders-in-Internet-Use.html>.

<sup>105</sup> 2008 High-Speed Services, *supra* note 94, at 16. See also *Sprint: 7.4% Market Share in 5 Years?*, available at <http://www.dailywireless.org/2010/02/11/sprint-7-4-market-share-in-5-years/> (last visited Apr. 6, 2010). Verizon and AT&T currently hold 32% and 29% of the market, respectively. *Id.*

<sup>106</sup> *Id.* ¶ 79.

Additionally, today, the primary wireless network access providers are the same companies that provide wireline access.<sup>107</sup>

**c. The Flexibility To Respond More Rapidly And Effectively To New Consumer Demands**

Additionally, the Commission sought to encourage “the flexibility to respond more rapidly and effectively to new consumer demands.”<sup>108</sup> There have been some notable cases, however, where the Internet access providers have ignored consumer demands, resulting in Commission action.<sup>109</sup> For instance, Comcast was aware as early as August 2007 from consumer demands that its users were frustrated with slow traffic and dropped connections to the BitTorrent service.<sup>110</sup> Comcast denied it was throttling traffic and would not respond forthrightly to consumer demands on its own.<sup>111</sup> The Commission had to intercede, and it took the Commission almost a year to settle the dispute between consumers, BitTorrent, and Comcast.<sup>112</sup> Thus, in a critical instance in which an Internet access provider has had a conflict of interest with consumers, the provider has not had an incentive to respond to consumer demands that are counter to the providers’ interests, and did not respond “rapidly and effectively.”

**d. The Availability Of Alternative Competitive Broadband Transmission To The Currently Required Wireline Broadband Common Carrier Offerings**

Finally, the Commission expected to see development in “the availability of alternative competitive broadband transmission to the currently required wireline broadband common carrier offerings.”<sup>113</sup> The Commission noted that when it made the determination in 1995,

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<sup>107</sup> See Verizon Wireless, Verizon Residential & Business High Speed Internet,, <http://www.verizonwireless.com/b2c/index.html> (last visited Apr. 6, 2010); Wireless from AT&T, <http://www.wireless.att.com/cell-phone-service/welcome/index.jsp> (last visited Apr. 6, 2010); AT&T DSL High Speed Internet Service, AT&T, <http://www.att.com/dsl/> (last visited Apr. 6, 2010).

<sup>108</sup> Wireline Broadband Order, *supra* note 22, at ¶ 79.

<sup>109</sup> These include the Comcast and Madison River cases.

<sup>110</sup> Marguerite Reardon, *Comcast Denies Monkeying with BitTorrent Traffic*, CNETNEWS.COM NEWS BLOG, Aug. 21, 2007, available at [http://www.news.com/8301-10784\\_3-9763901-7.html](http://www.news.com/8301-10784_3-9763901-7.html).

<sup>111</sup> *Id.*

<sup>112</sup> *Id.*

<sup>113</sup> Wireline Broadband Order, *supra* note 22, at ¶ 79.

“AT&T was no longer dominant in the long distance service market, that market was mature.”<sup>114</sup> “About 94 percent of American households had telephone voice service, and the vast majority of the telephones provided equal access to long distance service,”<sup>115</sup> whereas at the time of the Wireline Broadband Order, “only 54.6 percent of U.S. households subscribe[d] to either broadband or narrowband Internet access service.”<sup>116</sup> Therefore, the Commission held that “while cable modem and DSL clearly have exhibited significant growth over the last few years, market penetration for these two technologies still is far below the size of the potential market,”<sup>117</sup> and the Commission expected “these two market leaders to continue to compete head-to-head in a way that could result in higher customer penetration rates for one or both services.”<sup>118</sup> The expected result was “wider deployment of broadband Internet access service, more choices, and better terms.”<sup>119</sup>

While the Commission correctly predicted cable modem and DSL would continue to compete head to head, the result has not been “more choices and better terms.” Consumers now have less choice regarding broadband providers. “Over 90 percent of customers have no more than two broadband choices (DSL or cable modem),” and “20 percent [of customers] have only one” choice for broadband access,<sup>120</sup> which suggests a lack of competition.<sup>121</sup> This lack of choice as to providers creates an environment in which “[e]ven if there are some competitive choices among networks, it is not as if the consumer can switch between providers easily[,] [for

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<sup>114</sup> *Id.* ¶ 55 (citing Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier, 11 F.C.C.R. 3271 (1995) (order)).

<sup>115</sup> *Id.*

<sup>116</sup> *Id.* ¶ 51 (citing Federal Communications Commission, Wireline Comp. Bur., Industry Analysis & Technology Div., *Trends in Telephone Service*, at 2-10 (Apr. 2005)).

<sup>117</sup> *Id.* ¶ 55.

<sup>118</sup> *Id.* ¶ 56.

<sup>119</sup> *Id.* ¶ 61 (“As any provider increases its market share or upgrades its broadband Internet access service, other providers are likely to mount competitive challenges, which likely will lead to wider deployment of broadband Internet access service, more choices, and better terms.”).

<sup>120</sup> Kevin Werbach, *Connections: Beyond Universal Service in the Digital Age*, 7 J. OF TELECOMM. & HIGH TECH. L. 67, 69 (2009).

<sup>121</sup> Choice, Internet for Everyone, <http://www.Internetforeveryone.org/principles/choice> (last visited Apr. 6, 2010) (purporting that the lack of choice exists because of the lack of competition in ISPs).

example,] in response to a new policy [imposed by the provider], especially if there are only two providers and both follow the same policy.”<sup>122</sup> This duopoly may not serve the public interest.

#### **D. Reclassifying Internet Access Providers as Telecommunications Service Providers is Consistent With the Six Principles of Network Neutrality and With the Commission’s Stated Goals.**

Since competition has not developed as predicted, the Commission may reclassify. Reclassifying Internet access providers as telecommunications service providers would be an effective method of implementing the six principles of open networks<sup>123</sup> set forth in the Commission’s Notice of Proposed Rulemaking.<sup>124</sup> The principles reference conduct that the Commission has typically regulated under Title II. Reclassification under Title II would allow the Commission to regulate data transmission while remaining content-neutral. Finally, the Commission would be able to (and in some cases, should) forbear from regulation.

