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

In the Matter of)	
Protecting and Promoting the Open Internet)	GN Docket No. 14-28
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NOTICE OF PROPOSED RULEMAKING

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By the Commission: Chairman Wheeler and Commissioner Clyburn issuing separate statements;

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I. INTRODUCTION

- 1. The Internet is America's most important platform for economic growth, innovation, competition, free expression, and broadband investment and deployment. As a "general purpose technology," the Internet has been, and remains to date, the preeminent 21st century engine for innovation and the economic and social benefits that follow. These benefits flow, in large part, from the open, end-to-end architecture of the Internet, which is characterized by low barriers to entry for developers of new content, applications, services, and devices and a consumer-demand-driven marketplace for their products. As the Commission explained in its 2010 *Open Internet Order*, the Internet's open architecture allows innovators and consumers at the edges of the network "to create and determine the success or failure of content, applications, services and devices," without requiring permission from the broadband provider to reach end users. As an open platform, it fosters diversity and it enables people to build communities.
- 2. We start with a fundamental question: What is the right public policy to ensure that the Internet remains open? This Notice of Proposed Rulemaking (Notice), and the comment process that follows, will turn on this fundamental question.
- 3. Today, there are no legally enforceable rules by which the Commission can stop broadband providers from limiting Internet openness. This Notice begins the process of closing that gap, by proposing to reinstitute the no-blocking rule adopted in 2010 and creating a new rule that would bar commercially unreasonable actions from threatening Internet openness (as well as enhancing the transparency rule that is currently in effect).
- 4. The goal of this proceeding is to find the best approach to protecting and promoting Internet openness. Per the blueprint offered by the D.C. Circuit in its decision in *Verizon v. FCC*, the Commission proposes to rely on section 706 of the Telecommunications Act of 1996.² At the same time, the Commission will seriously consider the use of Title II of the Communications Act as the basis for legal authority. This Notice seeks comment on the benefits of both section 706 and Title II, including the benefits of one approach over the other. Under all available sources of legal authority (including also Title III for mobile services), the Commission seeks comment on the best ways to define, prevent and punish the practices that threaten an open Internet. We emphasize in this Notice that the Commission recognizes that both section 706 and Title II are viable solutions and seek comment on their potential use.
- 5. It is important to always remember that the Internet is a collection of networks, not a single network. And that means that each broadband provider can either add to the benefits that the Internet delivers to Americans—by maintaining Internet openness and by extending the reach of broadband networks—or it can threaten those benefits—by restricting its customers from the Internet and preventing edge providers from reaching consumers over robust, fast and continuously improving networks. This is a real threat, not merely a hypothetical concern.
- 6. In its 2010 *Order*, the Commission found that providers of broadband Internet access service had three types of incentives to limit Internet openness. First, broadband providers may have economic incentives to block or disadvantage a particular edge provider or class of edge

¹ Preserving the Open Internet, GN Docket No. 09-191, WC Docket No. 07-52, Report and Order, 25 FCC Rcd 17905, 17910, para. 13 (2010) (Open Internet Order or Order), aff'd in part, vacated and remanded in part sub nom. Verizon v. FCC, 740 F.3d 623 (D.C. Cir. 2014). Among other examples, the Commission cited Sir Tim Berners-Lee, who—25 years ago—needed neither permission nor approvals from network operators to invent the World Wide Web using existing Internet layer and transport protocols. Id.

² Section 706 of the Telecommunications Act of 1996, Pub. L. No. 104-104, § 706, 110 Stat. 56, 153 (1996) (1996 Act), as amended in relevant part by the Broadband Data Improvement Act (BDIA), Pub. L. No. 110-385, 122 Stat. 4096 (2008), is now codified in Title 47, Chapter 12 of the United States Code. See 47 U.S.C. § 1301 et seq.

providers.³ Second, broadband providers may have incentives to increase revenues by charging edge providers for access or prioritized access to the broadband provider's end users.⁴ In particular, excessive fees could reduce edge provider entry, suppress innovation, and depress consumer demand.⁵ Third, if providers could profitably charge edge providers they would have an incentive "to degrade or decline to increase the quality of service they provide to non-prioritized traffic."

- 7. Those threats are even more important today because Americans and American businesses have become even more dependent on the Internet. For example, according to the Pew Research Internet Project, as of January 2014, 87 percent of Americans used the Internet, compared to 14 percent in 1995. And it is a critical route of commerce, supporting an e-commerce marketplace that now boasts U.S. revenues of \$263.3 billion.
- 8. Of particular concern are threats to American innovation. In "the end-to-end architecture, different economic actors can independently choose their innovation projects." Innovation is the chief driver of American economic growth, which means that all Americans lose if the opportunity to innovate is curbed. For example, an economic study originally released in February 2012 and updated in July 2013 reported that the app economy is responsible for roughly 752,000 jobs in the United States, which is an increase from zero in 2007 when the iPhone was introduced. But equally important are the jobs that could be—but might not be—created if edge innovation and investment were to be chilled by doubt that the Internet will remain open or, even worse, if openness were defeated.
- 9. Although the Commission has emphasized for almost a decade the importance of legally enforceable standards, the United States Court of Appeals for the District of Columbia Circuit has twice invalidated the Commission's attempts, most recently in *Verizon v. FCC*, decided this January. It is in the absence of these protections for the open Internet that the Commission must act to ensure that new legally enforceable rules are put in place. That is a gap that must be closed as quickly as possible.
- 10. The remainder of the Notice proceeds as follows. First, we generally propose to retain the definitions and scope of the 2010 rules. Second, we tentatively conclude that the Commission should enhance the transparency rule that was upheld by the D.C. Circuit so that the public and the Commission have the benefit of sunlight on broadband provider actions and to ensure that consumers and edge

³ Open Internet Order, 25 FCC Rcd at 17919, para. 21; see Writers Guild of America East Comments at 2-3. In the Open Internet Order, the Commission defined "end user" as any individual or entity that uses a broadband Internet access service and sometimes used "subscriber" or "consumer" to refer to those end users that subscribe to a particular broadband Internet access service. "Edge provider" was defined as referring to content, application, service, and device providers, because they generally operate at the edge rather than the core of the network. These terms were not mutually exclusive. See Open Internet Order, 25 FCC Rcd at 17907, para. 4 n.2.

⁴ Open Internet Order, 25 FCC Rcd at 17919, para. 24; see Writers Guild of America East Comments at 2-3.

⁵ Open Internet Order, 25 FCC Rcd at 17919-20, para. 25.

⁶ *Id.* at 17922, para. 29.

⁷ Pew Research Internet Project, Internet Use Over Time, http://www.pewinternet.org/data-trend/internet-use/internet-use-over-time/ (last visited Apr. 22, 2014).

⁸ *See* U.S. Census Bureau, Quarterly Retail E-Commerce Sales, 4th Quarter 2013. http://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf.

⁹ Barbara Van Schewick. *Internet Architecture and Innovation* 301 (2010).

¹⁰ See Michael Mandel, 752,000 App Economy Jobs on the 5th Anniversary of the App Store, Progressive Policy Institute Blog (July 8, 2013), http://www.progressivepolicy.org/2013/07/752000-app-economy-jobs-on-the-5th-anniversary-of-the-app-store/; Michael Mandel, Where the Jobs Are: The App Economy 1, TechNet (Feb. 7, 2012), http://www.technet.org/wp-content/uploads/2012/02/TechNet-App-Economy-Jobs-Study.pdf.

¹¹ Verizon v. FCC, 740 F.3d 623 (D.C. Cir. 2014).

providers—indeed, the Internet community at large—have the information they need to understand the services they are receiving and to monitor practices that could undermine the open Internet. Third, we tentatively conclude that the Commission should adopt the text of the no-blocking rule from the *Open Internet Order* with a revised rationale, in order to ensure that all end users and edge providers can enjoy the use of robust, fast and dynamic Internet access. Fourth, and where conduct would otherwise be permissible under the no-blocking rule, we propose to create a separate screen that requires broadband providers to adhere to an enforceable legal standard of commercially reasonable practices, asking how harm can best be identified and prohibited and whether certain practices, like paid prioritization, should be barred altogether. Fifth, we propose a multi-faceted dispute resolution process to provide effective access for end users, edge providers, and broadband network providers alike and the creation of an ombudsperson to act as a watchdog to represent the interests of consumers, start-ups, and small businesses. Sixth, and finally, we ask how either section 706 or Title II (or other sources of legal authority such as Title III for mobile services) could be applied to ensure that the Internet remains open.

II. BACKGROUND

- 11. Today's Notice rests upon over a decade of consistent action by the Commission to protect and promote the Internet as an open platform for innovation, competition, economic growth, and free expression. At the core of all of these Commission efforts has been a view endorsed by four Chairmen and a majority of the Commission's members in office during that time: That FCC oversight is essential to protect the openness that is critical to the Internet's success. In recognition of this, the Commission has demonstrated a steadfast commitment to safeguarding that openness.
- 12. In 2004, former Chairman Michael Powell first articulated basic guiding principles for preserving Internet freedom in an address at Silicon Flatirons. Chairman Powell recognized that "consumers' hunger for an ever-expanding array of high-value content, applications, and devices" fueled investment in broadband networks as the "impressive generators of economic growth, innovation, and empowerment." He explained that "ensuring that consumers can obtain and use the content, applications and devices they want . . . is critical to unlocking the vast potential of the broadband Internet." Internet."
- 13. A year later, reinforcing Chairman Powell's guidance, the Commission unanimously approved the *Internet Policy Statement* setting forth four general Internet policy principles intended "[t]o encourage broadband deployment and preserve and promote the open and interconnected nature of the Internet." Specifically, subject to "reasonable network management," the principles entitle consumers to (1) "access the lawful Internet content of their choice;" (2) "run applications and use services of their choice, subject to the needs of law enforcement;" (3) "connect their choice of legal devices that do not

¹⁴ Appropriate Framework for Broadband Access to the Internet over Wireline Facilities; Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services; Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review-Review of Computer III and ONA Safeguards and Requirements; Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities, GN Docket No. 00-185, CC Docket Nos. 02-33, 01-33, 98-10, 95-20, CS Docket No. 02-52, Policy Statement, 20 FCC Rcd 14986, 14987-88, para. 4 (2005) (Internet Policy Statement).

¹² Michael K. Powell, Chairman, Federal Communications Commission, Preserving Internet Freedom: Guiding Principles for the Industry 3, Remarks at the Silicon Flatirons Symposium (Feb. 8, 2004), http://hraunfoss.fcc.gov/edocs/public/attachmatch/DOC-243556A1.pdf (Preserving Internet Freedom).

¹³ *Id.* at 3.

¹⁵ *Id.* at 14988 n.15.

harm the network;" and (4) enjoy "competition among network providers, application and service providers, and content providers." ¹⁶

- 14. The Commission incorporated these open Internet principles in a series of merger proceedings. In 2005, the Commission conditioned approval of the SBC/AT&T and Verizon/MCI mergers on the merged entities' compliance with the *Internet Policy Statement*. Although the Commission did not adopt any formal open Internet conditions on the Adelphia/Time Warner/Comcast transactions, the Commission made clear that its *Internet Policy Statement* "contains principles against which the conduct of Comcast [and] Time Warner . . . can be measured." So too, in 2006, the Commission accepted the AT&T and BellSouth commitment to "maintain a neutral network and neutral routing in [the merged entity's] wireline broadband Internet access service," as a formal condition of the merger. Likewise, in the 2011 Comcast-NBCU merger, the Commission adopted the commitments of the merged entity to not "prioritize affiliated Internet content over unaffiliated Internet content . . . [or] treat affiliated network traffic differently from unaffiliated network traffic" as well as to comply with the Commission's open Internet rules, regardless of the effect of "any judicial challenge" affecting those rules.
- 15. The Commission likewise incorporated openness principles for mobile services, adopting an open platform requirement for licensees in the Upper 700 MHz C Block in 2007. Specifically, the rules require Upper 700 MHz C-Block licensees to allow customers, device manufacturers, third-party application developers, and others to use or develop the devices and applications of their choice for Upper

¹⁷ SBC Communications, Inc. and AT&T Corp. Applications for Approval of Transfer of Control, WC Docket No. 05-65, Memorandum Opinion and Order, 20 FCC Rcd 18290, 18392, para. 211 (2005) (SBC/AT&T Transfer of Control Order); Verizon Communications Inc. and MCI, Inc. Applications for Approval of Transfer of Control, WC Docket No. 05-75, Memorandum Opinion and Order, 20 FCC Rcd 18433, 18537, para. 221 (2005) (Verizon/MCI Transfer of Control Order). The SBC/AT&T condition remained effective until November 2007, and the Verizon/MCI condition until January 2008, two years following the respective closing dates of each merger. See SBC/AT&T Transfer of Control at Appx. F; Verizon/MCI Transfer of Control Order at Appx. G.

¹⁶ *Id.* at 14988, para. 4.

¹⁸ Applications for Consent to the Assignment and/or Transfer of Control of Licenses, Adelphia Communications Corporation, (and Subsidiaries, Debtors-In-Possession), Assignors, to Time Warner Cable Inc. (Subsidiaries), Assignees, Adelphia Communications Corporation, (and Subsidiaries, Debtors-In-Possession), Assignors and Transferors, to Comcast Corporation (Subsidiaries), Assignees and Transferees, Comcast Corporation, Transferor, to Time Warner Inc., Transferee, Time Warner Inc., Transferor, to Comcast Corporation, Transferee, MB Docket No. 05-192, Memorandum Opinion and Order, 21 FCC Rcd 8203, 8299, para. 223 (2006).

¹⁹ See AT&T Inc. and BellSouth Corporation Application for Transfer of Control, WC Docket No. 06-74, Memorandum Opinion and Order, 22 FCC Rcd 5662, 5663, para. 2 (2007) (AT&T/BellSouth Merger Order); see also SBC/AT&T Transfer of Control Order, 20 FCC Rcd at 18392, para. 211.

²⁰ Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. for Consent to Assign Licenses and Transfer Control of Licenses, MB Docket No. 10-56, Memorandum Opinion and Order, 26 FCC Rcd 4239, 4275, para. 94 & n.213 (2011).

²¹ Service Rules for the 698-746, 747-762 and 777-792 MHz Bands; Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems; Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones; Biennial Regulatory Review-Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services; Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission's Rules; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010; Declaratory Ruling on Reporting Requirement under Commission's Part 1 Anti-Collusion Rule, WT Docket Nos. 07-166, 06-169, 06-150, 03-264, 96-86, PS Docket No. 06-229, CC Docket No. 94-102, Second Report and Order, 22 FCC Rcd 15289, 15359 (2007) (700 MHz Second Report and Order); 47 C.F.R. § 27.16.

