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CENTER FOR DEMOCRACY
& TECHNOLOGY

1634 I Street, NW
Suite 1100
Washington, DC 20006

P +1-202-637-9800
F +1-202-637-0968
E info@cdt.org

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
Protecting and Promoting the Open Internet	)	GN Docket No. 14-28
Framework for Broadband Internet Service	)	GN Docket No. 10-127

Comments of the Center for Democracy & Technology

Nuala O'Connor
David Sohn
Andrew McDiarmid

Center for Democracy & Technology
1634 I St., NW, 11th Floor
Washington, DC 20006
(202) 637-9800

July 17, 2014

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I. Introduction and Summary

The Commission is right to move quickly to reinstate some form of open-Internet protection in the wake of the DC Circuit decision vacating the agency's 2010 rules. The Internet's open openness is too important to free speech and innovation to leave to chance.

A policy framework in this area should have a simple but crucial goal: to preserve the availability of basic Internet service that operates in an evenhanded manner, and thus creates a decentralized and broadly accessible platform for speech and innovation. Such a framework need not and should not be unreasonably restrictive or burdensome for network operators; indeed, it would likely permit experimentation with additional or different services or business models, so long as "plain vanilla" Internet access service is not displaced.

The key elements of such a policy by now should be relatively well understood. They include some form of a no-blocking rule; some restrictions on discrimination among lawful Internet traffic; and some allowance for reasonable network management and special delivery arrangements (what the 2010 rule termed "specialized services") that don't undermine the Internet offering.

In theory, then, the Commission's current suggestion of a baseline level of nondiscriminatory Internet access coupled with the possibility of individually negotiated deals for enhanced levels of service could be consistent with the overall aims of sound open-Internet policy. Much would depend, however, on the extent to which the Commission has stable legal authority to monitor and limit discriminatory behavior in accordance with this framework.

The challenge is that *Verizon v. FCC* leaves serious questions about the extent of the Commission's legal authority when it comes to policies aimed at limiting discrimination by Internet access providers. In light of that decision, one approach would be to revisit the regulatory classification of broadband Internet access service. Classifying such service as a telecommunications service subject to Title II of the Communications Act would eliminate the specific legal obstacle that proved to be the downfall of the 2010 rules, and thus could provide a stable long-term base of authority for open Internet rules. At the same time, CDT recognizes the concerns that reclassification would spur an immediate legal battle and could expose carriers to outdated and excessively detailed regulation of their operations and business practices. These are significant complications, but CDT believes the Commission would have a strong legal case and could attempt to minimize the regulatory burden through a substantial exercise of the Commission's forbearance authority.

Alternatively, if the Commission decides not to pursue reclassification at this time, it should seek to fill the current policy vacuum with a multi-pronged approach that would include reliance on section 706 authority. We offer proposals for how the Commission might seek to craft meaningful protections under such an approach, including by coupling a rule based on section 706 with a new "edge-facing" policy.

Finally, whichever legal path the Commission chooses, there are several key considerations it should address.

- First, the Commission should clearly establish that its open Internet rules and authority focus specifically and exclusively on the provision of *transmission* functions. The

Commission should expressly disclaim any possible extension to the wide range of services and applications that travel "over the top" of the Internet transmission capacity provided by Internet access providers.

- Second, the Commission should seek regulatory parity between fixed and mobile Internet access providers. Mobile Internet access is now a core part of the Internet and should not be excluded from openness protections.
- Third, the Commission should not be dissuaded by tenuous claims that open Internet rules violate the First Amendment rights of carriers.
- Fourth, claims that interconnection practices may raise Internet openness concerns warrant further Commission attention, whether in this proceeding or separately.
- Fifth, because rules in this area would likely leave considerable discretion for case-by-case analysis, the Commission should pursue a business-review-letter process to provide guidance regarding emerging issues and practices.

II. Goals and Key Elements of an Open-Internet Framework

A. The Commission is right to continue to pursue open-Internet protections following the *Verizon v. FCC* decision.

The Commission is right to move promptly to reinstate some form of open-Internet protections in the wake of the *Verizon v. FCC* decision.

There is long history of Commission policy protecting an open Internet. From the 2005 broadband Internet Policy Statement to the 2008 order reprimanding Comcast for interfering with BitTorrent uploads to the 2010 Open Internet Rules, the Commission has expressed its intention to ensure that broadband providers will continue to provide Internet access in a fundamentally open fashion.

Verizon v. FCC threatens a sharp break from this history. Unless the Commission responds, we will be in uncharted territory: For the first time, there will be neither an existing policy constraining blocking and discrimination by broadband providers nor a live proceeding aimed at developing such a policy. Broadband providers would have unprecedented leeway, with little fear of legal or regulatory repercussions, to try to exercise new measures of influence or control over the content, applications, and services employed by their subscribers.

The Commission is right to preempt such a dangerous experiment. As the DC Circuit observed, the Commission in 2010 "convincingly detailed how broadband providers' position in the market gives them the economic power to restrict edge-provider traffic" and to "act as 'gatekeeper[s]' with respect to edge providers that might seek to reach [their] end-user subscribers."[1]

There is no evidence, meanwhile, that prior regulatory protections in this area, including the 2010 rules, have harmed investment or innovation at the network level. To the contrary, the DC Circuit found that "the Commission's prediction that the *Open Internet Order* regulations will encourage broadband deployment is, in our view, both rational and supported by substantial evidence."[2]

[1] *Verizon v. FCC*, 740 F.3d 623 (DC Cir. 2014), slip op. at 38.

[2] *Verizon v. FCC* at 34.

CDT would be particularly concerned about the potential impact on online free expression if the Commission were to allow the policy vacuum created by *Verizon v. FCC* to persist. The Internet's power to advance free expression and access to information is well established, and innovation at the edges continues to create new avenues and tools for online speech. The years since the *Open Internet Order* was being considered have seen a spate of online communications tools launch and rise to tremendous popularity, including Vine, Instagram, Viber, Snapchat, and WhatsApp. Ongoing innovation in user-empowering speech tools such as these could be chilled if the Internet were to become less open to novel and independent services and technologies.

Perhaps most important in considering the need for prompt action is the concern that, if practices to favor or disfavor particular Internet traffic were to become widespread, the damage to Internet openness could be difficult to reverse. Unraveling a web of discriminatory deals after significant investments have been made, business plans have been built, and technologies have been deployed would be a complicated undertaking both logistically and politically. Documenting the harms could prove challenging, as nobody knows about small businesses and new applications that are lost before they make it off the ground. And broadband providers would surely say that it is unfair and perhaps illegal for the Commission to interfere with their investment-backed expectations premised on the current regulatory environment.

In short, if we want broadband Internet access to operate in a manner that preserves the Internet's open character, the most efficient, effective, and fair approach is to establish that expectation in advance. The Commission is right to address open-Internet protections in a proactive manner now.

B. The goal and function of an open-Internet policy framework is to preserve the open character of ordinary Internet service – not to ban all forms of enhanced delivery.

The Commission should start with a clear view regarding the goal and function of an open-Internet policy framework: preserving the continued availability of basic Internet service that remains open to the full range of diverse content and services that exist online. Open-Internet policy need not and indeed traditionally has not entailed a rigid ban on all forms of enhanced delivery.

The Commission's effort to respond to the DC Circuit decision in *Verizon v. FCC* has sparked a vigorous debate centered on how policymakers should view the idea of network operators offering "fast lanes" or "paid prioritization." These are crucial questions, but some of the rhetoric on both sides tends to fuel exaggerated characterizations of how open Internet rules might answer them.

A realistic open-Internet policy framework does not aim to achieve some kind of egalitarian utopia where every blogger is the complete equal of the New York Times. Established entities with substantial resources will always have a variety of advantages – the ability to engage in extensive marketing, to afford state-of-the-art server equipment, to purchase caching services from a content delivery network (CDN), and more. Nor is the goal to prevent all differential treatment of traffic or all negotiation of commercial deals between network operators and content providers. Significantly, the 2010 rules always envisioned that network operators could

strike deals for the delivery of selected content or traffic via "specialized services."[3] They also permitted end-user controlled discrimination, under which subscribers themselves designate traffic for special treatment.[4]

Rather, the proper goal of an open-Internet policy framework is to preserve the availability of a basic Internet service on which providers of broadband Internet access do not and cannot single out specific content, applications, and online services in ways that allow them to pick winners and losers. To use an analogy to traditional mail delivery, the goal is effectively to make sure a robust basic postal service – accessible to anyone, for any lawful purpose, on a fundamentally "neutral" basis – is maintained. That aim does not require a ban on express delivery options, so long as those options are in addition to basic postal delivery and do not displace it.

In short, open-Internet policy needs to restrain some forms of preferential treatment in order to ensure that the open and decentralized model of ordinary Internet service will not be compromised. Access to a robust, nondiscriminatory Internet connection should remain a core feature of the communications landscape. But there also will remain some leeway for experimentation with side deals and special arrangements.

C. A reasonable framework requires several key elements.

A sound policy framework for protecting the open nature of the Internet requires several key elements.

1. An anti-blocking rule

The first and most obvious element is a prohibition against blocking access to lawful online content, applications, and services. Once an end user has subscribed to broadband Internet access, he or she should have free rein to engage in lawful communications with the full range of other Internet users or endpoints.

This is crucial for online free expression. It helps ensure that Internet users will be able to access the content and information of their choice, and will be able to speak to an essentially unlimited audience. It also encourages innovation, by ensuring that edge providers will have potential access to an essentially unlimited user base, without having to negotiate with broadband providers for access to subscribers.

2. General expectation of nondiscrimination for Internet service

An unconstrained right to discriminate would enable broadband providers to exercise almost as much gatekeeping power as an unconstrained right to block. By degrading some traffic or prioritizing other traffic, broadband providers could effectively play favorites in the online marketplace, distorting competition among online content and applications. The more favoritism became widespread, the more innovators and upstarts would need to consider striking deals with broadband providers to avoid being placed at a substantial disadvantage to their rivals.

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[3] *Preserving the Open Internet*, GN Docket No. 09-191, Report and Order, 25 FCCR 17905 (2010) (hereinafter "Open Internet Order"), ¶¶ 112–114.

[4] *Id.* ¶ 71.

An open-Internet policy therefore needs to establish that for Internet access service, there is a general expectation that broadband providers will not discriminate among lawful traffic based on its content, source, destination, ownership, application, or service. This is the core principle that prevents broadband providers from "playing favorites." It promotes innovation and speech by ensuring that the Internet remains a relatively level playing field, a platform with low barriers to entry and rough competitive neutrality for all online speakers, competitors, and innovators. As discussed below, a nondiscrimination rule may not be absolute – there would be some exceptions, such as for reasonable network management – but evenhanded treatment by broadband providers should be the baseline expectation.