##### **1. The Commission Historically Regulated Nondiscrimination and Promoted Transparency and Competition Under Title II.**

The conduct the Commission proposes to regulate is precisely the kind of conduct that the Commission has previously regulated under Title II. Reclassification under Title II is, therefore, particularly appropriate. In Title II, Congress vested the Commission with the authority to: prohibit service providers’ discrimination against consumers or other entities that connect to the

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<sup>122</sup> Daniel L. Brenner, *Creating Effective Broadband Network Regulation*, 62 FED. COMM. L. J. 13, 61 (2010).

<sup>123</sup> The open Internet discussion grew out of the Commission’s deregulation of broadband. The Commission began deregulation in 2002; in 2003, the first works discussing the need for network neutrality were published. In 2005, shortly after the Wireline Broadband Order and the Supreme Court’s decision in *Brand X*, the Commission adopted four principles of open networks, principles that would later become the foundation of the Commission’s Open Internet policy. Conversely, in Europe, the net neutrality discussion is “still at an early stage,” because Europe’s broadband market has never been deregulated as America’s has. Thus, in Europe, competitive market forces create an neutral environment as providers have incentives to offer open networks lest consumers switch to more open competitors. See Tim Wu, *Network Neutrality, Broadband Discrimination*, 2 J. OF TELECOMMS. AND HIGH TECH. L. 141 (2003), available at <http://ssrn.com/abstract=388863>; Fed. Comm’n Comm’n, Policy Statement, GN Docket No. 00-185, at ¶4 (2005), available at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-05-151A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-05-151A1.pdf); Neelie Kroes, European Commissioner for Digital Agenda, Net Neutrality in Europe, Address at the ARCEP Conference (Apr. 13, 2010), available at <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/10/153> (“This debate [over net neutrality] is still at an early stage in Europe. This is probably because our regulatory framework and the competitive investments that it fostered meant that we have not been so immediately confronted with these tough choices as in some other jurisdictions. Of course, we need to anticipate potential problems. However, as we do so, we must also avoid over-hasty regulatory intervention.”).

<sup>124</sup> NPRM, *supra* note 1, at ¶¶ 92, 104, 119.

network,<sup>125</sup> promote competition,<sup>126</sup> and require providers to state their charges, classifications, practices and regulations.<sup>127</sup>

Under Title II, it is unlawful for a common carrier to “make any unjust or unreasonable discrimination in charges, practices . . . or services for . . . like communication service, directly or indirectly, by any means or device, or to make or give any undue or unreasonable preference or advantage to any particular person, class of persons, or locality, or to subject any particular person, class of persons, or locality to any undue or unreasonable prejudice or disadvantage.”<sup>128</sup>

The Act defines a common carrier as “any person engaged as a common carrier for hire, in interstate or foreign communication by wire or radio or interstate or foreign radio transmission of energy.”<sup>129</sup> The Commission held, both in the Cable Modem Order and the Wireline Broadband Order, that the services of wireline and cable broadband Internet access providers “are unquestionably ‘wire communications’ as defined in [the Act].”<sup>130</sup> Further, in its Wireless Broadband Order, the Commission held that “wireless broadband Internet access service, offered using mobile, portable or fixed technologies, is ‘interstate . . . communications by radio.’”<sup>131</sup>

Thus, wireline, cable, and wireless access providers may be held to common carrier standards. They may not give undue advantage or impose a disadvantage in terms of access to content,

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<sup>125</sup> 47 U.S.C. § 201(a) gives the Commission the authority to require telecommunications service providers to allow consumers, as well as other providers, access to the network. Any practice the service provider implements in providing that access must be “just and reasonable.” Section 202(a) prohibits communications providers from engaging in unjust or unreasonable discrimination in, among other things, charges, practices, and services for or in connection with like communication services. Section 202(a) also prohibits carriers from giving undue or unreasonable preferences to any particular person, class of persons, or locality.

<sup>126</sup> In 47 U.S.C. § 1302, Congress has directed the Commission to encourage the deployment of advanced telecommunications capability to all Americans by using, among other tools, “measures that promote competition in the local telecommunications market.”

<sup>127</sup> § 203(a).

<sup>128</sup> § 201(a).

<sup>129</sup> § 153(10).

<sup>130</sup> Wireline Broadband Order, *supra* note 22, at ¶ 110. *See also* Cable Modem Order, *supra* note 23, at ¶ 7 (concluding that cable modem service is an interstate information service).

<sup>131</sup> Comments of Google Inc., *In re* Preserving the Open Internet Broadband Industry Practices, GN Docket No. 09-191, WC Docket No. 07-52, at 44 (filed Jan.14, 2010), *available at* <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020378725> (citing Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks, Declaratory Ruling, 22 F.C.C.R. 5901, ¶ 36 (2007)).

access to applications or service, access to network devices, and access to competition. Further, they may not engage in unreasonable discrimination against lawful Internet content, applications, and services.

## **2. The Six Principles Enumerated in the Commission’s Notice Fit Within the Ambit of Title II Regulation.**

The Commission’s six proposed principles codify the underlying thrust of Title II’s common carrier regulation. The principles mandate that consumers be allowed: first, to send and receive the lawful content of their choice;<sup>132</sup> second, to run applications and use services of their choice;<sup>133</sup> and third, to connect their choice of non-harmful devices to the network.<sup>134</sup> These principles are fundamentally anti-discrimination provisions, typical of the kinds of prohibitions historically implemented under Title II.<sup>135</sup> Further, the fourth principle mandates access to competition among network providers,<sup>136</sup> and is the logical application of common carrier regulation to modern telecommunications networks. By adopting the fourth principle, the Commission is following Congress’ directive to promote competition.