700 MHz C-Block networks, provided those devices and applications meet all applicable regulatory requirements and comply with reasonable conditions related to management of the wireless network (i.e., do not cause harm to the network). Further, the Commission prohibited Upper 700 MHz C-Block licensees from disabling features or functionality in handsets where such action is not related to reasonable network management and protection, or compliance with applicable regulatory requirements.²²

- 16. Also in 2007, the Commission unanimously adopted the *Broadband Industry Practices Notice of Inquiry*, explaining that vigilance and a willingness to act were necessary to keep the Internet open.²³ The *Broadband Industry Practices Notice* specifically sought comment on whether the *Internet Policy Statement* should be amended or expanded.²⁴
- 17. Meanwhile, the Commission applied open Internet principles in the context of particular enforcement proceedings. Just before the Commission adopted the *Internet Policy Statement*, the Enforcement Bureau had entered into a consent decree with Madison River Communications, a telephone company and provider of digital subscriber line (DSL) service, arising from complaints by Vonage that Madison River was blocking ports that were typically used by Vonage customers to make Voice over Internet Protocol (VoIP) telephone calls.²⁵ The consent decree required Madison River to stop blocking VoIP ports and refrain from otherwise inhibiting customers from using the VoIP applications of their choice.²⁶
- 18. In 2007, several parties filed complaints with the Commission alleging that Comcast was interfering with its customers' use of peer-to-peer applications in violation of the *Internet Policy Statement*.²⁷ Such applications allow users to share large files directly with one another without going through a central server, but also can consume significant amounts of bandwidth. In response, Comcast asserted that its conduct was a reasonable network management practice necessary to ease congestion.²⁸ The Commission disagreed and, in a 2008 Order, concluded that the company's practice "contravene[d] . . . federal policy" by "significantly imped[ing] consumers' ability to access the content and use the applications of their choice." As the Commission explained, Comcast's "practice unduly squelch[ed]

²² See id. at 15365, para. 206; 47 C.F.R. § 27.16.

²³ See Broadband Industry Practices, WC Docket No. 07-52, Notice of Inquiry, 22 FCC Rcd 7894, 7901 (2007) (Broadband Industry Practices Notice) (Statement of Chairman Kevin J. Martin: "The Commission is ready, willing, and able to step in if necessary."); id. at 7909 (Statement of Commissioner Robert M. McDowell: "[W]e must remain vigilant against possible market failure or anticompetitive conduct that would hamper the full development of the Internet and related services being provided to consumers.").

²⁴ *Id.* at 7898, para. 10. It asked whether and, if so, how the Commission should add non-discrimination and transparency principles to the four principles adopted in 2005. *Id.* at 7897-98, paras. 8-9. Concerned about the limited transparency of broadband Internet access providers' practices, the Commission asked "whether providers disclose their [network management and pricing] practices to their customers, to other providers, to application developers, and others." *Id.*

²⁵ Madison River Communications, File No. EB-05-IH-0110, Order, 20 FCC Rcd 4295 (Enforcement Bur. 2005) (Madison River Order).

²⁶ See id. at 4297, para. 5.

²⁷ Complaint of Free Press & Public Knowledge Against Comcast Corp., File No. EB-08-IH-1518 (filed Nov. 1, 2007); Petition of Free Press et al. for Declaratory Ruling, WC Docket No. 07-52 (filed Nov. 1, 2007).

²⁸ Comcast Comments, WC Docket No. 07-52, at 14 (filed Feb. 12, 2008).

²⁹ See Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications; Broadband Industry Practices; Petition of Free Press et al. for Declaratory Ruling that Degrading an Internet Application Violates the FCC's Internet Policy Statement and Does Not Meet an Exception for "Reasonable Network Management," File No. EB-08-IH-1518, WC Docket No. 07-52, Memorandum Opinion and Order, 23 FCC Rcd 13028, 13054, 13057, paras. 44, 49 (2008) (Comcast Order).

the dynamic benefits of an open and accessible Internet," harm that was further compounded by Comcast's failure to disclose its practice to its customers. In the *Comcast Order*, the Commission asserted ancillary jurisdiction under Title I of the Communications Act and concluded that it could resolve the dispute through adjudication rather than rulemaking.

- 19. Comcast challenged that decision in the D.C. Circuit, arguing (among other things) that the Commission lacked authority to prohibit a broadband Internet service provider from engaging in discriminatory practices that violate the four principles the Commission announced in 2005.³² On April 6, 2010, the D.C. Circuit granted Comcast's petition for review and vacated the Commission's enforcement decision. As to section 706 of the Telecommunications Act of 1996, the court noted that the agency had previously interpreted section 706 as not constituting a grant of authority and held that the Commission was bound by that interpretation for purposes of the case.³³
- 20. While the Comcast case was pending, the Commission issued a Notice of Proposed Rulemaking seeking comment on whether the Commission should codify the four principles stated in the *Internet Policy Statement*, plus proposed nondiscrimination and transparency rules, all subject to reasonable network management.³⁴
- 21. In December 2010, the Commission released the *Open Internet Order*, adopting three basic rules grounded in the Commission's prior decisions and broadly accepted Internet norms. First, the *Order* imposed a transparency rule, requiring both fixed and mobile providers to "publically disclose accurate information regarding the network management practices, performance, and commercial terms" of their broadband Internet access service. The rule specified that such disclosures be "sufficient for consumers to make informed choices regarding the use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings." Second, the *Order* adopted anti-blocking requirements. The rule barred fixed providers from blocking "lawful content, applications, services, or non-harmful devices subject to reasonable network management." It prohibited mobile providers from blocking "consumers from accessing lawful websites," as well as "applications that compete with the provider's voice or video telephony services," subject to "reasonable network management." Third, the *Order* adopted an anti-discrimination rule for fixed providers, barring them from "unreasonably discriminat[ing] in transmitting lawful network traffic," subject to "reasonable network management."

³⁰ See id. at 13028, para. 1.

³¹ *Id.* at 13033-50, paras. 12-40.

³² See Comcast Corp. v. FCC, 600 F.3d 642 (D.C. Cir. 2010).

³³ Comcast, 600 F.3d at 658-60.

³⁴ See Preserving the Open Internet et al., GN Docket No. 09-191, WC Docket No. 07-52, Notice of Proposed Rulemaking, 24 FCC Rcd 13064, 13067-68, 13100-15, paras. 10, 16, 88-141 (2009) (Open Internet NPRM). Although the Open Internet NPRM recast the Internet Policy Statement principles as rules rather than consumer entitlements, protecting and empowering end users remained a central purpose of open Internet protections

³⁵ See Open Internet Order, 25 FCC Rcd 17905, para. 1.

³⁶ 47 C.F.R. § 8.3.

³⁷ *Id*.

³⁸ 47 C.F.R. § 8.5.

³⁹ L

⁴⁰ 47 C.F.R. § 8.7.

- 22. Verizon challenged the *Open Internet Order* in the D.C. Circuit on several grounds.⁴¹ It argued that the Commission lacked statutory authority to adopt the rules, that the blocking and non-discrimination rules violated the Communications Act by imposing common carriage regulation on an information service, that the *Order* was arbitrary and capricious, and that the rules violated the First and Fifth Amendments to the U.S. Constitution.
- On January 14, 2014, the D.C. Circuit ruled on Verizon's challenge to the *Open Internet* Order. 42 As discussed further below, the court upheld the Commission's reading that sections 706(a) and (b) of the Telecommunications Act grant the Commission affirmative authority to encourage and accelerate the deployment of broadband capability to all Americans through, among other things, measures that promote competition in the local telecommunications market or remove barriers to infrastructure investment.⁴³ The court further held that the Commission could utilize that section 706 authority to regulate broadband Internet access service.44 It concluded that the Commission had adequately justified the adoption of open Internet rules by finding that such rules would preserve and facilitate the "virtuous circle" of innovation, demand for Internet services, and deployment of broadband infrastructure and that, absent such rules, broadband providers would have the incentive and ability to inhibit that deployment.⁴⁵ The court therefore rejected Verizon's challenge to the transparency rule.⁴⁶ However, the court struck down the "anti-blocking" and "anti-discrimination" rules, explaining that the Commission had chosen an impermissible mechanism by which to implement its legitimate goals. Specifically, the court held that the Commission had imposed *per se* common carriage requirements on providers of Internet access services.⁴⁷ Such treatment was impermissible because the Commission had classified fixed broadband Internet access service as an information service, not a telecommunications service, and had classified mobile broadband Internet access service as a private mobile service rather than a commercial mobile service.⁴⁸ The court remanded the case to the Commission for further proceedings consistent with its opinion.
- 24. Today, we respond directly to that remand and propose to adopt enforceable rules of the road, consistent with the court's opinion, to protect and promote the open Internet. As the above history demonstrates, our action builds on the foundation begun under Chairman Powell, continued under Chairman Martin and Genachowski, and reinforced by a decade of Commission policy.

⁴¹ Brief of Petitioner-Appellant Verizon, Verizon v. FCC, No. 11-1355 (D.C. Cir. July 2, 2012).

⁴² Verizon v. FCC, 740 F.3d 623 (D.C. Cir.2014).

⁴³ *Id.* at 635-42. In the *Open Internet Order*, the Commission explained its understanding that section 706(a) "authorizes the Commission . . . to take actions . . . that encourage the deployment of advanced telecommunications capability by any of the means listed in the provision." *Open Internet Order*, 25 FCC Rcd at 17969, para. 119; *see also id.* at 17969 n.370. The *Verizon* court agreed with the Commission's interpretation and found that "the Commission's current understanding of section 706(a) as a grant of regulatory authority represent[s] a reasonable interpretation of an ambiguous statute." *Verizon*, 740 F.3d at 637.

⁴⁴ Verizon, 740 F.3d at 642.

⁴⁵ *Id.* at 644-46.

⁴⁶ *Id.* at 659.

⁴⁷ See id. at 656-59.

⁴⁸ *Id*. at 650.

III. DISCUSSION

A. The Continuing Need for Open Internet Protections

1. An Open Internet Promotes Innovation, Competition, Free Expression, and Infrastructure Deployment

- 25. In the *Open Internet Order*, the Commission reiterated the conclusion underlying its prior policies—that the Internet's openness promotes innovation, investment, competition, free expression and other national broadband goals.⁴⁹ The Commission also found that the Internet's openness is critical to its ability to serve as a platform for speech and civic engagement and can help close the digital divide by facilitating the development of diverse content, applications, and services.⁵⁰ Further, the *Order* found that the benefits of Internet openness—increased consumer choice, freedom of expression, and innovation—applied to end users accessing the Internet using mobile services as well as fixed services.⁵¹
- In the *Open Internet Order*, the Commission specifically found that the Internet's openness enabled a "virtuous circle of innovation in which new uses of the network—including new content, applications, services, and devices—lead to increased end-user demand for broadband, which drives network improvements, which in turn lead to further innovative network uses."52 For example, the Commission explained that innovative streaming video applications and independent sources of video content have spurred end-user demand, which, in turn, has led to network investments and increased broadband deployment.⁵³ By contrast, the Commission reasoned, "[r]estricting edge providers' ability to reach end users, and limiting end users' ability to choose which edge providers to patronize, would reduce the rate of innovation at the edge and, in turn, the likely rate of improvements to network infrastructure."54 As discussed further below, the Commission found that, despite the advantages of the virtuous circle, broadband providers have short-term incentives to limit openness, generating harms to edge providers and users, among others.⁵⁵ Thus, the risk of broadband provider practices that may reward them in the short term but over the long run erode Internet openness threatens to slow or even break the virtuous circle—chilling entry and innovation by edge providers, impeding competition in many sectors, dampening consumer demand, and deterring broadband deployment—in ways that may be irreversible or very costly to undo. Also, innovation that does not occur due to lack of Internet openness may be hard to detect.

⁴⁹ Open Internet Order, 25 FCC Rcd at 17909-15, paras. 13-19; see Vonage Comments at 1; Voices for Internet Freedom Comments at 1-2. On February 19, 2014, the Wireline Competition Bureau released a Public Notice announcing the establishment of a new docket to consider how the Commission should proceed following the Verizon v. FCC opinion. See New Docket Established to Address Open Internet Remand, GN Docket No. 14-28, Public Notice, 29 FCC Rcd 1746 (Wireline Comp. Bur. 2014). Unless otherwise noted, all citations to comments in this Notice refer to comments filed in response to the Public Notice released by the Wireline Competition Bureau in GN Docket No. 14-28.

⁵⁰ Open Internet Order, 25 FCC Rcd at 17912-15, paras. 15-18; see Letter from Free Press et al., to Thomas Wheeler, Chairman, Federal Communications Commission, GN Docket No. 14-28, at 2 (filed Mar. 20, 2014) (Free Press Ex Parte Letter) (stating that "[f]ree speech depends upon access to open and nondiscriminatory platforms for that speech").

⁵¹ Open Internet Order, 25 FCC Rcd at 17956, para. 93.

⁵² *Id.* at 17910-11, para. 14.

⁵³ *Id.* at 17910-11, 17914, paras. 14, 17.

⁵⁴ *Id.* at 17910-11, para.14.

⁵⁵ See infra Section III.A.2.

- 27. The *Open Internet Order* acknowledged that there were tradeoffs to consider in adopting the 2010 rules.⁵⁶ The Commission concluded, however, that any small costs of imposing the rules were outweighed by the positive effect on network investment from the preservation of the openness that drives the virtuous circle, as well as the increased certainty in continued openness under the rules.⁵⁷
- 28. The D.C. Circuit held that "the Commission [had] more than adequately supported and explained its conclusion that edge provider innovation leads to the expansion and improvement of broadband infrastructure." The court also found "reasonable and grounded in substantial evidence" the Commission's finding that Internet openness fosters the edge provider innovation that drives the virtuous circle. ⁵⁹
- 29. We believe that these findings, made by the Commission in 2010 and upheld by the court, remain valid. If anything, the remarkable increases in investment and innovation seen in recent years—while the rules were in place—appear to have borne out much of the Commission's view. Both within the network and at its edges, investment and innovation have flourished while the open Internet rules were in force.
- 30. According to a June 2013 report by the White House Office of Science and Technology Policy, for example, nearly \$250 billion in private capital has been invested in U.S. wired and wireless broadband networks since 2009.⁶¹ USTelecom reports that broadband capital expenditures have risen steadily, from \$64 billion in 2009 to \$68 billion in 2012.⁶² Wireline providers alone invested \$25 billion in 2012.⁶³ And venture capital financing of "Internet-specific" businesses has doubled in the past four years, from \$3.5 billion in 2009 to \$7.1 billion in 2013.⁶⁴ Annual investment in U.S. wireless networks grew more than 40 percent between 2009 and 2012, from \$21 billion to \$30 billion, and exceeds investment by the major oil and gas or auto companies.⁶⁵
- 31. Whole new product markets have blossomed in recent years, and the market for applications has both diversified and exploded. A total of \$8.33 billion has been raised since 2007 on mobile media ventures, a majority of the funds (\$4.7 billion) to companies that provide software services, including mobile Web development, carrier-backend software, app development, and cloud-based

⁵⁶ Open Internet Order, 25 FCC Rcd at 17928, para. 39.

⁵⁷ *Id.* at 17927-31, paras. 38-42.

⁵⁸ *Verizon*, 740 F.3d at 644.

⁵⁹ *Id*

⁶⁰ But see AT&T Comments at 17 ("[A]ny broadband access provider that prevents innovative new content and applications from using its platform would inflict considerable harm on itself given that most consumers could switch to a different provider that does not engage in such self-defeating behavior.").

⁶¹ See White House Office of Science and Technology Policy & The National Economic Council, Four Years of Broadband Growth 5 (2013) (Four Years of Broadband Growth), http://www.whitehouse.gov/sites/default/files/broadband report final.pdf.

⁶² See USTelecom, Historical Broadband Provider Capex http://www.ustelecom.org/broadband-industry-stats/investment/historical-broadband-provider-capex_(last visited May 8, 2014); Patrick Brogan, Updated Capital Spending Data Showing Rising Broadband Investment in Nation's Information Infrastructure 1, USTelecom (Nov. 4, 2013), http://www.ustelecom.org/sites/default/files/documents/103113-capex-research-brief-v2.pdf (Updated Capital Spending Data Report).