3. Allowance for reasonable network management

A sound policy framework in this area must allow broadband providers to engage in reasonable network management practices. Where possible, such practices should be content- and application- agnostic and should comply with the common technical standards on which the Internet is based. But rules in this area should not be rigid. They should not attempt to specify in advance which particular technical practices should be prohibited or allowed. Detailed technical choices are best left to network operators, since they are in the best position to understand the technical consequences and tradeoffs associated with different choices. Network operators also need appropriate flexibility to devise new tactics and respond to new threats.

4. Flexibility for different/additional data delivery models that don't "squeeze out" ordinary Internet access

Broadband providers should have some flexibility to experiment with different services that reflect different business models or technical architectures from the open and innovation-friendly Internet – so long as such services create additional options to ordinary Internet access, rather than displacing it. A policy framework in this area needs to involve ongoing monitoring of such "specialized services" for any signs that they are negatively affecting the provision of ordinary Internet access.

5. Clarity regarding scope

A sound open-Internet policy should be clear about its scope. First, it should specify that it applies exclusively to the provision of broadband Internet access service – the function of providing the transmission links that connect subscribers to the Internet. Relatedly, it should expressly disclaim any application to the various online or "over-the-top" content, applications, and services that the Internet enables. This principle is discussed in more detail in section V.A. below.

Second, open-Internet protections should not depend on the specific technology a provider uses to connect its subscribers to the Internet. In particular, providers of mobile Internet access should not be exempt. This principle is discussed in more detail in section V.B. below.

III. Title II Reclassification

The advantage of reclassifying broadband service is that it potentially offers a stable base of legal authority for open Internet rules, at least in the long run. There are two principal disadvantages. The first is that it would surely engender a major legal battle in the short term. The inevitable legal fight would take several years and would entail some legal risk. The second is that, to avoid saddling broadband providers with excessive and outdated regulation, reclassification would need to be paired with substantial forbearance.

These are not trivial issues, and they complicate the reclassification option. Nevertheless, the legal case for Title II treatment of broadband Internet access service is actually quite strong in light of the statutory definitions, and the Commission has wide discretion in exercising its forbearance authority. Below, we discuss the legal questions and the forbearance issue in turn.

A. Title II reclassification has the potential to provide a stable base of legal authority for protecting Internet openness.

Reclassifying broadband Internet access service as a telecommunications service subject to Title II of the Communications Act would eliminate the specific legal obstacle that proved fatal for the Commission's 2010 Open Internet Rules. Absent the common-carrier prohibition, the Commission's rules would have survived. Changing the classification of broadband Internet service would take the common-carrier prohibition out of the equation. Moreover, provisions such as section 202(a) would provide clear statutory authority for the Commission to address discriminatory practices by network operators.

The first step would be to carefully define the service being classified as a telecommunications service. While the Commission's proposed definition seems reasonably narrowly focused, the Commission could be more specific by stating that the provision of Internet access includes (i) the assigning of an Internet Protocol address to a device owned or controlled by the subscriber; and (ii) providing the subscriber with the means for Internet Protocol communications to be transmitted physically, by wire or radio, between the subscriber's device and one or more interconnection points that enable further routing, directly or indirectly, to the Internet. This would help clarify that reclassification applies only to the entities offering "last mile" transmission service and not to (for example) backbone providers, content delivery networks, or over-the-top services.[5]

Reclassification would not, by itself, establish a policy framework for protecting the open Internet. But by establishing Commission authority regarding discriminatory practices, it would create a durable legal basis for the Commission to craft rules. For example, it would allow the 2010 rules for fixed Internet access service – accepted as reasonable or at least tolerable by many network operators other than Verizon – to be reinstated largely in their prior form. With the common-carrier prohibition no longer a factor, the Commission would be able to adopt such rules under its Title II authority, its section 706 authority, or both.

[5] CDT suggested this language in 2010. We also suggested additional language to make clear that it should not be read to include entities like hotels, libraries, or coffee shops that offer WiFi or other Internet connectivity to their patrons. *Framework for Broadband Internet Service*, GN Docket 10-127, Comments of CDT, July 15, 2010, https://cdt.org/files/pdfs/CDT_Comments-Framework_for_Broadband.pdf, at 13–14.

The key point is that the Commission would have solid authority to establish a general expectation that providers of Internet access service will not block nor discriminate among lawful traffic based on its content, source, destination, ownership, application, or service. As noted above, this is a core element of an open-Internet framework. The rule would not be absolute or inflexible – carriers might invoke exceptions such as the one for reasonable network management – but the default rule would be equal treatment of content regardless of source.

Title II would also enable the Commission to consider emerging forms of discrimination. For example, what if broadband providers were to transmit traffic equally from a technical perspective, but then charge subscribers different amounts based on which particular websites or online services they choose to access? Surcharges or discounts for accessing particular online content or services could undermine the Internet as an open platform and put Internet access providers in a position to pick winners and losers. With legal authority to address discriminatory practices, the Commission would be in a position to develop an appropriate policy response.

B. In today's marketplace, Internet access service meets the statutory definition of "telecommunications service."

As CDT argued previously in our 2010 comments to the Commission, there is a strong argument that Internet access service, as it is offered and understood in today's marketplace, meets the statutory definition of "telecommunications service."[6] The service that broadband providers offer to the public is widely understood today, by both the providers and their customers, as the ability to connect to anywhere on the Internet – to any of the millions of Internet endpoints – for whatever purposes the user may choose. It provides a classic example, in other words, of "transmission, between or among points specified by the user, of information of the user's choosing."[7]

This ability to transmit information to and from anywhere on the Internet is incontrovertibly the dominant function of Internet access service as it exists today. This is reflected in the marketing of the service providers themselves, which overwhelmingly focuses on connection speed and often describes the inclusion of additional functions as mere "extras."[8] It also is reflected in press accounts commenting on the broadband market and in surveys and reviews meant to assist consumers in choosing among providers – all of which again focus on speed as the leading factor other than price, and which generally do not even mention content or other non-

[6] *Id. at* 7–13.

[7] 47 USC § 153(43).

[8] *See XFINITY Internet*, Comcast, http://www.comcast.com/internet-service.html (boasting that its connection provides "fast speeds even with the whole family online" and allows users to "[s]hare music and upload photos in the blink of an eye"); *FiOS Internet*, Verizon, http://www.verizon.com/home/fios-fastest-internet/ (asserting that its FiOS service offers "a level of speed and capacity that cable can't always compete with – especially when it comes to upload speeds"); *XFINITY vs. the Competition*, Comcast, http://www.comcast.com/compare/comcast-xfinity-vs-verizon-fios.html (comparing Internet speeds between Xfinity and FIOS). (All sites last visited July 15, 2014.)

transmission functions as factors in evaluating Internet access service.[9] Gone are the days when Internet access service providers sought to differentiate themselves by offering "walled gardens" of proprietary content and users looked to their access provider to serve as a kind of curator of the chaos of the Internet.[10]

It may be true, as the Commission found starting in 2002, that service providers often choose to offer this telecommunications function together with other, non-telecommunications services. But providers' decisions to package certain services together cannot, by themselves, change the way those services are classified. Otherwise, carriers would have an easy path to evade Title II treatment whenever they wish – all they would have to do is package their Title II services with some insignificant service that is not a Title II service. Even ordinary telephone service could have escaped Title II treatment on such a theory. The Communications Act does not contemplate, much less dictate, such a result.

The question of whether Internet connectivity is offered as a distinct service, therefore, does not turn merely on whether it is sold together with other functions. It turns, ultimately, on whether the various functions are so "integrated" that it that it makes more sense to think of the entire package, as a "single, . . . comprehensive service offering" of which telecommunications is just one component – as the Commission ruled in 2002.[11]

Today, there is no basis for concluding that the telecommunications function of Internet access service is integrated with non-telecommunications functions. Rather, the additional functions are either relatively minor "add-on" services that many users ignore entirely, or are largely technical processes aimed at making the telecommunications function work smoothly.

First, at a general level, the well-documented rise of "cloud computing" means that a transmission link to the Internet serves as a gateway to services of all kinds.[12] For virtually any kind of information service function one might want, there are a variety of cloud-based providers,

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[9] *See, e.g., 2014 Residential Internet Service Provider Customer Satisfaction Study*, JDPower.com (2014), http://www.jdpower.com/resource/jd-power-2014-residential-internet-service-provider-customer-satisfaction-study; Edward Wyatt, "US Struggles to Keep Pace in Delivering Broadband Service," *NY Times*, Dec. 29, 2013, http://www.nytimes.com/2013/12/30/technology/us-struggling-to-keep-pace-in-broadband-service.html; Eric Griffith, "The Fastest ISPs of 2013", *PC Magazine*, Sept. 18, 2013, http://www.pcmag.com/article2/0,2817,2424456,00.asp; "How to Choose an ISP", *ConsumerSearch*, April 2013, http://www.consumersearch.com/isp/how-to-choose-an-isp.

[10] *See, e.g.*, Steven Johnson, "Rethinking a Gospel of the Web," *NY Times*, April 9, 2010, http://www.nytimes.com/2010/04/11/technology/internet/11every.html?_r=1 (noting that "the jungle of the World Wide Web" triumphed over "the walled gardens of CompuServe, AOL and MSN," and that "[o]pen platforms promote innovation and diversity more effectively than proprietary ones"); Catherine Yang, "AOL: You've Got Content for Free," *Bloomberg Businessweek*, June 7, 2005, http://www.businessweek.com/technology/content/jun2005/tc2005067_0871_tc024.htm (quoting AOL CEO, Johnathan F. Miller: "There's no return to the walled garden whatsoever").

[11] *Inquiry Concerning High-Speed Access to the Internet Over Cable & Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable* Facilities, GN Docket No. 00-185, CS Docket No. 02-52, Declaratory Ruling and Notice of Proposed Rulemaking, 17 FCCR 4798 ¶ 38 (2002) ("Cable Modem Order").

[12] *See, e.g.*, Mike Kavis, "The Need For Speed. Public Clouds Deliver", *Forbes*, June 18, 2014, http://www.forbes.com/sites/mikekavis/2014/06/18/the-need-for-speed-public-clouds-deliver/; Quentin Hardy, "The Era of Cloud Computing," *NY Times Bits Blog*, June 11, 2014, http://bits.blogs.nytimes.com/2014/06/11/the-era-of-cloud-computing/; Eric Griffith, "What Is Cloud Computing?," *PC Magazine*, March 12, 2013, http://www.pcmag.com/article2/0,2817,2372163,00.asp; Jon Stokes, "The Cloud: a short introduction," *Ars Technica*, Nov. 9, 2009, http://arstechnica.com/business/news/2009/11/the-cloud-a-short-introduction.ars.

completely independent of a user's Internet access provider. There is thus only one indispensable function a consumer looks to the connectivity provider for: the connection link that in turn enables access to the essentially unlimited range of Internet-based services.

More specifically, each of the information service functions cited in the *Cable Modem Order* as integrated with connectivity – email, newsgroups, personal web page hosting, obtaining and aggregating content, and provision of a "home page"[13] – are today widely available and widely obtained from independent, third-party sources. None are an integral part of a user's Internet access subscription.