Moreover, the fifth principle requires access providers to treat all content, applications and services in a nondiscriminatory manner,<sup>137</sup> and is simply a restatement of Title II’s restrictions on discrimination.<sup>138</sup> The Commission acknowledged this in the Notice of Proposed Rulemaking, and sought comment on what standard would be appropriate.<sup>139</sup> The Commission “propose[d] a

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<sup>132</sup> NPRM, *supra* note 1, at ¶ 92.

<sup>133</sup> *Id.*

<sup>134</sup> *Id.*

<sup>135</sup> For example, the Commission has long held that treating identical telecommunications services differently can be discrimination in violation of § 202(a). *See In re Western Union Tel. Co.*, 287 F.C.C.2d 515 (1971). The Commission has also historically prohibited bans on third-party devices that do not harm the telecommunications network. *See In re Carterfone*, 13 F.C.C.2d 420 (1968); 47 C.F.R. § 68 (codifying the standards for connecting lawful devices to a telecommunications network).

<sup>136</sup> NPRM, *supra* note 1, at ¶ 92.

<sup>137</sup> *Id.* ¶ 104.

<sup>138</sup> *See supra* note 124 and accompanying text.

<sup>139</sup> *Id.* ¶ 109 (“We note that our proposed nondiscrimination and reasonable network management rule bears more resemblance to unqualified prohibitions on discrimination added to Title II in the 1996 Telecommunications Act than it does to the general prohibition on “unjust or unreasonable discrimination” by common carriers in section

general nondiscrimination rule subject to reasonable network management and specifically enumerated exceptions . . . rather than extending that common carrier standard to broadband Internet access services.”<sup>140</sup> We agree; however, as specified below, that the Commission may apply that common carrier standard selectively, by exercising regulatory forbearance.

Lastly, the “information concerning network management and other practices,”<sup>141</sup> which the sixth principle requires providers to disclose, is precisely the kind of information providers are required to disclose under Title II. Title II’s transparency requirements “ensure the ability of users and information providers to seamlessly and transparently transmit and receive information between and across telecommunications networks.”<sup>142</sup> This requirement “recognizes that information services travel via telecommunications networks,” and regulates “[i]nterconnection standards for those networks [that] can shape the information services markets that they support.”<sup>143</sup> Moreover, the Commission’s goals in requiring transparency and disclosure not just to users but also to content, application, and service providers is consistent with *Computer III*’s goals for an open network architecture.<sup>144</sup>

Thus, the six principles at the heart of the Commission’s Open Internet policy statement are fundamentally based in Title II regulation, indicating that the goals of the Commission are consistent with regulation under Title II. Therefore, the reality of the circumstances, not the goals of the Commission, has changed. The Commission has traditionally regulated telecommunications service providers to prevent discrimination against consumers and other providers, promote competition, and ensure that information regarding providers’ charges, classifications, practices and regulations are available to the public. Reclassifying Internet

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202(a) of the Act. We seek comment on whether an “unjust or unreasonable discrimination” standard would be preferable to the approach we propose.”)

<sup>140</sup> *Id.*

<sup>141</sup> *Id.* ¶ 119.

<sup>142</sup> 47 U.S.C. § 256(a)(2) (2006).

<sup>143</sup> Kevin Werbach, *Off the Hook*, 95 CORNELL L. REV. 101 (2010).

<sup>144</sup> See NPRM, *supra* note 1, at ¶ 127 (noting that “the comparably efficient interconnection (CEI) and open network architecture (ONA) rules the Commission adopted in Computer III [might] provide a useful guide in developing disclosure requirements” in the context of the Commission’s transparency requirement).

access providers as communications service providers would allow the Commission to continue to promote those policies in response to the changed nature of modern telecommunications.

### **E. The Commission Should Exercise Some Regulatory Forbearance in Applying Title II Requirements to Access Providers.**

If the Commission reclassifies “broadband access . . . as a Title II telecommunications service, [the Commission] would remain free to forbear from enforcing any regulation to help promote competition. . . .”<sup>145</sup> One of “[t]he primary benefit[s] of reclassification . . . is that [the Commission] could impose interconnection requirements (and other access guarantees) with more clear legal authority.”<sup>146</sup> In the early days of the Internet’s development, Internet access providers were allowed to connect to the telephone company’s infrastructure, and the telephone company could not discriminate by favoring its own traffic as opposed to the provider’s traffic, thus allowing “a proliferation of independent ISPs that competed to offer dial-up service through the telephone facilities.”<sup>147</sup> This proliferation occurred because of the Title II requirements by which telephone companies were bound.<sup>148</sup>

Section 256 of the Communications Act requires the Commission “to promote nondiscriminatory accessibility by the broadest number of users and vendors of communications products and services to public telecommunications networks used to provide telecommunications services.” In addition the Commission is required “to ensure the ability of users and information providers to seamlessly and transparently transmit and receive information between and across telecommunications networks.”<sup>149</sup> These interconnection principles are good guidelines for

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<sup>145</sup> John Blevins, *A Fragile Foundation - The Role of "Intermodal" and "Facilities-Based" Competition in Communications Policy*, 60 ALA. L. REV. 241, 288 (2009).

<sup>146</sup> *Id.*

<sup>147</sup> Catherine Sandoval, *Disclosure, Deception, and Deep-Packet Inspection: The Role of the Federal Trade Commission Act’s Deceptive Conduct Prohibitions in the Net Neutrality Debate*, 78 FORDHAM L. REV. 641, 653 (2009).

<sup>148</sup> See e.g. Susan Crawford, *The Internet and the Project of Communications Law*, 55 UCLA L. REV. 359, 372 (2007) (noting that common carrier regulations caused the telephone companies to “provide flat-rate, dial-up access via a host of Internet service providers (ISPs)”); Sandoval, *supra* note 147, at 652 (noting the common carrier regulations “forbade discrimination by the [telephone companies] against traffic passing through the telephone network including . . . Internet traffic.”).

