



## EXECUTIVE SUMMARY

The Commission's *NPRM* elicited comments representing a wide array of interests and stakeholders from the Internet community. While commenters certainly did not see eye-to-eye on every issue, the comments made clear that all of the interested parties – broadband Internet service providers (“ISPs”) and content producers, application and service providers and consumers, policymakers and academics – share the Commission's goal of “preserving an open Internet” that continues to grow, thrive, and welcome innovation and private investment throughout the Internet ecosystem.

Importantly, there was broad consensus on a number of key principles that should shape the Commission's approach to any rules it may adopt in this proceeding. For example, there was near-universal acceptance that private investment is vital for achieving our Nation's broadband goals; that the Internet must remain an unrestricted and open platform where users can access the lawful content, applications, and services of their choice; and that any Commission intervention in the marketplace should be limited.

There also was substantial agreement on several specific recommendations for improving the draft rules proposed in the *NPRM*.

- There was widespread consensus that third-party technical groups, such as standards-setting bodies like the Internet Engineering Task Force, can play an important role in helping the Commission understand, refine, and address the various technical issues underlying key policy determinations. By tapping into this expertise and experience on the technical and commercial issues companies in the Internet ecosystem face every day, the Commission can leverage these groups to provide consensus-based resolutions and advice on and independent analysis of important questions and details. Several commenters suggested developing a government-led “co-regulatory” solution under which the Commission could leverage the expertise of one or more of these groups to implement whatever policies or rules the Commission may adopt. This would build on the successful history of industry collaboration that has driven innovation and investment throughout the Internet ecosystem and would also promote Commission processes that are more efficient, transparent, fact-based, and data-driven.
- A diverse group of commenters noted that the rules cannot focus too narrowly on Internet service providers as the only potential “gatekeepers,” but should account for the interdependent nature of the Internet ecosystem and the fact that application, operating system, and other providers who are part of the Internet ecosystem may also be potential “gatekeepers.”
- Commenters generally agreed that managed services may deliver significant public interest benefits – such as achieving several of the “national purposes” identified in the Recovery Act (and explained in greater detail in the National Broadband Plan) – if they are allowed to develop and mature without being subject to preemptive regulatory burdens. Commenters concluded that managed services could exist without affecting a robust, open Internet service; that the ability to offer managed services could be important to the business case for further investment in broadband networks; and that

there is no evidence that the Commission needs to regulate managed services to keep the Internet robust, open, and amenable to innovation and investment. In fact, the evidence demonstrates that companies that use their networks to deliver multiple services continue to increase the speed and capacity of their networks. In light of this evidence, the Commission should refrain from regulating managed services.

- Many commenters said that, if the Commission ultimately decides to adopt rules, such rules should be narrowly tailored to prevent the harms that the Commission identifies without precluding the kinds of innovation and experimentation that are likely to provide substantial public interest benefits. In that vein, the Commission should not adopt an *absolute* ban on “discrimination.” Many commenters recognize that an absolute ban on discrimination would prohibit “socially beneficial discrimination” and stifle innovation and investment. A more flexible and realistic standard, such as one that focuses on “unreasonable and anticompetitive” discrimination, would give the Commission sufficient authority to monitor practices that create a meaningful risk to innovation and openness on the Internet and to act swiftly to address those practices, while giving network providers and others the flexibility to innovate and experiment with technologies and business models.
- Like most commenters, Comcast supports disclosing to consumers the information they need to make informed decisions about their Internet service. The proposals in the *NPRM* to improve consumer disclosures were widely well-received in the comments. However, as a number of commenters noted, the Commission has multiple open proceedings examining these questions, and the National Broadband Plan recommends launching several more proceedings. The Commission should address issues of disclosure in a single, comprehensive proceeding dedicated to those questions. Moreover, the Commission should ensure that a consumer’s right to know also extends to applications and the effects such applications have on the consumer’s computer equipment and use of the Internet. In addressing such issues, the Commission should collaborate in the first instance with industry and other stakeholders to develop a set of consumer disclosure best practices.

Although the comments reflected substantial agreement on a number of issues, significant questions remain about whether the Commission should adopt new regulations. The initial round of comments provided no evidence, data, or facts supporting adoption of the proposed rules. In fact, the record, replete with the kind of data and evidence upon which this Commission is committed to rely, shows that the Internet continues to grow; that the marketplace for Internet content, applications, and services continues to thrive; and that competition between and among facilities-based broadband ISPs continues to drive investment and innovation in broadband networks to the benefit of consumers.

Comcast remains committed to operating our High-Speed Internet service in a manner consistent with the four openness principles of the *Internet Policy Statement* while engaging in reasonable network management. This commitment is unwavering, regardless of whether the Commission adopts any rules in this proceeding.

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BEFORE THE  
Federal Communications Commission  
WASHINGTON, D.C.

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

**REPLY COMMENTS OF COMCAST CORPORATION**

Comcast Corporation (“Comcast”) hereby responds to comments filed in response to the above-captioned Notice of Proposed Rulemaking (“*NPRM*”).<sup>1</sup>

**I. INTRODUCTION**

Hundreds of organizations (and thousands of individuals) filed comments that demonstrated a significant level of agreement on a number of key concepts and principles. Broadband Internet service providers (“ISPs”) and content producers, application and service providers and consumers, policymakers and academics, all clearly share the goal of “preserving an open Internet” that continues to grow, thrive, and welcome innovation and investment throughout the Internet ecosystem. It is this type of collaboration that has been instrumental to the growth and development of the Internet. Maintaining that collaborative atmosphere and practice is essential. In that spirit, as the Commission looks for a way forward in this

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<sup>1</sup> See *In re Preserving the Open Internet; Broadband Industry Practices*, Notice of Proposed Rulemaking, 24 FCC Rcd. 13064 (2009) (“*NPRM*”).

proceeding, these comments place primary emphasis on those areas of substantial agreement. Where there are disagreements, we seek that same collaboration in addressing them.

This spirit of constructive collaboration is exemplified by the joint letter submitted by Google and Verizon (the “Google-Verizon Joint Letter”).<sup>2</sup> They noted, and virtually all commenters agreed on, a number of key principles that should shape the Commission’s approach, including:

- Private investment is vital for achieving our Nation’s broadband goals, and public policies should continue to encourage and incent investment and innovation.<sup>3</sup>
- The Internet must remain an unrestricted and open platform where people can access the lawful content, applications, and services of their choice.<sup>4</sup>
- Any Commission intervention in the marketplace should be surgical and swift.<sup>5</sup>

Flowing from these principles, there are three key points upon which a significant cross-section of commenters agree.

First, there is widespread consensus that third-party technical groups, and particularly standards-setting bodies like the Internet Engineering Task Force (“IETF”), can play an

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<sup>2</sup> See Joint Letter of Google and Verizon, GN Docket No. 09-191, WC Docket No. 07-52 (Jan. 14, 2010) (“Google-Verizon Joint Letter”). As Arts+Labs recently noted, “As the time grows closer for a Commission decision on proposed rules to preserve an Open Internet, . . . serious participants in the policy arena are narrowing their differences on key issues.” Arts+Labs Reply Comments, GN Docket No. 09-191, WC Docket No. 07-52, at 1 (Apr. 5, 2010). Unless otherwise noted, all citations to comments herein are to comments filed in GN Docket No. 09-191 and WC Docket No. 07-52 on or about January 14, 2010.

<sup>3</sup> See Google-Verizon Joint Letter at 2-3. This was also a central pillar of the Joint Statement on Broadband adopted by the Commission: “Continuous private sector investment in wired and wireless networks and technologies, and competition among providers, are critical to ensure vitality and innovation in the broadband ecosystem and to encourage new products and services that benefit American consumers and businesses of every size.” *Joint Statement on Broadband*, GN Docket No. 10-66, FCC 10-42 ¶ 3 (Mar. 16, 2010).

<sup>4</sup> See Google-Verizon Joint Letter at 2.

<sup>5</sup> See *id.* at 4, 6. This principle was echoed in the National Broadband Plan, which recognized that any government role in the broadband ecosystem must be “limited.” *Connecting America: The National Broadband Plan 5* (Mar. 16, 2010) (“National Broadband Plan”), at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-296935A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296935A1.pdf) (“As a result, the role of government is and should remain limited.”).

important role in helping the Commission understand, refine, and address the various technical issues underlying the policy issues of concern for the Commission. The Google-Verizon Joint Letter specifically referenced the idea of a co-regulatory framework under which a third-party organization (or organizations) could play a number of roles;<sup>6</sup> this idea has great merit, and we would welcome the opportunity to participate in such a framework.

Second, a diverse group of commenters noted that, if the Commission’s goal is to “preserve an open Internet,” it must not focus solely on broadband ISPs as potential “gatekeepers.” The record suggests that other actors in the Internet ecosystem may have both the incentive and means to act as “gatekeepers.” This is by no means a call for expansive regulation of the Internet ecosystem. Quite the contrary; this is a call for a clear-eyed view of where Internet “openness” can be affected, whether by the actions of private players or the inadvertent actions of the government. It is also a call for policies flexible enough to allow all content, application, and service providers – including broadband ISPs – to experiment with different technologies and business models. Internet freedom means that parties throughout the ecosystem must be able to experiment and compete, and only where there are real, non-conjectural threats to that freedom should policymakers consider stepping in.

Third, commenters generally agreed that managed services may deliver significant public interest benefits if they are allowed to develop and mature without being subject to preemptive regulatory burdens. Managed services can encourage investment in broadband networks and help achieve the “national purposes” set forth for broadband in the Recovery Act, and discussed in detail in the National Broadband Plan. Imposing regulatory burdens on managed services is

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<sup>6</sup> See Google-Verizon Joint Letter at 4-7.

premature and unnecessary and risks stifling the development of those services and the benefits that would accrue from them. The record shows that regulation of managed services is not necessary to advance the Commission's goal of protecting and preserving an open Internet.

While there are substantial policy agreements, there remain significant questions about whether the Commission should, or even can, adopt the regulations proposed in this proceeding.<sup>7</sup> Proponents of regulation have had every opportunity to build a record showing that there is a need for such rules, and they have not done so. To the contrary, the record, replete with the kind of data and evidence upon which this Commission is committed to rely, shows that the Internet continues to grow; that the marketplace for Internet content, applications, and services continues to thrive; and that competition between and among facilities-based broadband ISPs continues to drive investment and innovation in the network to the benefit of consumers.

After nearly a decade of debate, the record still fails to show any significant harm to competition or consumers that can only be addressed by new rules. Nevertheless, and again in a spirit of collaboration, the record offers additional refinements to the rules the Commission has proposed, in the event that the agency establishes the record needed to proceed.

Finally, the U.S. Court of Appeals for the D.C. Circuit's recent decision in *Comcast v. FCC* confirms that the Commission must establish a clear statutory basis of authority for its proposed rules. While some parties may contend otherwise, the decision does not preclude the Commission from adopting open Internet rules; however, it does underscore that the

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<sup>7</sup> See *Quincy Cable TV v. FCC*, 768 F.2d 1434, 1463 (D.C. Cir. 1985) (concluding that the Commission must "determine whether the evil the rules seek to correct is a 'real or merely a fanciful threat'" (quoting *HBO, Inc. v. FCC*, 567 F.2d 9, 50 (D.C. Cir. 1977)).

Commission must show how each proposed rule is “reasonably ancillary” to the effective performance of its statutorily mandated responsibilities.

## **II. THE RECORD EVIDENCES WIDESPREAD AGREEMENT ON THE IMPORTANT ROLE THAT THIRD PARTY TECHNICAL GROUPS CAN PLAY IN THE INTERNET ECOSYSTEM’S SELF-GOVERNANCE.**

There is substantial agreement in the record on the important and productive role that third-party groups, including the IETF, other standards-setting bodies, and technical advisory groups, can play in Internet governance.<sup>8</sup> These groups tap into international expertise and experience that enables consensus-based resolutions in the first instance. They can provide advice on and independent analysis of important technical questions, thus better informing the Commission’s policy decisions.

Several commenters suggest developing a government-led “co-regulatory” solution under which the Commission could leverage the expertise of one or more third-party groups to implement whatever policies or rules it may adopt.<sup>9</sup> This would build on the successful history of self-governance and industry collaboration that has driven innovation and investment throughout the Internet ecosystem.<sup>10</sup> It would also promote Commission processes that are more efficient, transparent, fact-based, and data-driven.

In our initial comments, we urged the Commission to establish a safe harbor for network management practices that conform to standards promulgated by standards-setting bodies like

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<sup>8</sup> See, e.g., Alliance for Telecomm. Indus. Solutions (“ATIS”) Comments at 4-5; Bright House Networks Comments at 10; Center for Democracy & Tech. (“CDT”) Comments at 43-46; Comcast Comments at 52-58; Communications Workers of Am. (“CWA”) Comments at 23-24; Computer & Communications Indus. Ass’n (“CCIA”) Comments at 34-37; Google Inc. Comments at 71, 91-92; Distributed Computing Indus. Ass’n (“DCIA”) Comments at 11; Google-Verizon Joint Letter at 4-6.

<sup>9</sup> See, e.g., Google-Verizon Joint Letter at 4-5; Google Comments at 91; CCIA Comments at 34-37.

<sup>10</sup> See Comcast Comments at 5-14.

the IETF.<sup>11</sup> A number of voices inside and outside of the Internet industry similarly emphasized the important role standards-setting bodies can and should play in the Internet ecosystem’s governance. For example, the Center for Democracy and Technology urged the Commission to consider compliance with standards established by groups such as the IETF when the Commission evaluates network management practices.<sup>12</sup> Google and Verizon endorsed the use of outside technical advisory groups to inform the substance of the Commission’s rules,<sup>13</sup> as well as the use of standards groups to help develop the Commission’s baseline standards for acceptable practices.<sup>14</sup> Ericsson supported the idea of a presumption in favor of the reasonableness of any standardized solutions.<sup>15</sup> And Professors Clark, Lehr, and Bauer noted that innovation “based on standards that are approved by a suitable standards body after suitable deliberation, and are well documented . . . should be acceptable” to the Commission,<sup>16</sup> noting that practices that are standards-based already “at least . . . passed through some court of public opinion.”<sup>17</sup>

While the IETF itself demurs on “policy-making,” it is a particularly valuable resource. The IETF is the primary global forum where important technical and engineering questions about the Internet are debated and discussed.<sup>18</sup> It is consensus-based and driven by facts and data, and structured so that political and personal agendas are left at the door. It has well-

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<sup>11</sup> *See id.* at 52-53.