⁶³ Updated Capital Spending Data Report at 2.

⁶⁴ PricewaterhouseCoopers and National Venture Capital Association, Total U.S. Investments by Year Q1 1995-Q4 2013 (Jan. 17, 2014), http://www.nvca.org/index.php?option=com_docman&task=doc_download&gid=1033&Itemid=317 (select "Internet-Specific Companies" tab).

⁶⁵ Four Years of Broadband Growth at 2.

services in the United States. In April 2010, Apple released the first version of the iPad, which launched the tablet market.⁶⁶ The number of tablet users in the United States has increased from 9.7 million in 2010 to almost 70 million by the end of 2012, and is projected to grow to more than 160 million (approximately 50 percent of the U.S. population) by 2016.⁶⁷ In 2013, over \$1 billion in venture capital funding was invested in mobile media startups,⁶⁸ and overall app use in 2013 posted 115 percent year-over-year growth.⁶⁹ According to CTIA, in 2012 there were more than 20 independent non-carrier mobile application stores, offering over 3.5 million apps for 14 different operating systems.⁷⁰ The Wall Street Journal reported in March 2013 that Apple and Google each offered about 700,000 apps, and that application sales were approaching \$25 billion.⁷¹

- 32. Finally, we have seen tremendous growth in the online voice and video markets. The number of hours Americans spend watching video over the Internet has grown 70 percent since June 2010.⁷² Between 2010 and 2013, revenues from online video services grew 175 percent, from \$1.86 billion to \$5.12 billion.⁷³ Real-time entertainment (that is, programming that is viewed as it is delivered, such as video streamed by Netflix and Hulu) grew from 42.7 percent of the downstream fixed access traffic at peak time (generally 8:00 p.m. to 10:00 p.m.) in 2010 to 67 percent of the downstream fixed access traffic at peak time by September 2013.⁷⁴ VoIP usage has similarly continued to increase. The number of global over-the-top mobile VoIP subscribers increased by 550 percent in 2012.⁷⁵
- 33. We have also, however, witnessed a growing digital divide that threatens to undo the work of the Commission's open Internet policies. As certain cities get connected with fiber or other

⁶⁶ Apple, Apple-history/iPad, http://apple-history.com/ipad (last visited Apr. 8, 2014).

⁶⁷ SNL Kagan, Media Trends Actionable Metrics, Benchmarks & Projections for Major Media Sectors 262 (2013) (SNL Kagan Media Trends).

⁶⁸ *Id.* at 278.

⁶⁹ Flurry Analytics, *Mobile Use Grows 115% in 2013*, *Propelled by Messaging Apps*, Flurry Blog (Jan. 13, 2014), http://blog.flurry.com/bid/103601/Mobile-Use-Grows-115-in-2013-Propelled-by-Messaging-Apps.

⁷⁰ Letter from Scott K. Bergmann, Vice President, Regulatory Affairs, CTIA – The Wireless Association, to Thomas Wheeler, Chairman, Federal Communications Commission, WT Docket No. 13-135, GN Docket No. 09-51, at 2 (filed Nov. 13, 2013).

⁷¹ Jessica Lessin and Spencer Ante, *Apps Rocket Toward \$25 Billion in Sales*, Wall Street Journal Tech (Mar. 4, 2013), http://online.wsj.com/news/articles/SB10001424127887323293704578334401534217878.

⁷² See Nielsen, Three Screen Report 4, tbl.4 (June 2010), http://www.nielsen.com/content/dam/corporate/us/en/reports-downloads/2010-Reports/Three-Screen-Report-Q1-2010.pdf (estimating that during the second quarter of 2010, about 134.5 million Americans watched 3 hours and 10 minutes of video over the Internet per month, and about 20 million Americans watched 3 hours and 37 minutes of video on a mobile phone per month); Nielsen, A Look Across Media The Cross Platform Report 10, tbl.3 (Dec. 2013), http://www.nielsen.com/content/dam/corporate/us/en/reports-downloads/2013%20Reports/The-Cross-Platform-Report-A-Look-Across-Media-3Q2013.pdf (estimating that during the third quarter of 2013, about 147.7 million Americans watched 6 hours and 40 minutes of video over the Internet per month).

⁷³ This includes revenues from subscription services as well as sales and rentals of full-length television programs and movies. *See* SNL Kagan Media Trends at 158.

⁷⁴ Sandvine Intelligent Broadband Networks, Global Internet Phenomena Report 5, fig.1 (2H 2013), https://www.sandvine.com/downloads/general/global-internet-phenomena/2013/2h-2013-global-internet-phenomena-report.pdf; Sandvine Intelligent Broadband Networks, Fall 2010 Global Internet Phenomena Report 11, fig.7 (2010).

⁷⁵ Press Release, Infonetics Research, Infonetics Research Raises VoLTE Forecast; Over-the-top Mobile VoIP Subscribers Nearing 1 Billion Mark (July 8, 2013), http://www.infonetics.com/pr/2013/Mobile-VoIP-Services-and-Subscribers-Market-Highlights.asp.

technologies capable of providing broadband speeds of 25 Mbps up to 1 Gigabit, rural America and even some parts of urban America are falling farther and farther behind. Recent data suggest that a majority of Americans living in urban areas (64 percent) have access to at least 25 Mbps/10 Mbps service, while only a substantial minority of Americans residing in rural areas (only 21 percent) have access to that same 25 Mbps/10 Mbps service. We are similarly concerned as to whether advanced networks are being deployed to all Americans in urban areas, as the construction of new networks, especially competitive networks, is an outcome that must be encouraged.

- 34. In light of developments in the Internet ecosystem since 2010, we wish to refresh the record on the importance of protecting and promoting an open Internet. We seek comment on the current role of the Internet's openness in facilitating innovation, economic growth, free expression, civic engagement, competition, and broadband investment and deployment. Particularly, we seek comment on the role the open Internet rules have had in investment in the broadband marketplace—networks and edge providers alike. We are similarly interested in understanding the role that the open Internet may play in the promotion of competition or in identifying barriers to infrastructure investment that an open Internet may eliminate or lessen. We also seek comment on the role that the open Internet has for public institutions, such as public and school libraries, research libraries, and colleges and universities.⁷⁷
- 35. Additionally, we seek comment on the impact of the openness of the Internet on free expression and civic engagement. For example, the percentage of Americans who use the Internet reached 87 percent in 2014—an increase of 8 percent from 2010, the year in which the *Open Internet Order* was adopted—marking "explosive adoption" that has had "wide-ranging impacts on everything from: the way people get, share and create news . . . the way they learn; the nature of their political activity; their interactions with government; the style and scope of their communications with friends and family; and the way they organize in communities." In light of the important role that the Internet now plays as a vehicle for communication of all sorts—both for consumers and content providers—how should we consider the potential impact on social and personal expression of an Internet whose openness was not protected? For example, would there be particular impacts on political speech, on the ability of consumers to use the Internet to express themselves, or on the Internet's role as a "marketplace of ideas" that serves the interests of democracy in general, serving even the interests of those Americans who listen even if they do not actively speak? Are there other ways in which we should understand free-expression interests and whether they may be impaired by a lack of openness?

⁷⁶ We estimate broadband deployment by relying on the broadband deployment data collected by National Telecommunications and Information Administration (NTIA) and the states, in coordination with the Commission, as part of the State Broadband Initiative (SBI) and called "SBI Data." Department of Commerce, NTIA, State Broadband Data and Development Grant Program, Docket No. 0660-ZA29, Notice of Funds Availability, 74 Fed. Reg. 32545 (July 8, 2009), http://www.ntia.doc.gov/files/ntia/publications/fr_broadbandmappingnofa_090708.pdf.

⁷⁷ See, e.g., Letter of Emily Sheketoff, ALA Washington Office, et al. to Thomas Wheeler, Chairman, Federal Communications Commission (filed Feb. 13, 2014).

⁷⁸ Susannah Fox & Lee Rainie, The Web at 25 in the U.S. 4, Pew Research Internet Project (2014) http://www.pewinternet.org/files/2014/02/PIP_25th-anniversary-of-the-Web_0227141.pdf. The Pew Research Internet Project also reports that 73% of Internet users say that it would be somewhat hard or very hard to give up the Internet and that 56% of users say that "they have seen an online group come together to held a person or a community solve a problem." *Id.* at 7, 22.

⁷⁹ See Abrams v. United States, 250 U.S. 616, 630 (1919) (Holmes. J., dissenting) ("The ultimate good desired is better reached by a free trade in ideas—that the best test of truth is the power of the thought to get itself adopted in the competition of the marketplace.").

⁸⁰ See, e.g., Marvin Ammori, First Amendment Architecture, Wisconsin L. Rev., Vol. 2012, No. 1 (2012).

- 36. At the same time, we are mindful of the possible tradeoffs the Commission recognized at the time it adopted the *Open Internet Order*. When it adopted the rules in 2010, the Commission's primary focus was on the market between broadband providers and their end-user subscribers. The record contained no evidence of U.S. broadband providers engaging in pay-for-priority arrangements, in which the broadband provider would agree with a third party to directly or indirectly prioritize some traffic over other traffic to reach the provider's subscribers. As such, the Commission found that such arrangements would be a "significant departure from historical and current practice."
- 37. In the years since, this second side of the market—between broadband providers and edge providers or other third parties—has gotten increasing attention. In its arguments challenging the *Order*, Verizon expressed interest in pursuing commercial agreements with edge providers to govern the carriage of the edge providers' traffic. ⁸⁴ We also note that such arrangements between broadband and edge providers have begun to emerge. In January 2014, for example, AT&T launched a new sponsored data service, in which an edge provider enters an agreement with AT&T to sponsor and pay for data charges resulting from eligible uses of the sponsor's content by an AT&T mobile subscriber. ⁸⁵
- 38. We seek comment on the potential for, and development of, new business arrangements in the market between broadband providers and edge providers. What does the multi-sided market look like, and what are its effects on Internet openness? Do some types of broadband and edge provider arrangements (or aspects of such arrangements) raise greater concerns about Internet openness than others?⁸⁶

2. Broadband Providers Have the Incentive and Ability to Limit Openness

39. The *Open Internet Order* found that broadband Internet providers had the incentives and ability to limit Internet openness, and that they had done so in the past.⁸⁷ And the D.C. Circuit found that the Commission "adequately supported and explained" that absent open Internet rules, "broadband providers represent a threat to Internet openness and could act in ways that would ultimately inhibit the speed and extent of future broadband deployment." As discussed further below, we seek to update the record to reflect marketplace, technical, and other changes since the 2010 *Open Internet Order* was adopted that may have either exacerbated or mitigated broadband providers' incentives and ability to limit Internet openness. We seek general comment on the Commission's approach to analyzing broadband providers' incentives and ability to engage in practices that would limit the open Internet, as well as more targeted comment as addressed below.

⁸¹ Open Internet Order, 25 FCC Rcd at 17910-11, 17928-29, paras. 14, 39-40.

⁸² *Id.* at 17947-48, para. 76; *see also* Verizon and Verizon Wireless Comments, GN Docket No. 09-191, WC Docket No. 07-52, at Attach. C (filed Jan. 14, 2010) (Verizon Topper Declaration) (discussing the potential for a two-sided market but stating that "[u]nder current pricing arrangements, broadband providers charge only the consumer side of the market for the delivery of content of applications.").

⁸³ Open Internet Order, 25 FCC Rcd at 17947-48, para. 76; see also Verizon Topper Declaration.

⁸⁴ In its brief, Verizon argued that allowing broadband providers to enter into "arrangements (such as advertiser-supported services) . . . would help recover the costs of building and maintaining broadband networks." *See* Joint Reply Brief of Appellants/Petitioners Verizon and MetroPCS at 7-8, Verizon v. FCC, No. 11-1355 (D.C. Cir. Dec. 21, 2012).

⁸⁵ See News Release, AT&T, AT&T Introduces Sponsored Data for Mobile Data Subscribers and Businesses (Jan. 6, 2014), http://www.att.com/gen/press-room?pid=25183&cdvn=news&newsarticleid=37366&mapcode.

⁸⁶ See infra paras. 96, 126, 138.

⁸⁷ Open Internet Order, 25 FCC Rcd at 17915-26, paras. 20-37.

⁸⁸ *Verizon*, 740 F.3d at 645.

- 40. As noted above, the Commission has pursued policies to safeguard Internet openness for over a decade. Thus, while the number of existing cases has been relatively few, we believe this to be primarily due to the fact that the Commission has had policies in place during the period in question that it has been ready to enforce. His is different from the experience under the European legal framework, which for the most part has not contained rules or policies prohibiting blocking and discriminatory practices like the Commission's open Internet regulatory policies. In the absence of such rules and policies, commenters note more instances of broadband providers engaging in some level of restriction in Europe than the Commission has witnessed in the United States under its open Internet policies. For example, a survey conducted by the Body of European Regulators for Electronic Communications (BEREC) shows that European Internet service providers reported engaging in specific restrictions such as traffic degradation as well as blocking and throttling when accessing "specific applications (such as gaming, streaming, e-mail or instant messaging service) and, to a much lesser extent, when [accessing] specific content and application providers." We seek comment on this analysis and ask whether there is some other explanation to account for this phenomenon.
- 41. We also note that concerns related to the open Internet rules and norms have continued to occur. For example, in 2012, the Commission reached a \$1.25 million settlement with Verizon for refusing to allow tethering apps on Verizon smartphones, based on openness requirements attached to

⁸⁹ See Letter from Barbara van Schewick to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket Nos. 09-191, 14-28, at 2 (filed Mar. 4, 2014) (Barbara van Schewick Ex Parte Letter) (stating that "instances of blocking and discrimination in the US market for wireline broadband Internet access occurred in the presence of strong regulatory policies supporting network neutrality"); Alissa Cooper Comments at 3, 168 (noting that in the United Kingdom, notwithstanding competition between ISPs, discrimination still occurs). But see CEA Comments at 2-3 (arguing that the competitive marketplace obviates the need for additional open Internet rules).

⁹⁰ Alissa Cooper Comments at 167 ("Where regulatory threat is present and internalized by ISPs, it fundamentally shapes traffic management, while its absence has an equally strong effect."); Barbara van Schewick *Ex Parte* Letter at 2.

⁹¹ Barbara van Schewick *Ex Parte* Letter at 2 & Attach. A at 13, fig. 2 (discussing evidence of blocking and discrimination as noted by several sources, including the Body of European Regulators for Electronic Communications (BEREC), that shows the relative frequency of broadband providers reporting some level of restriction). The European Parliament voted to adopt net neutrality rules in April 2014 that will now be considered by the 28 European Union Member States in order to become binding regulation. To date, among European countries only the Netherlands and Slovenia have net neutrality regulations. *See* Zack Whittaker, *EU Passes Net Neutrality Law, Votes to End Throttling, Site Blocking*, Between the Lines Blog, ZD Net (Apr. 3, 2014), http://www.zdnet.com/eu-net-neutrality-passes-vote-7000027998/.