<sup>149</sup> 47 U.S.C. § 256 (2006).

requiring a system of interconnection. Interconnection should be required of facilities-based carriers, whether wireless or wireline, in order to ensure robust competition and greater innovation.<sup>150</sup> The possibility of connection would lead to the development of new ways to offer Internet access, as well as ways to create faster, more reliable connections. With Title II reclassification of broadband access, however, the Commission should forbear from applying interconnection principles to non-facilities based access providers.<sup>151</sup>

Title II-type nondiscrimination rules would prevent a provider from favoring its own content over that of another provider and would forbid disparate treatment of various types of Internet traffic, much like the common carrier requirements to which the telephone companies have been subjected for decades.<sup>152</sup> Nondiscrimination rules from Title II should also be applied to Internet access providers in order to protect consumers and innovators from unreasonable content blocking.<sup>153</sup>

Transparency is another key Title II requirement that should be required of Internet access providers. Transparency will best effectuate the reasonable network management principles proposed below and will ensure that there is a check on Internet access providers' actions regarding network management.<sup>154</sup> Furthermore, the principles of transparency will better protect consumers from unreasonable network management and will provide both the Commission and consumers with the knowledge necessary to investigate network management practices.<sup>155</sup>

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<sup>150</sup> See generally Susan Crawford, *The Radio and The Internet*, 23 BERKELEY TECH. L. J. 993, 954 (2008) (contrasting the closed-world of cellular phones and land telephones that has not led to much innovation, and the original open Internet model which has helped innovation thrive and flourish).

<sup>151</sup> Non-facilities based Internet access providers do not own the pipes, so they should not be regulated as the owners of the pipes for interconnection purposes.

<sup>152</sup> See generally Sandoval, *supra* note 147, at 652; Crawford, *supra* note 148, at 372.

<sup>153</sup> See generally Comments of PIC, *supra* note 13, at 28; Comments of Free Press, *In re Preserving the Open Internet Broadband Industry Practices*, GN Docket No. 09-191, WC Docket No. 07-52, at 74 (filed Jan. 14, 2010), available at <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020378751> [hereinafter Comments of Free Press]

<sup>154</sup> See Comments of PIC, *supra* note 13, at 39.

<sup>155</sup> See *id.* at 63; Comments of Free Press, *supra* note 153, at 114; see also Comments of BBIC and BRC, *supra* note 2, at 6–7.

Finally, the Commission should not rely on Sherman Act antitrust enforcement as a means to enforce nondiscrimination. Recently, the Supreme Court held that if facilities-based Internet access providers have no statutory duty to deal (i.e., interconnect) with competitors, they may refuse to deal at their own discretion, so long as this complies with antitrust laws.<sup>156</sup> Since there is no antitrust-based duty for facilities-based providers to deal or interconnect, a facilities-based provider has no antitrust-based duty not to discriminate against non-facilities-based providers.<sup>157</sup> While there is no nondiscrimination duty in antitrust laws, however, the duty does “arise... from FCC regulations.”<sup>158</sup>

The Court further held that decisions regarding whether a company must deal with a competitor are best left to the regulatory agency that oversees the industry and to the courts.<sup>159</sup> Therefore, while antitrust law is not sufficient to oblige access providers to allow interconnection, it is the duty of the Commission to regulate interconnection and duties to deal upon providers.<sup>160</sup>

#### **IV. REASONABLE NETWORK MANAGEMENT**

While the NPRM correctly identifies the need to develop a standard for determining reasonable network management,<sup>161</sup> the tests proposed by the Commission and by various groups submitting public comments lack sufficient specificity and practical consideration. Commenters therefore propose a two-prong test for determining reasonable network management. Under this test, described in further detail below,<sup>162</sup> an Internet access provider seeking to implement a network

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<sup>156</sup> *Pacific Bell Tel. Co. v. Linkline Communc’ns, Inc.*, \_\_ U.S. \_\_, 129 S. Ct. 1109, 1119 (2009).

<sup>157</sup> *See id.* (“But a firm with no duty to deal . . . has no obligation to deal under terms and conditions favorable to its competitors.”).

<sup>158</sup> *Id.* (emphasis added).

<sup>159</sup> *Id.* at 1121 (“The problem should be deemed irremedia[ble] by antitrust law when compulsory access requires the court to assume the day-to-day controls characteristic of a regulatory agency.”).

<sup>160</sup> *Id.*

<sup>161</sup> In the NPRM, the Commission noted that “[r]easonable 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; (iii) prevent the transfer of unlawful content; or (iv) prevent the unlawful transfer of content; and (b) other reasonable network management practices. NPRM, *supra* note 1, at ¶ 135.

<sup>162</sup> *See infra* discussion at Part IV.C.

management practice must prove to the Commission that its purpose is valid and that the means are properly tailored to achieving that purpose.

### **A. The Role of Network Management**

Network management involves the methods employed by Internet access providers to make their networks run efficiently. “Network management refers to the activities, methods, procedures, and tools that pertain to the operation, administration, maintenance, and provisioning of networked systems.”<sup>163</sup> Network management is used as a “tool for proactively managing the network and collecting alarms and alerts at threshold levels that are below the ‘Houston, we’ve got a problem’ level.”<sup>164</sup>

The term “network management” encompasses all tools network managers use, including the setup and design of the network itself. Common tools include schedulers that allocate resources and balance traffic flow, and timers that redistribute management resources from idle data sessions.<sup>165</sup> Other management tools include deep packet inspection,<sup>166</sup> reset injection,<sup>167</sup> throttling (in which transmission is sped up or slowed down), and bandwidth caps.<sup>168</sup> While network management practices are often used in a nondiscriminatory manner to keep the network functioning, they can also be used in discriminatory ways and for illegitimate

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<sup>163</sup> ALEXANDER CLEMM, NETWORK MANAGEMENT FUNDAMENTALS 8 (Cisco Press) (2006).

<sup>164</sup> REGIS J. BATES, BROADBAND TELECOMMUNICATIONS HANDBOOK 764 (2002).