<sup>12</sup> *See* CDT Comments at 45.

<sup>13</sup> *See* Google-Verizon Joint Letter at 4-5; Google Comments at 91.

<sup>14</sup> *See* Google-Verizon Joint Letter at 6; Google Comments at 71.

<sup>15</sup> *See* Ericsson Comments at 23.

<sup>16</sup> David Clark, William Lehr, and Steve Bauer Comments at 12 (“Clark, Lehr, and Bauer Comments”).

<sup>17</sup> *Id.* at 24.

<sup>18</sup> *See* Comcast Comments at 54-56.

established and transparent procedures. The standards and other items under consideration at the IETF are thoroughly vetted by many eminent scholars, technicians, and engineers, and are open to review and comment by any member of the public.<sup>19</sup> As Ericsson explained, bodies like the IETF “represent a broad cross section of the communications industry,” “their standards take into account input from a wide array of technical experts from various disciplines,” and “these organizations play a central role in obtaining industry coalescence around the most practical and least overall harmful solutions to engineering obstacles.”<sup>20</sup> In its combination of openness and expertise, the IETF is, as Ethan Zuckerman and former Google executive and current U.S. Deputy CTO Andrew McLaughlin have written, “the premier standards body for the Internet.”<sup>21</sup>

A particular value of the IETF is that it is a global body, and is not geographically limited as to the talents and insights upon which it can draw. In this respect, as in many others, it “looks like the Internet.” Forming a collaborative relationship between the Commission and the IETF and other international standards-setting bodies, and working with those bodies to refine and address the technical and engineering issues that are of consequence to the global Internet community, will help reinforce this nation’s commitment to, in the words of Secretary of State Clinton, “a single Internet where all of humanity has equal access to knowledge and ideas.”<sup>22</sup>

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<sup>19</sup> See *id.* at 54-55.

<sup>20</sup> Ericsson Comments at 23; see Info. Tech. Indus. Council (“ITIC”) at 8 (“All broadband Internet access service providers rely on a large suite of standardized capabilities to manage traffic.”).

<sup>21</sup> Ethan Zuckerman & Andrew McLaughlin, *Introduction to Internet Architecture and Institutions* (Aug. 2003) (emphasis added), available at <http://cyber.law.harvard.edu/digitaldemocracy/internetarchitecture.html>.

<sup>22</sup> Hillary R. Clinton, U.S. Sec’y of State, Remarks on Internet Freedom (Jan. 21, 2010), available at <http://www.state.gov/secretary/rm/2010/01/135519.htm>. On the other hand, the downside to the globally interconnected nature of the Internet is that threats to the ecosystem can come from anywhere. Secretary Clinton recognized that those threats require “a coordinated response by all governments, the private sector, and the international community.” *Id.* As the National Broadband Plan recognized, “The global, borderless nature of the Internet has also led to the emergence of new categories of threats that can come from anyone, anywhere in the world, at any time. Protecting the Internet and providing for cybersecurity is both an economic and national security (footnote continued...)

Comcast also proposed the creation of an advisory group that would undertake to provide guidance on the regulations the Commission may adopt,<sup>23</sup> a call echoed by a number of parties. The Computer and Communications Industry Association (“CCIA”) suggested that the Commission could conserve resources, prevent unnecessary delay, and avoid regulatory uncertainty by authorizing a “dedicated multidisciplinary technical advisory group” that would hear complaints in the first instance and offer recommendations for resolution of the complaint.<sup>24</sup> This process would help “preserv[e] Enforcement Bureau resources for the review, and possible adoption of, the panel’s recommendation.”<sup>25</sup> Similarly, the Google-Verizon Joint Letter urges the Commission to utilize a technical advisory group (“TAG”) as a forum for dispute resolution in the first instance, “with the backstop of federal government involvement on a case-by-case basis to address bad actors where this self-governance process and market forces prove inadequate.”<sup>26</sup> Under this framework, the Commission could address practices on a case-by-case basis, and complainants and defendants would be encouraged to first collaborate to resolve complaints before the TAG prior to going to the Commission if they believe the TAG’s findings are incorrect.<sup>27</sup>

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(...footnote continued)

challenge and collectively, one of the most serious challenges of the 21st century.” National Broadband Plan at 287. Working closely with international bodies places the United States firmly in the lead in dealing with those threats.

<sup>23</sup> See Comcast Comments at 57-58.

<sup>24</sup> CCIA Comments at 34-35.

<sup>25</sup> *Id.* CCIA’s members include Google, Yahoo!, eBay, and Microsoft. See Computer & Communications Indus. Ass’n, *About CCIA: Members*, <http://www.cciagnet.org/index.asp?bid=11> (last visited Apr. 21, 2010).

<sup>26</sup> Google-Verizon Joint Letter at 4-5. In addition to serving as a forum for dispute resolution, the letter identified three potential roles for a TAG or other “co-regulatory” institution: (a) develop best practices; (b) issue advisory opinions; and (c) coordinate with standards-setting bodies. See *id.* at 5-6. Practices that comply with the principles, best practices, and/or advisory opinions of the TAG could be presumed to comply with any net neutrality rules. *Id.* at 6-7.

<sup>27</sup> See *id.* at 5-6.

The notion of adopting this kind of “co-regulatory” solution to assist in developing, administering, and implementing the Commission’s proposed regulations is consistent with the Commission’s stated goals “to provide greater predictability as well as to help address emerging challenges to the open Internet.”<sup>28</sup> Under a co-regulatory solution, “the agency self-consciously and formally identifies relevant norms of cooperation and provides for an institutional strategy to develop and enforce them.”<sup>29</sup> Essentially, the Commission could adopt the basic norms and authorize a third-party institution initially to provide more detailed guidance – both in the form of ex ante advisory opinions and in the form of case-by-case dispute resolution – on how those norms work in practice.<sup>30</sup>

Such an approach has three key benefits. First, it allows the Commission to ensure that initial enforcement and guidance are accomplished with maximum stakeholder input, thereby reinforcing the collaborative, symbiotic nature of the Internet ecosystem.<sup>31</sup> Second, it allows the Commission to draw upon the collective expertise, experience, and knowledge of the Internet community, including established organizations such as the IETF.<sup>32</sup> Finally, a process managed by such a third-party organization would be “more flexible, sensitive to the relevant technical considerations, and able to adapt to change.”<sup>33</sup>

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<sup>28</sup> *NPRM* ¶ 6.

<sup>29</sup> Philip J. Weiser, *The Future of Internet Regulation* 43 U.C. Davis L. Rev. 529, 560 (Dec. 2009).

<sup>30</sup> *Id.* at 569-70.

<sup>31</sup> *Id.* at 572 (“Because the empowered [third-party organization] would operate as a collaborative effort among relevant stakeholders, it would also have the opportunity to follow the cooperative spirit that has traditionally prevailed in Internet standard-setting bodies . . .”).

<sup>32</sup> *Id.* at 569 (noting that two key aspects to whether the regulatory approach is viewed as legitimate are the extent to which it coordinates with existing organizations and the extent to which it draws upon existing expertise and knowledge in the Internet community).

<sup>33</sup> *Id.* at 571.

Co-regulatory solutions are not uncommon. A 2008 report by the United Kingdom’s Office of Communications (“OfCom”) cited several examples from the United Kingdom and other countries of co-regulatory solutions implemented to address particular situations.<sup>34</sup> In the United States, the Federal Trade Commission (“FTC”) uses a form of co-regulation for policing false-advertising claims: parties can take their complaints first to the Better Business Bureau’s National Advertising Division (“NAD”), with the FTC serving as a legal backstop to hear appeals, when necessary, to decide cases on its own.<sup>35</sup> The FCC also has adopted co-regulatory approaches, most notably in the context of managing the use of point-to-point microwave links and private land mobile radio systems,<sup>36</sup> as well as in the amateur (or “ham”) radio context.<sup>37</sup> The common thread running through all of these regimes is that the regulatory agency exercises oversight and can serve as a legal backstop to ensure that norms are properly enforced, but otherwise allows a third-party organization to work with affected stakeholders to collaborate and draw upon the expertise within the stakeholder community to constructively resolve various issues.<sup>38</sup>

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<sup>34</sup> OfCom, *Initial Assessments of When To Adopt Self- or Co-Regulation* ¶¶ 2.33-2.42 (Mar. 27, 2008), available at <http://www.ofcom.org.uk/consult/condocs/coregulation/condoc.pdf>. Ofcom recently affirmed its commitment to “promoting and facilitating the development and use of effective forms of self-regulation” in order to “ensure that regulation helps, rather than hinders, the development of markets” by “us[ing] the least intrusive regulatory mechanisms appropriate for the situation.” Ofcom, *Annual Plan 2010/11*, at 10 (Mar. 31, 2010), available at [http://www.ofcom.org.uk/about/accoun/reports\\_plans/annual\\_plan1011/annplan1011/annplan1011.pdf](http://www.ofcom.org.uk/about/accoun/reports_plans/annual_plan1011/annplan1011/annplan1011.pdf).

<sup>35</sup> For more information about the NAD, see <http://www.nadreview.org/AboutNAD.aspx>.

<sup>36</sup> Weiser, *supra* note 29, at 555 n.94 (citing John R. Williams, Office of Plans & Policy, FCC, *Private Frequency Coordination in the Common Carrier Point-to-Point Microwave Service*, OPP Working Paper Series, Paper No. 21 (1986), available at [http://www.fcc.gov/Bureaus/OPP/working\\_papers/oppwp21.pdf](http://www.fcc.gov/Bureaus/OPP/working_papers/oppwp21.pdf)).

<sup>37</sup> *Id.* at 572-73, 576-77, 579.

<sup>38</sup> Or, as former FCC Chief Engineer Dale Hatfield put it, a key reason why the co-regulatory solution works so well is that it allows the engineers to “sit down together, solve these problems, and say let’s figure out how to do it.” *Id.* at 555.

Given the breadth of consensus on this approach, the Commission should determine how to incorporate the invaluable contributions from the IETF and other such organizations, as well as any new institutions that the Commission may find helpful, into its policymaking and regulatory activities in this area. Like OfCom, the Commission should affirmatively commit to an approach that “promot[es] and facilitat[es] the development and use of effective forms of self-regulation” or co-regulation in order to “use the least intrusive regulatory mechanisms appropriate for the situation”<sup>39</sup> and to “improve[e] the value for money that [the Commission] deliver[s] to stakeholders by continuing to improve [its] efficiency.”<sup>40</sup>

### **III. THE RECORD CONFIRMS THAT THE PROPOSED RULES WILL NOT ACHIEVE THEIR INTENDED PURPOSE WITHOUT IMPORTANT AMENDMENTS.**

But for a few outliers, the vast majority of commenters urged the Commission to take only those steps necessary to achieve its objective and protect the open Internet. This is consistent with the approach espoused by the National Broadband Plan: “the role of government is and should remain limited.”<sup>41</sup>

If the Commission demonstrates that rules are needed to preserve an open Internet, but wishes to “limit” the role of government so as to minimize potential disruption to investment and innovation, the proposed regulations need significant changes. First, the rules must be modified to address the potential risks to an open Internet wherever they may occur in the Internet

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<sup>39</sup> Ofcom, *Annual Plan*, *supra* note 34, at 10.

<sup>40</sup> *Id.* at 7 (“Ofcom remains committed to reducing and simplifying complex or unnecessary regulation . . .”).

<sup>41</sup> National Broadband Plan at 5. As the Google-Verizon Joint Letter notes, any government intervention should be “swift” and “surgical.” Google-Verizon Joint Letter at 4; *see* Eric Schmidt & Ivan Seidenberg, Op-Ed., *Unleashing American Broadband: Google and Verizon Support a Policy of Minimal Government Involvement*, Wall St. J. Mar. 30, 2010, available at <http://online.wsj.com/article/SB20001424052748704100604575145663137195890.html>.

ecosystem. Second, the proposed nondiscrimination regulation must be modified to more surgically address the risks of consumer or competitive harm, and to give parties more flexibility to innovate and experiment. Third, the Commission should refrain from adopting transparency rules in this proceeding, and should instead consider consumer-focused transparency issues comprehensively in a separate proceeding. Fourth, the Commission must adopt a robust and meaningful reasonable network management provision to ensure that network operators have the flexibility to take the steps necessary to meet their customers' demands.

**A. The Record Confirms That Potential Risks to an “Open Internet” Can Occur Throughout the Internet Ecosystem.**

Lawrence Strickling, Assistant Secretary of Commerce for Communications and Information, recently observed that the Internet is “an agglomeration of human actors – it’s a large and growing social organization.”<sup>42</sup> He noted that “the one thing that the Internet must have – not just to thrive, but to survive – [is] the trust of *all actors on the Internet*. . . . I think this issue of trust applies to *every actor on the Internet*.”<sup>43</sup> For the proposed regulations to work, they must embody this reality.

In order to “preserve an open Internet,” we first need agreement on what “the Internet” is. Many observers offer many different definitions. AT&T contends that the *NPRM*'s definition of the Internet was too broad, such that it encompassed any service that uses the Internet Protocol (“IP”) common addressing scheme, even though a service may not constitute what consumers

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<sup>42</sup> Lawrence E. Strickling, Assistant Sec’y of Commerce for Communications & Info., *The Internet: Evolving Responsibility for Preserving a First Amendment Miracle*, Speech at The Media Institute (Feb. 24, 2010), available at [http://www.ntia.doc.gov/presentations/2010/MediaInstitute\\_02242010.html](http://www.ntia.doc.gov/presentations/2010/MediaInstitute_02242010.html); see Zuckerman & McLaughlin, *supra* note 21 (“The heart of the Internet is not a place or an organization, but a principle: *cooperation*.” (emphasis in original)).