⁹² Body of European Regulators for Electronic Communications, A View of Traffic Management and Other Practices Resulting in Restrictions to the Open Internet in Europe 8-9 (2012), available at http://apps.fcc.gov/ecfs/document/view?id=7521087926 (discussing several instances where operators gave preferential treatment to select over-the-top traffic). Additionally, there is evidence that the second largest French ISP was automatically blocking ads in Internet traffic delivered to subscribers in January 2013. While the ISP ultimately removed the block following government intervention, press reports indicate that the block was motivated to pressure Google into compensating the ISP for the traffic generated by YouTube. Barbara van Schewick Ex Parte Letter's at 3; Cyrus Fariyar, France's Second Largest ISP Suspends Ad Blocking For Now (Jan. 7, 2013), ArsTechnica, http://arstechnica.com/business/2013/01/frances-second-largest-isp-suspends-ad-blocking-for-now/. Furthermore, the Voice on the Net (VON) Coalition Europe released a report identifying restrictions on Internet access by mobile networks based mainly on the operators' terms and conditions. The report noted that in 2012, a U.K.-based mobile Internet access service provider contractually limited users from using services not affiliated with the ISP, including Internet-based streaming services, voice, peer-to-peer file sharing, or Internet-based video. VON Europe, Non-exhaustive Identification of Restrictions on Internet Access by Mobile Operators 17 (2012), http://www.scribd.com/doc/98641591/VON-Europe-Non-exhaustive-Indentification-of-Restrictions-on-Internet-Access-by-Mobile-Operators.

Verizon's Upper 700 MHz C-Block license. ⁹³ In the same year, consumers also complained when AT&T refused to permit Apple's FaceTime iPhone and iPad application to use its mobile network, restricting its use to times when the end user was connected to Wi-Fi and thus to another broadband provider, although the Commission did not conclude whether such a practice violated our open Internet principles. ⁹⁴ We seek identification of, and comment on, actions taken by broadband providers—both domestically and internationally—since the adoption of the *Open Internet Order* that have threatened or could potentially threaten the Internet's openness. How should such incidents inform how we craft our rules on remand?

a. Economic Incentives and Ability

- 42. In the *Open Internet Order*, the Commission found that providers of broadband Internet access service had multiple incentives to limit Internet openness. The *Order* concluded that the threat of broadband provider interference with Internet openness would be exacerbated by—but did not depend on—such providers possessing market power over potential subscribers in their choice of broadband provider. However, the Commission found that most residential customers have only one or two options for wireline broadband Internet access service, increasing the risk of market power, and found the future of mobile Internet access service as a competing substitute remained unclear. Moreover, the Commission emphasized that customers may incur significant costs in switching from one provider to another, thus creating "terminating monopolies" for content providers needing high-speed broadband service to reach end users. 96
- 43. The D.C. Circuit found that the Commission's assessment of broadband providers' incentives and economic ability to threaten Internet openness was not just supported by the record but also grounded in "common sense and economic reality." It affirmed the Commission's conclusions that vertically integrated broadband providers have incentives to interfere with competitive services and that broadband providers generally have incentives to accept fees from edge providers. And the court cited with approval the Commission's conclusion that a broadband provider would be unlikely to fully account for the harms resulting from such practices. The court also upheld the agency's conclusion that such incentives could "produce widespread interference with the Internet's openness in the absence of Commission action. Finally, the court agreed that the Commission need not engage in a market power analysis to justify its rules, explaining that broadband providers' ability to block or disadvantage edge providers depended on "end users not being fully responsive to the imposition of such restrictions," not

⁹³ News Release, Federal Communications Commission, *Verizon Wireless to Pay \$1.25 Million to Settle Investigation into Blocking of Consumers' Access to Certain Mobile Broadband Applications* (July 31, 2012), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-315501A1.pdf.

⁹⁴ See David Kravets, *AT&T Holding FaceTime Hostage is No Net-Neutrality Breach*, Wired.com (Aug. 22, 2012), http://www.wired.com/threatlevel/2012/08/facetime-net-neutrality-flap/; see also Open Internet Advisory Committee, 2013 Annual Report (Aug. 20, 2013), at 39-46, http://transition.fcc.gov/cgb/oiac/oiac-2013-annual-report.pdf (2013 OIAC Annual Report).

⁹⁵ *Open Internet Order*, 25 FCC Rcd at 17923-24, paras. 32-33; Data Foundry et al. Comments at 1-2 (arguing that ISPs are able to leverage market power over transmission facilities into the logically separate Internet access market).

⁹⁶ Open Internet Order, 25 FCC Rcd at 17924-25, para. 34.

⁹⁷ *Verizon*, 740 F.3d at 644 ("The Commission's finding that Internet openness fosters the edge provider innovation that drives this 'virtuous cycle' was likewise reasonable and grounded in substantial evidence.").

⁹⁸ *Id.* at 645-46.

⁹⁹ *Id.* at 646 (discussing "negative externalities" resulting from broadband provider behavior).

¹⁰⁰ *Id.* at 649 (internal quotations omitted).

on "the sort of market concentration that would enable them to impose substantial price increases on end users." 101

- 44. We seek to update the record underlying the *Open Internet Order*'s conclusion that broadband providers have incentives and the economic ability to limit Internet openness in ways that threaten to weaken or break the virtuous circle. How have changes in the marketplace or technology since 2010 affected broadband providers incentives and economic ability to engage in such practices? To what extent do broadband providers today have economic incentives and mechanisms to block or disadvantage a particular edge provider or class of edge providers? To what extent do vertically integrated providers have particularized incentives to discriminate—on price, quality, or other bases—in favor of affiliated products? What are broadband providers' incentives to increase revenues by charging edge providers for access or prioritized access to the broadband provider's end users? Are there features of the Internet ecosystem that facilitate or impede a broadband provider's ability to internalize the harms caused by practices that limit openness? Are there justifications for charging fees to edge providers that were not present in 2010? We seek comment on these and other economic incentives and abilities that broadband providers may have to limit openness. 102
- 45. We generally seek comment on what economic tools broadband providers utilize to manage traffic on their networks. Broadband providers may address traffic management through commercial terms and conditions on end users, such as pricing for different levels of throughput or through the use of "data caps." To what extent and in what ways do broadband providers use such tools to manage traffic, such as by excluding certain content from such an end user data cap?¹⁰³ Might these tools be used to exploit market power or reduce competition?
- 46. In addition, we seek comment on end users' ability to switch providers if a particular broadband service does not meet their needs. What is the extent of switching costs, and how do switching costs affect the incentives and economic ability of providers to limit Internet openness?¹⁰⁴ As discussed in the *Open Internet Order* and affirmed by the D.C. Circuit, both edge providers seeking access to end users and end users seeking access to edge providers are subject to the gatekeeper effect of a retail broadband provider.¹⁰⁵ Absent multi-homing, an end user has only one option to reach a given edge provider's content.¹⁰⁶ To reach any given end user, an edge provider must ensure that it or its broadband provider can reach the end user's broadband provider. Terms and conditions, price, or lack of other broadband providers, among other factors, can raise switching costs to the point where switching is inefficient, infeasible, or even impossible.¹⁰⁷ We seek comment on these conclusions. To what extent do

¹⁰¹ Verizon, 740 F.3d at 648.

¹⁰² See, e.g., Public Knowledge and Common Cause Comments 4-7 (stating that data caps limit Internet openness).

¹⁰³ See News Release, AT&T, AT&T Introduces Sponsored Data for Mobile Data Subscribers and Businesses (Jan. 6, 2014), http://www.att.com/gen/press-room?pid=25183&cdvn=news&newsarticleid=37366&mapcode; 2013 OIAC Annual Report; see also Public Knowledge & Common Cause Comments at 6-9 (arguing that, by creating a "special lane for affiliated content," data caps have the potential to negatively impact the open Internet and the long term growth of the network).

¹⁰⁴ See Open Internet Order, 25 FCC Rcd at 17921, para, 27; Vonage Comments at 5.

¹⁰⁵ Open Internet Order, 25 FCC Rcd at 17919, para 24. But see AT&T Comments at 17 ("[A]ny broadband access provider that prevents innovative new content and applications from using its platform would inflict considerable harm on itself given that most consumers could switch to a different provider that does not engage in such self-defeating behavior.").

¹⁰⁶ In this context, we use "multi-homing" to refer to a customer that subscribes to more than one Internet service provider, noting the subscriber may be either an end user or an edge provider. *See, e.g.*, Christiaan Hogendorn, *Broadband Internet: Net Neutrality versus Open Access* 15, Wesleyan University Economics Department (2007), http://chogendorn.web.wesleyan.edu/oa.pdf.

¹⁰⁷Open Internet Order, 25 FCC Rcd at 17921, para 27.

consumers face significant switching costs in choosing to change broadband access providers? Which services, if any, are most vulnerable to a broadband provider's market power because of the inability to effectively reach subscribers through other means? To the extent that such switching costs exist, to what extent, if any, are they exacerbated by additional factors, such as the difficulty consumers may have in effectively monitoring the extent to which edge providers have difficulty reaching them, the number of effective substitutes a consumer may have among broadband providers, or the impact of bundled pricing and switching costs attached to the purchase or use of bundled services, such as a combined offering of broadband access along with video services and voice telephony? Would all likely alternatives have similar incentives to limit openness, possibly for a different set of services? We also seek comment on an end user's ability to switch broadband providers in response to specific broadband provider practice, for example a broadband provider's decision to charge an edge provider to reach the customer. Are switching costs relevant to an edge provider's interaction with a broadband provider and, if so, how? Finally, what are the implications when consumers have no ability to switch providers because there is only one provider offering service to the consumer's location?

- 47. We also seek comment on the state of competition in broadband Internet access service, and its effect on providers' incentives to limit openness. We seek comment on the appropriate view of whether broadband services with substantially different technical characteristics are competitive substitutes. For example, how should we regard the ability of DSL service with speeds of, for example, 3 Mbps downstream and 768 kbps upstream to constrain conduct by a provider of high-speed broadband with speeds of, for example, 25 Mbps downstream and 3 Mbps upstream (or higher)? How should we regard the geography of broadband competition? From an end user's point of view, do national practices or market shares have any impact on edge providers, without regard to the definition of a geographic market?
- 48. In the fixed broadband context, we have seen evidence of limited choice between broadband providers in many areas of the country. As the speed threshold increases to 6 Mbps downstream and 1.5 Mbps upstream, the number of households that are located in census tracts with at least three providers that report serving customers at those higher speeds dips down to a mere 34 percent. In many areas of the country, with respect to fixed Internet access, consumers may have only limited options, i.e., one or two fixed providers available. We seek comment on the extent to which commercial practices differ in places where consumers have only one choice of a wireline broadband provider, two choices, or more than two choices. We therefore also seek comment as to whether increased spectrum availability and technological developments in the mobile broadband marketplace, e.g., growth in 4G/LTE availability, would affect the market power of fixed broadband providers. The service of the country of the service o
- 49. We further seek general comment on our approach towards analyzing broadband provider incentives. Under the Commission's reading, which the court upheld, our section 706 authority is not

¹⁰⁸ Industry Analysis and Technology Division, Federal Communications Commission, *Internet Access Services:* Status as of December 31, 2012 62, Map 4 (2013), http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db1224/DOC-324884A1.pdf (*Internet Access Services Report*). The map shows the number of providers of fixed connections by census tract but does not necessarily reflect the number of choices available to a particular household nor does it measure competition.

¹⁰⁹ NTIA and Federal Communications Commission, National Broadband Map, www.broadbandmap.gov (last visited Apr. 8, 2014).

¹¹⁰ Within the mobile sector, providers are in the process of deploying 4G/LTE networks. LTE subscribers have grown from 215,000 at year end 2010 to almost 100 million by 2013. LTE subscribers in the U.S. are expected to grow to almost 200 million by year end 2016. The number of 4G-connected LTE devices in the U.S. market increased 158% since 2012. Sixteenth Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, WT Docket No. 11-186, Report, 28 FCC Rcd 3700, 3857, para. 248 (2013).

predicated on a finding of market power, specifically, that broadband providers need not be found to be "benefiting from the sort of market concentration that would enable them to impose substantial price increases on end users." Nor do we believe that the open Internet concerns described above solely arise in markets where broadband providers possess market power over subscriber prices. We recognize, however, that the presence or absence of market power—over broadband subscriptions, over end users once they have chosen a broadband provider, and over content providers who wish to reach those end users—may inform an understanding of a broadband provider's behavior in the Internet marketplace and its incentives to engage in practices that limit Internet openness. Thus, we seek comment on whether the Commission should engage in a market power analysis with respect to broadband providers and, if so, how we should go about that analysis.

50. We further seek comment on whether there are other economic theories that the Commission should consider to better understand and assess broadband providers' incentives to engage in practices that affect the Internet's openness. For example, do broadband providers have an incentive to extract rents from upstream services whose price significantly exceeds the marginal cost of delivering those services to an additional customer? Are there positive network effects from widespread adoption of broadband services by consumers that we should recognize?¹¹² Do edge providers that incur significant sunk costs in the delivery of their output face "lock-in" problems if they become dependent on a particular pathway to their current or potential users? In the absence of open Internet protections, would those edge providers face uncertainty that would hamper their ability to attract capital? Does the trend towards the caching of content closer to end users either increase such lock-in problems or, separately, limit the number of pathways by which an edge provider's output can effectively reach current or potential end users? We seek comment on whether and how other theories and new evidence may supplement or supplant the original *Open Internet Order* analysis.

b. Technical Ability

51. The *Open Internet Order* likewise found that broadband providers have the technical ability to limit Internet openness. As the *Order* explained, increasingly sophisticated network management tools enable providers to identify and differentiate the treatment of traffic on their own broadband Internet access service networks. The D.C. Circuit agreed, finding "little dispute that broadband providers have the technological ability to distinguish between and discriminate against certain types of Internet traffic." We seek comment on this general conclusion and on how this ability to impose restrictions on edge providers and end users has increased or decreased with further developments in technology or business practices since the *Open Internet Order*. We also seek comment on provider abilities that were not identified in the *Open Internet Order* or elsewhere in this Notice, including

¹¹¹ Verizon, 740 F.3d at 648.

¹¹² One such model is "Metcalfe's law" a rough empirical description of the value of a communications network, where n is the number of users in a network, the total value of the network is equivalent to n(n-1) or roughly n² when n is large. Carl Shapiro, Information Rules: A Strategic Guide to the Network Economy 184 (1999). The precise equation has been called into question, see Bob Briscoe et al., Metcalfe's Law is Wrong, IEEE Spectrum 26-31 (2006) (proposing a valuation equation of n log(n)), and we do not rely on the precise mathematical formulation of the effects that it predicts.

¹¹³ Open Internet Order, 25 FCC Rcd at 17923, para. 31. We recognize that broadband providers also have the ability to impact traffic and congestion in ways that go beyond the management of traffic within their networks. In particular, we understand that broadband providers also manage traffic in the context of their relationships with other autonomous networks. For example, traffic and congestion may be affected by interconnection arrangements for the exchange of Internet traffic between two networks as well as CDN-type arrangements in which third parties place equipment in or adjacent to the providers' network. As discussed in section III.B, the rules we propose today reflect the scope of the 2010 Open Internet Order, which applied to broadband provider conduct within its own network.

¹¹⁴ Verizon, 740 F.3d at 646.

identifying the particular ability and its relevance to this proceeding. For example, one commenter has expressed concern about broadband providers offering prioritized service in a manner that may harm rural or minority end users. ¹¹⁵ Is it technically feasible for a broadband provider to block or degrade based on the location or neighborhood of the end user? Is it likely that it would do so? If so, how should our rules address this concern?