- **Email.** While Internet access providers continue to offer email accounts to their subscribers, there are many free email services also available on the Internet.[14] These services provide a popular alternative to access provider–based email. Based on data estimates, the top three web-based email providers (Yahoo!, Outlook.com, and Gmail) collectively received more than one billion unique visitors in May 2012.[15] As of June 2014, a ranking of the top 10 websites by unique visitors included Yahoo! Mail at number 5; Gmail at number 6; and Windows Live Mail at number 10.[16] Popular Internet access providers' sites, such as Comcast Xfinity and Verizon Webmail, do not appear on the list. It is difficult to say with complete certainty how widespread access-provider email usage is relative to email from other providers, since usage estimates may not include email usage that takes place through email clients instead of through web-based mail. However, these results clearly show that even if some users still use access provider–based email, many prefer other alternatives, and email is not a critical function for an access service to provide.

- **Newsgroups.** Though still widely used, newsgroups have become far less integral to – and far less integrated with – Internet access in the years since the *Cable Modem Order*. They predate and to some extent have been superseded by today's dominant web-based news and discussion forums such as blogs, social networks, and individual websites. Traditionally, and at the time of the *Cable Modem Order*, access providers would operate a newsgroup server to allow subscribers easy access to the USENET network. Currently, however, much newsgroup activity has migrated to independent entities that do not provide general Internet access, such as Google Groups and Giganews.[17] In fact, several of the biggest American Internet access service providers have discontinued direct newsgroup access entirely.[18]

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[13] *In re High-Speed Access to the Internet Over Cable and Other Facilities*, 17 FCCR 4798 (2002), Report and Order (hereinafter "Cable Modem Order") ¶¶ 18, 38.

[14] *See* http://en.wikipedia.org/wiki/Comparison_of_webmail_providers for a partial list.

[15] Serdar Yegulalp, "Webmail war: Gmail vs. Outlook.com vs. Yahoo Mail," *Computerworld*, March 1, 2013 http://www.computerworld.com/s/article/9236988/Webmail_war_Gmail_vs._Outlook.com_vs._Yahoo_Mail.

[16] "Top 10 US Websites by Total Visits This Week," *Experian*, http://www.hitwise.com/us/datacenter/main/dashboard-10133.html.

[17] *See* Google Groups, http://groups.google.com; GigaNews, http://giganews.com.

[18] *See, e.g.*, Verizon Customer Support, *Verizon Newsgroup Service Has Been Discontinued*, Verizon, http://www22.verizon.com/ResidentialHelp/HighSpeed/General+Support/Top+Questions/QuestionsOne/125159.html (last visited July 3, 2014); "ATT Announces Discontinuation of USENET Newsgroup Services," *NewsDemon*, June 9, 2009, http://www.newsdemon.com/blog/2009/06/09/att-announces-discontinuation-of-usenet-newsgroup-services; Jared Moya, "Cox to Drop Free Usenet Service June 30th," *ZeroPaid*, April 22, 2010, http://www.zeropaid.com/news/88729/cox-to-drop-free-usenet-service-june-30th.

Given this evolution, there is no basis on which to conclude that newsgroups are so integrated as to preclude classification of Internet access service as a telecommunications service.

- **Personal web page hosting.** In this area, competition is vigorous, and there is no evidence to suggest that this remains a primary factor for people selecting an Internet access service provider. Internet users now increasingly rely on third party sources such as WordPress, Tumblr, and Blogger to create personal web pages.[19] Many users maintain personal profiles on social networking sites like Facebook – currently boasting more than 128 million users in the U.S.[20] – in lieu of creating individual web pages. Other third party hosts that either provide web page hosting services include InMotion, Yahoo Small Business, Dreamhost and many more.[21] Meanwhile, some major broadband providers have ceased to offer free personal web page hosting to their subscribers.[22]

- **Obtaining and aggregating content.** Users no longer rely on their Internet access providers as a direct source of online content. In the early days of the Internet, access providers (including AOL, CompuServe, and Prodigy) provided a "walled garden" for users by producing or collecting desirable content and presenting it in a single, central location. This model has largely been discarded. Search engines now provide a more convenient and effective way for users to find the content they desire. The main search engines (Google, Yahoo!, and Microsoft's Bing) receive considerably more traffic than broadband Internet access providers' in-network pages, indicating users' preference for search engines as a means of locating content.[23] Apparently aware of this preference, broadband providers include third-party search engines on their own less-popular content pages.[24]

  Should a user prefer a more curated experience, that user has many available options that are unaffiliated with his or her Internet access provider. Numerous sites,

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[19] *See* "Top Sites in the United States," *Alexa*, http://www.alexa.com/topsites/countries/US, (last visited July 11, 2014) (ranking these platforms as the twenty-fourth, twenty-first, and fourteenth most popular sites in the US, respectively).

[20] Dado Ruvic, "Facebook reveals daily users for US and UK, data aimed at advertisers," *Reuters*, Aug. 13, 2013, http://www.reuters.com/article/2013/08/13/us-facebook-users-idUSBRE97C0WY20130813.

[21] *See* Jeffrey L. Wilson, "How to Pick a Good Web Hosting Service," *PC Magazine*, Nov. 21, 2013, http://www.pcmag.com/article2/0,2817,2424725,00.asp.

[22] *See* Verizon Web Hosting, http://www.verizon.com/Support/SmallBusiness/Application/web-hosting.htm (last visited July 11, 2014) (noting that Verizon's web hosting product is, "no longer available for new customers."); Laura Northrup, "Cox Ends Free Web Pages for Internet Service Customers," *Consumerist*, Nov. 4, 2011, http://consumerist.com/2011/11/04/cox-ends-free-web-pages-for-internet-service-customers/; *see also* Comcast Xfinity, Customize Your Personal Website, June 28, 2014, http://customer.comcast.com/help-and-support/internet/customize-your-website-or-personal-web-page/ ("The Comcast Personal Web Pages (PWP) feature is no longer available to customers who have not previously activated this feature").

[23] *See, e.g.*, "ComScore Media Metrix Metrix Ranks Top 50 US Web Properties for September 2013," *comScore*, Oct. 21, 2013, https://www.comscore.com/Insights/Press-Releases/2013/10/comScore-Media-Metrix-Ranks-Top-50-US-Web-Properties-for-September-2013.

[24] *See, e.g.*, Comcast.net, http://www.comcast.net; TWC Central, http://www.twcc.com/. (Both last visited July 15, 2014.)

such as Yahoo! News, Google and AOL,[25] offer personalized portal pages that provide equivalent functionality and similar interface to the access provider–offered portal pages. Users can also rely on social news sites like Reddit, Digg, or StumbleUpon for content.[26] In short, the access provider is simply no longer its users' primary source or aggregator of content.

- **Home page.** A user's home page is a setting in the user's browser, i.e., in software installed on the user's Internet-accessible device. The Internet access provider does not control it; a user can set his or her home page to any desired page. Many sites compete for the privilege of being a user's home page, since being set as the home page guarantees repeat visits from that user. Most sites make it easy to set their site as the user's home page, either by providing instructions on how to change the page or by offering a single-click button to automatically change it.[27] While the Internet access provider may certainly offer a portal site to aggregate content for the user and serve as a home page, doing so does not provide any service not already available to users from multiple other sources. Furthermore, as discussed above, the home pages offered by Internet access providers are of waning utility in the face of current search-first usage patterns.

Other functions cited previously by the Commission facilitate the smooth and effective functioning of Internet access service and are essentially invisible or of little direct interest to the typical consumer. These functions do not change the nature of the connectivity service, and are thus comparable to "adjunct-to-basic" services, first identified and treated as telecommunications services by the Commission in 1985.[28] In accordance with the Commission's finding that adjunct-to-basic services are covered by the management exceptions to the definition of information services,[29] many of these functions fit comfortably within that exception, because their entire purpose is to ensure the efficient operation of the telecommunications function.

- **DNS.** The *Cable Modem Order* cited domain name resolution through a domain name system (DNS) as an "application" that is integrated with Internet connectivity

[25] AOL has largely transitioned from an Internet access provider to an aggregator of content and online services. *See* Jake Coyle, "AOL launches online video network, *AOL On*," *Yahoo News*, April 24, 2012 http://news.yahoo.com/aol-launches-online-video-network-aol-222116148.html.

[26] *See* Reddit, http://www.reddit.com; Digg, http://www.digg.com; StumbleUpon, http://www.stumbleupon.com.

[27] *See, e.g.*. Search History and Settings: Set Google as My Homepage, Google, http://www.google.com/support/websearch/bin/answer.py?hl=en&answer=463; Keep Everything You Love All in One Place, Yahoo!, http://www.yahoo.com/bin/set; Make AOL.com Your Home Page, AOL, http://www.aol.com/mksplash.adp; Make MSN Your Homepage, MSN, http://www.myhomemsn.com.

[28] In its opinion and order *In the Matter of North American Telecommunications Association*, the Commission identified as "adjunct-to-basic" services that "do[] not alter the fundamental character of telephone service," and for regulatory purposes treated such a services as basic services. 58 Rad. Reg. 2d 402 ¶ 27. *See also Second Computer Inquiry*, Final Decision, 77 FCC 2d 384 ¶ 98 (1980) (*modified, in part, by In re* Section 64.702 (Second Computer Inquiry), 79 FCC 2d 953 (1980); *Re Second Computer Inquiry*, 39 P.U.R. 4th 319 (1980)).

[29] *In re Implementation of the Non-Accounting Safeguards of Sections 271 and 272*, 11 FCCR 21905 ¶ 107 (1996) ("[W]e conclude that "adjunct-to-basic" services are also covered by the "telecommunications management exception" to the statutory definition of information services, and therefore *are treated as telecommunications services under the 1996 Act.*") (*modified in part by In re Implementation of the Non-Accounting Safeguards*, 12 FCCR 2297 (1997), http://www.fcc.gov/Bureaus/Common_Carrier/Orders/1996/fcc96489.txt; *reversed in non-relevant part by In re Implementation of the Telecomm. Act of 1996*, 13 FCCR 8061).

service.[30] But the DNS lookup service provided by broadband Internet access providers simply translates text URLs (such as http://www.cdt.org) requested by users into numeric IP addresses (such as 54.85.18.136). This is a basic routing function that establishes connections between users and the Internet endpoints of their choosing.[31] As such, it satisfies the Commission's historical test for adjunct-to-basic services: DNS (1) is intended to facilitate the use of Internet connectivity, and (2) does not alter the fundamental character of that service.[32] Moreover, it is directly analogous to computer-provided directory assistance in the telephone context, which the Commission considered adjunct-to-basic and thus treated as a basic (telecommunications) service.[33]

In any event, DNS service, much like e-mail, web-hosting, and the other services discussed above, is available from third-party sources. Google Public DNS processes about 130 billion queries per day.[34] OpenDNS likewise processes over 50 billion daily.[35] Internet users are free to use the DNS provider of their choice, and switching between them does not require altering any aspect of the Internet access service itself. Users need only quickly update a single setting in their operating system's Internet preferences to point DNS requests to another server.[36]

- **Caching**.[37] Caching, too, meets the criteria for an adjunct-to-basic service that should not turn an otherwise telecommunications service into an information service. This function involves simply re-routing traffic to alternate copies of websites stored closer to the subscriber. Its purpose is to reduce network congestion and improve the perceived speed of users' connections. It does not alter the information or provide access to information other than that requested by subscribers. In short, it is simply a technical tool to speed network performance.