<sup>43</sup> Strickling, *supra* note 42 (emphasis added).

and service providers perceive as “broadband Internet access services.”<sup>44</sup> For example, the proposed definition could encompass AT&T’s U-verse IP cable television service, even though it is not part of “the Internet.” In contrast, Level 3 Communications suggested defining the Internet as “a worldwide network of computers that allows for the exchange of information.”<sup>45</sup>

The Telecommunications Act of 1996 (the “1996 Act”) offers two definitions of the Internet. Section 230 defines the Internet as “the international computer network of both Federal and non-Federal interoperable packet switched data networks.”<sup>46</sup> Section 231 elaborates on this definition, explaining that the Internet is “the combination of computer facilities and electromagnetic transmission media, and related equipment and software, comprising the interconnected worldwide network of computer networks that employ the Transmission Control Protocol/Internet Protocol or any successor protocol to transmit information.”<sup>47</sup>

The Supreme Court defined the Internet as a “network of interconnected computers.”<sup>48</sup> And in its 2005 *Internet Policy Statement*, the Commission affirmed each of these definitions.<sup>49</sup> Other, more recent, definitions of the Internet encompass its magnitude, diversity of content, diversity of access platforms, and power to connect users all over the world. For example, in its listing for the term “Internet,” Newton’s Telecom Dictionary explains, “*The Internet is both a transport network – moving every form of data around the world (voice, video, data and images)*

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<sup>44</sup> AT&T Comments at 96-97.

<sup>45</sup> Level 3 Comments at 4.

<sup>46</sup> 47 U.S.C. § 230(f)(1); cf. Zuckerman & McLaughlin, *supra* note 21 (“The Internet is not a single network, but a vast network of networks that voluntarily choose to interconnect with each other.”).

<sup>47</sup> 47 U.S.C. § 231(e)(3).

<sup>48</sup> *Nat’l Cable & Telecomm. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 974 (2005).

<sup>49</sup> *In re Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, Policy Statement, 20 FCC Rcd. 14986 ¶ 1 n.1 (2005) (“*Internet Policy Statement*”).

– and a network of computers which allow you (and them) to access, retrieve, process, and store all manner of information.”<sup>50</sup>

The Commission’s National Broadband Plan draws on the frequently used “Internet ecosystem” analogy.<sup>51</sup> As with any ecosystem, the individual components have a symbiotic and interdependent relationship and, in many cases, are so intertwined that it can be difficult to tell where one starts and one ends.<sup>52</sup>

Choosing to ignore the interdependence among participants in the Internet ecosystem, some commenters argued that the Commission should focus its energies only on broadband ISPs, while at the same time claiming (inconsistently) that broadband ISPs are not part of the “Internet.”<sup>53</sup> Other commenters argue that the proposed regulations need only apply to broadband ISPs because their position is “unique.” For example, Akamai argues that regulations

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<sup>50</sup> Harry Newton, *Newton’s Telecom Dictionary* 502 (23d ed. 2007).

<sup>51</sup> See generally National Broadband Plan *passim*.

<sup>52</sup> For instance, rapid advances in technology have led to the increased use of cloud computing, or accessing applications from the Internet instead of one’s own computer; machine-to-machine (M2M) interaction over the network, especially via mobile devices; and networked monitoring or sensing devices. See National Broadband Plan at 17-18.

<sup>53</sup> Free Press Comments at 15-23. Under Free Press’s analysis, ISPs provide a service distinct from the Internet, merely providing an input (i.e., access) to the network (the Internet). But this analysis fails to account for the technological differences between dial-up access to the Internet and broadband Internet service. In the dial-up world, the narrow-band copper telephone network would take the user from her home to the ISP. In the broadband world, the ISPs bring the Internet right to the home. The integrated nature of broadband ISPs’ Internet offerings was central to the Commission’s decision to classify cable modem service as an information service. See *In re Inquiry Concerning High-Speed Access to the Internet over Cable and Other Facilities*, Declaratory Ruling & NPRM, 17 FCC Rcd. 4798 ¶ 41 (2002) (“Our analysis, like the relevant statutory definitions, focuses instead on the single, integrated information service that the subscriber to cable modem service receives and the nature of the relationships among cable operators and the entities with which they cooperate to provide cable modem service . . .”) *aff’d sub nom. Brand X Internet Service v. NCTA*, 545 U.S. 967 (2005). Moreover, Free Press’s effort to separate the Internet into discrete components harkens back to classic telephone network decisions in which the networks and inputs were separable. But such an approach is anachronistic in today’s broadband world. Specifically, Free Press encourages the Commission to employ a model that was designed for a world where the network (1) offered solely pure transmission, (2) was owned and operated by an enormous and entrenched monopoly, and (3) was characterized by stable technology. The Commission should reject such an approach.

should apply only to broadband ISPs because only they are potential “gatekeepers.”<sup>54</sup> Similarly, Google argues that broadband ISPs are uniquely positioned to control Internet traffic, and have the incentive to promote their own revenue streams through control over broadband networks.<sup>55</sup> But these commenters downplay the interdependence among the various Internet stakeholders and the potential for bottlenecks at various locations in the Internet ecosystem.

For example, Akamai plays a critical storage and transport role. It operates one of the largest content delivery networks (“CDN”) in the world.<sup>56</sup> As such, it is in a position to influence the user experience – and the “prioritization” of content – as much as or more than others, including broadband ISPs. It can be argued that Akamai’s services act as a “gatekeeper” inasmuch as they enable web site owners to essentially pay for prioritized end-user access to their sites, and give preferential treatment to certain content in ways that are not transparent to the end user. It is odd that, serving this role, Akamai would feel compelled to argue for regulation of broadband ISPs while ignoring its own ability to influence the openness of the Internet.

Moreover, as the leading Internet search engine and seller of online advertising, and the provider of a growing number of applications and services, many of which are today or may soon become substitutes for traditional voice, video, and data services, Google is in a unique position to take certain actions to promote its own revenue streams.<sup>57</sup> Others have argued that

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<sup>54</sup> Akamai Tech., Inc. Comments at 9-11.

<sup>55</sup> See Google Comments at 24-34.

<sup>56</sup> CDNs are networks of servers that cache or store content closer to where it might be requested and deliver it to end users based on geographic locations by collocating with broadband ISPs with which they have strategic alliances. See Kartik Hosanagar, et al., *Service Adoption and Pricing of Content Delivery Network (CDN) Services 1* (2006), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=590350](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=590350).

<sup>57</sup> See Google, Inc., *Corporate Information: Company Overview*,

(footnote continued...)

Google’s multifaceted business model positions it as a potential Internet “gatekeeper.” For example, some have noted that, if a website is not listed in Google’s indexed search results, it is as if the website does not exist on the Internet.<sup>58</sup> A small company called Foundem explained in its comments that “[s]earch engines have become the Internet’s gatekeepers and are arguably as essential a component of its infrastructure as the network itself.”<sup>59</sup> The risks associated with potential “gatekeepers” other than broadband ISPs are echoed by numerous other commenters, including the National Organizations – a group of sixteen civil rights, professional, service, and elected officials’ organizations<sup>60</sup> – as well as by academics<sup>61</sup> and government leaders.<sup>62</sup>

In short, the Commission cannot claim to effectively address potential risks to “an open Internet” unless it fully considers all the points in the Internet ecosystem where those risks reside, and adopts policies or rules that reach those points.

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<http://www.google.com/intl/en/corporate/index.html> (last visited Apr. 19, 2010). Google leads in developing software-as-a-service business models – the development of Google’s web-based word processing, presentation, spreadsheet, and data storage services have even driven Microsoft to make its Office 2010 web productivity package web-deliverable. See Robert Atkinson, et al., Info. Tech. & Innovation Found., *The Internet Economy 25 Years After .com* 39 (Mar. 2010), available at <http://www.itif.org/files/2010-25-years.pdf>.

<sup>58</sup> See Stan Schroeder, *Reminder: Google Is Not the Internet (Yet)*, Mashable, Mar. 4, 2009, <http://mashable.com/2009/03/04/reminder-google-internet/> (last visited Apr. 26, 2010).

<sup>59</sup> Foundem Comments at 1. Foundem alleges that Google “leverage[s] its search engine monopoly” into other fields, and that, if it continues to do so, “competitors will be harmed, new entrants will be discouraged, and innovation inevitably will be suppressed.” *Id.* at 3-4.

<sup>60</sup> See National Organizations Comments at 31 (arguing that the trend of search engines driving traffic to certain businesses’ web sites will make it difficult for other businesses, particular small and minority-owned businesses, to succeed on the Internet).

<sup>61</sup> See, e.g., Frank Pasquale, *Law in a Networked World: Internet Nondiscrimination Principles: Commercial Ethics for Carriers and Search Engines*, 2008 U. Chi. Legal F. 263, 298-99 (2008) (arguing that dominant search engines should be subject to nondiscrimination regulations).

<sup>62</sup> Howard Shelanski, Deputy Dir. for Antitrust, Bureau of Econ., FTC, *Net Neutrality Regulation: Why Now -- Or Ever?*, Speech at the Free State Foundation Winter Telecom Policy Summit (Jan. 29, 2010), available at <http://www.nextgenweb.org/news-and-blog-clips/free-state-foundation-winter-telecom-policy-summit-net-neutrality-regulation> (explaining that the existence of discrimination extends beyond last-mile network providers and noting that “[i]f Google can dump Beijing it can sure as heck dump you as an application or content provider”).

Just as the Commission cannot effectively address potential risks to “an open Internet” unless it fully considers the other players that have a key role in the Internet ecosystem, so too it cannot effectively address those potential risks by exempting certain broadband ISPs from all or part of its rules based on the technology those ISPs use. While several commenters noted the potentially negative effect these regulations could have on the wireless sector,<sup>63</sup> that is no less true of the wireline sector;<sup>64</sup> last-mile challenges are faced by all broadband ISPs to some degree.<sup>65</sup> Clearwire correctly stated that, in spite of wireless providers’ concerns, open Internet regulations are generally feasible for wireless broadband networks.<sup>66</sup> As Comcast explained in its initial comments, while technological differences among broadband technologies may lead to different applications of rules or policies intended to “preserve an open Internet,” these differences do not justify exempting any broadband ISPs from those rules or policies in their entirety.<sup>67</sup>

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<sup>63</sup> CTIA, for example, argues that applying net neutrality regulations to wireless could have the unintended consequence of stifling investment and innovation. CTIA – The Wireless Association (“CTIA”) Comments at 8. According to CTIA, despite the economic crisis, wireless providers continued to spend billions of dollars to expand coverage and increase network capacity. *Id.* at 7. Verizon echoes CTIA’s concerns, citing the wireless industry’s extensive investments, which include its own upgrades to its fiber network and Verizon Wireless’s roll-out of 4G wireless broadband service intended to provide a competitive option for wireline broadband subscribers. *See Verizon & Verizon Wireless (“Verizon”) Comments at 18-30.*

<sup>64</sup> For example, scarce bandwidth and sharing of last-mile resources have a tremendous impact on their business models. AT&T argued that spectrum constraints make it impossible to infinitely expand wireless networks. AT&T Comments at 162-164. CTIA expressed concerns that the mobile nature of wireless service makes traffic patterns difficult to predict, as users’ quality of service may be degraded by other users in the vicinity demanding significant capacity. CTIA Comments at 39-40.

<sup>65</sup> *See Time Warner Cable, Inc. Comments at 68-69; Comcast Comments at 30-31.* Time Warner acknowledged wireless broadband providers’ concerns but noted that they are not unique to the wireless sector – all Internet service providers, including cable and other wireline providers, must manage their networks in the face of finite capacity. Time Warner Cable Inc. Comments at 68-69.

<sup>66</sup> Clearwire Corp. Comments at 9-10; *see New America Found. et al. Comments at 5 & app. A.*

<sup>67</sup> *See Comcast Comments at 32; see also Google Comments at 81-82 (“While the FCC’s proposed policy framework should apply to basic network-based practices like blocking or degrading Internet traffic, the parameters of what constitutes a reasonable network management practice should be flexible enough to accommodate legitimate differences between wired and wireless networks, and even between different kinds of wireless networks.”); Free* (footnote continued...)

**B. Any Rules Should Prohibit “Unreasonable and Anticompetitive Discrimination,” Properly Balancing Business and Technical Flexibility and the Interest in Preserving an Open Internet.**

If the Commission ultimately finds a need to adopt rules in this proceeding, it should not adopt an *absolute* ban on “discrimination,” as the proposed rule would impose. Many of the comments addressing the proposed nondiscrimination rule recognize that an absolute ban on discrimination would prohibit “socially beneficial discrimination,” and that such a ban would stifle innovation and investment. Commenters warned that a strict nondiscrimination rule would foreclose new business models and innovation, and urged the Commission to narrow any nondiscrimination rule it may adopt to focus on unreasonable and anticompetitive conduct.

**1. An Absolute Nondiscrimination Rule Would Foreclose Socially Beneficial Differentiation, Stifling Investment and Innovation.**

Consistent with the *NPRM*'s recognition that “[t]he key issue we face is distinguishing socially beneficial discrimination from socially harmful discrimination in a workable manner,”<sup>68</sup> commenters almost universally acknowledged that not all differentiation between Internet traffic is harmful or nefarious. But the proposed rule would place an absolute prohibition on any discrimination or differentiation, and fails to strike a balance between harmful and “socially beneficial” discrimination. It was broadly criticized by, among others, leading technologists and renowned economists:

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(...footnote continued)

Press Comments at 125-26 (“The Commission should not categorically apply different treatment to mobile broadband Internet access service. Certainly, some characteristics of mobile broadband networks, including spectrum usage and problems introduced by mobility, vary from fixed networks. But not all fixed networks operate alike, and some have far different performance characteristics and limitations than others . . . . The purpose of a reasonable network management framework is to handle all of these distinctions, and to evaluate proportional responses to the demonstrable problems in the network.”); CDT Comments at 51 (“Given the technical realities of wireless networks, however, what constitutes reasonable network management on a wireless data network might differ from that of wired connections.”).