<sup>165</sup> See Comments of Ericsson Inc., *In re* Preserving the Open Internet Broadband Industry Practices, GN Docket No. 09-191, WC Docket No. 07-52, at 12-15 (filed Jan. 14, 2010), available at <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020373538> [hereinafter Comments of Ericsson].

<sup>166</sup> See Michael Kassner, *Deep Packet Inspection: What You Need to Know*, TECHREPUBLIC, July 28, 2008, <http://blogs.techrepublic.com.com/networking/?p=609> (noting this involves examination of the information inside data packets).

<sup>167</sup> See Seth Schoen, *Detecting Packet Injection: A Guide to Observing Packet Spoofing by ISPS*, ELECTRONIC FRONTIER FOUNDATION, available at [http://www.eff.org/files/packet\\_injection.pdf](http://www.eff.org/files/packet_injection.pdf) (noting this occurs when ISPs inject fraudulent or spoofed packets to users).

<sup>168</sup> Various fee schemes can also be considered methods of network management.

purposes.<sup>169</sup> Commenters thus propose a framework to determine when network management is “reasonable” and therefore proper.

## **B. Other Commenters’ Suggestions for Determining Reasonable Network Management**

Several commenters, in both the public interest and private sectors, express concern over the Commission’s broad definition of reasonable network management, which includes a catch-all for “other network management practices.”<sup>170</sup> Public interest commenters in particular urge a more confined definition that reflects the technical origins of network management, and would consider legal considerations (such as lawfulness of content or transmissions) only as part of a separate framework based on the needs of law enforcement and public safety.<sup>171</sup>

Public Interest Commenters (PIC) urge the Commission to remove non-technical aspects and broad catchall language from the definition of reasonable network management, and to consolidate “scattered references” to reasonable network management in a single section entitled “Exceptions for Reasonable Network Management.”<sup>172</sup> PIC also advocate a strict scrutiny approach, under which an Internet access provider must show that a network management practice furthers a legitimate purpose intended to ensure the proper functioning of the network,

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<sup>169</sup> Some scholars argue that the Commission is not in the best position to determine and regulate what is “reasonable network management.” See Brenner, *supra* note 122, at 24–40. However, since private entities performing network management have proven to regulate in discriminatory manners for illegitimate purposes, the natural and neutral regulator of network management should be the Commission.

<sup>170</sup> See, e.g., Comments of PIC, *supra* note 13, at 37; Comments of Free Press, *supra* note 153, at 85–86 (noting the proposed definition is “circular, ambiguous, and incomplete, and without further definition will create loopholes and result in future errors in policymaking”); Comments of Adtran, Inc., *In re* Preserving the Open Internet Broadband Industry Practices, GN Docket No. 09-191, WC Docket No. 07-52, (filed Jan. 14, 2010), *available at* <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020376957> [hereinafter Comments of Adtran] (noting the Commission’s “vague and circular definition is not helpful for divining lawful network management practices”).

<sup>171</sup> See, e.g., Comments of PIC, *supra* note 13, at 37 (cautioning against allowing providers to claim censorship and copyright enforcement as network management practices); Comments of Electronic Frontier Foundation, *In re* Preserving the Open Internet Broadband Industry Practices, GN Docket No. 09-191, WC Docket No. 07-52, at 11-12 (filed Jan. 14, 2010), *available at* <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020371860> [hereinafter Comments of EFF] (noting network management is “generally understood to mean practices that promote the proper technical functioning of an ISP’s network, not efforts to determine whether any particular subscriber activity violates copyright law”).

<sup>172</sup> Comments of PIC, *supra* note 13, at 39. PIC believe this consolidation would allow for more consistent application of the reasonable network management exception and remove ambiguity. *Id.*

and that it is narrowly tailored to address that purpose.<sup>173</sup> Free Press also disagrees with the Commission’s list of reasonable practices.<sup>174</sup> Free Press advocates a two-pronged standard under which network management practices are reasonable “when they advance a public interest purpose (supported by evidence that such a purpose is not hypothetical in the context of the practice), and when they use means that are geographic, temporal, and proportional with respect to that purpose.”<sup>175</sup>

Several private entities, however, argue against codifying the Internet principles. Adtran, Cisco, and Nokia Siemens, among others, worry that bright-line rules create too rigid an approach.<sup>176</sup> Adtran proposes adoption of a disclosure obligation that provides consumers access to information regarding Internet access provider offerings.<sup>177</sup> Cisco proposes a flexible approach that allows Internet access providers to evolve in ways that best serve the interests of users and subjects abuse to a case-specific analysis.<sup>178</sup> Nokia Siemens notes that if the Commission were to ultimately promulgate rules, the rules should be interpreted flexibly.<sup>179</sup>

### **C. Commenters’ Proposed Framework for Determining Reasonable Network Management**

While the NPRM and several public commenters correctly identify the need to develop a standard for determining reasonable network management, Commenters propose a more specific and more practicable framework. Under this framework, the Commission should evaluate an Internet access provider seeking to implement a network management practice based on a two-

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<sup>173</sup> *Id.* at 35.

<sup>174</sup> *See* Comments of Free Press, *supra* note 153, at 5 (“Rather than creating a prescriptive list of reasonable network management practices, we recommend a standards-based test of simple factors or criteria to judge reasonableness.”).

<sup>175</sup> Comments of Free Press, *supra* note 153, at 83–84.

<sup>176</sup> Comments of Adtran, *supra* note 170, at 14; Comments of Cisco Systems, Inc., *In re* Preserving the Open Internet Broadband Industry Practices, GN Docket No. 09-191, WC Docket No. 07-52, at 1 (filed Jan. 14, 2010), *available at* <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020374147> [hereinafter Comments of Cisco]; Comments of Nokia Siemens Networks US LLC, *In re* Preserving the Open Internet Broadband Industry Practices, GN Docket No. 09-191, WC Docket No. 07-52, at 3 (filed Jan. 14, 2010), *available at* <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020377717> [hereinafter Comments of Nokia Siemens].

<sup>177</sup> *See* Comments of Adtran, *supra* note 170, at 14.