- 52. We seek comment on broadband providers' ability to limit Internet openness through management of traffic on their own networks and limitations imposed on their end users. Providers generally have the ability to manage traffic and congestion on their own networks and have developed a number of techniques to do so. For example, a provider can use technical methods like packet classification, admission control and resource reservation, rate control and traffic shaping, as well as packet dropping and packet scheduling to identify and manage traffic on its network. Such techniques may provide additional ability to discriminate in a way that is largely opaque to edge providers and end users. We seek comment on the technical tools broadband providers can and do use to manage traffic on their networks.
- 53. The *Open Internet Order* found that providers had in fact used their ability to limit openness, citing several instances where broadband providers had been subject to Commission enforcement proceedings for violating open Internet norms. In the *Order*, the Commission cited the Madison River case, the Comcast-BitTorrent case, as well as various mobile wireless Internet providers' refusal to allow customers to use competitive payment applications, competitive voice applications, and remote video applications. The Commission also noted other allegations of blocking or degrading peer-to-peer traffic, but did not determine whether those specific practices violated open Internet principles. The D.C. Circuit noted these examples along with the Commission's as persuasive justification for adopting open Internet rules.

¹¹⁵ See Letter from Harold Feld, Senior Vice President, Public Knowledge, to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket No. 14-28, at 4-5 (filed May 2, 2014).

¹¹⁶ Broadband Internet Technical Advisory Group Technical Working Group, Real time Network Management of Internet Congestion (2013), http://www.bitag.org/documents/BITAG_-_Congestion_Management_Report.pdf (BITAG Network Management Report). In addition to technical tools described here, as described above, broadband providers can also employ economic tools to discriminate with respect to traffic on their networks. *See supra* Section III.A.2.

Voice over LTE (VoLTE) technology may use the quality of service (QoS) feature of the IP multimedia subsystem (IMS) to deliver VoLTE traffic with higher priority than other types of traffic sharing the same LTE channel. Indeed, one essential requirement for high quality VoLTE deployment is ensuring the delivery of low latency voice traffic within the provider's LTE network, which would require traffic discrimination using the QoS feature of the IMS. *See* Lennart Norell, Eric Parsons, & Per Synnergren, *Telephony Services Over LTE End-to-End* 36, Ericsson Review (2010), http://www.ericsson.com/res/thecompany/docs/publications/ericsson_review/2010/lte_e2e.pdf; Spirent White Paper, VoLTE Deployment and the Radio Access Network The LTE User Equipment Perspective 3-5 (Aug. 2012), http://www.spirent.com/~/media/White%20Papers/Mobile/VoLTE_Deployment_and_the_Radio_Access Network.pdf.

¹¹⁸ We note that other forms of discrimination in the Internet ecosystem may exist, but such conduct is beyond the scope of this proceeding. *See* AAF Comments at 2 (suggesting that edge providers may have the incentive and ability to engage in discriminatory conduct).

¹¹⁹ Open Internet Order, 25 FCC Rcd at 17925-27, paras. 35-37.

¹²⁰ *Id.* at 17925, para 35 & n.107.

¹²¹ *Id.* at 17926, para. 36.

 $^{^{122}}$ Verizon, 740 F.3d at 648-49 ("[T]hese incidents . . . buttressed the agency's conclusion that broadband providers' incentives and ability to restrict Internet traffic could produce '[w]idespread interference with the Internet's

B. Scope of the Rules

54. The rules adopted in the *Open Internet Order* applied to "broadband Internet access service," which was defined as:

A mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints, including any capabilities that are incidental to and enable the operation of the communications service, but excluding dial-up Internet access service. This term also encompasses any service that the Commission finds to be providing a functional equivalent of the service described in the previous sentence, or that is used to evade the protections set forth in this Part. 123

The *Order* defined "mass market" to mean a service marketed and sold on a standardized basis to residential customers, small businesses, and other end-user customers such as schools and libraries, including services purchased with support of the E-rate program. ¹²⁴

- 55. The *Verizon* decision upheld the Commission's regulation of broadband Internet access service pursuant to section 706 and did not disturb this aspect of the *Open Internet Order*. Thus, the definition of "broadband Internet access service" remains a part of the Commission's regulations. We tentatively conclude that we should retain this definition without modification. We seek comment on that conclusion. The court in *Verizon* also stated that, apart from the service provided to end users, "broadband providers furnish a service to edge providers, thus undoubtedly functioning as edge providers' 'carriers.'" We seek comment on whether this should be identified as a separate service and, if so, how we should define that service and what the regulatory consequences are, if any, of that definition.
- 56. We also seek comment on the following issues that arise in connection with the scope of the application of the rules we propose today.
- 57. Specifically Identified Services. The Open Internet Order excluded certain categories of services from the definition of broadband Internet access service, such as dial-up Internet access service and multichannel video programming, the latter of which the Commission understood not to meet the definition of "provid[ing] the capability to transmit data to and receive data from all or substantially all Internet endpoints." We tentatively conclude that we would maintain this approach, but seek comment on whether we should change this conclusion.
- 58. Enterprise Services. The Open Internet Order excluded enterprise service offerings, which are typically offered to larger organizations through customized or individually negotiated arrangements. Similarly, the Open Internet Order excluded virtual private network services, hosting, or data storage services. The Commission explained that such services "typically are not mass market services and/or do not provide the capability to transmit data to and receive data from all or substantially

¹²³ 47 C.F.R. § 8.11(a); *Open Internet Order*, 25 FCC Rcd at 17932, para. 44; *id.* at 17935, para. 51 (finding that the market and regulatory landscape for dial-up Internet access service differed from broadband Internet access service).

¹²⁴ Open Internet Order, 25 FCC Rcd at 17932, para. 45.

¹²⁵ Verizon, 740 F.3d at 653.

¹²⁶ 47 C.F.R. § 8.11(a); Open Internet Order, 25 FCC Rcd at 17932, para. 44.

¹²⁷ Open Internet Order, 25 FCC Rcd at 17933, para. 47.

¹²⁸ *Id.* at 17932, para. 45.

all Internet endpoints." The *Open Internet Order* also established that the rules did not apply to: (1) edge provider activities, such as the provision of content on the Internet; and (2) premise operators, entities like coffee shops or bookstores, which offer Internet access services to their patrons. We tentatively conclude that we would maintain this approach, but seek comment on whether we should change this conclusion.

- beyond "the limits of a broadband provider's control over the transmission of data to or from its broadband customers." In other words, the *Order* applied to a broadband provider's use of its own network but did not apply the no-blocking or unreasonable discrimination rules to the exchange of traffic between networks, whether peering, paid peering, content delivery network (CDN) connection, or any other form of inter-network transmission of data, as well as provider-owned facilities that are dedicated solely to such interconnection. Thus, the *Order* noted that the rules were not intended "to affect existing arrangements for network interconnection, including existing paid peering arrangements." We tentatively conclude that we should maintain this approach, but seek comment on whether we should change our conclusion. Some commenters have suggested that we should expand the scope of the open Internet rules to cover issues related to traffic exchange. We seek comment on these suggestions. For example, how can we ensure that a broadband provider would not be able to evade our open Internet rules by engaging in traffic exchange practices that would be outside the scope of the rules as proposed?
- broadband providers may offer "specialized services" over the same last-mile connections used to provide broadband service. The Commission stated that these services can benefit end users and spur investment, but also noted the potential for specialized services to jeopardize the open Internet. Due to these concerns, the Commission stated that it would monitor these services, but that its rules would "not prevent broadband providers from offering specialized services such as facilities-based VoIP." We tentatively conclude that we should maintain this approach and continue to closely monitor the development of specialized services to ensure that broadband providers are not using them to bypass the open Internet rules or otherwise undermine a free and open Internet. We seek comment on this tentative conclusion. How can we ensure that the specialized services exception is not used to circumvent our open Internet rules? In addition, should specialized services be addressed within the scope of the "commercially reasonable" rule either as a safe harbor or among the factors for consideration? Should the Commission define "specialized services"?

¹²⁹ We also note that our rules apply only as far as the limits of a broadband provider's control over the transmission of data to or from its broadband customers.

¹³⁰ Open Internet Order, 25 FCC Rcd at 17934-35, para. 50.

¹³¹ *Id.* at 17935-36, para. 52.

¹³² *Id.* at 17933, para. 47 n.150.

¹³³ *Id.* at 17944, para. 67 n.209.

¹³⁴ See, e.g., Level 3 Comments at 11-13; Cogent Comments at 31-33.

¹³⁵ Open Internet Order, 25 FCC Rcd at 17909, 17965-66, paras. 7, 112-14.

¹³⁶ *Id.* at 17922-23, 17965-66, paras. 39, 112-14.

¹³⁷ See infra para. 139.

¹³⁸ The *Open Internet Order* did not formally define "specialized services," but described them as "services that share capacity with broadband Internet access service over providers' last-mile facilities." *Open Internet Order*, 25 FCC Rcd at 17965, para. 112; *cf.* 2013 OIAC Annual Report at 66-81 (identifying difficulties with defining "specialized services"). By contrast, the net neutrality rules that the European Parliament voted to adopt in April 2014 included a specific definition for "specialized services" as "an electronic communications service optimised (continued...)

- Reasonable Network Management. Although the Open Internet Order's definition of 61. broadband Internet access service did not itself address reasonable network management, the concept was incorporated into each of the 2010 rules. Specifically, the transparency rule "does not require public disclosure of competitively sensitive information or information that would compromise network security or undermine the efficacy of reasonable network management practices." The 2010 no-blocking rule was made expressly subject to "reasonable network management." And the unreasonable discrimination rule expressly provided for reasonable network management, which was defined as follows: "A network management practice is reasonable if it is appropriate and tailored to achieving a legitimate network management purpose, taking into account the particular network architecture and technology of the broadband Internet access service." The Commission further concluded that it would "develop the scope of reasonable network management on a case-by-case basis." We tentatively conclude that we should continue the same approach. We seek comment on this conclusion as applied to an enhanced transparency rule, our re-adoption of the no-blocking rule, and the proposal to adopt a "commercially reasonable" standard. How can we ensure that the ability of providers to engage in reasonable network management is not used to circumvent the open Internet protections implemented by our proposed rules?
- "mobile" Internet access service. It defined "fixed broadband Internet access service" to expressly include "broadband Internet access service that serves end users primarily at fixed endpoints using stationary equipment, . . . fixed wireless services (including fixed unlicensed wireless services), and fixed satellite services." It defined "mobile broadband Internet access service" as "a broadband Internet access service that serves end users primarily using mobile stations." The impact of this distinction varied by rule. The transparency rule applies equally to both fixed and mobile broadband Internet access service. The no-blocking rule applied a different standard to mobile broadband Internet access services, and mobile Internet access service was excluded from the unreasonable discrimination rule. We tentatively conclude that we should maintain the same approach in today's Notice. We seek comment on this approach, which is discussed in more detail in the context of each of the proposed rules below. We recognize that there have been significant changes since 2010 in the mobile marketplace, including how mobile providers manage their networks, the increased use of Wi-Fi, and the increased use of mobile devices and applications. We seek comment on whether and, if so, how these changes should lead us to revisit our treatment of mobile broadband service. Specifically, we seek comment below on whether the

¹³⁹ Open Internet Order, 25 FCC Rcd at 17937-38, para. 55.

¹⁴⁰ 47 C.F.R. § 8.5.

¹⁴¹ Open Internet Order, 25 FCC Rcd at 17952, para. 82; 47 C.F.R. § 8.11(d).

¹⁴² Open Internet Order, 25 FCC Rcd at 17952, para. 83.

¹⁴³ 47 C.F.R. § 8.11(b).

¹⁴⁴ 47 C.F.R. § 8.11 (c).

¹⁴⁵ Open Internet Order, 25 FCC Rcd at 17959-61, paras. 99-103.

no-blocking rule should continue to distinguish between fixed and mobile broadband¹⁴⁶ and whether, under the commercially reasonable rule, mobile networks should be subject to the same totality-of-the-circumstances test as fixed broadband.¹⁴⁷ In addition, how should the definitions of "fixed" and "mobile" services be applied to a fixed broadband provider's commercially deployed Wi-Fi service that is made available to the provider's fixed broadband customers? How should such changes affect our treatment of reasonable network management for mobile providers? Similarly, how should we treat mobile services that are deployed and/or marketed as express substitutes for traditional telecommunications or broadband services? Finally, have there been changes in technology or the marketplace for the provision of satellite broadband Internet access service that should lead the Commission to reassess how its rules should apply to such services?

C. Transparency Requirements to Protect and Promote Internet Openness

1. The 2010 Transparency Rule

63. In the *Open Internet Order*, the Commission concluded that effective disclosure of broadband providers' network management practices, performance, and commercial terms of service promotes competition, innovation, investment, end-user choice, and broadband adoption. To that end, the Commission adopted the following transparency rule:

A person engaged in the provision of broadband Internet access service shall publicly disclose accurate information regarding the network management practices, performance, and commercial terms of its broadband Internet access services sufficient for consumers to make informed choices regarding the use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings. 149

64. The Commission determined that the best approach to implementing the transparency rule was to allow broadband providers flexibility, while providing guidance concerning effective disclosure. The Commission stated that "effective disclosures will likely include" information concerning "some or all" of the following topics: (1) network practices, including congestion management, application-specific behavior, device attachment rules, and security measures; (2) performance characteristics, including a general description of system performance (such as speed and latency) and the effects of specialized services on available capacity; and (3) commercial terms, including pricing, privacy policies, and redress options. In 2011, the Commission's Enforcement Bureau and Office of General Counsel issued advisory guidance to further clarify compliance with the transparency requirements regarding point-of-sale disclosures, service descriptions, security measures, and the extent

¹⁴⁶ See infra Section III.D.4.

¹⁴⁷ See infra Section III.E.4.

¹⁴⁸ Open Internet Order, 25 FCC Rcd at 17936, para. 53.

¹⁴⁹ *Id.* at 17937, para. 54.

¹⁵⁰ *Id.* at 17938-40, paras. 55-57. In so doing, the Commission stated that broadband providers must, at a minimum, prominently display or provide links to disclosures on a publicly available, easily accessible website that is available to current and prospective end users and edge providers as well as the Commission, and must disclose relevant information at the point of sale. *Id.* In addition, the Commission clarified that the transparency rule did not require public disclosure of competitively sensitive information or information that would compromise network security or undermine the efficacy of reasonable network management practices. *Id.*

¹⁵¹ *Id.* at 17938-39, para. 56 (noting that this list is not necessarily exhaustive).

of required disclosures, while noting that "these particular methods of compliance are not required or exclusive; broadband providers may comply with the transparency rule in other ways." ¹⁵²

65. The D.C. Circuit's decision in *Verizon v. FCC* upheld the transparency rule, which remains in full force, applicable to both fixed and mobile providers. In today's Notice, we inquire as to ways that the transparency rule can be improved, taking into account changes in the nature of the provision of broadband services since 2010. We believe we have ample authority not only for our existing transparency rule, but also for the enhanced transparency rule we propose today, whether the Commission ultimately relies on section 706, Title II, or another source of legal authority. We seek comment on whether and how—if at all—the source of the Commission's legal authority relied upon to adopt other open Internet rules would affect the authority or authorities that provide the strongest basis for any improvements to the transparency rule or otherwise would inform how we define the goal of transparency in general.¹⁵⁴

2. Enhancing Transparency to Protect and Promote Internet Openness

66. "Sunlight," as Justice Brandeis has explained, "is . . . the best of disinfectants." If designed correctly, disclosure policies are among the most effective and least intrusive regulatory measures at the Commission's disposal. Applied here, the Commission continues to believe that access to accurate information about broadband provider practices encourages the competition, innovation, and high-quality services that drive consumer demand and broadband investment and deployment. The transparency rule thereby reflects the "virtuous circle" that, in the long term, unites the interests of end

¹⁵² See FCC Enforcement Bureau and Office of General Counsel Issue Advisory Guidance for Compliance with Open Internet Transparency Rule, GN Docket No. 09-191, WC Docket No. 07-52, Public Notice, 26 FCC 9411 (2011) (Transparency Compliance PN).