<sup>68</sup> *NPRM* ¶ 103.

- **Professors David Clark, William Lehr, and Steve Bauer:** “[W]e see the potential for more harm in deterring potentially beneficial innovations such as expanded deployment of QoS mechanisms by ISPs than benefit in addressing the risk that ISPs might engage in harmful discrimination. We do not recommend adopting the discrimination rule.”<sup>69</sup>
- **Professor Michael Katz (former FCC Chief Economist):** “Examination of the sources cited by the Commission in support of its proposed rule reveals that they do not, in fact, provide a sound foundation for that rule. . . . [A]s the *NPRM* itself admits, there are forms of discrimination that promote consumer welfare.”<sup>70</sup>
- **Twenty Economic Scholars, Professors, and Practitioners:** “[T]he proposed regulations would limit or proscribe (to a somewhat unpredictable degree) a variety of business practices that presumptively contribute to economic efficiency, promote competition, foster innovation, increase investment, promote product differentiation and consumer choice, and enhance consumer welfare.”<sup>71</sup>
- **Professors Faulhaber & Farber:** “It is a canon of faith among Internet aficionados that the Internet has always been nondiscriminatory in its operations, and that this principle of nondiscrimination has recently come under threat from ‘gatekeeper’ broadband ISPs. *Nothing could be further from the truth.* The Internet has always used prioritization of traffic, congestion control and other methods of network management since the earliest days, as any technologist familiar with its full history can aver. Imposing any form of nondiscrimination via regulation would be a radical change from past Internet practice.”<sup>72</sup>
- **Professor Marius Schwartz:** “The real debate, then, should not be over uniform treatment and pricing, but over whether anticompetitive or other socially harmful discrimination is likely and, if so, whether *targeted* regulation is likely to help on balance. The proposed rules are vastly overbroad. . . . Such a stance is

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<sup>69</sup> Clark, Lehr, and Bauer Comments at 25.

<sup>70</sup> Michael L. Katz, *Maximizing Consumer Benefits from Broadband* ¶¶ 60-62 (Jan. 9, 2010) (attached as Attachment B to Verizon’s Comments).

<sup>71</sup> Jerry Brito et al., *Net Neutrality Regulation: The Economic Evidence* ¶ 39 (Apr. 8, 2010) (“*Net Neutrality Regulation: The Economic Evidence*”) (filed by Jeffrey A. Eisenach, GN Docket No. 09-191 (Apr. 12, 2010)). The twenty economic scholars, professors, and practitioners are Jerry Brito, Jr., Martin Cave, Robert Crandall, Larry Darby, Everett Ehrlich, Jeffrey Eisenach, Jerry Ellig, Henry Ergas, David Farber, Gerald Faulhaber, Robert Hahn, Wayne Leighton, Robert Litan, Glen Robinson, Hal Singer, Vernon Smith, William Taylor, Timothy Tardiff, Leonard Waverman, and Dennis Weisman.

<sup>72</sup> Gerald R. Faulhaber & David J. Farber, *The Open Internet: A Customer-Centric Framework*, 4 Int’l J. Comm. 302, 316 (2010) (“*Faulhaber & Farber*”) (attached as Exhibit 1 to AT&T’s comments) (emphasis added), available at <http://ijoc.org/ojs/index.php/ijoc/article/viewFile/727/411>.

particularly unwarranted given the striking lack of evidence for harmful discrimination.”<sup>73</sup>

These concerns were echoed by myriad commenters, including:

- **Amazon.com:** “[T]he Internet has long been interconnected with private networks and edge caches that enhance the performance of some Internet content in comparison with other Internet content, and . . . these performance improvements are paid for by some but not all providers of content. . . . We believe it appropriate to apply the same principle within the networks managed by broadband [ISPs]: content may be favored, so long as doing so causes no harm – e.g., delays in transmission or other reductions in quality – to other content.”<sup>74</sup>
- **CONNECT:** “Although the Commission’s proposed nondiscrimination rule is intended to preserve innovation, it actually could have the opposite effect. . . . In CONNECT’s experience, a broadband network operator’s ability to offer enhanced or prioritized services promotes innovation by facilitating the development of applications that depend upon or benefit from packet prioritization.”<sup>75</sup>
- **Cisco:** “[T]he Commission should decline to adopt the nondiscrimination requirement contemplated in the *Notice*. This rule would severely limit the ability of providers to respond to fast-changing market conditions and evolving consumer needs. . . . These limits will do nothing to protect consumers, and would instead threaten to depress investment in networks, applications, or both.”<sup>76</sup>
- **National Telecommunications Cooperative Association:** “NTCA believes this proposal is premature and too broad. Some ‘discrimination’ is necessary and desirable for the effective operation of the network. It also provides all consumers who are using a network’s public Internet service the ability to receive the quality service agreed to in their subscriber agreements.”<sup>77</sup>

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<sup>73</sup> Declaration of Marius Schwartz, Professor of Economics, Georgetown Univ. 10 (attached as Exhibit 3 to AT&T’s Comments) (emphasis in original); see Robert W. Crandall & Hal J. Singer, *The Economic Impact of Broadband Investment* 5-6, 52-53 (2010) (filed in GN Docket No. 09-191 (Mar. 29, 2010)) (explaining why the proposed nondiscrimination rule “is likely to deter innovation” and “undermine the incentives of BSPs to invest in next-generation access technologies”).

<sup>74</sup> Amazon.com Comments at 2.

<sup>75</sup> CONNECT Comments at 2-3. “CONNECT is a regional non-profit organization whose mission is to support research excellence and commercialization of innovation.” *Id.* at 1.

<sup>76</sup> Cisco Comments at 5.

<sup>77</sup> NTCA Comments at 5-6; see Arts+Labs Comments at 5 (noting that the *NPRM*’s proposed nondiscrimination rule “will limit the development of valuable new business models and discourage Internet investment and innovation”); National Grange Ex Parte Letter, GN Docket No. 09-191, at 2 (Mar. 29, 2010) (“This  
(footnote continued...)”)

CONNECT and other commenters noted that a strict nondiscrimination rule simply ensures that those parties who can afford more expensive means of prioritizing their content will continue to do so, while other, smaller companies will be forced to make decisions that could divert precious resources away from innovation.<sup>78</sup> Not every Internet content, application, or service provider can afford its own server farms like Google's or caching services like Akamai's.<sup>79</sup> As the CWA noted, "Absent the ability to purchase content delivery network services and QoS offerings from a broadband [ISP], new, small-entrant content, application, or service providers could not enter and compete against large content, application, or service providers like Google that have built their own geographically dispersed networks of servers that enable them to prioritize their own services to end-users."<sup>80</sup>

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(...footnote continued)

overly broad prohibition will harm the Internet experience of the average consumer, especially rural consumers . . . ."); St. Louis Soc'y for the Blind & Visually Impaired Ex Parte Letter, GN Docket No. 09-191, at 1 (Mar. 31, 2009) ("I remain concerned that the non-discrimination clause outlined in the Open Internet NPRM could undo some of the benefits that make broadband so helpful to the blind and visually impaired population, particularly in the areas of healthcare, education and telework . . . .").

<sup>78</sup> See CONNECT Comments at 2-3 ("While we do not have a firm opinion on the manner in which the goal of increasing the opportunity for innovation on and via the Internet, we are concerned that [the proposed nondiscrimination rule] may have the unintended consequence of threatening innovation and undermining competition by: (i) denying entrepreneurs the ability to obtain the enhanced or prioritized services necessary for their particular applications or services to succeed in the market; and (ii) making it more difficult for entrepreneurs to challenge established technology companies, which are less likely to need enhanced or prioritized services from broadband network operators. The network operators should be permitted to offer favorable pricing to small users."); *Faulhaber & Farber* at 319 ("The market expands value by encouraging mutually beneficial exchange; forbidding a class of mutually beneficial exchange guarantees inefficient outcomes.").

<sup>79</sup> Verizon Comments at 73 (noting that "the rule would be affirmatively anticompetitive and would lock in the advantages enjoyed by established actors in the Internet ecosystem to the detriment of smaller providers").

<sup>80</sup> CWA Comments at 16. The Internet content, application, and service providers who filed comments supporting an absolute discrimination rule are, by and large, well-capitalized, well-established incumbents who may be seeking to maintain the status quo and their market position. Contrary to assertions that net neutrality unequivocally will impact and benefit all content, application, and service providers, "there is every reason to believe that content providers whose offerings would be enhanced by QoS offerings would buy them and others would not. Arguments that they would be better off if they did not even have the opportunity to obtain QoS have no basis in experience or economic logic." *Faulhaber & Farber* at 318.

An absolute prohibition on all discrimination is absolutely *unnecessary* for the Commission to achieve its goals for this proceeding. Advocates for an absolute prohibition argued that broadband ISPs will require Internet content, application, and service providers to “pay-to-play” or be blocked or degraded,<sup>81</sup> and that permitting broadband ISPs to offer the option of prioritizing certain Internet traffic will create an incentive for broadband ISPs to reduce investment.<sup>82</sup> These concerns are overblown and, in many cases, not rooted in fact.<sup>83</sup>

Fundamentally, consumers demand high-quality service from broadband ISPs. If a broadband ISP does not provide a sufficiently robust Internet service that meets their demands, consumers will switch providers. That happens every day. Broadband ISPs must provide a service that meets consumer demand, and consumers demand a robust open Internet service. Were a broadband ISP to adopt a new business model that in some way deprived consumers of a robust open Internet service, consumers could go elsewhere. In short, the marketplace leaves broadband ISPs with only one choice if they want to succeed: they must continue to offer a robust open Internet service.

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<sup>81</sup> See American Library Ass’n Comments at 5; Ass’n of Research Libraries et al. Comments at 4; Free Press Comments at 45.

<sup>82</sup> See Nicholas Economides, *Why Imposing New Tolls on Third-Party Content and Applications Threatens Innovation and Will Not Improve Broadband Providers’ Investment* 13 (Jan. 2010) (attached as Appendix A to Google’s Comments); Free Press Comments at 4.

<sup>83</sup> See, e.g., *Faulhaber & Farber* at 318 (“Some have argued that prioritizing some traffic necessarily disadvantages non-priority traffic. This is not the case. Traffic which is latency-sensitive (such as VoIP) can be seriously harmed if it does not receive top priority; traffic which is not latency-sensitive (such as movie downloads) can tolerate short delays without any harm whatsoever. This is the very definition of not being latency-sensitive; short delays don’t matter.”).

**2. Any “Nondiscrimination Rule” Should Be Limited to Unreasonable and Anticompetitive Conduct That Causes Harm to Consumers or Competition.**

Were the Commission to adopt a nondiscrimination rule, it is the view of a wide array of commenters that the Commission should adopt a more flexible and realistic standard than what appears in the proposed rule, such as the proposal to focus on “unreasonable and anticompetitive” discrimination. As Amazon.com noted, the Commission should not prohibit practices that might be considered “discriminatory” but are actually innovative technologies and business models that do not harm the open Internet.<sup>84</sup> A prohibition on “unreasonable and anticompetitive discrimination” gives the Commission sufficient authority to monitor practices and business models that create a meaningful risk to innovation and openness on the Internet and to act swiftly and surgically to address those risks, while giving broadband ISPs and others in the Internet ecosystem the flexibility to innovate and experiment with technologies and business models.

Although there were variations in how commenters would formulate a more flexible nondiscrimination rule, most supported a rule focusing on an “unreasonable discrimination” standard. For example, the CWA explained that a more appropriate rule would mirror that of Section 202(a)’s rule against “unjust or unreasonable discrimination,” which is designed to address anticompetitive conduct:

The Section 202(a) nondiscrimination standard is sufficiently strong to protect against the type of improper discrimination that the *NPRM*’s proposed nondiscrimination is intended to prevent: provider interference with the free flow of information and viewpoints over the Internet and *anticompetitive and consumer*

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<sup>84</sup> See Amazon.com Comments at 2.

abuses. Indeed, the heart of § 202(a) is protection against network provider favoritism of, or preferences for, particular customers or their communications.<sup>85</sup>

Sprint Nextel notes that “[a]n unjust or unreasonable discrimination standard would be far preferable [to the *NPRM*’s proposed rule], because such a standard contains the flexibility needed to distinguish socially beneficial discrimination from socially harmful discrimination.”<sup>86</sup>

Other commenters supported a similar standard.<sup>87</sup>

A number of commenters suggested that the standard also focus on “anticompetitive discrimination.”<sup>88</sup> The Information Technology and Innovation Foundation explained: “The correct way to draft a non-discrimination rule is to focus on discriminatory *market practices*, not on *engineering practices* that are either discriminatory or not depending on one’s viewpoint on nuanced aspects of network design and operation.”<sup>89</sup> Rather than a blanket prohibition on all practices that differentiate between Internet traffic, without any evidence of market failure or

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<sup>85</sup> CWA Comments at 18 (emphasis added).

<sup>86</sup> Sprint-Nextel Comments at 24; *see* Comcast Comments at 43.

<sup>87</sup> *See, e.g.*, Rural Cellular Ass’n Comments at i (“The ‘unjust or unreasonable’ standard would work effectively to distinguish between socially beneficial and socially harmful discrimination, and also would serve better than a bright-line test in achieving the Commission’s objective of designing ‘an appropriately light and flexible policy to preserve the open Internet.’” (quoting *NPRM* ¶ 108)); CWA Comments at 23; Time Warner Cable Inc. Comments at 60.