<sup>178</sup> Comments of Cisco, *supra* note 176, at 3.

<sup>179</sup> Comments of Nokia Siemens, *supra* note 176, at 10.

part test. First, the Commission must determine whether the practice at issue qualifies as network management, which should be defined as any technical practice used by an Internet access provider that impacts an individual or entity's Internet access.<sup>180</sup> Second, if the practice qualifies as network management, the Commission should evaluate the reasonableness of the practice in light of the circumstances. In evaluating reasonableness, the Commission must consider: (a) the type of purpose or interest served by the network management practice, and (b) whether the method(s) used to achieve that purpose are substantially related to advancing that purpose and do not unnecessarily disturb legitimate user behavior. In order to show that its claimed purpose is real and valid, a provider must present objective data showing that there is an immediate necessity and that economic solutions alone would not reasonably address the need.

Networking device manufacturers, Internet access providers, and broadband content providers are likely to take issue with the evaluation process proposed above, based on their need to rapidly implement certain practices.<sup>181</sup> For this reason, we propose an emergency exception allowing a provider to implement a technical practice in response to a security or virus threat without first submitting the practice to evaluation. While these emergency measures would be presumptively reasonable, they remain subject to challenge under the above provisions. If a court or the Commission should determine that such emergency procedures comprise an abuse by the Internet access provider, the Commission should retain the right to impose monetary sanctions in an amount deemed equitable, and such abusive practices should be terminated. These sanctions would serve to deter providers from attempting to invoke the emergency exception as a loophole.

The two guidelines for reasonableness under this framework acknowledge Free Press's suggestions for determining reasonableness based on purpose and means, and for establishing

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<sup>180</sup> "Technical practices" should be defined as those that "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." Comments of PIC, *supra* note 13, at 38. Prioritizing *control traffic*, for instance, would be "well within" the bounds of reasonable network management. *See id.* at 46–47.

<sup>181</sup> *See, e.g.*, Comments of Comcast Corporation, *In re Preserving the Open Internet Broadband Industry Practices*, GN Docket No. 09-191, WC Docket No. 07-52 (filed Jan. 14, 2010), *available at* <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020375772> [hereinafter Comments of Comcast]. *See also* Richard S. Whitt, *Evolving Broadband Policy: Taking Adaptive Stances to Foster Optimal Internet Platforms*, 17 *COMMLAW CONSPICUOUS* 417, 463 (2009) (noting innovation-related concerns arising in the context of regulating prioritization deals).

threshold criteria to evaluate the legitimacy of network management practices.<sup>182</sup> Commenters agree with Free Press that including a “purpose” standard and requiring objective data allows for flexibility without permitting anticompetitive purposes or those that intentionally harm innovation or consumer choice.<sup>183</sup> Charging the Commission to examine a provider’s claimed purpose for network management addresses the common sentiment that a valid purpose is one that serves the public interest rather than solely private interests.<sup>184</sup>

Further, while this test urges a technical definition of network management, it allows the Commission to separate typical network management functions from those that block, degrade, or prioritize data based on source, application, or content.<sup>185</sup> It does not implicate the “back door” concerns expressed by commenters such as Sony.<sup>186</sup> Sony urges the Commission to include as “network management” service and pricing schemes, noting that “mechanisms like download caps, tiered pricing structures, overage charges, or metered billing may have the effect, or even the purpose, of limiting consumer use of bandwidth intensive applications, like Internet-delivered video.”<sup>187</sup> This argument, however, fails to acknowledge that such practices could not be invoked as an exception to the nondiscrimination rule, and thus would violate the Commission’s proposed nondiscrimination policy, if adopted, in any event.

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<sup>182</sup> See Comment of Free Press, *supra* note 153, at 86, 91. Free Press has noted that “[a] purpose and means test that permits only proportional, public interest-measured discrimination will maintain a level playing field for both personal and commercial communications, and will sustain the Internet’s environment of innovation without permission.” *Id.* at 84. Free Press has also pointed out that Comcast, Canada, and Japan all apply a two-prong test for purpose and means. *Id.* at 91. In the Comcast Order, the Commission held that reasonable network management practices must further a critically important interest and be narrowly or carefully tailored to serve that interest. *Id.*

<sup>183</sup> See *id.* at 92.

<sup>184</sup> See, e.g., *id.* at 94. Under Free Press’s formulation of the purpose test, claims of “congestion management,” harmful traffic, and unlawful traffic could constitute valid purposes. *Id.* at 92–94.

<sup>185</sup> See Comments of PIC, *supra* note 13, at 38 (noting performance of typical 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, applications, or content”).

<sup>186</sup> See Comments of Sony Electronics, *In re Preserving the Open Internet Broadband Industry Practices*, GN Docket No. 09-191, WC Docket No. 07-52, at 7 (filed Jan. 14, 2010), *available at* <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020375966> [hereinafter Comments of Sony] (noting the Commission’s definition “fails to account for practices that do not involve constraints on the flow of traffic across a service provider per se, but even so deter consumer usage of, and thus demand for, broadband Internet access”).

<sup>187</sup> *Id.* at 6.

Because the Commission will find a purpose reasonable only where it is valid and necessary to network management, the test also addresses commenters' concerns that providers might try to invoke practices that are anticompetitive or otherwise harmful.<sup>188</sup> The purpose standard, however, does not over-limit a provider by requiring that a practice be designed to achieve *only* a stated purpose and effect.<sup>189</sup> Further, public interest groups have agreed that "[t]he Commission should not define categories or practices or purposes that are either always or never reasonable . . . ."<sup>190</sup> This framework thus reconciles concerns about "back door" practices with the need to maintain a flexible approach to network management.

Finally, this framework recognizes and comports with the notion that network management practices should never be used as a substitute for deployment of facilities and expansion of capacity.<sup>191</sup> This framework rejects an approach in which all network management practices are presumptively reasonable,<sup>192</sup> which is problematic because it would allow providers to circumvent the Commission's rules entirely through loopholes identified by various commenters. Commenters' framework, in contrast, takes a middle ground by balancing the interests of open networks with the practical need for protecting the safety and security of the networks.