- **Network security, network monitoring, capacity management, and troubleshooting.**[38] Like caching, these activities are intended to preserve a fast, uncongested, working network. They are most often largely invisible to consumers, in the sense that most consumers are unaware of how they relate to their

[30] *Cable Modem Order* ¶¶ 37–38.

[31] Such a conclusion was a key factor in Justice Scalia's apt dissent in the *Brand X* case: "DNS, in particular, is scarcely more than routing information, which is expressly excluded from the definition of 'information service.'" *Nat'l Cable & Telecomm. Ass'n v. Brand X*, 545 US 967, 1012–13 (2005).

[32] *See In re Establishment of a Funding Mechanism for Interstate Operator Services for the Deaf*, 11 FCCR 6808 ¶ 16 (1996).

[33] *In re Implementation of the Telecomm. Act of 1996*, 13 FCCR 8061 ¶ 73 (1998) (*vacated on other grounds by U.S. West, Inc. v. Fed. Commc'ns Comm'n*, 17 Communications Reg. 87 (10th Cir. 1999); *reconsidered and granted in part by In re Lenfest New Castle County Regarding Cable Programming Service Tier Rates*, 14 FCCR 14 (1998)).

[34] *See* Yunhong Gu, "Google Public DNS Now Supports DNSSEC," *Google Online Security Blog*, March 19, 2013 http://googleonlinesecurity.blogspot.com/2013/03/google-public-dns-now-supports-dnssec.html.

[35] *See* OpenDNS System, http://system.opendns.com/ (last visited July 8, 2014).

[36] *See, e.g.*, Configuring your network settings to use Google Public DNS, Google, https://developers.google.com/speed/public-dns/docs/using.html.

[37] *Cable Modem Order* ¶ 17.

[38] *Id.*

connection; rather, these activities are simply part and parcel of running a network. To the extent that security services are aimed at securing subscribers' computers and not the network itself, they are typically offered as optional services amid a sea of third-party anti-virus and anti-malware competitors.

In sum, the services cited in the *Cable Modem Order* are all either wholly separable and available from third parties; so directed at routing and other critical network functionality as to be considered analogous to adjunct-to-basic services; or, in the case of DNS lookup, both. Routing, security, and other management functions easily fall within the management exception to the definition of information services. For the functions that do not fall within that exception, the fact that unaffiliated options are readily and easily available conclusively demonstrates that such services are not fundamentally integral to the Internet access service.

There is a powerful argument, therefore, that broadband Internet access fits within the statutory definition of telecommunications services, given the realities of today's marketplace.

C. Reclassification should be coupled with forbearance from most of the provisions of Title II.

Broadband providers have expressed deep concern that reclassification would subject them to burdensome and outdated regulation. CDT appreciates this concern. Many provisions of Title II are deeply rooted in the history of monopoly-era telephone regulation and would be a poor fit for the current Internet access marketplace. Regulating subscriber prices, or requiring regulatory approval to construct new communications facilities, or calling for detailed regulator scrutiny into the transactions or management of broadband providers all would be antithetical to the effort to promote a dynamic and growing market for broadband Internet access service. To avoid such a result, it would be essential to couple Title II classification with forbearance from most provisions of Title II.

In 2010, the Commission's then Chairman and General Counsel proposed forbearing from all but a handful of provisions of Title II – specifically, sections 201, 202, 208, 222, 254, and 255.[39] CDT believes this would be a sound and feasible approach.

The legal and policy case for forbearance would be relatively straightforward. Forbearance analysis usually requires the Commission to consider the consequences of lifting a rule that has been in force for some time. In this case, however, the current state of play is different. Broadband providers have not been subject to the provisions of Title II, so there is ample real-world experience with how the broadband marketplace functions without, for example, subscriber price regulation and tariff-filing requirements. The Commission could reasonably conclude that actual experience demonstrates that the enforcement of such requirements against broadband providers is "not necessary" to ensure reasonable charges and practices or to protect consumers.[40]

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[39] Austin Schlick, General Counsel, Federal Communications Commission, "A Third-Way Legal Framework for Addressing the Comcast Dilemma," May 6, 2010, https://apps.fcc.gov/edocs_public/attachmatch/DOC-297945A1.pdf; *see also*, Chairman Julius Genachowski, Federal Communications Commission, "The Third Way: A Narrowly Tailored Broadband Framework," May 6, 2010, https://apps.fcc.gov/edocs_public/attachmatch/DOC-297944A1.pdf.

[40] 47 USC § 160(a)(1), (a)(2).

Moreover, the Commission has substantial discretion with respect to forbearance. Commission forbearance decisions are subject to full *Chevron* deference, and the forbearance statute "imposes no particular mode of market analysis."[41] The DC Circuit has stated that the "arbitrary and capricious" standard is "particularly deferential in matters such as this, which implicate competing policy choices, technical expertise, and predictive market judgments."[42] Where the Commission has determined to forbear from applying a regulation or provision, we are not aware of any case in which its judgment has been reversed.

Critics say forbearance still creates regulatory uncertainty, because a future Commission could reverse any forbearance decision taken today. But the ability of a future Commission to reverse prior decisions and apply particular Title II requirements to broadband providers exists *regardless* of whether the Commission reclassifies Internet access providers at this time. If the Commission reclassifies now, this hypothetical future Commission would need to reverse a forbearance decision. If not, the Commission would need to reverse a classification decision. Either way, the future Commission would need to articulate legally sufficient reasons for changing its mind. The theoretical risk of a future Commission changing policy course exists in any event.

To the extent that the central fear is that Title II classification would open the door to retail price regulation at some point in the future, it is worth noting that commercial mobile radio services are already subject to a policy framework that combines Title II treatment with substantial forbearance.[43] Retail price regulation has not materialized, and we are not aware of any evidence that the theoretical possibility of some future Commission deciding to embark on price regulation has in any way discouraged the deployment of those services.

One provision of Title II that warrants particular mention, given CDT's interest and expertise in privacy issues, is Section 222, concerning the privacy of customer information. The Federal Trade Commission has a lead role in addressing privacy questions. Common-carrier activities are exempt from FTC authority, however, so reclassification would have the side effect of curtailing the FTC's ability to safeguard user privacy in connection with broadband Internet access service. Applying Section 222 would therefore be necessary to avoid creating a major loophole with respect to privacy protection. CDT believes that a rulemaking would be needed to address exactly how Section 222 should apply in the Internet connectivity context, including how to define "customer proprietary network information" (CPNI) for this purpose. CDT therefore agrees with the Commission's suggestion in its 2010 NOI that it might exclude Section 222 from forbearance, but temporarily refrain from applying it until the agency has conducted a further rulemaking on the details of its application.[44]

IV. Approaches Involving Section 706

If the Commission chooses not to revisit the statutory classification of broadband Internet access service at this time, then the agency should pursue a multi-pronged approach. It should

[41] *Earthlink v. FCC*, 462 F.3d 1, 7–8 (DC Cir. 2006).

[42] *Ad Hoc Telecom. Users Cmte. v. FCC*, 572 F.3d 903, 908 (DC Cir. 2009).

[43] *See* 47 USC § 332

[44] *Framework for Broadband Internet Service*, GN Docket No. 10-127, Notice of Inquiry, 25 FCC Rcd 7866 (2010) ¶ 82.

use section 706 authority to adopt rules regarding broadband Internet access service, as proposed in the NPRM but strengthened in several respects. It should consider augmenting these rules with new policies focused on the second side of broadband providers' service, following the DC Circuit's finding that network operators effectively provide a service to all the websites and Internet content providers the operators' subscribers choose to access. And the Commission should expressly acknowledge that the rules it is adopting may not address the full range of open-Internet concerns, and reserve the possibility of additional Commission scrutiny or action in the future.

A. Section 706 may not provide a stable legal foundation.

An approach based on section 706 carries some legal questions.

First, there is no guarantee that a reviewing court would uphold rules like the ones outlined in the Commission's NPRM. The language from *Verizon v. FCC* that the Commission's proposed approach appears to rely on is potentially instructive, but it is also dicta. The court suggested that a certain form of no-blocking rule – requiring a minimum level of service but permitting individualized negotiations for higher levels of service – "might" not violate the statutory prohibition on common-carrier treatment.[45] At the same time, the court said it was a close call and that there is "some appeal" to the argument that anti-blocking rules are *per se* common carriage.[46] Moreover, there would be a substantial argument that the *Cellco* precedent cited by both the DC Circuit and the Commission is not directly on point, because that case did not involve a baseline level of service that anyone could get for free. In short, it is simply uncertain whether a future court would agree that section 706 can sustain even a no-blocking rule, much less a policy framework aimed at limiting discrimination.

Moreover, assuming that rules based on section 706 survive an initial challenge, they still would be subject to "as applied" challenges on an ongoing basis. As the court in *Cellco* observed, rules that do not on their face impose common-carriage obligations might nonetheless be applied in a manner that is tantamount to common carriage.[47] Thus, each effort to enforce the rules could raise new questions, and new litigation, regarding whether the Commission has crossed over the line to common carriage.

The potential for such disputes seems real, because there is a fundamental tension in trying to limit discrimination by entities that (given current regulatory classifications) cannot be made subject to a true non-discrimination rule. This is the central challenge facing rules based on section 706. Limiting discrimination is a core element of an open-Internet policy framework, but avoiding the common-carrier prohibition requires leaving substantial room for individual negotiation of terms – in other words, for individualized and hence discriminatory treatment. This legal fine line would require careful navigation and could provide ongoing fodder for legal challenges.

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[45] *Verizon v. FCC* at 61.

[46] *Id.* at 60.

[47] *Cellco Partnership v. FCC*, 700 F.3d 534 (DC Cir. 2012), slip op. at 24–25.

B. The Commission should strengthen its proposed rules by prohibiting prioritization deals that have a side effect of degrading the absolute performance of other traffic.

Rules based on section 706 would need to (i) allow substantial room for individualized negotiations and terms, in order to avoid the common-carrier prohibition; but also (ii) provide some regulatory constraint on the resulting deals or arrangements, in order to safeguard against practices that would undermine the open nature of the Internet. Whatever standard the Commission adopts for evaluating such deals and arrangements – whether the "commercial reasonableness" standard suggested in the NPRM, or some other formulation, as discussed below – the Commission should strengthen its proposed rules by establishing the clear expectation that deals that degrade the absolute performance of third-party traffic, even if only as an unintended side effect, will not be permitted.