<sup>88</sup> *See* Telecommunications Industry Ass’n (“TIA”) Comments at 28 (“TIA recommends that the Commission at the very least qualify the nondiscrimination rule to prohibit only ‘anticompetitive’ discrimination. This qualifier would recognize the importance of differentiating among traffic types, and would give providers latitude to pursue steps that maximize consumer benefit.”); NTCA Comments at 7 (“Rather than a strict nondiscrimination prohibition, the Commission should consider regulation that seeks to safeguard consumers and application providers from unreasonable and anticompetitive conduct.”); Corning Comments at 16 (“By focusing on unreasonable discrimination that results in anticompetitive conduct, the Commission will be able to perform a case-by-case analysis of any such allegations against a broadband service provider, while at the same time promoting reasonable and competitive conduct that benefits consumers and spurs investment in broadband infrastructure throughout the broadband industry.”); NCTA Comments at 34; Comcast Comments at 43; ITIC Comments at 8; AT&T Comments at 9; *see also* Letter from Senator Olympia J. Snowe to Chairman Julius Genachowski, FCC, GN Docket No. 09-191, at 1 (Oct. 22, 2009).

<sup>89</sup> ITIF Comments at 23 (emphasis added); *see* NTCA Comments at 6-7 (“There is no way to anticipate technological advances or consumer behavior and the Commission must be careful that it does not set up a regulatory regime of unintended consequences. The Commission has not considered the broad array of services that broadband [ISPs] do or could provide to their end users.”).

consumer harm,<sup>90</sup> a standard that focuses on unreasonable and anticompetitive conduct would allow the Commission to consider the benefits and harms of a particular practice. As Arts+Labs noted, “should the Commission determine that a non-discrimination rule is appropriate, . . . any [such] rule should be connected to the user experience and predicated on some showing of harm.”<sup>91</sup> Focusing on marketplace practices will give the Commission a more refined tool to distinguish between socially beneficial discrimination and any discrimination that is of real concern to the open Internet.

The risks of the *NPRM*'s overly broad proposed nondiscrimination rule were explained very well by Google in a letter seeking clarification about language of the 700 MHz Order that prohibits “discriminatory charges . . . or conditions on customers who seek to use devices or applications outside of those provided by the licensee”:

The phrasing differs from the traditional statutory formulation prohibiting “unjust or unreasonable discrimination . . . for like communication service,” contained in Section 202(a) of the Communications Act of 1934. The apparent difference between the order language and the familiar statutory standard could create needless uncertainty and confusion during the actual implementation process. By not including the usual qualifier, the current text could be read to prohibit *any* differential pricing or conditions -- no matter how just or reasonable. Different products and services will, of course, be priced differently, a situation distinct from unreasonably discriminatory charges, but which might be barred under the current order language.<sup>92</sup>

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<sup>90</sup> See AT&T Comments at 110 (noting that no party has demonstrated that the services that would be prohibited under the proposed rule have led to any “anticompetitive conduct,” “market failure,” or “consumer harm”).

<sup>91</sup> Arts+Labs Comments at 5.

<sup>92</sup> Letter from Richard Whitt, Washington Telecom Counsel, Google, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 06-150, at 1-2 (Nov. 21, 2007).

The concerns that Google highlighted about the overbroad nondiscrimination language in the 700 MHz Order are equally applicable to the nondiscrimination rule proposed in the instant proceeding.

For all the reasons cited above, the Commission should embrace the strong guidance against an overbroad rule and, instead, develop a standard based on “unreasonable and anticompetitive discrimination.”

**C. The Commission Should Refrain from Adopting Transparency Rules in this Proceeding, and Should Instead Consider Consumer-Focused Transparency Issues Comprehensively in a Separate Proceeding.**

Many commenters, including Comcast, stressed that providing timely, accessible, and clear information to consumers is a competitive necessity, both for attracting new customers and satisfying existing ones.<sup>93</sup> For example, AT&T said that “transparent disclosures of the terms and conditions applicable to a customer’s service are critical to create the conditions for genuine competition because they enable consumers to make educated choices based on real differences among service providers.”<sup>94</sup> Expressing a sentiment widespread in the record, the Google-Verizon Joint Letter emphasized: “Transparency will ensure an environment of informed user choice.”<sup>95</sup>

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<sup>93</sup> The NPRM acknowledged that parties voluntarily followed Comcast’s lead and posted enhanced disclosures on their websites. *NPRM* ¶ 124.

<sup>94</sup> AT&T Comments at 188.

<sup>95</sup> Google-Verizon Joint Letter at 3. The European Union has placed particular emphasis on the role of transparency as an alternative to direct regulation of broadband ISPs’ business practices and network management. See John W. Mayo et al., Editorial, *How To Regulate the Internet Tap*, N.Y. Times, Apr. 20, 2010 (co-authored by Professors Marius Schwartz, Bruce Owen, and Lawrence J. White; Robert Shapiro, a senior policy fellow at Georgetown Center for Business and Public Policy; and Glenn Woroch, Executive Director of the Center for Research on Telecommunications Policy at the University of California, Berkeley), available at <http://www.nytimes.com/2010/04/21/opinion/21mayo.html>.

At the same time, Comcast joins other commenters in urging caution about using the instant proceeding to adopt specific transparency rules. The Commission already has multiple open proceedings examining these questions,<sup>96</sup> and the National Broadband Plan recommends the launch of several more proceedings.<sup>97</sup> For example, the *NPRM* proposed additional disclosures such as “actual” network data transmission rates,<sup>98</sup> an issue that was central to several recommendations in the National Broadband Plan.<sup>99</sup> Complex questions like how to account for the many variables that affect transmission rates and throughput; how to ensure that a simple metric accurately captures a complex range of performance attributes; and how to ensure that tests across providers are consistent may be better resolved by a more thorough examination of these issues in a single, comprehensive proceeding that is dedicated to these questions – and that also includes corresponding transparency obligations on the part of Internet content, application, and service providers.<sup>100</sup>

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<sup>96</sup> See, e.g., *In re Consumer Information & Disclosure; Truth-in-Billing Format; IP-Enabled Services*, Notice of Inquiry, 24 FCC Rcd. 11380 (2009); *In re IP-Enabled Services*, Notice of Proposed Rulemaking, 19 FCC Rcd. 4863 ¶ 72 (2004).

<sup>97</sup> National Broadband Plan at 35-36, 44-46.

<sup>98</sup> *NPRM* ¶ 125.

<sup>99</sup> National Broadband Plan at 44-46 (recommending that the Commission (1) coordinate with the National Institute of Standards and Technology (“NIST”) in establishing technical broadband performance measurement standards and a measurement methodology and a process for updating them, (2) continue its efforts to measure and publish data on actual performance of fixed broadband services, and (3) initiate a rulemaking proceeding by issuing an *NPRM* to determine performance disclosure requirements for broadband).

<sup>100</sup> We note that, even though the National Broadband Plan suggested that the Commission work with NIST to develop standards for evaluating the performance of broadband networks, several commenters suggested that bodies like IETF are well-suited to develop disclosure standards and will be able to develop and vet different measurement methodologies to produce fair, accurate, and user-friendly metrics. See, e.g., CCIA Comments at 34. For the reasons outlined above regarding the important role that IETF and other standards-setting bodies play in the global Internet community, this idea has merit and should be thoughtfully considered in any proceeding.

The goal of setting standards for transparency should be on providing consumers what they need to know to make informed decisions about their Internet experience.<sup>101</sup> Given the current broad online dissemination of disclosures about network management and other network practices, many commenters questioned the efficacy of a rule that would place new obligations on broadband ISPs to disclose network management information to content, application, and service providers. This would *not* benefit consumers by providing useful information; the desire of many proponents of such a requirement seems to be merely to increase the burden on broadband ISPs.

Some commenters insisted that broadband ISPs should have an affirmative “duty to disclose” to other content, application, and service providers,<sup>102</sup> but there was almost no meaningful discussion of what information should be included beyond what *consumers* need to know, how such expanded disclosure would create public interest benefits, or what the reciprocal disclosure “duties” of content, application, and service providers should be. As AT&T pointed out, the *NPRM*’s proposal to impose this duty “would be needless and counterproductive” because “[d]evelopers have no more need than consumers for detailed network-management information” and the “disclosures broadband providers offer to consumers will achieve that. The Commission’s suggestion that there is some other category of ‘additional information [that]

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<sup>101</sup> See Google Comments at 64 (“At its core, transparency is a consumer protection issue: consumers should know what they are paying for . . .”).

<sup>102</sup> See, e.g., *id.* at 66; Free Press Comments at 112 (“The Commission should require ongoing disclosure of both high-level information . . . geared towards a general audience, as well as detailed information . . . sufficient to enable third party providers and savvy users to make effective choice and optimal use of the service.”).

should be made available' to developers is simply mystifying, as is its reference to the 25-year-old CEI rules applied to the legacy telecommunications network.”<sup>103</sup>

Moreover, by focusing exclusively on disclosure by broadband ISPs of actions that could “reasonably affect the ability of users” to realize full use and enjoyment of the Internet, the Commission ignored the fact that the actions and practices of content, application, and service providers can have *as much or more* impact on consumers’ full use and enjoyment of the Internet.<sup>104</sup> A consumer’s right to know should also extend to the role of applications, especially if they consume inordinate amounts of bandwidth; remain resident in a consumer’s computer even if “uninstalled”; disable or modify any firewall, anti-virus, or anti-malware software; expose user files or personal information to the Internet; or take other steps that could affect the consumer’s Internet experience. Similarly, a consumer’s right to know should extend to practices by a search engine provider that may block or prioritize particular links, content, applications, or services.<sup>105</sup> All of these concerns should be disclosed to consumers because they may, by the Commission’s own terms, “reasonably affect the ability of users” to enjoy an open Internet.

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<sup>103</sup> AT&T Comments at 191; *see* Comcast Comments at 47 n.160 (explaining that “the CEI and ONA rules offer helpful insights into the quagmire such rules are likely to create and the burdens such regulations would impose on ISPs” and that “those rules were rooted in the unique problems associated with the historic Bell System monopoly and not the free marketplace environment of the Internet”). AT&T explained that one of the reasons that Internet content, application, and service providers have flourished on the Internet is “precisely because . . . the Internet permits developers to introduce applications at the edge of the network *without* needing to coordinate with the providers who control the physical transmission layer.” AT&T Comments at 191 (emphasis in original). Coordinating efforts and resolving these sorts of questions in a manner that addresses the concerns and goals of all stakeholders is exactly what a pan-industry forum, such as the IETF, is designed to achieve. *See supra* Section II.

<sup>104</sup> *See* AT&T Comments at 195-96; Bright House Networks Comments 10-11; CWA Comments at 21-23, Cox Communications (“Cox”) Comments at 32; Google-Verizon Joint Letter at 3; Time Warner Cable Inc. Comments at 99.

<sup>105</sup> *See* Verizon Comments at 50.

The Commission must also avoid any transparency rule that would potentially require broadband ISPs to disclose sensitive, proprietary details about the network or network management practices. Several commenters raised serious concerns that such technical or proprietary details could be used by bad actors to circumvent a network's security and management protections. For instance, AT&T explained that “[c]ompelled disclosure of the technical details of network-management techniques would also be as harmful as it is needless because it could serve only one conceivable purpose: to facilitate network manipulation by third parties.”<sup>106</sup> Others noted that applying the transparency requirements only to non-sensitive information would be more effective because it would avoid the injection of added risk to the network.<sup>107</sup>

In light of these concerns, we urge the Commission to address issues of consumer disclosure in a single, comprehensive proceeding that is dedicated to those questions, and that addresses disclosure by both broadband ISPs and content, application, and service providers. In addressing such issues, the Commission should collaborate in the first instance with industry and other stakeholders to develop a set of consumer-disclosure best practices, which the Commission could collect and make available online in order to maximize the benefits in transparency for consumers.<sup>108</sup> As US Telecom proposed, stakeholders could “articulate best practices with

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<sup>106</sup> AT&T Comments at 193.

<sup>107</sup> See Cox Comments at 11; MPAA Comments at 21.

<sup>108</sup> See Mayo et al., *supra* note 95 (“As American policymakers decide what should be done about net neutrality, they would do well to consider the precedents set by Europe’s new framework. The goal should be to develop — through a deliberative process involving regulators, the public and affected companies — industry-wide disclosure requirements that provide consumers with easy-to-interpret information on company-based limitations on access, use of services or applications.”).

respect to disclosure . . . in much the same way that voluntary standards setting bodies develop technical standards.”<sup>109</sup>

**D. The Commission Should Adopt a Broad Definition of What Constitutes “Reasonable Network Management” and Ensure That Broadband ISPs Have the Necessary Flexibility To Deliver a Positive Consumer Experience.**

In the *NPRM*, the Commission expressly recognized that “there may be times when strict application of those rules would be in tension” with the Commission’s goals of encouraging investment and innovation, promoting competition, and protecting the rights of users.<sup>110</sup> In light of the nearly unanimous view that network management is a necessity for maintaining a functioning Internet,<sup>111</sup> the Commission’s proposed provision regarding “reasonable network management” is critical to addressing this tension, and the ultimate success of these rules.

As the *NPRM* recognized and most commenters agreed, drawing the network management provision too restrictively and preemptively would reduce the ability of broadband ISPs to take actions necessary to ensure that consumers have a positive broadband Internet experience.<sup>112</sup> The *NPRM* appropriately defines “reasonable network management” to include

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<sup>109</sup> US Telecom Comments at 52.

<sup>110</sup> *NPRM* ¶ 133.

<sup>111</sup> See, e.g., CWA Comments at 23 (“The *NPRM* appropriately subjects its open Internet rules to ‘reasonable network management.’”); ITIC Comments at 8 (“The provision of robust, reliable Internet access is simply not possible unless the network owner engages in active network management.”); Letter from Carol Bartz, CEO, Yahoo!, to Julius Genachowski, Chairman, FCC, GN Docket No. 09-191, at 1 (Jan. 21, 2010) (“[B]roadband providers, understandably, have a reasonable expectation that they will be allowed to do what needs to be done to ensure a good experience for their users – whether that is fighting spam, avoiding traffic congestion that negatively impacts the network, assisting law enforcement or fighting malicious attacks on the infrastructure.”); AT&T Comments at 185 (“It is thus essential that the Commission maintain ‘reasonable network management’ as a highly flexible exception to its Internet *principles*, and this exception would be even more important were the Commission to harden those principles into *rules*.”) (emphasis in original).