#### **D. Copyright Enforcement**

Internet access providers allegedly restrict users from making high volume downloads in an effort to maximize network performance and impede the spread of online piracy and illegal downloads. These providers have the power to limit the transfer of copyrighted material if it

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<sup>188</sup> See, e.g., Comments of PIC, *supra* note 13, at 39 (noting the Commission should also "ensure that the purportedly reasonable practices are not merely a pretense to excuse anticompetitive or otherwise invidious behavior").

<sup>189</sup> *Contra id.* at 40 (proposing a test under which a practice that is reasonable must be designed to achieve "*only* the stated purpose and effect").

<sup>190</sup> See, e.g., Comments of Free Press, *supra* note 153, at 86. ("[S]uch an approach ignores most of the *factors* that determine whether an act of network management should be considered reasonable. Finally, a category system buttressed with a generic and circular concept of "reasonable" would fail to provide clarity and certainty, and would fail to protect consumers or provide flexibility to network operators.")

<sup>191</sup> Comments of PIC, *supra* note 13, at 40.

<sup>192</sup> See, e.g., Comments of Ericsson, *supra* note 165, at 22.

would violate applicable laws.<sup>193</sup> Internet access providers have used a variety of techniques that, for the most part, have served to limit the quantity of bandwidth allocated to individual subscribers.<sup>194</sup> These practices, while potentially useful, are unnecessary in this context.

The problem here lies not with the concept of thwarting illegal activity, but with the authority conferred on Internet access providers to distinguish between “lawful and “unlawful” conduct. The Commission previously suggested that Internet access providers “may *reasonably* prevent the transfer of content that is unlawful.”<sup>195</sup> It should not, however, give providers *carte blanche* authority to make these determinations. Such an allowance would upset the current balance between copyright and free speech that is struck by 17 U.S.C. § 512, and thus would chill speech.<sup>196</sup> Allowing an Internet access provider to decide the legality of a fair use would “essentially require the provider to stand in the place of a federal court,” and could result in the thwarting of legal content.<sup>197</sup>

In implementing a test for reasonable network management, the Commission should avoid “singling out of any particular content . . . for blocking or deprioritization . . . in the absence of [overt] evidence that such traffic or content was harmful.”<sup>198</sup> A packet of data that infringes

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<sup>193</sup> NPRM, *supra* note 1, at ¶ 139.

<sup>194</sup>These assorted practices ranged from “bit caps and traffic shaping” to “volume-bounded service plans or usage-sensitive pricing plans.” See The Walt Disney Company’s Ex Parte Presentation, *In re* Preserving the Open Internet Broadband Industry Practices, GN Docket No. 09-191, WC Docket No. 07-52, at 26 (filed Dec. 18, 2009) [hereinafter Comments of Disney] (citing Daniel Castro et al., The Information Technology & Innovation Foundation, *Steal These Policies: Strategies for Reducing Digital Piracy*, 8 (Dec. 2009)). While methods differ, a generally accepted method for throttling traffic occurs when ISPs “lower the priority of packets flowing to and from their heaviest users during periods of high network load.” Castro et al., at 9–10. Some pollute peer-to-peer networks by uploading corrupted files to sites that index torrent files, which discourages users from engaging in piracy by drastically slowing illegal downloads. See *id.* Alternatively, “content identification systems recognize copyrighted content” via unique digital watermarks, fingerprints, and metadata. *Id.* at 10. ISPs can track this content as data enters and exits the network. *Id.*

<sup>195</sup> NPRM, *supra* note 1, at ¶ 139 (emphasis added).

<sup>196</sup> Religious Tech. Ctr. v. Netcom On-Line Commc’n Servs., Inc., 907 F.Supp. 1361, 1383 (N.D. Cal. 1995) (holding prescreening postings for possible infringement would effectively chill free speech). The holding in *Netcom* was codified by 17 U.S.C. § 512(a). H.R. REP. 105-551. See also Comments of PIC, *supra* note 13, at 62-63.

<sup>197</sup> In 2008, researchers at the University of Washington documented hundreds of false allegations of infringement, including devices for which infringement was impossible. Comments of PIC, *supra* note 13, at 59.

<sup>198</sup> NPRM, *supra* note 1, at ¶ 137.

copyright has no greater effect on network integrity than a packet that does not. Thus, copyright enforcement is purely a legal issue with little—if any—relevance to the efficient operation of a network.<sup>199</sup>

Commenters thus agree with PIC and with EFF, who contend that copyright filtering should not be contemplated within the proposed rules,<sup>200</sup> and that copyright enforcement is not reasonable network management.<sup>201</sup> Additionally, Commenters agree with EFF that a copyright exception to the six principles creates a loophole that may excuse Internet access providers from using undisclosed, overbroad techniques that interfere with *lawful* activities, as long as the providers claim they were attempting to restrict *unlawful* ones.<sup>202</sup>

### **E. The Proposed Transparency Principle**

The NPRM formulates a proposed transparency principle as follows: “[s]ubject to reasonable network management, 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.”<sup>203</sup> Commenters support the proposed principle, which provides exceptions for trade secrets and proprietary information.

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<sup>199</sup> Comments of PIC, *supra* note 13, at 55.

<sup>200</sup> *Id.* at 53; Comments of EFF, *supra* note 171, at 10-11 (removing from the definition “(iii) prevent the transfer of *unlawful content*; or (iv) prevent the *unlawful transfer* of content”). Public Interest Commenters further note that since 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.” Comments of PIC, *supra* note 13, at 43.

<sup>201</sup> Comments of PIC, *supra* note 13, at 53-55; Comments of EFF, *supra* note 171, at 11 (noting that since the proposed regulations do not protect unlawful content, there is no need for an exception to permit ISPs to block such content).