Allowing favored Internet traffic to "cut the line" in backed-up router queues during periods of congestion is a good example of a practice this policy would bar. Prioritizing certain traffic in that manner means longer queuing time and hence degraded performance for non-prioritized traffic – and the more traffic is prioritized in this fashion, the greater the negative impact on everything else. If such prioritization became widespread, it would make reliance on the ordinary, non-prioritized Internet an increasingly unattractive and competitively nonviable option.

A Commission policy against such "zero sum" prioritization practices could take the form of either a rule or a strong presumption. Either way, network operators would retain the ability to engage in reasonable network management, so the policy would not be inflexible. It would, however, prevent scenarios where individually negotiated prioritization deals make congestion worse for all those content providers who haven't negotiated similar deals. That is crucial, because a key purpose of open Internet rules is to ensure that online innovators and upstarts retain the practical ability to reach potential end users *without* having to negotiate deals with numerous broadband providers.

A rule or presumption against such deals would not bar all forms of enhanced delivery, however, because not all tactics for enhanced delivery are so "zero sum" in nature. Caching services, by storing content closer in the network to end users, speed selected traffic while generally reducing the overall traffic load on the network. Offloading certain traffic to separate, dedicated capacity (specialized services) would likewise not degrade the likely performance of other Internet-based services. There may be other tactics that could speed targeted traffic without slowing non-targeted traffic. Some of these might raise possible policy concerns of their own – for example, they might carry some risk of decreasing incentives to invest in capacity upgrades for regular Internet access – but those concerns need not be directly addressed within this particular rule or presumption.

C. A "commercially reasonable" standard is inappropriate for open Internet rules, so the Commission should consider alternative formulations.

Another way to improve rules based on section 706 would be to modify the Commission's proposed legal standard. CDT agrees with the Commission's observation that "[s]ound public policy requires that Internet openness be the touchstone of a new legal standard."[48] But instead

[48] *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, Notice of Proposed Rulemaking, FCC 14-61 (rel. May 15, 2014) (hereinafter "NPRM"), ¶ 116.

of formulating a new standard, the Commission proposes to import the "commercially reasonable" standard from the data-roaming context. That standard is not a good fit for the policy aims of this proceeding.

In the data-roaming context, two commercial entities deal directly with one another to negotiate a fee-for-service agreement. There is a direct business relationship with contractual privity and a purely commercial purpose on both sides of the transaction. The standard aims to promote the successful conclusion of this direct commercial transaction and to protect against unfairness in its terms.

Open-Internet protections, by contrast, apply to a context where there is frequently no direct negotiation and no direct agreement between key parties. Most online content providers have no direct business relationship with most of the broadband providers who deliver their traffic to end users. Indeed, far from aiming to promote the successful conclusion of contractual agreements, open Internet rules seek to ensure that no such agreements will be necessary for the delivery of traffic.

Moreover, while broadband providers are commercial entities with commercial purposes, many of the parties seeking to route traffic to broadband subscribers are not. The Internet features no shortage of noncommercial speakers and noncommercial speech. Unlike data roaming, Internet openness involves many relationships that are not business-to-business and serves many purposes that are noncommercial.

A standard devised to assess the reasonableness of a direct contractual agreement between two commercial parties is therefore ill-suited to assessing whether and how the practices of broadband providers may affect Internet openness. Indeed, using the same standard for these two disparate contexts could lead to problems in the future: Precedents developed in one context may flesh out the meaning or interpretation of the standard in ways that are inapplicable to the other context.

A better approach would be to articulate a new standard that is tailored to the particular aims of this proceeding. Picking a shorthand label or catchphrase for such a standard is less important than articulating its content, but CDT would suggest that a standard might require practices to be "consistent with Internet openness" or prohibit practices that would tend to "undermine Internet openness."

The Commission could then explain that a practice will be considered to violate this standard if substantial adoption of the practice would tend to undermine:

(i) the traditional and practical ability of broadband Internet access subscribers to access and use the lawful Internet content, applications, services, and devices of their choice without interference from their provider of broadband services; or

(ii) the traditional and practical ability of developers of independent online content, applications, services, or devices to make those offerings available to interested Internet users everywhere without having to negotiate for or obtain any kind of permission or agreement from those users' providers of Internet service.

Alternative formulations are possible, but the legal standard should reflect the purposes of open-Internet policy.

D. Rules should apply equally to mobile Internet access service.

The Commission's proposed rules could also be improved by extending them fully to mobile Internet access service. As discussed at greater length below in section V.B., any open Internet rules the Commission adopts should cover not just fixed Internet services, but mobile services as well. The allowance for reasonable network management provides ample flexibility for carriers to address any network management challenges that are specific to mobile wireless networks, so no broad exemption is warranted.

This may be especially true for rules based on section 706, which would provide room for individually negotiated arrangements and would only bar discrimination that is "commercially unreasonable" (in the NPRM's formulation) or that "undermines Internet openness" (CDT's suggested formulation). To the extent that 706-based rules already include more flexibility than the 2010 rule, there would be even less reason to exempt mobile Internet access from their reach.

E. Adding a new "edge-facing" policy could strengthen the Commission's proposed open-Internet framework.

The DC Circuit's holding that broadband providers "furnish a service to edge providers"[49] presents an opportunity to consider open-Internet policy from a new angle. A new policy expressly addressing this edge-facing service that carriers provide could augment the Commission's proposed rules.

The Commission's proposed rules, like the 2010 rules, apply to "broadband Internet access service," defined in relevant part as the "capability to transmit data to and receive data from all or substantially all Internet endpoints." This is a reasonable description of the functionality broadband providers provide to subscribers: Subscribers get the ability to send and receive traffic to and from the entire Internet. That includes not only the carriage of traffic over the broadband provider's own network, but also the onward forwarding of traffic over other networks with which that broadband provider has arranged to interconnect.

The definition is not, however, an accurate description of the functionality broadband providers provide to edge providers (i.e., the websites and other providers of online content or services that Internet subscribers choose to access). What edge providers get from each broadband provider is more limited: not the ability to reach the entire Internet, but rather the ability to reach the subscribers of that particular broadband provider. And the service is limited to carriage across the broadband provider's own network. Edge providers make their own arrangements, via their own Internet access, transit providers, or content delivery networks, for the delivery of traffic to and from the edge of the broadband provider's network. The edge-facing service of the broadband provider is to carry that traffic between the interconnection point and the relevant subscribers across its own local network.

[49] *Verizon v. FCC* at 51.

In short, what Internet carriers provide to edge services is different from what they provide to subscribers, and it does not meet the definition of broadband Internet access service. This disparity did not concern the Commission prior to *Verizon v. FCC*, because the Commission's position was that broadband providers only provided service to their subscribers. Edge providers were not considered to be customers or recipients of a service from broadband providers.

Now that the DC Circuit has rejected that position, it is appropriate for the Commission to consider this edge-facing service as a distinct offering warranting distinct analysis. The Commission has an opportunity to craft an appropriate definition of these services and develop an appropriate policy framework for them – a framework which may augment whatever open Internet rules the Commission adopts for "subscriber-side" services.

Defining edge-facing service

CDT suggests defining edge-facing service as follows, modeled on the definition of broadband Internet access service but diverging from it where appropriate: "a service by wire or radio that provides the capability to transmit and receive data across the provider's own network to and from subscribers of the provider's broadband Internet access service, including any capabilities that are incidental to and enable the operation of the communications service."

This definition would be consistent with the DC Circuit's discussion that perhaps "the relevant service that broadband providers furnish [to edge providers] is access to their subscribers generally."[50] At base, the service broadband providers provide to edge providers is the ability to communicate with the broadband provider's subscribers.

Unlike the conception of sender-side services suggested by Tim Wu and Tejas Narechania, this definition would not hinge on the direction of traffic.[51] In a two-way Internet communication between a broadband subscriber and a remote edge provider, neither party views the "service" it is getting from the broadband provider as limited to the ability to send bits in the outbound direction. For both parties, the key functionality is the ability to communicate – to send and receive traffic, not just to send it. CDT believes that the distinction between subscriber-side services and edge-facing service is best demarcated by different functionalities each receives (access to the full Internet on one hand, and access to one broadband provider's subscribers on the other) and not by separating traffic flows based on direction.

To be sure, this implies that the same exchange of bits – say, a two-way communication between a broadband subscriber and a website – can simultaneously constitute the provision of distinct services to two distinct parties. But that is not an unreasonable way of characterizing certain two-sided markets. Take the example of a classified advertising service. To the advertiser, the service sells advertising space. To the reader, the service provides access to a convenient compendium of listings. These two distinct services result in a single underlying product: a publication containing classified ads. Broadband providers may be viewed in a

[50] *Verizon v. FCC* at 61.

[51] *See* Tejas N. Narenchania and Tim Wu, "Sender Side Transmission Rules for the Internet," (Draft, June 6, 2014), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2447107.

similar fashion as providing a product – the transmission of bits in two directions – that serves the distinct needs of two sets of customers.

There are at least two ways that a focus on edge-facing service, thus defined, could contribute to a policy framework to promote the open Internet.

1. Possible applicability of Title II (as suggested in Mozilla petition)

One option is discussed in Mozilla's May 5 petition.[52] As set forth in that petition, there is a strong argument that the edge-facing functionality that broadband carriers provide could qualify as a telecommunications service subject to Title II. The service that edge providers receive consists exclusively of the transmission of traffic across the broadband provider's network. On the Internet side, the transmission function does not come bundled with any of the other services (email, newsgroups, website hosting, etc.) that were key to the Commission's decision to classify subscriber side services as information services. The main question would be whether edge-facing service can be considered to be provided "for a fee," possibly on a theory that carriers receive valuable consideration for the exchange and carriage of edge provider traffic via interconnection agreements or subscriber revenues, or possibly if carriers start charging edge providers directly, as Verizon told the DC Circuit it intended to start doing.[53]

Classifying edge-facing service under Title II would not require the Commission to reverse prior classification decisions, for the simple reason that the Commission has not previously recognized the existence of such a service and hence has had no occasion to consider its regulatory treatment. Now that the DC Circuit has ruled that broadband carriers do provide a service to edge providers, it would be perfectly reasonable for the Commission to consider how those services might be treated under the statute. And the fact that the Commission has judged the subscriber side of broadband (the only side it previously recognized) as information services is no bar to different treatment of the Internet side. The DC Circuit has observed that "one may be a common carrier with regard to some activities but not others."[54]

As discussed above with respect to the option of full reclassification of broadband Internet access service, applying Title II would not automatically create a complete policy framework. Rather, it would provide the Commission with a stable base of authority to craft appropriate nondiscrimination rules for edge-facing service. Such rules could be based on provisions of Title II, on section 706, or both. Importantly, however, they would not be subject to the common-carrier prohibition that doomed the Commission's 2010 rules. They would also need to be coupled with extensive forbearance, as many provisions of Title II would not be sensible to apply to edge-facing services.