<sup>112</sup> See Alcatel-Lucent Comments at 8; AT&T Comments at 185-86. “This definition – in combination with an ‘unjust or unreasonable’ non-discrimination principle – strikes the appropriate balance in protecting consumers while allowing providers to manage their networks to benefit consumers.” CWA Comments at 23.

*not only* practices employed to “reduce or mitigate the effects of congestion . . . or to address quality-of-service concerns,” “address traffic that is unwanted by users or harmful,” “prevent the transfer of unlawful content,” and “prevent the unlawful transfer of content,” *but also* (and importantly) “other reasonable network management practices.”<sup>113</sup> This “catch-all” was included specifically to ensure that broadband ISPs have “additional flexibility” to manage their networks in the ever-changing Internet ecosystem and because the Commission did “not presume to know now everything that providers may need to do to provide robust, safe, and secure Internet [service], much less everything they may need to do as technologies and usage patterns change.”<sup>114</sup>

Although sufficiently broad to ensure broadband ISPs have flexibility in how they manage their networks, a “reasonable network management” rule that solely enforces *ex ante* regulations would allow parties to second-guess each and every management practice broadband ISPs implement, and potentially lead to sanctions for ISPs who guess wrong as to what regulators might later deem reasonable. Such a rule will impede broadband ISPs’ ability to manage their networks to deliver the services their customers expect.<sup>115</sup> So too will a rule that requires broadband ISPs to seek Commission approval prior to implementation of new network management practices. As Professors Faulhaber and Farber observe:

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<sup>113</sup> *NPRM* ¶ 135.

<sup>114</sup> *Id.* ¶ 140; *see* CWA Comments at 23.

<sup>115</sup> *See Faulhaber & Farber* at 324 (“Network administrators would not be given a rulebook, but would be subject to *ex post* penalties if the actions they took during a congestion emergency were later found by regulators not to be ‘reasonable.’ Having the advantage of 20-20 hindsight, plus lots of ‘help’ from advocates and competitors could punish network management actions by hard-pressed administrators.”); AT&T Comments at 186 (“Providers will be less likely to invest in cutting-edge network-management technology if they fear that an unpredictable regulator could latter [sic] strip that technology of its value by deeming its use ‘unreasonable.’”); Verizon Comments at 81.

Network management is difficult at best; driven by exogenous shocks requiring instant reactions from experienced network administrators using what tools are available and relying on experience. . . . This is not a job which is amenable to rules, since it involves highly technical, complex and dynamic engineering decisions well beyond the expertise of most regulators. When an event occurs and new lessons are learned, we cannot wait for a regulatory body to write new rules, go through a 90-day comment cycle, followed by a reply comment cycle, and then possibly a court challenge to be able to use the lessons experience teaches us.<sup>116</sup>

When the Commission in the past has attempted “to establish a comprehensive regulatory scheme to dictate network-services development” – for example, in the case of video dialtone, open video systems, and advanced instant messaging – “one finds failure, not success.”<sup>117</sup>

For these reasons, rather than making up the parameters of what is “reasonable” on the fly or detailing ex ante what network management practices are deemed acceptable, the Commission should find a third way. We urge the Commission to tap into the expertise of entities like the IETF and other relevant industry standards-setting bodies as a first step.<sup>118</sup> As explained above, there was widespread support in the record for the important role that such third-party organizations can play in implementing any rules the Commission adopts in this proceeding.<sup>119</sup> These groups can assist the Commission in determining in the first instance, through a consensus-based process premised on engineering expertise, which network management practices are reasonable (and, therefore, should be included in a safe harbor or a

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<sup>116</sup> *Faulhaber & Farber* at 323.

<sup>117</sup> *See Daniel L. Brenner, Creating Effective Broadband Network Regulation*, 62 Fed. Comm. L.J. 13, 32 (2010).

<sup>118</sup> *See Comcast Comments* at 52-53; *ITIC Comments* at 8 (urging the Commission to “assist network owners by providing examples of presumptively reasonable network management practices”).

<sup>119</sup> *See supra* Section II.

rebuttable presumption).<sup>120</sup> Other standards-setting bodies could have similar roles, as could industry consortia and trade associations that promulgate, publish, and seek public input on “best practices” for network management.<sup>121</sup> CDT, which proposes utilizing standards bodies such as the IETF in a more limited role, recognizes their usefulness and urges the Commission to evaluate the reasonableness of network management practices in light of Internet standards established by bodies such as these.<sup>122</sup>

By empowering third-party entities to help guide the Commission on how to assess the “reasonableness” of various practices, the Commission will reduce the concerns on the part of broadband ISPs about the standards applicable to their network management decisions. At a minimum, network management undertaken for the purpose of addressing recognized, legitimate concerns such as network congestion, security, spam, copyright protection, and law enforcement needs, “should be treated as presumptively permissible, [and] the presumption . . . should only be rebutted where it is demonstrated that a network management technique is targeted in a manner that is anticompetitive or that harms consumers.”<sup>123</sup>

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<sup>120</sup> See CCIA Comments at 36 (“CCIA encourages the Commission to designate an existing entity, such as the IETF, or establish a new technical advisory panel that will consider and evaluate disputes over network management practices in the first instance [and] provide clear guidance to [broadband ISPs], such that [broadband ISPs] are not left wandering the darkness waiting for the Commission to complete case-by-case adjudications.”).

<sup>121</sup> See ATIS Comments at 4 (“Based on ATIS’ experience with network management, ATIS strongly believes that . . . the industry should be permitted to continue to develop effective and equitable network management tools through organizations such as ATIS.”); CWA Comments at 23-24 (“[B]est practices in the network engineering community, industry standards, and standards created by accepted standards bodies are useful and reliable guideposts for the Commission to use in determining whether a given practice falls within the ‘reasonable network management’ definition.”); Comcast Comments at 56-58. One group that serves as an example of useful and effective collaboration among interested stakeholders is the Messaging Anti-Abuse Working Group (“MAAWG”), which was created “to enhance consumer trust and confidence by developing universal policies and procedures to address messaging abuse.” MAAWG Comments at 1.

<sup>122</sup> See CDT Comments at 45-46.

<sup>123</sup> ITIC Comments at 8; see AT&T Comments at 187 (“And in all events, the Commission should create a *rebuttable presumption* that a network-management practice intended to address a legitimate provider interest --  
(footnote continued...)”)

Certain parties urge the Commission to narrowly define “reasonable network management” to permit only congestion management, and to require broadband ISPs to “seek prior permission” from the Commission before implementing other network management practices.<sup>124</sup> But as ITIC explained, “Network management tools are in constant use in all types of networks to address requests for network resources, to allocate capacity, to minimize congestion, and to compensate for interference or signal degradation.”<sup>125</sup> AT&T confirmed that “network management challenges go well beyond bandwidth and usage issues. For example, network engineers must figure out how to route the highest volumes of traffic – and the most sensitive or urgent traffic – when confronted with hardware and network failures, including cable cuts, natural disasters, and other disruptions.”<sup>126</sup> Given the dynamic nature of the Internet and the numerous potential problems that can arise outside the scope of congestion management, the Commission should reject calls for a prior approval process. For the same reasons that Google argues that the Internet should allow “innovation without permission,” it is equally vital to let network engineers innovate and act according to industry standards without seeking prior government approval.

Some commenters claim that network management is used by broadband ISPs as a means of avoiding investment in bandwidth, and they believe they have the answer: broadband ISPs

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(...footnote continued)

including, but not limited to, safeguarding consumers or networks and mitigating congestion -- is reasonable, unless and until a complainant demonstrates otherwise.”) (emphasis in original).

<sup>124</sup> See Google Comments at 68 (“Google urges the FCC to establish a clear but narrow set of reasonable network management practices, limited solely to engineering practices legitimately related to network congestion.”), 73 (urging the FCC to eliminate its “catch-all” exception and, instead, “establish a process . . . by which providers may seek prior permission”).

<sup>125</sup> ITIC Comments at 8-9.

<sup>126</sup> AT&T Comments at 184. “There are on average more than 49,000 such failures *each month* over AT&T’s U-verse, wireless, and DSL networks combined.” *Id.* (emphasis in original).

should simply invest in more capacity.<sup>127</sup> However, as Professors Faulhaber and Farber observe, “[i]t is obvious that this is not a serious suggestion for dealing with congestion when it occurs. Adding capacity to a network takes time, while congestion must be dealt with immediately.”<sup>128</sup> Networks must be built to meet reasonably foreseeable demands, but, when demand exceeds supply, congestion can occur and must be managed. Today, without any of the regulations proposed by the *NPRM*, ISPs invest tens of billions of dollars in their networks. They have every competitive incentive to continue doing so, provided that the Commission retains the kind of light-touch regulatory environment that is essential to maintaining investor confidence.

#### **IV. MANAGED SERVICES STAND TO DELIVER SIGNIFICANT INNOVATION AND PUBLIC INTEREST BENEFITS IF THEY ARE ALLOWED TO DEVELOP WITHOUT UNNECESSARY REGULATORY BURDENS.**

In the initial comments, there was substantial agreement that “managed services” could provide a number of public interest benefits, such as by helping to realize several of the national purposes outlined in the Recovery Act and incenting continued investment in and deployment of next-generation networks.<sup>129</sup> There was also substantial agreement that Commission policies should encourage the realization of these benefits, a position that was strongly reinforced in the

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<sup>127</sup> See Free Press Comments at 84 (urging the Commission to set “ a high bar” for what constitutes “reasonable network management” to “encourage efficient investment and growth” and protect against “profiting from artificial scarcity”); Center for Media Justice et al. Comments at 40 (filed under the name “Public Interest Commenters”) (“Finally, network management practices should never be used as a substitute for deployment of facilities and expansion of capacity.”); see also Google Comments at 69 (“Differentiation of traffic should not become a long-term excuse for a broadband provider’s failure to make appropriate and continuing network investments to resolve capacity issues.”).

<sup>128</sup> *Faulhaber & Farber* at 324. Moreover, “‘Just add capacity’ is a recipe for a very expensive Internet[.]” *Id.*

<sup>129</sup> See, e.g., Alcatel-Lucent Comments at 21; ATIS Comments at 1, 5; American Cable Ass’n Comments at 13; Bright House Networks Comments at 12-15; Cisco Comments at 14-16; Clearwire Corp. Comments at 13; Ericsson Comments at iii; ITIC Comments at 13; Motorola Comments at 14; NCTA Comments at 6, 37; TIA Comments at 38-40.

National Broadband Plan.<sup>130</sup> The essential conclusion to draw from the record thus far is that, so long as broadband ISPs continue to provide a robust open Internet service, the Commission should refrain from adopting, or even proposing, any regulations that might thwart their ability to invest in and develop managed services.

The term “managed services” has not proven susceptible to easy or consistent definition.<sup>131</sup> Nevertheless, it is clearly appreciated that managed services can coexist with a robust, open Internet service. A number of commenters explained how managed services can deliver a number of consumer and public interest benefits if they are allowed to develop and grow in a deregulatory environment.<sup>132</sup> These benefits can include smart grid, distance learning, and other uses of broadband networks that help to fulfill the national purposes identified by Congress in the Recovery Act.<sup>133</sup> For example, Dr. Elizabeth Cowboy, Medical Director of the Via Christi Health Systems in Wichita, Kansas, wrote to Chairman Genachowski to explain that

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<sup>130</sup> See generally National Broadband Plan Section III.

<sup>131</sup> See, e.g., Comcast Comments at 61-62 (explaining that “those services[,] such as ‘cable services’ and ‘telecommunications services[,]’ already have been defined and regulated under provisions of the Communications Act and Commission precedent [and] thus, . . . would not come within the new ‘managed’ services rubric the Commission seeks to create here”); Cisco Comments at 14-15 (proposing that the Commission define managed services broadly as those services that generally share a need for minimal latency, minimal jitter, guaranteed bandwidth, and (in some cases) heightened security); OPASTCO Comments at 11 (arguing that the definition should be flexible and allow rural ILECs to offer enhanced services that can increase the opportunity for revenue needed to support the development and deployment of broadband networks); Free Press Comments at 108 (noting that managed services “could take a variety of forms”); TIA Comments at 37 (urging the Commission to subdivide managed services into two groups: one that includes services created by operators to serve an established need on the part of the end user-entity and generally requiring guaranteed (low) packet loss, guaranteed (low) packet delay, secure connectivity, and guaranteed bandwidth; and a second group including services requested directly by the end-user); Ad Hoc Telecomm. Users Comments at 28-29.

<sup>132</sup> See, e.g., Alcatel-Lucent Comments at 21; ATIS Comments at 1, 5; ACA Comments at 13; Bright House Networks Comments at 12-15; Cisco Comments at 14-16; Clearwire Corp. Comments at 13; Ericsson Comments at iii; ITIC Comments at 13; Motorola Comments at 14; NCTA Comments at 6, 37; TIA Comments at 38-40; Time Warner Cable Inc. Comments at 103.

<sup>133</sup> See, e.g., CDT Comments at 47-48 (discussing potential telemedicine applications); Comcast Comments at 60-61; Global Crossing Comments at 8-9.

“[m]uch of telemedicine’s advances rely on the security, timeliness, and accuracy of patient data transmitted over broadband networks.”<sup>134</sup> While security, reliability, and accuracy may serve as impediments to delivering this type of service over the “best efforts” open Internet, these are exactly the kinds of special requirements that can be addressed through managed services.