<sup>202</sup> Comments of EFF, *supra* note 171, at 10-11 (proposing the Commission remove from the definition of reasonable network management “(iii) prevent the transfer of *unlawful content*; or (iv) prevent the *unlawful transfer* of content”). PIC note that the proposed rules would neither expand nor limit the obligations of a provider under the DMCA’s safe harbor provisions, nor alter a provider’s obligation to respond to a search warrant or civil subpoena. Comments of PIC, *supra* note 13, at 43.

<sup>203</sup> NPRM, *supra* note 1, at ¶ 119.

Comcast Corporation disagrees with Commenters' stance, stating that the proposed rule "would create a new and burdensome legal duty for network operators while failing to impose corresponding duties on other key participants in the Internet ecosystem."<sup>204</sup> While Comcast remains "committed to preserving the open Internet,"<sup>205</sup> it is unclear how the proposed transparency rule would destroy an open Internet. Commenters believe that "[g]reater transparency will give consumers the confidence of knowing that they're getting the service they've paid for, enable innovators to make their offerings work effectively over the Internet, and allow policymakers to ensure that broadband providers are preserving the Internet as a level playing field."<sup>206</sup>

The Texas Office of Public Utility Counsel (TOPUC) supports Commenters' stance on transparency, noting that "consumers should have accurate and informative information about the services being provided to them especially when 'technical capabilities and limitations of the services they purchase' have a direct impact on the availability, quality, and price of those services and products."<sup>207</sup> The Institute of Electrical and Electronics Engineers adds that creating transparency is necessary in order to properly inform consumers of their privacy decisions.<sup>208</sup> Commenters agree and believe a transparency rule that is not subject to reasonable network management will ensure greater consumer access and freedom from discrimination, which will in turn spur investment and innovation.<sup>209</sup>

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<sup>204</sup> See Comments of Comcast, *supra* note 181, at 4.

<sup>205</sup> *Id.*

<sup>206</sup> See Prepared Remarks of Chairman Julius Genachowski, The Brookings Institution, Washington, DC, Sept. 21, 2009, available at <http://www.openInternet.gov/read-speech.html>. Further, transparency "will also help facilitate discussion among all the participants in the Internet ecosystem, which can reduce the need for government involvement in network management disagreements." *Id.*

<sup>207</sup> See Comments of Texas Office of Public Utility Counsel, *In re Preserving the Open Internet Broadband Industry Practices*, GN Docket No. 09-191, WC Docket No. 07-52, at 8 (filed Jan. 14, 2010), available at <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020373868> [hereinafter Comments of TOPUC].

<sup>208</sup> See Comments of IEEE-USA, *In re Preserving the Open Internet Broadband Industry Practices*, GN Docket No. 09-191, WC Docket No. 07-52, at 13 (June 5, 2009), available at <http://fjallfoss.fcc.gov/ecfs/document/view?id=6520219422> [hereinafter Comments of IEEE-USA]. The Institute suggests that providers educate consumers on their privacy policies and practices in regards to collection, data storage, sharing, and usage. *Id.* Further, they suggest that providers would still be able to receive monetary gain through data collection even with such policies, as they can collect from consumers that allow such collection. *Id.*

<sup>209</sup> Ryan Singel, Skype, *Wireless Companies Fight To Shape Net Neutrality Regs*, WIRED, Jan. 15, 2010, <http://www.wired.com/epicenter/2010/01/skype-ctia-net-neutrality> ("More importantly, consumers will have the

## 1. Exception for Reasonable Network Management

Commenters agree with PIC, EFF, and TOPUC, among others, who contend that the transparency principle should not be subjected to an exception for reasonable network management.<sup>210</sup> Commenters agree that the Commission’s current proposal, which appears to swallow the sixth principle and proposed transparency rule, would allow network management practices affecting content to escape disclosure where an Internet access provider deems them to be reasonable.<sup>211</sup>

## 2. Exceptions for Trade Secrets and Proprietary Information

Commenters believe that with regard to the exceptions for trade secrets and proprietary information, such information would still be transparent to the government as well as to those consumers who seek to obtain such information through legal action.

## V. CONCLUSION

As discussed above, the Commission should consider reclassifying Internet access providers as telecommunications service providers. Reclassification is consistent with the Commission’s six open Internet principles. Finally, the Commission should consider adopting a two-prong test for assessing reasonable network management.

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confidence that they will be able to use devices and access content, applications, and services of their choice; that broadband access providers will not act as gatekeepers, favoring certain traffic over others; and that they will be provided sufficient information about their broadband access service to make informed choices in the broadband marketplace.”).

<sup>210</sup> Comments of PIC, *supra* note 13, at 39; Comments of EFF, *supra* note 171, at 23-25; Comments of TOPUC, *supra* note 207, at 8 (noting “it is unclear from the NPRM what ‘reasonable network management’ practices would be needed to override the need for consumers to have access to accurate information about products and service” and that “informed consumers make informed purchasing and usage decisions”). EFF urges the Commission to revise the proposal as follows: “A provider of broadband Internet access service must disclose such information concerning network management and other practices (including practices undertaken to address the needs of law enforcement, public safety or national security or homeland security authorities) as is reasonably required for users and content, application, and service providers to enjoy the protections specified in this part.” Comments of EFF, *supra* note 171, at 23-25.

<sup>211</sup> Comments of PIC, *supra* note 13, at 39.

Respectfully submitted this 26<sup>th</sup> day of 2010 by;



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BEFORE THE FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

April 26, 2010

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

**Addendum to the  
Reply Comments of the BroadBand Institute of California  
and the  
Broadband Regulatory Clinic**

This reply comment of the **BroadBand Institute of California (BBIC)** and the **Broadband Regulatory Clinic (BRC)** addresses the reclassification and regulation of broadband providers under Title II. For an in depth discussion on how wireless broadband providers should be regulated, please see the reply comment of Professor Catherine J.K. Sandoval filed in this proceeding. Professor Sandoval's reply comment discusses the FCC's jurisdiction over wireless broadband providers under Title III and its authority to regulate the use of the radio spectrum. Professor Sandoval is a member of the faculty at the Santa Clara University, School of Law, and Associate Director of the **BBIC**.