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[52] Mozilla Petition to Recognize Remote Delivery Services in Terminating Access Networks and Classify Such Services as Telecommunications Services Under Title II of the Communications Act, May 5, 2014, https://blog.mozilla.org/netpolicy/files/2014/05/Mozilla-Petition.pdf.

[53] *See Verizon v. FCC* at 37 (quoting Verizon's counsel from the oral argument transcript at 31: "but for [the Open Internet Order] rules we would be exploring those commercial arrangements.").

[54] *NARUC v. FCC,* 533 F.2d 601, 608 (DC Cir. 1976).

2. Linking the concepts of individualized negotiations and specialized services

Alternatively, focusing on edge-facing service may provide a new avenue for an open-Internet policy framework to avoid the common carrier prohibition, even without classifying edge-facing service under Title II. The idea would be to link the concepts of individualized negotiations on the Internet side with the offering of specialized services to subscribers, so that specialized services become the vehicle for creating the flexibility in terms that the DC Circuit has held the common carrier prohibition to require.

The 2010 rules allowed broadband providers to offer specialized services in addition to broadband Internet access service. Thus, there was always some potential for edge providers and broadband providers to negotiate special delivery arrangements. In litigating *Verizon v. FCC,* however, the Commission never pointed to the allowance for specialized services as a possible source of the "substantial room for individualized bargaining and discrimination in terms"[55] necessary to distinguish the Commission's rules from common carriage.

The challenge facing such an argument would have been that the Commission's approach treated broadband Internet access service and specialized services as distinct, and the case concerned the permissible regulatory treatment of the former standing alone. But even if the two services are treated as distinct on the subscriber side, they need not be treated that way on the Internet side. If the relevant edge-facing service is defined consistently with our proposal above and with the DC Circuit's suggestion in *Verizon v. FCC*[56] – in effect, as the provision of a capability to reach a broadband provider's subscribers, without regard to the precise manner or quality of transmission – then the edge-facing service could include the transmission of traffic to subscribers via both regular Internet service (standard transmission) and specialized service (e.g. including quality-of-service guarantees). The overall edge-facing service would be transmission, with different options constituting tiers of service that "permit broadband providers to distinguish somewhat among edge providers."[57]

In other words, the Commission could consider a regime under which, as per the DC Circuit's suggestion, a broadband provider would be required to provide a baseline level of service to all edge providers, while still retaining some flexibility to negotiate for special treatment in individual cases. The Commission could require such special arrangements, however, to be provided in a manner consistent with specialized services treatment on the subscriber side. Under such a regime, there would be flexibility for special deals, but not unlimited flexibility. The constraint would depend on the definition of specialized services.

The 2010 order did not define specialized services. CDT believes that a definition should include at least two components. First, there should be a requirement that the service be truly specialized, in the sense of serving a specific and limited purpose. Second, there should be a technical requirement of logical separation – that is, wholly or significantly separate capacity – between the specialized traffic and the Internet traffic. If the specialized service traffic were completely comingled with Internet traffic, it would not be meaningful to characterize it as a

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[55] *Cellco Partnership v. FCC,* 700 F.3d at 548.

[56] *See Verizon v. FCC* at 61 (suggesting that "the relevant 'carriage' broadband providers furnish [to edge providers] might be access to end users more generally," rather than access at any particular level of speed or service).

[57] *Verizon v. FCC* at 61.

service provided as an addition or alongside the subscriber's Internet service. CDT discussed the appropriate definition of specialized services at much greater length – and offered a specific proposal – in our October 2010 comments to the Commission.[58]

The end result of this kind of approach could be a policy framework that in principle could be similar to the 2010 rules. Edge providers would be entitled to a standard level of access to broadband subscribers. They could also try to negotiate special arrangements with broadband providers. To avoid violating the rules, though, such special arrangements would need to be carried as specialized services to and from subscribers, rather than being comingled with ordinary broadband Internet access traffic.

As the Commission noted in 2010, permitting special treatment via specialized services carries some policy risks. The Commission would need to carefully monitor the marketplace for signs that specialized services are "retarding the growth of or constricting capacity available for broadband Internet access service."[59] But integrating specialized services into the analysis of how much leeway open Internet rules leave for individualized negotiations, and considering the issue through an edge-facing lens, may create a new opening to argue that rules quite similar to the 2010 rules could nonetheless be consistent with the approach the DC Circuit suggested might pass muster.

F. The Commission should acknowledge the limits of rules based on section 706 and leave open the possibility of further steps in the future.

If the Commission chooses to rely on section 706, it should expressly acknowledge that the rules it adopts likely do not offer a complete answer to the policy concerns at issue in this proceeding. Acknowledging the limits of what its current approach can achieve, and signaling that additional steps could be possible in the future, would be better than signaling that the Commission believes that its current rules represent the full extent of what is needed.

Acknowledging the constrained nature of 706-based rules would help avoid the impression that the agency affirmatively endorses, or at least sees no potential concerns about, the full set of practices not covered by its rules. Rules based on section 706, even if they impose some limits on discriminatory practices, may well be forced for legal reasons to leave a wider berth for discriminatory treatment than the Commission or many open-Internet supporters would otherwise advise. For example, discrimination in pricing to subscribers (surcharges or discounts based on what content they choose to access) may prove difficult for such rules to address. And the risks of specialized services – such as the possibility that ordinary broadband capacity will fall behind as investment is diverted to specialized services – likely cannot be neatly captured in a rule and thus require careful monitoring on an ongoing basis.

In short, a variety of practices could raise serious policy questions even if they are not prohibited by the Commission's rules in this proceeding. The Commission should not convey the impression to market participants or policymakers that it is offering a positive policy judgment

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[58] *Preserving the Open Internet / Broadband Industry Practices*, GN Docket No. 09-191 / WC Docket No. 07-52, Comments of CDT (Specialized Services and Mobile Wireless), Oct. 12, 2010, https://cdt.org/insight/fcc-comments-on-specialized-and-application-of-openness-principles-to-mobile-wireless-platforms/

[59] 2010 Order ¶ 114.

and lending the weight of its authority to controversial practices that may happen to escape the reach of its rules.

Moreover, signaling that the Commission remains open to the possibility of further action in the future may serve as at least a marginally useful constraint on harmful behavior. Market participants may be less willing to push the envelope if they perceive the Commission to be open to further action than if they perceived it to have sent a message of "case closed."

Perhaps the strongest way to emphasize that the Commission will not limit its ongoing scrutiny to practices that violate the letter of its initial rules would be to state that Title II classification remains a serious consideration. At a minimum, the Commission could leave open the reclassification docket. More pointedly, the Commission could indicate an intention to further explore regulatory classification, either in connection with the ongoing proceeding on the transition to all-IP services or in a separate proceeding.

The Commission also could state that its framework based on section 706 should be viewed as an initial measure, taken in the interest of moving quickly to fill the policy vacuum left by the DC Circuit decision. The agency could indicate that, in the event it later chooses to pursue Title II or any other legal approach to authority, it would likely modify its rules to fill gaps and, possibly, take a more restrictive approach to discrimination.

With respect to specialized services in particular, the Commission should echo its commitment from its 2010 order to "closely monitor" marketplace developments "with a particular focus on any signs that specialized services are in any way retarding the growth or constricting the capacity available for broadband Internet access service."[60] The Commission should reiterate that it would be concerned if broadband Internet capacity fails to keep pace.

Finally, the Commission could include a statement modeled on paragraphs 104–105 of the 2010 order. Those paragraphs warned that the limited application of the 2010 rules to mobile broadband services "should not suggest that we implicitly approve of any provider behavior that runs counter to general open-Internet principles." The Commission noted that "[b]eyond the practices expressly prohibited by our rules, other conduct by mobile broadband providers . . . may not necessarily be consistent with Internet openness and the public interest" and pledged to "closely monitor developments in the mobile broadband market," "investigate and evaluate concerns as they arise," and "adjust our rules as appropriate." Here, the Commission could similarly emphasize that any limits in the scope of its rules should not be read as implicit approval of any practices that might undermine Internet openness, and that the Commission intends to actively monitor and address practices that may arise.

V. Issues That Apply to Either Legal Approach

A. The Commission should cabin its policy focus to the provision of physical transmission functions, and expressly disclaim authority over Internet content and applications.

Whichever legal approach the Commission elects to take, the agency should narrowly focus its regulatory activity on the services that provide the transmission links that connect subscribers to

[60] Open Internet Order ¶¶ 113, 114.

the Internet. The Commission should expressly disclaim regulatory authority over the content, applications, and services that run over the Internet.

The purpose of this proceeding is to preserve the Internet as a transmission medium that is equally open and available to an essentially unlimited array of content, applications, and services. Central to that goal is the simple premise that *carriers providing connections to the Internet* should not limit choices or play favorites. Open-Internet protections, therefore, should apply specifically and exclusively to providers of Internet access service.

The Commission could be more specific by stating, either in an actual rule or in explanatory text, that the provision of Internet access includes (i) the assigning of an Internet Protocol address to a device owned or controlled by the subscriber; and (ii) providing the subscriber with the means for Internet Protocol communications to be transmitted physically, by wire or radio, between the subscriber's device and one or more interconnection points that enable further routing, directly or indirectly, to the Internet. This would help clarify that open Internet rules apply to the entity providing the "last mile" transmission pathway and not to (for example) backbone providers, content delivery networks, or over-the-top services.[61]

By contrast, any effort to extend open-Internet protections to over-the-top services or computer software or hardware would invite dangerous overbreadth and quickly raise a host or problems. Open Internet rules aim to permit innovation and choice at the Internet's endpoints. This produces a smorgasbord of services and applications, many of which are not themselves open, neutral, or nondiscriminatory; rather, they reflect the particular preferences or idiosyncratic tastes of their creators or users. Extending openness requirements to over-the-top services and applications would undercut the very choice and innovation that an open Internet is intended to facilitate.

To be sure, some over-the-top services may come to present legitimate questions about market power or anticompetitive conduct. Where that happens, competition or consumer protection laws may apply. But open-Internet policy cannot provide an all-purpose safeguard across the entire Internet ecosystem; to be effective, it needs to be tailored to the specific risk for which it was designed.

A clear statement by the Commission fencing off online content, applications, and services from Commission oversight would be important for several reasons. From a political and messaging standpoint, it would offer the best defense against the all-too-common rhetorical charge that the agency aims to "regulate the Internet." It would also serve the policy goals of this proceeding. Without clear limits, open-ended theories and applications of jurisdiction could open the door for future Commissions, pursuing any number of potential policy concerns, to attempt to regulate any of the wide range of conduct and communications traversing the Internet. Such a result would undermine the very Internet openness that is the focus of this proceeding.