¹⁵³ Verizon, 740 F.3d at 659 (affirming the transparency rule).

¹⁵⁴ See infra Section III.F.

¹⁵⁵ L. Brandeis, Other People's Money, Chapter 5 (National Home Library Foundation ed. 1933), *available at* http://www.law.louisville.edu/library/collections/brandeis/node/196.

¹⁵⁶ See, e.g., Howard Beales, Richard Craswell & Steven C. Salop, *The Efficient Regulation of Consumer Information*, 24 J. L. & Econ. 491 at 513 (1981); Howard Beales, Richard Craswell & Steven C. Salop, *Information Remedies for Consumer Protection*, 71 Am. Econ. Rev. 410 at 411 (Papers & Proceedings, May 1981); Alissa Cooper, How Regulation and Competition Influence Discrimination in Broadband Traffic Management: A Comparative Study of Net Neutrality in the United States and United Kingdom 47 (Sept. 2013), http://www.alissacooper.com/phd-thesis/ ("A policy of requiring ISPs to publicly disclose the details of their traffic management practices, whether combined with additional regulation or not, has enjoyed widespread support.") (Cooper Thesis); *see also* Letter from Kathleen Grillo, Senior Vice President, Federal Regulatory Affairs, Verizon, to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket Nos. 12-269, 14-28, at 1 (filed Mar. 24, 2014) (arguing that "the Commission should rely primarily on consumer choice, competition, and *transparency* to guide Commission policy") (emphasis added).

¹⁵⁷ See, e.g., Organization for Economic Co-operation and Development, Enhancing Competition in Telecommunications: Protecting and Empowering Consumers 4, Directorate for Science, Technology and Industry, Committee for Information, Computer and Communications Policy (2008), http://www.oecd.org/dataoecd/25/2/40679279.pdf (stating that informed consumers "are necessary to stimulate firms to innovate, improve quality and compete in terms of price. In making well-informed choices between suppliers, consumers not only benefit from competition, but they initiate and sustain it."); see also Open MIC Comments at 4 (asserting that "the marketplace will function properly only if there is honest and full disclosure of all corporate policies and practices regarding network management practices"); CompTIA Comments at 3 (stating that "the transparency rule is vitally important today, and will play an even more significant role in a world in which ISPs and edge providers have flexibility to bargain with one another"); Consumer Federation of America Comments at 3 (suggesting that the Commission "maximize the power of transparency under Section 706 to promote competition and provide consumer protection").

users, edge providers, and the broader Internet community. As the Commission explained in the *Open Internet Order*, disclosures under the rule: (1) help end users make informed choices regarding the purchase and use of broadband services and increase end users' confidence in broadband providers' practices; (2) ensure that edge providers have access to broadband providers' network information necessary to develop innovative new applications and services; and (3) inform the Internet community and the Commission about broadband providers' practices and conduct that could impact Internet openness. In today's Notice, we seek comment on the effectiveness of the existing transparency rule and on whether and, if so, how the rule should be enhanced to meet its goals with respect to end users, edge providers, the Internet community, and the Commission.

- Today, we seek general comment on how well the Commission's existing transparency rule is working. We are especially interested in comments that describe the current operation, benefits, and shortcomings of the existing rule, how broadband providers are complying with it, and how we should measure such compliance. We are also mindful that the additional rules we propose today to protect Internet openness consistent with the D.C. Circuit's decision may place even greater importance on the extent to which information about broadband providers' practices is disclosed to end users, edge providers, and the Commission. Taking all of that into account, we tentatively conclude that we should enhance the transparency rule to improve its effectiveness for end users, edge providers, the Internet community, and the Commission. We seek comment on this tentative conclusion and on what burdens or compliance issues may be associated with this approach, including for smaller providers.
- 68. Tailored disclosures. In the Open Internet Order, the Commission stated that broadband providers may be able to satisfy the transparency rule through use of a single disclosure, and therefore did not require different types of disclosures to different parties such as individual end users, edge providers, the broader Internet community, and the Commission. We have concerns that a single disclosure may not provide the required disclosures in a manner that adequately satisfies the informational needs of all affected parties. For example, some recent research suggests that consumers have difficulty understanding commonly used terms associated with the provision of broadband services. Edge providers, however, may benefit from descriptions that are more technically detailed. We therefore tentatively conclude that it would be more effective to require broadband providers to more specifically tailor disclosures to the needs of these affected parties. We seek comment on this tentative conclusion, on the nature of the disclosures that should be tailored, and on what burdens or compliance issues, if any, may be associated with more targeted disclosures.

a. Transparency to End Users

69. Since the Commission adopted the transparency rule, we have received hundreds of complaints from consumers suggesting that, under the rule, broadband providers may not be providing end user consumers the accurate information they need and have a right to receive. ¹⁶³ Of particular

¹⁵⁸ Open Internet Order, 25 FCC Rcd at 17936-37, para, 53.

¹⁵⁹ We note that an informal review of broadband provider disclosures conducted by Commission staff found that the majority are providing some form of disclosure statements, but that many do not appear to provide all the information the rule was designed to disclose.

¹⁶⁰ Open Internet Order, 25 FCC Rcd at 17940, para. 58.

¹⁶¹ Cooper Thesis at 186-88 (citing a study which found that consumers do not understand basic terminology such as "traffic management"); *see also* 2013 OIAC Annual Report at 82-88 (noting studies that indicate consumers are confused when choosing service providers).

¹⁶² See, e.g., Cogent Comments at 17 (asserting that "the information provided to date by many broadband providers has been of limited or no utility to end users or edge providers").

¹⁶³ Our analysis of consumer complaints received since the transparency rule took effect shows a significant number of consumer complaints about provider speeds, charges, and other commercial practices that the rule was designed (continued...)

concern to many consumers is that the speed of their service falls short of the advertised speed.¹⁶⁴ Many consumers complain that they have been charged amounts greater than advertised rates, including fees and charges beyond basic rates.¹⁶⁵ We have also received a number of consumer complaints raising questions about the source of slow or congested services.¹⁶⁶ Consumers have also reported surprise at broadband providers' statements about slowed or terminated service based on consumers' "excessive use." Other consumers report confusion about how data consumption is calculated for purposes of data caps.¹⁶⁷

- 70. We seek comment on the extent to which the existing transparency rule is effectively informing end users. We are interested both in what information broadband providers are disclosing to end users and how that information is being disclosed. In addition, we seek comment on the incentives and ability of broadband providers to provide service at lower quality or higher prices than their subscribers expected when they enrolled, and on the incentives and ability of subscribers to choose other options if their broadband providers fail to live up to these expectations. If a subscriber is locked in to a particular provider, how can transparency rules bring the performance of that provider up to the subscriber's expectations?
- 71. In light of the consumer complaints discussed above, we also consider enhancements to the existing rule with respect to the content, form, and method of broadband providers' disclosures to end users.
- 72. Content and Form of Disclosure. We seek comment on whether there are ways to make the content and format of disclosures more accessible and understandable to end users. With respect to content, should the Commission require the disclosure of specific broadband provider network practices, performance characteristics (e.g., effective download speeds, upload speeds, latency, and packet loss), and/or terms and conditions of service to end users (e.g., data caps)? We are particularly interested in whether there are network practices, performance characteristics, or commercial terms relating to broadband service that are particularly essential but not easily discoverable by end users absent effective disclosure. With respect to format, both academic research and the Commission's experience with consumer issues have demonstrated that the manner in which providers display information to consumers can have as much impact on consumer decisions as the information itself.¹⁶⁸ We therefore seek comment

¹⁶⁴ For example, one consumer stated that he "was promised 50Mbps of Internet speed. At no time during [his] service [had he] ever had this speed of service and the deceptive claim remains on [the provider's] website and in marketing materials."

¹⁶⁵ One consumer complained that actual bill is "almost 20%" higher than advertised price due to fees.

¹⁶⁶ For example, one consumer stated that "I was sold Internet access, but I believe bandwidth through to Netflix is being artificially restricted. I have checked access to other providers and it is greater than 10X that of Netflix. I have contacted Netflix to verify their function. Their equipment is functioning properly."

¹⁶⁷ One consumer complained that the vendor stated the file size as 2.1 megabytes (MB), but the provider counted download as 144 MB.

¹⁶⁸ See generally James M. Lacko & Janis K. Pappalardo, Improving Consumer Mortgage Disclosures: An Empirical Assessment of Current and Prototype Disclosure Forms, FTC Bureau of Economics Report (June 2007), http://www.ftc.gov/os/2007/06/P025505MortgageDisclosureReport.pdf (stating that quantitative consumer testing shows that the form of mortgage cost disclosure affects consumer understanding of mortgage costs); Sumit Agarwal, John C. Driscoll, Xavier Gabaix & David Laibson, Learning in the Credit Card Market (Feb. 8, 2008) http://scholar.harvard.edu/files/laibson/files/learning_credit_042413.pdf (stating that consumer knowledge about credit card fee plans, including how to avoid late fees, depreciates rapidly over time); see also Eugenio J. Miravete, (continued...)

on best practices for displaying and formatting relevant disclosures for end users, including any potential costs and burdens to broadband providers. For example, the Open Internet Advisory Committee (OIAC) has proposed the use of a standardized label for Internet service that includes basic information such as performance speed (i.e., upload and download speed), price (i.e., monthly fee averaged over three years), and usage restrictions (i.e., any points at which the applicable terms of service change, including data usage caps and any charges, speed reductions, or other penalties for exceeding a cap) that consumers can use to comparison shop for service. Are there lessons we can learn regarding effective disclosure practices from independent consumer research or disclosure in other approaches to standardized labels? Should the information be made available in a machine-readable format, such as XML, that might allow the Commission, industry associations, or other organizations to easily access and synthesize information for consumers?

- 73. Network Practices. With respect to data caps, should we require disclosures that permit end users to identify application-specific usage or to distinguish which user or device contributed to which part of the total data usage? Should we require disclosure of any type of traffic exempted from any data caps, and how end users can find their current consumption levels? Should we require that disclosures explain any restrictions on tethering for mobile devices? Should the Commission expand its transparency efforts to include measurement of other aspects of service such as packet loss, packet corruption, latency, and jitter in addition to upstream and downstream speed? Should the Commission require the reporting of actual achieved results for each category? If providers offer different tiers of service to their end users, should providers be required to make disclosures by tier? What should be the required timing of any such disclosures? Is it important that network practices be disclosed in advance of their implementation?
- 74. *Method of Disclosure*. The *Transparency Compliance PN* advised broadband providers that they can comply with the point-of-sale disclosure requirement by, for instance, "directing prospective customers at the point of sale, orally and/or prominently in writing, to a web address at which the required disclosures are clearly posted and updated." We seek comment on whether that approach is adequate or whether the Commission should consider alternative approaches.

¹⁶⁹ In 2011, the United Kingdom's largest Internet service providers agreed to a voluntary Code of Practice which requires each one to produce a comparable table of traffic management information called a Key Facts Indicator (KFI). *See, e.g.*, Ofcom, Improving Traffic Management Transparency, http://consumers.ofcom.org.uk/2011/11/improving-traffic-management-transparency/ (last visited May 12, 2014).

¹⁷⁰ See 2013 OIAC Annual Report at 82-88 (containing information about the OIAC Label Study); see also New America Foundation, Broadband Truth-in-Labeling, Open Technology Initiative (2009), http://newamerica.net/sites/newamerica.net/files/policydocs/NAF_OTI_Broadband_Truth_in_Labeling-09-2009.pdf.

¹⁷¹ For example, the Federal Trade Commission's Energy Guide labeling program requires standard labels on certain appliances that disclose estimated yearly operating cost and energy use. *See* 16 C.F.R. Part 305. The Federal Food, Drug, and Cosmetic Act (FD&C Act) and the Fair Packaging and Labeling Act are the federal laws governing food products under the Food and Drug Administration's jurisdiction. *See* 21 U.S.C. §§ 301-399; 15 U.S.C. §§ 1451-1461. The FD&C Act was amended by the Nutrition Labeling and Education Act of 1990, which requires most foods to bear nutrition labeling and requires food labels that bear nutrient content claims and certain health messages to comply with specific requirements. *See* 21 U.S.C. § 343-1.

¹⁷² See Transparency Compliance PN, 26 FCC Rcd at 9413-14 (clarifying that the rule does not compel the distribution of disclosure materials in hard copy or extensive training of sales employees to provide disclosures themselves).

b. Transparency to Edge Providers

- 75. As noted above, the Commission also adopted the transparency rule to ensure that broadband providers would disclose sufficient information to permit "content, application, service, and device providers to develop, market, and maintain Internet offerings." Some commenters have suggested that current disclosures provide insufficient information for edge providers. We seek comment on how the existing transparency rule is working and how we can enhance its effectiveness with respect to edge providers. Should we view some categories of edge providers, such as start-up companies, as having distinct needs and, if so, what would be the implications for an enhanced transparency rule?
- 76. We also seek comment on the extent to which the transparency rule does, or should, disclose useful information to providers who seek to exchange traffic with broadband provider networks. In other words, should we view transit, CDN, or other providers engaged in Internet traffic exchange as a class of persons whose interests are similar to those of edge providers who wish "to develop, market, and maintain Internet offerings," perhaps because they may have such edge providers as their customers? For instance, many edge providers utilize the services of an intermediary CDN, such as Akamai, EdgeCast, Limelight, or Level 3, or cloud service providers such as Amazon, Microsoft, or RackSpace, which provide the servers upon which the applications run and also interconnect directly with broadband providers. Other edge providers bypass these networks and interconnect directly with broadband providers through peering arrangements. Some edge providers, such as Google or Amazon, may act both as content providers for their own services and as CDNs or cloud service providers for other services. We seek comment on whether these subgroups have distinguishable needs for information that could be provided through disclosure and, if so, what kind of information would be most useful.

c. Transparency to the Internet Community and the Commission

- 77. The Common Interests of End Users, Edge Providers, and the Broader Internet Community. We seek comment on the extent to which the existing transparency rule fully reflects the "virtuous circle" that, in the long term, unites the interests of end users, edge providers, the broader Internet community, and the Commission. Are there ways to enhance the transparency rule to further facilitate the virtuous circle? What other disclosures might encourage and improve the deployment of broadband in the United States?
- 78. We also seek comment—relevant to all stakeholders—on whether and, if so, how the Commission should enhance the existing transparency rule to ensure the effectiveness of, and compliance with, the other rules we propose in today's Notice. For example, to ensure the effectiveness of the noblocking rule proposed below, should the Commission mandate that broadband providers disclose—in a more rigorous and consistent way—the expected performance end users can expect from their broadband service? To improve information about broadband provider practices for end users, edge providers, and the broader Internet community, we tentatively conclude that broadband providers must disclose in a timely manner to consumers, edge providers, and the public (and, of course, the Commission) when they make changes to their network practices as well as any instances of blocking, throttling, and pay-for-priority arrangements, or the parameters of default or "best effort" service as distinct from any priority service.
- 79. *Measuring Broadband Performance*. The *Open Internet Order* requires broadband providers to disclose accurate information regarding network performance for each broadband service they provide. The accuracy and availability of such network performance information is a common

¹⁷³ 47 C.F.R. § 8.3.

¹⁷⁴ See, e.g., Cogent Comments at 10-23; Open MIC Comments at 4.