The ability to offer managed services also can be important to the business case for further investment in broadband networks.<sup>135</sup> Broadband ISPs’ leveraging of communications networks for multiple purposes proves the point. Both cable and telephone networks grew into broadband networks as their owners were able to introduce new services, such as Internet service and voice applications. As wireline, wireless, cable, and other providers look for new ways to invest and compete, the ability to offer managed services can provide the return on investment needed to justify the massive expenditures that will be required to bring broadband to the next level and meet the deployment goals of the National Broadband Plan.<sup>136</sup>

There are those who believe that managed services should be regulated for fear that the ability to offer such services could thwart the open Internet. For example, Netflix and Vonage

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<sup>134</sup> Letter from Dr. Elizabeth Cowboy, Medical Director, *eCare-ICU*, Via Christi Health Sys., to Julius Genachowski, Chairman, FCC, GN Docket No. 09-191, at 2 (Mar. 9, 2010) (“*Via Christi Health Letter*”). Notably, in the Commission’s February 18th Open Meeting, the Broadband Task Force suggested that one concern with delivering smart grid services is the reliability of commercial, best-efforts broadband Internet service. See News Release, FCC, *Broadband Plan’s Working Recommendations for Key National Priorities Unveiled 2* (Feb. 18, 2010). Allowing broadband providers to work with energy companies and other potential partners to develop the requisite technologies and quality-of-service necessary to deliver smart grid services will be integral to realizing the benefits of smart grid and other managed services.

<sup>135</sup> See, e.g., Nokia Siemens Comments at 14; OPASTCO Comments at 11; Qwest Comments at 28-29; Verizon Comments at 44-45.

<sup>136</sup> National Broadband Plan at 9 (“GOAL No. 1: At least 100 million U.S. homes should have affordable access to actual download speeds of at least 100 megabits per second and actual upload speeds of at least 50 megabits per second” by 2020). As the FCC’s Broadband Team recognized, this type of effort could require almost \$350 billion in network investments. See Presentation, Broadband Task Force, FCC, *September Commission Meeting, 141 Days Until Plan Is Due* slide 45 (Sept. 29, 2009), available at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-293742A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-293742A1.pdf) (estimating that to reach every home in America with 100 Mbps service could require \$350 billion in network investment).

argue against allowing network operators to provide managed services that might compete with the Internet-based video and voice services Netflix and Vonage deliver.<sup>137</sup> The path urged by these commenters is unnecessary and, ultimately, counter-productive. Free Press concedes that it would be prudent to gather information on the nature and impact of such services before adopting new policies.<sup>138</sup> There is no evidence that the Commission needs to regulate managed services to keep the Internet robust, open, and amenable to innovation and investment. Rather, the evidence demonstrates that, as companies use their networks to deliver multiple services, they are constantly increasing the speed and capacity for their broadband Internet services.

For nearly 15 years, broadband ISPs have been investing billions of dollars to improve their service by increasing speed and enhancing quality. Among the many steps Comcast has taken to improve the quality of its service to stay ahead of competitors and customer demand is the widespread deployment of DOCSIS 3.0, which will enable download speeds in excess of 50 Mbps and soon 100 Mbps and more. DOCSIS 3.0 is already available to over 80 percent of the 50.8 million homes that can purchase Comcast's High-Speed Internet service. Comcast also is leading the way on IPv6 deployment – an essential step to ensure that the booming growth of the Internet does not cause it to run out of IP addresses for connected devices.<sup>139</sup> And Comcast is a leader in the deployment of DNSSEC, DNS Lookup, Constant Guard, and other utilities designed to ensure the security and reliability of the service.<sup>140</sup> The facts clearly show that

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<sup>137</sup> See Netflix Comments at 9-10; Vonage Comments at 27.

<sup>138</sup> See Free Press Comments at 105-09.

<sup>139</sup> See Jason Livingood, Executive Director, Internet Sys., *Preparing for the IPv6 Transition*, Comcast Voices, Jan. 27, 2010, at <http://blog.comcast.com/2010/01/preparing-for-the-ipv6-transition.html> (last visited Apr. 19, 2010); Comcast Corp., *Comcast.net IPv6 Information Center*, at <http://www.comcast6.net/> (last visited Apr. 19, 2010).

<sup>140</sup> See Comcast Comments at 8.

competition is driving providers like Comcast to constantly improve, innovate, and invest to meet the increasing demands of consumers. In short, the marketplace has done well addressing consumers' demands for robust Internet service, and there is no evidence that allowing network operators to provide "managed services," whether under new regulatory regimes or without regulation, will change that fact.

**V. SIGNIFICANT QUESTIONS ABOUT THE FACTUAL BASIS FOR ANY REGULATION ARE STILL UNANSWERED.**

There remain important questions about the factual basis for upsetting the regulatory status quo. The data and evidence compiled in the record thus far highlight the risks to continued investment and innovation if the Commission adopts the regulations as proposed. And while Comcast and others have offered constructive ideas on how to reduce the adverse consequences of any new rules, the "risks" to an open Internet that these rules are intended to address remain largely theoretical. Despite the eternal vigilance of activists, they have not identified any new risks to an open Internet during the pendency of this proceeding that demonstrate a need for new rules.

But there is an area of real risk thoroughly documented in the record – the risk that new regulations would have a detrimental effect on continued investment in the Internet, particularly by broadband ISPs who need the continued support of the financial community to continue improving competitive broadband networks. In fact, the evidence still weighs disproportionately against proceeding with new rules.

Proponents of the rules continued to fall back on conjecture about potential anticompetitive, anti-consumer practices by broadband ISPs, rather than on actual evidence of a

problem. They cited no evidence of current broadband ISPs' wrongdoings, other than pointing to the oft-cited Madison River and Comcast-BitTorrent incidents, which are inapposite.<sup>141</sup> This is not surprising, since the evidence largely points in the other direction.<sup>142</sup> Moreover, to the extent commenters believe that the *Comcast Network Management Order* provides a basis to issue open Internet regulations, it is important to note that the order has been vacated, rendering it a legal nullity.<sup>143</sup>

The National Broadband Plan recognized, “[d]ue in large part to *private investment* and *market-driven innovation*, broadband in America has improved considerably in the last decade.”<sup>144</sup> As Cisco noted in its comments, “[t]he fact that years of experience without rules of

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<sup>141</sup> See, e.g., DISH Comments at 5; Elec. Frontier Found. Comments at 2; Google Comments at 39; Vonage Comments at 9. These two examples actually illustrate that the proposed rules are unnecessary and highlight the success of the Commission's current policies. The Madison River case resulted in a prompt settlement and consent decree with the carrier whose conduct was challenged, and Comcast voluntarily proffered to transition from its challenged network management practice to a protocol-agnostic network management tool prior to issuance of the Commission's Order, a transition that was completed over 15 months ago. See, e.g., Internet Innovation Alliance Comments at 5 (“The handful of oft-cited bad actions over the past five years – such as the failure to notify consumers of its restrictions on P2P traffic over the BitTorrent file sharing software – have quickly resulted in prompt reversals and/or seemingly effective enforcement actions.”); ITIF Comments at 10 (arguing that they are “unaware of any *current* behavior in the Internet marketplace that would demand immediate FCC action” and that Madison River and Comcast-BitTorrent have “long since been corrected” (emphasis in original)); MetroPCS Communications, Inc. Comments at 18 (“Ironically, these cases – which are separated by a number of years and relate to completely different circumstances – were resolved by the Commission under its existing policies. Given the significant increase in broadband adoption in the last four years, the fact that there have been only two complaints demonstrates how well competition has been working.”).

<sup>142</sup> See *Internet Oversight Is Needed, but Not in the Form of FCC Regulation*, Wash. Post, Apr. 17, 2010, available at <http://www.washingtonpost.com/wp-dyn/content/article/2010/04/16/AR2010041604610.html> (“For the past eight years, the FCC has rightly taken a light regulatory approach to the Internet, though it believed it had authority to do more. . . . There have been very few instances where ISPs have been accused of wrongdoing -- namely, unfair manipulation of online traffic -- and those rare instances have been cleared up voluntarily once consumers pressed the companies.”).

<sup>143</sup> See *United States v. Munsingwear*, 340 U.S. 36, 41 (1950); *Action on Smoking & Health v. Civil Aeronautics Bd.*, 713 F.2d 795, 797 (D.C. Cir. 1983); see also *Aviation Enters. v. Orr*, 716 F.2d 1403, 1408 (D.C. Cir. 1983) (explaining that vacatur “drain[s] the court’s underlying findings of fact of whatever vitality they might otherwise have had”). As the D.C. Circuit has explained, “[t]o ‘vacate,’ . . . means ‘to annul; to cancel or rescind; to declare, to make, or to render, void; to defeat; to deprive of force; to make of no authority or validity; to set aside.’” *Action on Smoking & Health*, 713 F.2d at 797 (quoting 91 C.J.S. Vacate (1955)).

<sup>144</sup> National Broadband Plan at 3 (emphasis added).

the sort contemplated here *have yielded virtually no complaints of anticompetitive activity* seriously undermines the argument that such rules are necessary.”<sup>145</sup> Verizon Executive Vice President Tom Tauke summed up the discussion by noting that “[t]here is virtually no one who is contending that there is a problem *now*. Instead, the debate is over whether or not actions taken by the government would prevent a problem in the future.”<sup>146</sup> “Imaginative” theory and conjecture are not a solid foundation for fact-based, data-driven policymaking.<sup>147</sup>

Only a few parties argue that regulations will not be detrimental to broadband ISPs’ investments or employment. For example, Google argues that broadband ISPs have been investing under “de facto” openness for many years, so “de jure” openness should not substantially change the investment equation.<sup>148</sup>

In contrast, nearly every commenter that discussed the issue (and *every* commenter who actually invests in competitive broadband networks) explained that new regulations would harm network operators’ business case for improving broadband Internet services. For example:

**Professors Faulhaber & Farber:** “The costs of the proposed regulation in terms of reduced consumer welfare, reduced investment incentives, and reduced innovation are likely very large.”<sup>149</sup>

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<sup>145</sup> Cisco Comments at 7 (emphasis added).

<sup>146</sup> Free State Found. Winter Telecom Policy Summit – Net Neutrality Regulation: *Net Neutrality: Why Now – Or Ever?* (Jan. 29, 2010) (Remarks of Thomas Tauke), available at <http://www.nextgenweb.org/news-and-blog-clips/free-state-foundation-winter-telecom-policy-summit-net-neutrality-regulation>.

<sup>147</sup> *Net Neutrality Regulation: The Economic Evidence* ¶ 32 (“[W]e do not believe that the Commission should make public policy decisions on the basis of imaginative theories that have not yet been formally modeled, let alone empirically demonstrated.”).

<sup>148</sup> Google Comments at 8-9. This formulation underestimates the potential reach of the proposed regulations and ignores the fact that investment in the networks largely has been driven by the ability to derive multiple revenue streams from the same network.

<sup>149</sup> *Faulhaber & Farber* at 304; *see id.* at 318 (“Prohibiting broadband ISPs from charging for enhanced performance would certainly result in reducing ISP incentives to invest or innovate in performance-enhancing network capabilities.”).

**Professors Becker & Carlton:** “The FCC’s proposed rules would artificially restrict the ability of Internet service providers to respond to changes in technology and demand. That restriction would be likely to harm investment, innovation, and consumer welfare.”<sup>150</sup>

**Twenty Economic Scholars, Professors, and Practitioners:** “To the extent regulatory uncertainty prevents parties from engaging in efficiency-enhancing conduct, or entering into efficiency-enhancing contracts, or increases the risks that such conduct or contracts will be voided (or even penalized) by subsequent Commission decisions, firms are less likely to engage in the investment and innovation that such conduct and contracts would otherwise have enabled.”<sup>151</sup>

And a coalition of communications technology manufacturing companies noted, “a substantial body of research shows that [the Commission’s proposed] nondiscrimination rule . . . likely would have a negative impact on network innovation and investment and would be particularly harmful to innovation and investment in rural areas.”<sup>152</sup>

The impact of reduced investment cannot be overstated. Cox noted two recent studies that found that even a two percent reduction in total broadband investment could reduce employment by 31,000 jobs, and a five percent reduction could reduce employment by 78,000 jobs.<sup>153</sup> Economists Robert Crandall and Hal Singer “estimate that the going-forward capital expenditures in next-generation access technologies would create approximately 509,000 jobs

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<sup>150</sup> Declaration of Gary S. Becker & Dennis W. Carlton, Professors of Economics and Business, Univ. of Chicago ¶ 11 (attached as Attachment A to Verizon’s Comments); *see id.* at 24 (“Network Neutrality rules are likely to harm consumer welfare by deterring investment and preventing network service providers from adopting efficient practices.”); *see also* Comcast Comments at 10-12; BT Americas Comments at 2; CenturyLink Comments at 9-11; CWA Comments at 15; TIA Comments at 26; US Telecom Comments at 51; Verizon Comments at 66; Cisco Comments at 6; Songwriters Guild of Am. Comments at 2; NCTA Comments at 17-18; Time Warner Cable Inc. Comments at 30-33.

<sup>151</sup> *Net Neutrality Regulation: The Economic Evidence* ¶ 44.

<sup>152</sup> Manufacturer Coalition Comments at 3. The coalition represents 18 companies, including ADC Telecommunications, BTECH Inc., Camiant, Inc., Omnitron Systems Technology, Inc., Positron Access Solutions, and Sheyenne Dakota, Inc.

<sup>153</sup> *See* Cox Comments at 18.

relative to a world without such investments *so long as no new regulatory changes undermine the incentives of [broadband ISPs] to continue to invest.*”<sup>154</sup>

The Commission also should not underestimate the potentially negative consequences for adoption. The National Organizations, which include “sixteen highly-respected civil rights, professional, service and elected officials’ organizations,” “are particularly concerned about the effects of the Commission’s proposed nondiscrimination rule on affordability” and how “[f]orcing end users to bear the entire costs of broadband networks and thus pay higher prices for broadband offerings would negatively impact broadband adoption and either cement or widen the digital divide.”<sup>155</sup> Twenty economic scholars, professors, and practitioners echoed this concern in their filing:

[T]he upshot [of the proposed nondiscrimination rule] would be to raise prices to downstream subscribers and ultimately reduce broadband adoption – precisely the opposite of what the Commission is seeking to accomplish through its National Broadband Plan. Unlike the conjectural benefits of “subsidizing content,” the substantial

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<sup>154</sup> Crandall & Singer, *supra* note 73, at 4 (emphasis in original).