Finally, disclaiming authority over applications and content makes sense from a legal perspective. Courts have held that the Commission lacks jurisdiction over activities that are not

[61] CDT believes that entities such as hotels, libraries, and coffee shops that offer WiFi or other Internet connectivity to their patrons should likewise be excluded from the scope of open Internet rules. See *supra n. 5*.

closely connected to the actual transmission of communications. For example, the Commission lacks authority to regulate the non-transmission-related functions of consumer electronics.[62]

By the same logic, any data processing performed at an Internet endpoint before or after the transmission of a communication would be outside the scope of Commission authority. The actions of websites and other services accessed via the Internet (search engines, social networks, cloud computing services, etc.) are thus outside the Commission's subject matter jurisdiction.

In addition, any Commission regulation of Internet content or applications would raise serious constitutional issues. Courts have repeatedly struck down efforts to regulate Internet content.[63] And on the Internet, all the data contained the communications between two endpoints is protected speech. Thus, the interactions between Internet users and other Internet endpoints, including online services, are constitutionally protected from regulation.

In sum, the Commission should state clearly that whatever authority it asserts in this proceeding does not and likely cannot extend to the myriad over-the-top services that the Internet enables. Doing so would help safeguard the open and vibrant Internet, by ensuring that the Commission's approach to this proceeding, far from laying the groundwork for broader Internet regulation, actually serves as a bulwark against it.

B. Mobile Internet access service should not be exempt from some or all of the Commission's open Internet rules.

The Commission proposes to maintain the bifurcated application of openness rules to fixed and mobile broadband.[64] CDT believes such a two-tiered approach is unwarranted and unwise.

Mobile Internet access is not the emerging and rapidly evolving market the Commission cited in 2010.[65] As we argued then, people are increasingly using mobile Internet access in much the same ways as wireline access.[66] And the trends toward the convergence of fixed and mobile user experiences and increased mobile Internet usage have only accelerated since that time. According to the Pew Internet Project, 58% of American adults now own a smartphone.[67] The percentage of cell phone owners who access the Internet using their phone has more than

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[62] *See Am. Library Ass'n v. FCC*, 406 F.3d 689,691–92 (DC Cir. 2005).

[63] *See, e.g.*, *Reno v. ACLU*, 521 US 844; *Ashcroft v. ACLU*, 542 US 656 (2004); *PSINet, Inc. v. Chapman*, 362 F.3d 227 (4th Cir. 2004); *Am. Booksellers Found. v. Dean*, 342 F.3d 86 (2d Cir. 2003); *Cyberspace Communications, Inc. v. Engler*, No. 99-2064, slip op. (6th Cir. Nov. 15, 2000), aff'g, 55 F. Supp. 2d 737 (E.D. Mich. 1999); *ACLU v. Johnson*, 194 F.3d 1149 (10th Cir. 1999).

[64] NPRM ¶ 62.

[65] NPRM ¶ 94.

[66] *Preserving the Open Internet*, GN Docket No. 09-191, Comments of CDT, Jan. 14, 2010, http://www.cdt.org/files/pdfs/2010_CDT_openness_comments.pdf, at 51; Comments of CDT (Specialized Services and Mobile Wireless), Oct. 12, 2010, https://cdt.org/insight/fcc-comments-on-specialized-and-application-of-openness-principles-to-mobile-wireless-platforms/.

[67] Pew Internet Project, "Mobile Technology Fact Sheet," Jan. 2014, http://www.pewinternet.org/fact-sheets/mobile-technology-fact-sheet/.

doubled, to 63%, since 2009–10, when the Commission last considered open Internet rules.[68] 34% of smartphone owners go online mostly with their phone.[69]

Improving technology and the widespread use of smartphones and tablets has meant that the mobile Internet experience ever more resembles the fixed broadband experience.[70] Mobile browsers and apps are often designed to work in almost exactly the same whether in use over a WiFi or cellular data connection. And mobile carriers and standards bodies are actively developing technologies for seamlessly switching between WiFi and mobile connections, even further blurring the line between the fixed and mobile access.[71] Policy should reflect this convergence and the fact that both fixed and mobile Internet access services provide the same underlying function. It should treat fixed and mobile services under a common set of rules.

This is not to say that technological or structural considerations on which the Commission has requested comment in the past are irrelevant. But the best approach is to account for any such considerations in the rules' *application*, not in substantive differences. For example, mobile carriers regularly point to mobile networks' unique challenges, such as spectrum limitations, mobility, capacity constraints and dynamic sharing, and radio interference.[72] But none of these considerations commands a substantively different rule. Each can be adequately accounted for as part of the Commission's case-by-case consideration of what constitutes unreasonable discrimination or reasonable network management. Networks differ, and what is considered reasonable can and should differ for mobile and fixed networks. In particular, subscriber- or usage-based capacity management may need to be more aggressive in the mobile context.[73] But there is no reason the technical characteristics of mobile networks require a substantively different rule that would allow greater discrimination among the content, applications, and services a user chooses to access.

C. Open Internet rules do not violate network operators' First Amendment rights.

The Notice asks for comment on the argument that the US Constitution is a bar to the enactment of open Internet rules.[74] CDT filed a brief on behalf of several law professors rebutting Verizon's First Amendment arguments in its challenge to the 2010 Rules and agrees with the Commission's conclusion that limits on blocking and discriminatory treatment of Internet traffic do not affect broadband providers' own speech, but merely their commercial activity as

[68] Maeve Duggan, "Cell Phone Activities 2013," Pew Internet Project, Sept. 9, 2013, http://www.pewinternet.org/2013/09/19/cell-phone-activities-2013/.

[69] Pew Mobile Fact Sheet, *supra* n. 67.

[70] A third of Americans own tablet computers, 10 times as many as in 2010. *See* Kathryn Zickuhr, "Tablet Ownership 2013," Pew Internet Project, June 10, 2013, http://www.pewinternet.org/2013/06/10/tablet-ownership-2013/.

[71] *See* FCC Open Internet Advisory Committee Mobile Broadband Working Group, "Openness in the Mobile Broadband Ecosystem," Aug. 20, 2013, http://transition.fcc.gov/cgb/oiac/Mobile-Broadband-Ecosystem.pdf

[72] Sources listed in *Preserving the Open Internet*, GN Docket No. 09-191, Reply Comments of CDT, April 26, 2010, at 41.

[73] *See Id.* at 41–42.

[74] NPRM ¶ 159.

conduits for others' speech.[75] In any event, were a court to disagree and apply heightened scrutiny, we believe rules like those issued in 2010 and proposed in the Notice would easily survive intermediate scrutiny under the *Turner cases*.[76] We summarize these arguments from our brief below.

1. The activity governed by the rules does not constitute speech.

Broadband providers are not engaging in their own speech through the provision of Internet access. They are simply communications conduits, and as such they do not have credible First Amendment objections to no-blocking and nondiscrimination rules.

When deciding whether particular conduct is expressive enough to warrant First Amendment scrutiny, the Supreme Court has considered whether "[a]n intent to convey a particularized message was present, and [whether] the likelihood was great that the message would be understood by those who viewed it."[77] Broadband providers' conduct as a conduit for others' speech fails this test. First, in delivering sending and receiving data to and from the Internet at customers' request, a broadband provider clearly does not intend to convey a message. Indeed, most if not all broadband terms of service expressly disclaim responsibility for Internet content.[78] And as the Commission is aware, Verizon relied on similar disclaimers in earlier litigation, arguing that Internet access providers perform "a pure transmission or 'conduit' function. . . . This function is analogous to the role played by common carriers . . . Traditionally, this passive role of conduit for the expression of others has not created any duties or liabilities under the copyright laws."[79]

Second, as the markets for Internet access and online services function today, there is little chance that anyone would think that her broadband provider endorses all of the content accessible online via her connection, or disapproves of that which cannot be accessed. When an Internet user loads a webpage or sends an e-mail, nothing about the activity signals any involvement of the broadband provider transmitting the data. Moreover, any given broadband provider transmits a variety of messages that often contradict each other, and no reasonable user could impute all of these various conflicting views to the provider. Without some additional speech from the carrier to express an opinion about the data it transmits, the mere ability of a user to access the content or applications of her choice communicates nothing at all.[80]

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[75] *See* Brief Amici Curiae of the Center for Democracy & Technology and Legal Scholars in Support of Appellee, *Verizon v. FCC*, https://www.cdt.org/files/pdfs/CDT_Amicus_Verizon_v_FCC_FINAL_FILESTAMPED.pdf; *See also* Susan Crawford, "First Amendment Common Sense," 127 Harv. L. Rev. 2343, Jun. 20, 2014, http://harvardlawreview.org/2014/06/first-amendment-common-sense/.

[76] *Turner Broadcasting System, Inc. v FCC*, 512 US 622 (1994) (*Turner I*) and *Turner Broadcasting System, Inc. v FCC*, 520 US 180 (1997) (*Turner II*).

[77] *Spence v. Washington*, 418 US 405, 410–411.

[78] See, e.g., Verizon FiOS Terms of Service, https://my.verizon.com/central/vzc.portal?_nfpb=true&_pageLabel=vzc_help_policies&id=TOS, and AT&T High-Speed Internet Terms of Service, http://www.att.com/shop/internet/att-internet-terms-of-service.html (both last accessed July 14, 2014).

[79] *Recording Indus. Ass'n of Am. v. Verizon Internet Serv.*, 351 F.3d. 1229 (DC Cir. 2003); *see also*, Brief of Appellee FCC, *Verizon v. FCC*, at 68, http://www.fcc.gov/document/verizon-v-fcc-no-11-1355-dc-cir-1.

[80] *See Rumsfeld v. FAIR*, 547 US 47, 66 ("The fact that . . . explanatory speech is necessary is strong evidence that the conduct at issue here is not so inherently expressive that it warrants protection.").

In short, just as a telephone company could not successfully challenge a common carriage requirement under the First Amendment, a broadband provider cannot invalidate a nondiscrimination requirement.[81]

2. Rules such as those enacted in 2010 would survive intermediate scrutiny.

In the unlikely event a court disagrees with the above analysis and recognizes a speech interest in broadband providers' carriage of Internet traffic, CDT believes rules such as those issued in 2010 or proposed in the Notice would easily pass constitutional muster.

To the extent a court were to find that some form of heightened scrutiny was required to assess no-blocking and nondiscrimination rules issued by the Commission, intermediate scrutiny would be the appropriate standard. In the *Turner* cases, which several carriers cite for the proposition that limitations on conduit intermediaries constrain those intermediaries' speech,[82] the Supreme Court upheld "must carry" rules on operators of cable systems. The must-carry rules in *Turner* were upheld under intermediate scrutiny despite a colorable argument that they were content-based restrictions warranting strict scrutiny insofar as they required carriage of specific broadcast signals.[83] The no-blocking and nondiscrimination rules as proposed by the Commission carry no such specificity.