¹⁷⁵ See infra Section III.D.3.

¹⁷⁶ Open Internet Order, 25 FCC Rcd at 17937-39, paras. 54, 56.

linchpin for end users, edge providers, and all stakeholders in the Internet community. As noted in the *Order*, the Commission launched a broadband performance measurement project called "Measuring Broadband America" (MBA) to accurately measure key performance metrics, including baseline connection speed and latency. To satisfy their obligations under the transparency rule, all of the 12 largest fixed broadband providers chose to participate in the measurement program. Last year the Commission expanded its MBA program to include mobile broadband by releasing a Mobile Broadband Speed Test App, an open-source, crowdsourcing program to assess mobile broadband network performance nationwide. The app measures mobile broadband and Wi-Fi network performance and delivers to consumers an in-depth view of key metrics related to their mobile broadband experience. We seek comment on the effectiveness of this approach for providing consumers with useful information regarding the performance of both fixed and mobile broadband networks. We seek comment on whether participation in MBA should continue to satisfy the requirement that actual speeds be disclosed. Are there areas of this program that can be improved to provide more useful information to consumers?

- 80. More generally, are there more efficient or more comprehensive ways to measure network performance metrics, including for broadband providers not participating in MBA? For example, could the ability to measure and report network performance be included in the end user's own network modem or residential gateway? Do such functionalities currently exist, or are they in development?¹⁸² Are there academic or other external research organizations that could assist the Commission in collecting and analyzing information about traffic, congestion, and other features of the Internet?¹⁸³ Should the Commission mandate the use of monitoring devices, like those used in MBA? How can performance metrics most accurately measure the actual download and upload speeds a consumer can expect to experience, rather than "up to" speeds or "last-mile" performance? Should the Commission look to an external advisory group to aid in the development and feasibility of performance metrics and measurement?
- 81. *Congestion*. The *Open Internet Order* highlighted the value of providing end users with information about the sources of congestion that might impair the performance of edge-provider services.¹⁸⁴ As the *Open Internet Order* explained, "it is often difficult for end users to determine the causes of slow or poor performance of content, applications, services or devices." At the same time, the Commission recognized that "congestion management may be a legitimate network management

¹⁷⁷ *Id.* at 17940, para. 58 n.188.

¹⁷⁸ See, e.g., Transparency Compliance PN, 26 FCC Rcd at 9414.

¹⁷⁹ See News Release, Federal Communications Commission, FCC Unveils Mobile Broadband Speed Test App to Empower Consumers (Nov. 14, 2013), http://www.fcc.gov/document/fcc-unveils-mobile-broadband-speed-test-app-empower-consumers.

¹⁸⁰ See Office of Engineering and Technology & Consumer and Governmental Affairs Bureau, Federal Communications Commission, Measuring Broadband America, http://www.fcc.gov/measuring-broadband-america (last visited May 12, 2014).

¹⁸¹ See, e.g., Cogent Comments at 10-17 (suggesting a number ways to improve the MBA program including more localized data, more frequent release of "unaudited" data, and tests that would allow for comparison of traffic that originates outside a provider's network to that which originates within the network).

¹⁸² For example, the Internet Engineering Task Force (IETF) has started a related standards effort. *See* Internet Engineering Task Force, Large-Scale Measurement of Broadband Performance, https://datatracker.ietf.org/wg/lmap/charter/ (last visited May 12, 2014).

¹⁸³ See, e.g., The Cooperative Association for Internet Data Analysis, Home, http://www.caida.org/home/ (last visited May 12, 2014).

¹⁸⁴ See Open Internet Order, 25 FCC Rcd at 17938-39, 17944, paras, 56, 70.

¹⁸⁵ *Id.* at 17944, para. 70.

purpose."¹⁸⁶ But the Commission also emphasized the importance of the disclosure to end users of "descriptions of congestion management practices" including "indicators of congestion" and "the typical frequency of congestion."¹⁸⁷

- 82. Since the 2010 *Open Internet Order*, some have suggested that sources of congestion that impact end users may originate beyond the broadband provider's network or in the exchange of traffic between that network and others. An end user's inability to ascertain the source of congestion could lead to confusion, for example, to the filing of an unjustified complaint against a broadband provider (if the source of the congestion were elsewhere) or a mistaken decision by the end user to purchase additional bandwidth to improve performance (again, if the source of congestion were elsewhere). Edge providers and other stakeholders also have expressed a need for greater information about network congestion. ¹⁸⁸
- 83. In light of these concerns, we tentatively conclude that we should require that broadband providers disclose meaningful information regarding the source, location, timing, speed, packet loss, and duration of network congestion. We seek comment on this tentative conclusion, including on how to implement it in a practical manner that provides meaningful information to end users, edge providers, and other stakeholders without causing undue burden on broadband providers. For example, should the information to be disclosed be based upon a sampling taken at given points in time, and if so, what would be an appropriate interval for such sampling? We note that Cogent has made suggestions about enhancements to the transparency rule along these lines and proposing specific means of implementation, upon which we seek comment. 189 In making the foregoing tentative conclusion and seeking comment on how to implement it, we emphasize that we are positing that the public would be served by additional information concerning the existence and duration of congestion, regardless of its cause, so that there is greater understanding of the impact of that congestion on the performance of a broadband provider's network, if any. We do not, however, propose to expand the scope of the open Internet rules in any fashion to regulate traffic exchange, though, as noted above, we ask for public input on this tentative conclusion. 190

d. Transparency for Mobile Broadband

84. The Commission currently applies the same transparency requirement to both fixed and mobile providers, reasoning that end users need a clear understanding of "network management practices, performance, and commercial terms, regardless of the broadband platform they use to access the Internet." We seek comment on how we should assess the effectiveness of the existing rule in the mobile broadband context. For example, most mobile broadband plan offerings have generally had lower data usage limits than those offered for fixed broadband services. Accordingly, do mobile broadband

¹⁸⁶ *Id.* at 17955, para. 91.

¹⁸⁷ *Id.* at 17938, para. 56.

¹⁸⁸ See, e.g., Cogent Comments at 10-17; Level 3 Comments at 3.

¹⁸⁸ See Cogent Comments at 10-23.

¹⁸⁸ See supra Section III.C.2.a.

¹⁸⁹ See Cogent Comments at 10-23.

¹⁹⁰ See supra Section III.B.

¹⁹¹ See Open Internet Order, 25 FCC Rcd at 17958-59, para. 97. The Order also provided certain clarifications regarding how this requirement applied to mobile broadband providers, specifying that such providers were required "to disclose their third-party device and application certification procedures, if any; to clearly explain their criteria for any restrictions on use of their network; and to expeditiously inform device and application providers of any decisions to deny access to the network or of a failure to approve their particular devices or applications." *Id.* at 17959, para. 98.

subscribers have an enhanced need to understand, monitor, and more flexibly adjust their mobile data usage needs than the fixed broadband users?

85. We seek comment on whether and, if so, how enhancements to the transparency rule should apply to mobile broadband network providers. Would the enhanced transparency requirements described herein, or others, help meet the information needs of mobile broadband device and application developers as well as the needs of end users? How can we make sure that the disclosure requirements discussed above are appropriate and effective for mobile broadband in view of the many operational factors that may influence performance of mobile broadband networks, including the mobile access technology, the weather, the distance to the serving cell site, the number of users in a cell site, and device capability?¹⁹² Should the nature of disclosure to customers of wireless networks be different if the wireless service is provided by a network as an explicit substitute for copper-based, traditional service, including voice and DSL?

Burdens of Enhanced Transparency on Broadband Providers

86. We seek comment on the extent to which adopting enhanced transparency requirements would create particular burdens in either the fixed or the mobile broadband environment and whether and how such burdens would affect the pace of innovation, investment, and growth. How can we achieve the public benefits of enhanced disclosure requirements without imposing unreasonable burdens on the broadband providers? Are there ways to minimize the costs and burdens associated with any enhanced disclosure requirements? Are there ways the Commission or industry associations could reduce any such burdens, for example through the use of a voluntary industry standardized glossary, or through the creation of a dashboard that permits easy comparison of the policies, procedures, and prices of various broadband providers throughout the country?

3. **Compliance and Enforcement**

In the *Open Internet Order*, the Commission noted that a key objective of the transparency rule is to enable the Commission to collect information necessary to assess, report, and enforce the open Internet rules. 193 As discussed further below, we seek comment on how the Commission can best design a process for enforcing the transparency rule that provides certainty, flexibility, and access for all affected parties. 194 Should the Commission permit individuals to report possible noncompliance with our open Internet rules anonymously or take other steps to protect the identity of individuals who may be concerned about retaliation for raising concerns? We propose that the consequences of a failure to comply with our transparency rule should be significant and include monetary penalties. We seek comment on the most effective methods to ensure ongoing compliance with the transparency rule. How can we ensure that these disclosure requirements are as effective and effectively enforced as disclosure requirements in other areas of the law, such as disclosures to the Securities and Exchange Commission? Should the Commission require broadband providers to certify that they are in compliance with the required disclosures, particularly if the current flexible approach is amended to require more specific disclosures?¹⁹⁵ Should we also require broadband providers to submit

¹⁹² See Transparency Compliance PN, 26 FCC Rcd at 9415 (recognizing that "measuring performance can be more challenging for mobile broadband than for fixed").

¹⁹³ See Open Internet Order, 25 FCC Rcd at 17937, para, 53.

¹⁹⁴ See infra Section III.H.

¹⁹⁵ Cf., e.g., 47 C.F.R. § 64.2009(e) (requiring telecommunications carriers to file an annual certification confirming that it has established operating procedures adequate to ensure compliance with the customer proprietary network information (CPNI) rules).

reports containing descriptions of current disclosure practices?¹⁹⁶ If so, should we modify our existing process for protecting the confidentiality of competitively sensitive information?¹⁹⁷

88. We also seek comment on whether the Commission can better promote transparency through its own outreach and reporting mechanisms. Should the Commission establish and make public a list of those broadband providers that block or otherwise limit certain types of traffic? Should the Commission collect and publish information on pay-for-priority arrangements? In what timeframe should the Commission require providers to report such changes in their traffic management policies to the Commission? We invite comment on the merits of these options, and any other suggestions commenters may deem relevant, to ensure full compliance with the transparency rule, including identification of any regulatory burdens this might entail for broadband providers.

D. Preventing Blocking of Lawful Content, Applications, Services, and Nonharmful Devices

- 89. We believe that, as the Commission found in the *Open Internet Order*, "the freedom to send and receive lawful content and to use and provide applications and services without fear of blocking is essential to the Internet's openness and to competition in adjacent markets such as voice communications and video and audio programming." The D.C. Circuit acknowledged the validity of this policy rationale for the no-blocking rule adopted in the *Open Internet Order*, but vacated the rule because it found that the Commission had failed to provide a legal rationale under which the prohibition would not impermissibly subject broadband providers to common carriage regulation.²⁰⁰ To address the ongoing concerns with the harmful effects that blocking of Internet traffic would have on Internet openness, we propose to adopt the text of the no-blocking rule that the Commission adopted in 2010, with a clarification that it does not preclude broadband providers from negotiating individualized, differentiated arrangements with similarly situated edge providers (subject to the separate commercial reasonableness rule or its equivalent). So long as broadband providers do not degrade lawful content or service to below a minimum level of access, they would not run afoul of the proposed rule. We also seek comment below on how to define that minimum level of service. Alternatively, we seek comment on whether we should adopt a no-blocking rule that does not allow for priority agreements with edge providers and how we would do so consistent with sources of legal authority other than section 706, including Title II.²⁰¹
- 90. It is important to understand the relationship between the proposed no-blocking and commercial reasonableness rules. Although the proposed no-blocking rule only establishes a minimum level of service, and thus allows room for individualized negotiations, the proposed commercial reasonableness rule separately applies to any and all conduct, including by asking whether paid prioritization can be barred outright and by asking whether to bar practices that harm competition, consumers, and the free exercise of speech.

¹⁹⁸ See, e.g., Open MIC Comments at 4 (suggesting that the Commission require ISPs to make available all their filings regarding network management practices including those in legal proceedings and with other federal regulatory agencies).

¹⁹⁶ See, e.g., Open Internet NPRM, 24 FCC Rcd at 13111, para. 128.

¹⁹⁷ 47 C.F.R. 8 0.459.

¹⁹⁹ *Open Internet Order*, 25 FCC Rcd at 17941-42, para. 62.

²⁰⁰ Verizon, 740 F.3d at 658.

²⁰¹ See infra Section III.F. For example, to the extent the Commission relies on Title II, would sections 201(b) and 202(a) of the Act compel a different result than provision of a minimum level of service? See 47 U.S.C. § 201(b) (prohibiting unjust or unreasonable "charges, practices, [or] classifications"); 47 U.S.C. § 202(a) (prohibiting "unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services").

1. The 2010 No-Blocking Rule

- 91. 2010 Open Internet Order. In the Open Internet Order, the Commission adopted a no-blocking rule to preserve the openness that was and remains a core expectation of end users. The Open Internet Order noted that a no-blocking principle had been broadly accepted since its inclusion in the Commission's 2005 Internet Policy Statement, and the Internet Policy Statement itself reflected expectations and practices of how the Internet should and did work. A more limited variation of the rule applied to mobile broadband providers, due to the operational constraints that affect mobile broadband services, the rapidly evolving nature of the mobile broadband technologies, and the generally greater amount of consumer choice for mobile broadband services than for fixed.
- 92. D.C. Circuit Opinion in Verizon v. FCC. The D.C. Circuit struck down the no-blocking rule after finding that the Commission had failed to provide a legal justification that would take the rule out of the realm of impermissible common carriage. The court stated that it was "somewhat less clear" whether the no-blocking rule constituted per se common carriage regulation than whether the antidiscrimination rule did. Nonetheless, the court concluded that the no-blocking rule, at least as described in the Open Internet Order, required broadband providers to serve edge providers indiscriminately. The no-blocking rule thereby imposed per se common carriage rules and thus violated the Communications Act's prohibition on the imposition of common carrier obligations on providers of information services.
- 93. The court intimated that the no-blocking rule could pass scrutiny, however, if broadband providers could engage in individualized bargaining while subject to the rule. The court reasoned that "if the relevant service that broadband providers furnish is access to their subscribers generally, as opposed to access to their subscribers at the specific minimum speed necessary to satisfy the anti-blocking rules, then these rules, while perhaps establishing a lower limit on the forms that broadband providers' arrangements with edge providers could take, might nonetheless leave sufficient 'room for individualized bargaining and discrimination in terms' so as not to run afoul of the statutory prohibitions of common carrier treatment." Such a practice would allow for individualized bargaining where providers would not be required "to hold themselves out to serve all comers indiscriminately on the same or standardized terms." If the Commission's no-blocking rule allowed individualized bargaining above the minimum level of service necessary, then the rule might not create *per se* common carriage obligations. The court noted that although the Commission had asserted this interpretation of the rule at oral argument, the

²⁰² See Open Internet Order, 25 FCC Rcd at 17941-42, para. 62.

²⁰³ Id. See generally Internet Policy Statement, 20 FCC Rcd 14986.

²⁰⁴ See Press Release, Chairman Kevin J. Martin, Comments on Commission Policy Statement (Aug. 5, 2005) ("The evidence today is that their Internet access consumers have the ability to reach any Internet content. Indeed, cable and telephone companies' practices already track well the Internet principles we endorse today."), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-260435A2.pdf.