<sup>155</sup> National Organizations Comments at 15-16; *see* Civil Rights Organizations Ex Parte Letter, GN Docket No. 09-191, at 1 (Jan. 14, 2010) (filed under the name of Sylvia Aguilera) (signed by 23 Civil Rights organizations) (“We feel it is extremely possible that net neutrality could slow the growth of broadband services, putting minority groups at risk of being left behind in our nation’s acceptance of this most important new technology.”); OCA Nat’l Cntr. Ex Parte Letter, GN Docket No. 09-191, at 1 (Mar. 30, 2010) (representing Asian-Pacific Americans and noting that “[m]inority business owners already face a number of obstacles when starting a company and further regulation only adds another barrier to entry”); *see also* Harry Alford, CEO, Nat’l Black Chamber of Commerce, Editorial, *Broadband Rules Target Black Families*, Cincinnati Enquirer, Mar. 31, 2010 (“Under the banner of ‘Internet openness,’ some are proposing new regulations that threaten to increase the cost of broadband service at exactly the wrong time for our economy.”), available at <http://news.cincinnati.com/article/20100331/EDIT02/3310381/Broadband-rules-target-black-families>; Brent Wilkes, Nat’l Exec. Dir., League of United Latin Am. Citizens, Editorial, *A Broadband Bill of Rights for Latinos*, Daily Sparks Tribune, Mar. 29, 2010 (“For sure, net neutrality standards should protect against broadband providers engaging in anticompetitive behavior by blocking or inhibiting access to competing Web sites or content. But beyond that, online applications companies should not be able to exploit these rules for their own parochial benefit and, in particular, should not be able to use net neutrality rules to shift the costs onto consumers for building broadband networks.”), available at [http://www.dailysparkstribune.com/view/full\\_story/6877754/article-A-broadband-bill-of-rights-for-Latinos?instance=secondary\\_story\\_bullets\\_left\\_column](http://www.dailysparkstribune.com/view/full_story/6877754/article-A-broadband-bill-of-rights-for-Latinos?instance=secondary_story_bullets_left_column).

economic benefits of increased broadband adoption have been demonstrated in numerous empirical studies.<sup>156</sup>

When it comes to evaluating the claims in the record, the views of those parties that actually must raise the funds to invest in networks and the experts that advise them on those decisions should carry greater credibility with the Commission than the views of parties who have neither built broadband networks nor invested in them. And, in the event of uncertainty, the Commission should refrain from regulating given the decided lack of evidence of any harms in the record and the need to avoid unnecessary impediments to investment in a still-uncertain economy. If the speculative arguments by proponents of regulation are wrong, as we believe they are, and if their speculation becomes the basis for rules, the consequence could reduce investment and jobs and bring harm, not benefits, to consumers.

Finally, some parties argued that regulation would help foster innovation and investment at the edge. Under this theory, an edge service or application provider will have less incentive to innovate, or will have a harder time acquiring capital, because it cannot be certain that its service or application will be able to reach consumers.<sup>157</sup> Professors Faulhaber & Farber demonstrate otherwise:

The losers are innovators that need enhanced network performance so that they can introduce a higher quality of service. But prohibiting ISPs from offering performance enhancements for a fee discourages “edge” innovation that could

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<sup>156</sup> *Net Neutrality Regulation: The Economic Evidence* ¶ 38 (citing, among other sources, Mark Dutz et al., *The Substantial Consumer Benefits of Broadband Connectivity for U.S. Households*, Internet Innovation Alliance, (July 2009); and Robert Crandall, William Lehr, & Robert Litan, *The Effects of Broadband Deployment on Output and Employment: A Cross-Sectional Analysis of U.S. Data*, Brookings Inst.: Issues in Economic Policy No. 6 (2007)); see also Julius Genachowski, Chairman, FCC, Reviewing the National Broadband Plan: Hearing Before the Senate Commerce Committee (April 14, 2010) (“Multiple studies tell us the same thing – even modest increases in broadband adoption can yield hundreds of thousands of new jobs.”).

<sup>157</sup> See Free Press Comments at 45 (arguing that the “potential for discriminatory treatment and nonstandard network management could destroy investor confidence in the applications market, stifling growth in the one segment that drives the information economy”).

take advantage of those very network performance enhancements. Under the proposed regulations, customers will never get to choose these high-powered services, since the FCC will have regulated them away.<sup>158</sup>

They are not alone in their assessment. The Manufacturer Coalition warned that “[b]oth network investment and web content and service investment would decline since the proposed rule would prohibit ISPs and web content and service providers from implementing a large variety of socially beneficial business models involving distinctive treatment of specific web content or services under which benefits exceed costs.”<sup>159</sup> As the American Consumer Institute notes, absent any analysis or facts in the record, there is no basis for the Commission to conclude that its proposed rules will “create greater value for consumers from innovation among suppliers in the Internet value cluster – network providers, content providers and applications providers.”<sup>160</sup>

What is most illogical about the argument that regulation would help foster innovation and investment at the edge is that it ignores the tremendous innovation at the edge that already has taken place on the Internet in the *absence* of such regulation.<sup>161</sup> The National Broadband Plan discussed at length how innovation at the edge has helped create value, save money, and improve the lives of consumers.<sup>162</sup> It is not a coincidence that many of the most popular Internet applications and services in the world – including Google, Facebook, YouTube, and Amazon – were founded in the United States. If parties believe that there is no difference between *de jure* and *de facto* openness with respect to investment in the network,<sup>163</sup> then maintaining the status

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<sup>158</sup> *Faulhaber & Farber* at 318.

<sup>159</sup> Manufacturer Coalition Comments at 3.

<sup>160</sup> American Consumer Institute Comments at 7-8.

<sup>161</sup> National Broadband Plan at 3.

<sup>162</sup> *See id.* at 15-17.

<sup>163</sup> *See supra* note 148 and accompanying text.

quo will have no negative effect on the edge application and service developers. To be sure, the light-touch regulatory approach towards the Internet first adopted by the Clinton Administration in the mid-Nineties has facilitated the extraordinary success and growth of the entire Internet ecosystem, including the amazing success achieved by companies at the edge.

**VI. THE COMCAST DECISION CONFIRMS THAT THE COMMISSION MUST PROVIDE A NEW AND MORE PARTICULARIZED ANALYSIS OF ITS ANCILLARY AUTHORITY TO ADOPT THE PROPOSED RULES.**

On April 6, 2010, the U.S. Court of Appeals for the District of Columbia Circuit issued its judgment and opinion in *Comcast v. FCC*.<sup>164</sup> Contrary to the claims of some commenters, the decision does not close the door on ancillary authority, but it does have two primary implications for this proceeding. First, it precludes the *NPRM*'s reliance on the theory of ancillary authority as it was articulated in the *Comcast Network Management Practices Order* as a basis for its authority to adopt the proposed rules.<sup>165</sup> Second, it confirms that the Commission must explain how each proposed regulation is “reasonably ancillary” to the effective performance of its statutorily mandated responsibilities, not merely to a statutory statement of policy or purpose, and that the agency must do so in a sufficiently particular way supported by substantial record evidence.<sup>166</sup>

As Comcast noted in our initial comments, the *NPRM* “simply adopts in large part the analysis [of statutory authority] in the *Comcast Network Management Order*.”<sup>167</sup> The *NPRM* stated that “[w]e have ancillary jurisdiction . . . when the subject matter falls within the agency’s

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<sup>164</sup> *Comcast Corp. v. FCC*, No. 08-1291, 2010 WL 1286658 (D.C. Cir. Apr. 6, 2010).

<sup>165</sup> *See id.* at \*19.

<sup>166</sup> *Id.* at \*7, \*12.

<sup>167</sup> Comcast Comments at 22.

general statutory grant of jurisdiction and the regulation is ‘reasonably ancillary to the effective performance of the Commission’s various responsibilities,’” and concluded “[t]hat test is met” largely based on the policies set forth in Section 230(b) of the Communications Act and Section 706(a) of the Telecommunications Act of 1996.<sup>168</sup> The *Comcast* court, however, explained that the governing test requires the Commission to identify a specific “statutorily mandated responsibilit[y]” to which its exercise of authority is reasonably ancillary, not a mere purpose or policy provision.<sup>169</sup> Thus, the *NPRM*’s reliance on Sections 230(b) and 706(a) is not tenable because the D.C. Circuit has rejected that theory of statutory authority.<sup>170</sup>

The *Comcast* decision also makes clear that the Commission cannot make a general assertion of ancillary authority to regulate Internet services, but must instead “defend its exercise of ancillary authority on a case-by-case basis.”<sup>171</sup> This confirms that, to use ancillary authority, “the Commission must demonstrate *with substantial evidence* how *each particular rule* it has proposed is ‘reasonably ancillary’ to a statutorily mandated responsibility.”<sup>172</sup> Although, as the

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<sup>168</sup> *NPRM* ¶ 83 (quoting *United States v. Sw. Cable Co.*, 392 U.S. 157, 172-73 (1968)).

<sup>169</sup> *Comcast Corp.*, 2010 WL 1286658, at \*12 (“[T]he Commission maintains that congressional policy by itself creates ‘statutorily mandated responsibilities’ sufficient to support the exercise of section 4(i) ancillary authority. Not only is this argument flatly inconsistent with *Southwestern Cable*, *Midwest Video I*, *Midwest Video II*, and *NARUC II*, but if accepted it would virtually free the Commission from its congressional tether.”). The exercise of ancillary authority is only appropriate when: “(1) the Commission’s general jurisdictional grant under Title I covers the subject of the regulations; and (2) the regulations are reasonably ancillary to the Commission’s effective performance of its statutorily mandated responsibilities.” *Am. Library Ass’n v. FCC*, 406 F.3d 689, 700 (D.C. Cir. 2005).

<sup>170</sup> *Comcast Corp.*, 2010 WL 1286658, at \*12, \*16. Although the *Comcast* court acknowledged that Section 706 “does contain a direct mandate,” it noted that the Commission, “[i]n an earlier, still-binding order, . . . ruled that section 706 ‘does not constitute an independent grant of authority,’” and therefore, “[a]s in the case of section 230(b) and section 1, the Commission is seeking to use its ancillary authority to pursue a stand-alone policy objective, rather than to support its exercise of a specifically delegated power.” *Id.* at \*16.

<sup>171</sup> *Id.* at \*8.

<sup>172</sup> *Comcast Comments* at 24 (emphasis added) (citing *Sw. Cable Co.*, 392 U.S. at 176-77; *NARUC v. FCC*, 533 F.2d 601, 613-14 (D.C. Cir. 1976); *GTE Serv. Corp. v. FCC*, 474 F.2d 724, 734 (2d Cir. 1973); and *CCIA v. FCC*, 693 F.2d 198, 213 (D.C. Cir. 1984)).

*Comcast* court acknowledges, broadband Internet services satisfy the first prong of the ancillary authority test because they fall within the Commission’s subject matter jurisdiction,<sup>173</sup> the *NPRM* fails to satisfy the second prong because it does not adequately explain how any of the regulations it proposes “are reasonably ancillary to the Commission’s effective performance of its statutorily mandated responsibilities.”<sup>174</sup> Whatever the validity of other regulations in this area, the Commission must “independently justif[y]” that the particular regulations it has proposed here are “reasonably ancillary” to a statutorily-mandated responsibility.<sup>175</sup> Accordingly, if the Commission elects to go forward with open Internet regulations, it must revisit the basis for its authority set forth in the *NPRM* and proceed under the parameters provided by the D.C. Circuit.

## VII. CONCLUSION

The Internet has been in general use for well over a decade. But given the rapid pace of innovation and evolution, it cannot be considered “mature” – the emergence of new technologies and more dynamic interactive content, applications, and services every day gives it the character of constant change. Mindful of this dynamism, the Commission must clearly establish that there is a compelling need to regulate before adopting rules that risk stifling investment and innovation. The record in this proceeding does not evidence that compelling need. But the record does reflect widespread agreement on some important issues as the Commission moves forward in this proceeding, particularly the salutary role that third-party technical groups can

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<sup>173</sup> See *Comcast Corp.*, 2010 WL 1286658, at \*3; see also 47 U.S.C. § 151 (granting the Commission jurisdiction over “interstate and foreign commerce in communications by wire or radio”).

<sup>174</sup> *Am. Library Ass’n*, 406 F.3d at 700.

<sup>175</sup> See *Comcast Corp.*, 2010 WL 1286658, at \*19 (“Because the Commission has failed to tie its assertion of ancillary authority over Comcast’s Internet service to any ‘statutorily mandated responsibility,’ we grant the petition for review and vacate the *Order*.” (citing *Am. Library*, 406 F.3d at 692)).

play in supporting the Commission’s goals, the need to fully evaluate potential risks to an open Internet that exist throughout the Internet ecosystem (not just at what engineers would consider the “network” or “physical” layer), the importance of establishing a compelling need for – and narrowing and clarifying the form of – any rules the Commission may adopt, and the threat that regulation poses to yet-to-be-developed “managed and specialized” services. We urge the Commission to recognize the substantial consensus on these matters as it carefully charts its course.

Respectfully submitted,

/s/ Kathryn A. Zachem

Kathryn A. Zachem

David M. Don

Mary P. McManus

COMCAST CORPORATION

2001 Pennsylvania Ave., NW Suite 500

Washington, DC 20006

(202) 379-7134

Joseph W. Waz, Jr.  
COMCAST CORPORATION  
One Comcast Center  
1701 John F. Kennedy Boulevard  
Philadelphia, PA 19103-2838

James L. Casserly  
Ryan G. Wallach  
Daniel K. Alvarez  
WILLKIE FARR & GALLAGHER LLP  
1875 K Street, N.W.  
Washington, DC 20006

*Attorneys for Comcast Corporation*

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