Indeed, basic rules against blocking and discrimination are content-neutral by definition. Far more clearly than the rules at issue in *Turner*, the purposes underlying open Internet rules "are unrelated to the content of speech,"[84] and the Supreme Court's description of the content-neutral nature of rules in *Turner* applies with even greater force to rules protecting the open Internet (paraphrasing *Turner I*):

> They do not require or prohibit the carriage of particular ideas or points of view. They do not penalize [broadband providers] because of the content [that they transmit]. They do not compel [broadband providers] to affirm points of view with which they disagree. They do not produce any net decrease in the amount of available speech.[85]

"A content-neutral regulation will be sustained if 'it furthers an important or substantial government interest . . . unrelated to the suppression of free expression' [and if] the means

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[81] See *Turner I*, 512 US at 684 (O'Connor, J., dissenting, ". . . if Congress may demand that telephone companies operate as common carriers, it can ask the same of cable companies; such an approach would not suffer from the defect of preferring one speaker to another."). Note also that the analogy to telephone carriers is apt regardless of whether the rules applied amount to common-carriage obligations, either by intent or effect. How the Commission chooses to classify a particular service under the Communications Act has no direct bearing on the *constitutional* analysis of a nondiscrimination obligation.

[82] *See, e.g.*, Preserving the Open Internet, GN Docket No. 09-191: Comments of AT&T at 235–40, Comments of Verizon at 111–115, Comments of Time Warner Cable at Exh. A, and Comments of NCTA at 49–64.

[83] *Turner II*, 520 US 180; For the argument that must-carry rules were not content-neutral, *see Turner I*, 512 US 622, 674 (O'Connor, J., dissenting).

[84] *Turner I*, 512 US at 647.

[85] *Id.*

chosen 'do not burden substantially more speech than is necessary.'"[86] Rules to protect Internet openness as they have been proposed by the Commission would likely satisfy both requirements.

As the Commission has noted repeatedly over the course of these proceedings, protecting Internet openness furthers at least three important government interests: promoting infrastructure investment, promoting competition between online services, and protecting Internet users' ability to receive and share the content of their choice.[87] Congress has enacted statutes placing significant priority on these aims: Section 706 expresses Congress' judgment that broadband deployment is an important goal of government policy, and section 230 of the Communications Act endorses the policy goals of promoting the continued development of interactive computer services, vibrant competition between such services, and user control over what information they access.[88] Even as it vacated the 2010 Rules, the DC Circuit recognized the strong policy purposes motivating Commission action to preserve Internet openness.[89]

In particular, assuring that Internet users and innovators retain the ability to exercise their First Amendment rights online, to speak and receive speech without interference from the broadband providers that have bottleneck control over their high-speed access to the Internet, is not merely an important, but indeed a compelling government interest. As *Turner I* affirmed, "assuring that the public has access to a multiplicity of information sources is a governmental purpose of the highest order, for it promotes values central to the First Amendment."[90] "Indeed," the Court continued, "it has long been a basic tenet of national communications policy that the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public."[91]

The roots of this recognition that protection of First Amendment rights is itself an important government interest can be found much farther back than *Turner*. As Justice Black previously articulated:

> It would be strange indeed however if the grave concern for freedom of the press which prompted adoption of the First Amendment should be read as a command that the government was without power to protect that freedom. . . . Surely a command that the government itself shall not impede the free flow of ideas does not afford non-governmental combinations a refuge if they impose restraints upon that constitutionally guaranteed freedom. . . .Freedom of the press from governmental interference under the First Amendment does not sanction repression of that freedom by private interests.[92]

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[86] *Turner I*, 512 US at 662 (citing *United States v. O'Brien*, 391 US 367, 377 (1968) and *Ward v. Rock Against Racism*, 491 US 781, 799 (1989)).

[87] *See, e.g.*, NPRM ¶ 25 *et. seq.*

[88] 47 USC § 230(b).

[89] *Verizon v. FCC*, at 35–44 (explaining how "[t]he Commission's finding that Internet openness fosters the edge-provider innovation that drives this "virtuous cycle" was likewise reasonable and grounded in substantial evidence.")

[90] *Turner I*, 512 U.S. at 663.

[91] *Id.* (internal quotation marks omitted); see also Marvin Ammori, *First Amendment Architecture*, 2012 Wisc. L. Rev. 1, 15–18 & n.68 (citing scholarship exploring the constitutionality of media and telecommunications policies furthering the speech interests of users, viewers, callers, and listeners).

[92] *Associated Press v. United States*, 326 U.S. 1, 20 (1945).

As the Commission has amply demonstrated, broadband providers' ability to act as gatekeepers and discriminate against lawful content and applications that Internet users would otherwise be able to communicate to each other poses clear risk to both edge-based innovators' continued ability to compete as well as Americans' ability to exercise their free speech rights online. Addressing that threat is unquestionably an important and substantial government interest.

Open Internet rules focused on the provision of broadband Internet access would be narrowly tailored to serve these government interests, while restricting no more speech than is necessary (if any). The Commission rightly proposes to apply the rules only to providers of broadband Internet access, whose unique physical control of a communications conduit creates the potential for a bottleneck that could enable content gatekeeping. And such rules would have even less impact on broadband providers' speech than the must-carry rules ultimately upheld in *Turner*. There, cable operators' own speech was burdened by the fact that the must-carry rules deprived them of the use of channels that they otherwise could have used to transmit their own speech or speech chosen by them.[93] With broadband Internet access, there is no channel scarcity to consider: rules requiring broadband providers to remain open to the full array of content and services available on the Internet do not similarly require those broadband carriers to forego creating or transmitting any particular content.

For these reasons, there can be no credible First Amendment objection to rules narrowly focused on restricting blocking or discrimination by providers of broadband Internet access.

D. Claims that Internet interconnection practices have the potential to raise significant open-Internet concerns warrant further Commission attention.

The NPRM proposes to exclude Internet traffic exchange from the scope of its open Internet rules.[94] Whether in this proceeding or a separate one, however, the Commission should consider claims that certain interconnection practices may undermine Internet openness.

Internet interconnection has traditionally been unregulated. CDT believes that the resulting system of voluntarily negotiated arrangements has generally worked well, to the benefit of the Internet and Internet users. At the same time, interconnection is also a key part of what Chairman Wheeler has characterized as the "Network Compact." What happens at the interface points between networks has a significant impact on how the Internet works.

Recently, parties such as Level 3, Cogent, and Netflix have claimed that broadband providers may be allowing certain interconnection points to become congested in order to drive online content providers to agree to new and more expensive direct interconnection arrangements. Access-network operators, on the other hand, argue that congestion stems from an effort by Netflix and its transit providers to evade fair and appropriate payments associated with traditional and widely accepted conventions for traffic exchange – by routing huge volumes of

[93] See *Turner I*, 512 U.S. at 675 (O'Connor, J., dissenting).

[94] NPRM ¶ 59.

traffic over expressly limited, payment-free interfaces that were never intended for such traffic volumes.[95]

In assessing the extent to which interconnection practices raise openness-related concerns, the Commission should focus on two key questions. First, do these recent disputes suggest a significant risk that interconnection practices could provide a vehicle for broadband providers to play favorites among online content and services providers? And second, do they suggest a significant risk that interconnection practices could increase online entry barriers, by forcing small and emerging online speakers and competitors to start negotiating and paying for direct interconnection, or else be relegated to much slower and more congested interfaces? If either risk seems substantial, then interconnection practices would indeed raise issues similar to those that are the focus of open-Internet policy.

One challenge in considering these questions is the relative lack of information regarding interconnection. In that regard, the Commission's proposal to require transparency regarding the source and location of network congestion could be an important first step.[96] It would be useful to have concrete information about the extent to which interconnection points represent significant congestion bottlenecks. In additional to helping policymakers, public disclosure of such information could lead to stronger marketplace pressure to resolve congestion problems at interconnection points. Additional information gathering opportunities include a pending technical review by the Broadband Internet Technical Advisory Group (BITAG)[97] and ongoing joint research by partners at the University of California at San Diego and MIT.[98]

The Commission also should be careful to distinguish interconnection with last-mile subscriber networks from interconnection among other types of parties. CDT is not aware of significant issues or claims involving traffic exchange between backbone networks or any other networks that do not have a terminating access monopoly with respect to a substantial body of subscribers. Given the history of largely successful Internet interconnection arrangements with little or no government involvement, the Commission should place a high priority on minimizing unnecessary interference and avoiding both the appearance and the reality of an intention to exercise regulatory oversight over interconnection generally.

E. The Commission should create a business-review-letter process, to provide guidance about the Commission's enforcement intentions.

Regardless of the precise approach the Commission chooses, open Internet rules are likely to establish some general policy standards that will leave substantial leeway for interpretation.

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[95] *See* David Young, "Why is Netflix Buffering? Dispelling the Congestion Myth," Verizon Policy Blog, July 10, 2014, http://publicpolicy.verizon.com/blog/entry/why-is-netflix-buffering-dispelling-the-congestion-myth.

[96] NPRM ¶ 83.

[97] BITAG press release, "BITAG Announces Technical Review Focused on Internet Interconnection," June 18, 2014, http://www.bitag.org/documents/Press_Release_-_Announcing_Internet_Network_Interconnection_Topic_(June_2014).pdf.

[98] David Clark (MIT), "Measuring Internet Congestion" (Joint work with CAIDA, UCSD), Presentation to the Congressional Internet Caucus, June 18, 2014, https://ipp.mit.edu/sites/default/files/Congestion-DC-June-2014-final_0.pdf.

The application of the policy framework to specific factual circumstances will require case-by-case analysis and adjudication.

This is important for ensuring appropriate flexibility, but it also entails a lack of certainty. Over time, case-by-case adjudication may build up a helpful body of precedent that provides guidance to the marketplace, but this could be a slow process – particularly if it relies exclusively on the adjudication of formal complaints, which may be relatively cumbersome and limited in frequency.

To facilitate the development of helpful guidance in the interpretation of the rules, the Commission should proceed with its suggestion in the NPRM to establish a business-review-letter approach similar to that of the Antitrust Division of the Department of Justice.[99] Such a process would provide a way for individual companies to resolve uncertainty they may face under the rules, while accelerating the growth of a body of precedent to which other industry participants might look. It could also foster useful discussions between broadband providers and Commission staff and a more regular and informed consideration of open-Internet policy issues.

The Commission should be clear, however, that use of the business-review-letter process should be purely voluntary. There should be no expectation that broadband providers must seek permission from the Commission before changing or instituting new network management practices, and the decision by a broadband provider not to seek a business review letter should not result in any negative inference regarding the provider or its practices.

* * *

CDT appreciates the opportunity to comment on these important policy issues. The Internet's openness has enabled it to serve as an unprecedented platform for free expression and independent innovation. We thank the Commission for its commitment to preserving that openness, and look forward to helping craft effective and lasting protections.

Respectfully submitted,

Nuala O'Connor
David Sohn
Andrew McDiarmid

Center for Democracy & Technology
1634 I St., NW, 11th Floor
Washington, DC 20006
(202) 637-9800

July 17, 2014

[99] NPRM ¶ 165.