²⁰⁵ Open Internet Order, 25 FCC Rcd at 17956-57, 17959-60, paras. 94-95, 99.

²⁰⁶ Verizon, 740 F.3d at 658.

²⁰⁷ *Id.* at 657.

²⁰⁸ *Id.* at 651.

²⁰⁹ See id. at 655-58.

²¹⁰ See id. at 658.

²¹¹ *Id*.

²¹² See id.; see also id. at 667-68 (Silberman, J., dissenting in part) ("By exceeding the minimum level of service, the majority suggests, the broadband providers would have wide latitude to engage in individualized bargaining.").

court could not consider it as a possible basis for upholding the rule because the Commission had not advanced this position in the *Open Internet Order*.²¹³

2. Proposal to Adopt a No-Blocking Rule

94. We continue to believe that safeguarding consumers' ability to access and effectively use the lawful content, applications, services, and devices of their choice on the Internet is an essential component of protecting and promoting the open Internet. Therefore, we tentatively conclude that we should adopt the text of the rule that the Commission adopted in the *Open Internet Order*, which provided:

A person engaged in the provision of fixed broadband Internet access service, insofar as such person is so engaged, shall not block lawful content, applications, services, or non-harmful devices, subject to reasonable network management.²¹⁴

A person engaged in the provision of mobile broadband Internet access service, insofar as such person is so engaged, shall not block consumers from accessing lawful websites, subject to reasonable network management; nor shall such person block applications that compete with the provider's voice or video telephony services, subject to reasonable network management.²¹⁵

- 95. We believe this to be the public policy that will best serve Internet openness. While maintaining this rule text, we propose to make clear that the no-blocking rule would allow individualized bargaining above a minimum level of access to a broadband provider's subscribers—the revised rationale the court suggested would be permissible rather than *per se* common carriage—but, also consistent with the court's analysis, separately subject such practices to scrutiny under the commercially reasonable practices rule (or its equivalent). We believe that by preserving end users' ability to access the Internet content of their choice, reinstating a no-blocking rule would increase demand for broadband services and thus increase investment in broadband network infrastructure and technologies. We seek comment on the proposed no-blocking rule and its potential effect on broadband investment and deployment, including whether and under what circumstances broadband providers have incentives to block content. We also seek comment on possible approaches other than adopting the text of the 2010 rule. Should we modify the text of the rule to explicitly address the minimum level of access required, as discussed below?
- 96. Alternatively, we seek comment on whether we should adopt a no-blocking rule that either itself prohibits broadband providers from entering into priority agreements with edge providers or acts in combination with a separate rule prohibiting such conduct.²¹⁷ As discussed below, the record in this proceeding reflects numerous public concerns about the potential for priority agreements to harm an open Internet.²¹⁸ How could we address such concerns in the context of the no-blocking rule? If the

²¹³ *Id.* at 658-59 (quoting the Commission counsel's statement at oral argument that "it's not common carriage to simply have a basic level of required service, if you can negotiate different levels with different people").

²¹⁴ *Open Internet Order*, 25 FCC Rcd at 17942, para. 63. Consistent with the 2010 rule, the phrase "content, applications, services" in the proposed rule for fixed broadband service "refers to all traffic transmitted to or from end users of a broadband Internet access service, including traffic that may not fit cleanly into any of these categories." *Id.* at 17942, para. 64 & n.200.

²¹⁵ *Id.* at 17959, para. 99.

²¹⁶ See, e.g., CompTIA Comments at 3 (explaining that following the striking down of the no-blocking rule, "a number of CompTIA's member companies, all of which were small edge providers, voiced concern that ISPs would now charge them for access to their customers and block them if they refused to pay").

²¹⁷ See infra paras. 126, 138.

²¹⁸ See infra n.250.

Commission were to proceed down this alternative path, how should the Commission define "priority"? Are "priority" agreements broader than "pay-for-priority," possibly including the exchange of consideration other than money? Are there other arrangements between broadband providers and edge providers that have the potential to harm Internet openness and should be addressed within the noblocking rule? Commenters should address the legal bases and theories, including Title II, that the Commission could rely on for such a no-blocking rule, and how different sources of authority might lead to different formulations of the no-blocking rule.

3. Establishing the Minimum Level of Access under the No-Blocking Rule

- 97. As noted above, the D.C. Circuit suggested that the Commission's 2010 no-blocking rule could be interpreted as requiring broadband providers to "furnish... access to their subscribers generally" while "establishing a lower limit on the forms that broadband providers' arrangements with edge providers could take"—and that under that interpretation the rule might not impose common carrier status on broadband providers. Consistent with the court's ruling, we tentatively conclude that the revived no-blocking rule should be interpreted as requiring broadband providers to furnish edge providers with a minimum level of access to their end-user subscribers. We tentatively conclude that our proposed no-blocking rule would allow broadband providers sufficient flexibility to negotiate terms of service individually with edge providers, consistent with the court's view that we must permit providers to "adapt... to individualized circumstances without having to hold themselves out to serve all comers indiscriminately on the same or standardized terms." We reiterate that, as discussed further below, under the proposed rules contained herein such individualized arrangements for priority treatment would be subject to scrutiny under the proposed commercial reasonableness rule and prohibited under that rule if they harm Internet openness. We seek comment on these tentative conclusions.
- 98. Requiring this minimum level of access under the no-blocking rule will ensure that all users have access to an Internet experience that is sufficiently robust, fast, and effectively usable. This includes both end-user consumers and edge providers of all types and sizes, including those content providers who do not enter into specific arrangements with broadband providers. In short, our approach will enable consumers to access the content, services, and applications they demand and ensure that innovators and edge providers have the ability to offer new products and services. We seek comment on this analysis.
- 99. Under the approach described by the D.C. Circuit, "broadband providers [would] have no obligation to actually provide an edge provider with the minimum service necessary to satisfy the rules," because they could instead "deliver all edge providers' traffic" in a manner that exceeds that minimum, and they would then be free to "negotiate separate agreements with each individual edge provider" and also to "charge similarly-situated edge providers completely different prices for the same service." Are there alternative approaches that, consistent with the *Verizon* decision, would avoid *per se* common

²²⁰ Such actions, permissible under the no-blocking rule, would, of course, be separately subject to the proposed commercially reasonable practices standard set out below. *See infra* Section III.E.

²¹⁹ Verizon, 740 F.3d at 658.

²²¹ Verizon, 740 F.3d at 652 (quoting Cellco P'ship v. FCC, 700 F.3d 534, 548 (D.C. Cir. 2012)). In this regard, we view the operation of the no-blocking rule separate from any other impact on broadband providers that might arise from application of the legal standard, factors, and dispute resolution framework discussed below. See infra Sections III.E, III.F, III.H.

²²² See infra Appx. A (proposing a definition of "block" for purposes of the no-blocking rule).

²²³ Verizon, 740 F.3d at 658. We note that a broadband provider's discretion in setting rates could be constrained to some degree by the commercially reasonable standard and dispute resolution framework discussed below, if adopted by the Commission. See infra Sections III.E, III.H. As we explain below, that proposed standard would not constitute per se common carriage.

carriage? Are there forms of price discrimination that, even if appropriate under the no-blocking rule, should be separately subject to the commercial reasonableness rule or its equivalent?

- 100. We also seek comment on how, consistent with this interpretation, we should define or clarify the minimum level of access required by the rule, or otherwise define what provider conduct would constitute "blocking" under the rule. In our view, a defined minimum level of access provides assurances both to end users, by helping them understand the potential uses of their service, and to edge providers. Such assurances should enhance consumer demand, which drives investment both in the network and at the edge.
- 101. We also seek comment on how "minimum level of access" should be defined to provide the robust, fast, and effectively usable access discussed above. Should we define the minimum level of access from the perspective of end users, edge providers, or both? Should the minimum level of access be dynamic, evolving over time, and if so, how can that flexibility be incorporated into the rule? In the following paragraphs, we describe in alphabetical order several possible options by which we may define a minimum level of access under the no-blocking rule. We seek comment on these options and on any approaches by which the Commission should define the minimum level of access. For each of these potential options, we seek comment on its advantages and disadvantages, on its legal sustainability under Verizon, and on how effective it would be at protecting the open Internet, including the ease or difficulty with which violations can be identified and remedied. We seek comment on how the Commission should implement, monitor compliance with, and enforce the rule, under each of the options described. For each option, we also seek comment on whether the minimum level of access should be reflected in providers' disclosures under an enhanced transparency rule. Under any of these options, we seek comment on how the minimum level of access should be measured. Should the Commission measure technical parameters, based on a sample, focusing on speed, packet loss, latency, or other factors? Where in the network should such measurement take place to ensure an accurate measure of the broadband provider's performance? Finally, we recognize that from time to time a provider may be unable to provide such a minimum level of access temporarily for a variety of reasons.²²⁴ We seek comment on how the Commission should distinguish such temporary inadvertent failures from intentional or prolonged blocking, including whether the Commission should consider exempting incidents of blocking that last for less than a specified amount of time.
- 102. Best Effort. One way to define a minimum level of access is as a requirement that broadband providers apply no less than a "best effort" standard to deliver traffic to end users. For any particular type of Internet traffic, best-effort delivery would represent the "typical" level of service for that type of traffic—in effect, routing traffic according to the "traditional" architecture of the Internet. Broadband providers would be free to negotiate "better than typical" delivery with edge providers, and would be prohibited (subject to reasonable network management) from delivering "worse than typical" service in the form of degradation or outright blocking. We seek comment on this potential approach.

²²⁴ Aside from complete outages (which are not the subject of this Notice), we note that in some cases inadvertent action or circumstances outside a provider's control may cause a subset of traffic to be blocked. For example, if a connection with one of several peering partners is severed, some Internet traffic may seem unacceptably slow while other traffic appears normal. Alternatively, a provider engaged in reasonable network management (such as blocking the source of a distributed denial of service attack) may inadvertently block other traffic due to a transcription error. If steps are taken in a timely manner to correct such problems, we would not anticipate considering such action to violate a no-blocking rule.

²²⁵ See, e.g., S. Floyd & M. Allman, Comments on the Usefulness of Simple Best-Effort Traffic 9-14, Internet Engineering Task Force (July 2008), https://tools.ietf.org/html/rfc5290.

²²⁶ Open Internet NPRM, 24 FCC Rcd at 13086, para. 56 ("The Internet has traditionally relied on an end-to-end, open architecture, in which network operators use their 'best effort' to deliver packets to their intended destinations without quality-of-service guarantees.").

Would "best effort" be measured against the technical capacity of a particular broadband provider's network capacity and characteristics?

- 103. *Minimum Quantitative Performance*. Another way to define a minimum level of access is through specific technical parameters, such as a minimum speed. To the extent that commenters believe that the Commission should promulgate a rule that establishes specific technical parameters for the required minimum level of access, what should those parameters be? Should they identify specific speeds of service, or would it be preferable to identify specific problems that a minimum level of service would avoid (such as preventing latency and jitter for services that tolerate them poorly)?²²⁷ Would the Commission need to differentiate between different broadband access technologies? While this approach would provide greater certainty than other approaches, a specific technical definition of minimum access could become outdated as available broadband network technologies change and available broadband speeds improve. How frequently would we need to revisit a specific technical definition of minimum access to ensure that it keeps up with advances in broadband service?
- 104. An Objective, Evolving "Reasonable Person" Standard. Another approach to defining a minimum level of access to broadband providers' end users is to think of it as the level that satisfies the reasonable expectations of a typical end user. We might think of this as a "reasonable person" standard of access. For example, a typical end user may reasonably expect the ability to access streaming video from any provider, place and receive telephone calls using the VoIP service of the end user's choosing, and access any lawful web content. Under this approach, a broadband provider that satisfies these and other reasonable expectations would be in compliance with the no-blocking rule. One possible advantage of this approach to defining minimum access is flexibility: the absence of a specific technical definition means that the standard for compliance can evolve as the expectations in the marketplace change without further Commission action. On the other hand, this approach may create less certainty than other approaches might and could be more difficult to enforce. We seek comment generally on a "reasonable person" standard for defining minimum access, and in particular, how this standard could be crafted to be sufficiently objective and predictable to provide certainty to broadband providers and edge providers.

4. Application of the No-Blocking Rule to Mobile Broadband

- 105. As noted above, the 2010 no-blocking rule applied differently to mobile broadband providers than to fixed, and today's Notice would maintain that approach. The previous rule prohibited mobile broadband providers from blocking consumers from accessing lawful websites or blocking applications that compete with the provider's voice or video telephony services. We propose to adopt the same approach as in the 2010 obligation, which would prohibit mobile broadband providers from blocking lawful web content as well as applications that compete with the mobile broadband providers' own voice or video telephony services, subject to reasonable network management. We seek comment on this proposal.
- 106. In addition, we seek comment on whether it would serve the public interest to expand the rule's scope to include reasonable access to all applications that compete with the mobile broadband Internet access provider's other services, not just those that compete with voice or video telephony services, subject to reasonable network management practices. Should the application of the no-blocking rule to mobile broadband providers turn on whether mobile service was marketed to consumers as a substitute for a fixed telecommunications service previously offered by the provider or its affiliate? How would treating mobile broadband differently from fixed broadband affect consumers in different demographic groups, including those who rely solely on mobile broadband for Internet access?²²⁸ How

(continued...)

²²⁷ See Vonage Comments at 8 (urging the Commission to "define a baseline throughput level" that "reflect[s] changing consumer expectations while recognizing legitimate technical constraints").

²²⁸ For example, according to the Pew Research Internet Project, in 2011, Blacks and Latinos were more than twice as likely as whites to rely on their smartphones as their exclusive source of Internet access (38% of Black/Latino smartphone users versus 17% of white non-Hispanic smartphone users), and those with incomes of less than

should the Commission consider applying a no-blocking rule to facilities-based mobile providers versus resellers?

- 107. We also seek comment on whether and how we should define a minimum level of access in the context of the proposed no-blocking rule for mobile broadband, or otherwise clarify what constitutes "blocking," and whether that definition should be different for mobile broadband than for fixed. For each of the approaches discussed above to define a "minimum level of access," we seek comment on any particular benefits or difficulties that such approach would present.
- 108. We recognize that there have been substantial mobile marketplace changes and developments since 2010, including the increased use of Wi-Fi technology, and seek comment on whether and how such changes should impact our no-blocking rule for mobile broadband. We seek comment on the extent to which we should take into account the increasing provision of Wi-Fi by broadband providers, ²²⁹ and the growing use of Wi-Fi by end users for the off-load of wireless broadband, as we consider the application of the no-blocking rule to mobile broadband services. ²³⁰

5. Applicability of the No-Blocking Rule to Devices

109. The 2010 no-blocking rule prohibited fixed broadband providers from blocking non-harmful end-user devices, and the rule we propose today would do the same. We seek comment on how this treatment of non-harmful devices fits into the *Verizon* court's interpretation of the rule. Should the ability to attach non-harmful devices to broadband service be included among the reasonable end-user expectations listed above, or should we analyze non-harmful devices differently?

E. Codifying an Enforceable Rule to Protect the Open Internet That Is Not Common Carriage *Per Se*

- 110. Separate and distinct from the no-blocking rule, we believe that establishing an enforceable legal standard for broadband provider practices is necessary to preserve Internet openness, protect consumers, and promote competition. While the D.C. Circuit vacated the Commission's rule prohibiting "unreasonable discrimination" by fixed broadband providers on the theory that it "so limited broadband providers' control over edge providers' transmissions that [it] constitute[d] common carriage *per se*," the court underscored the validity of the "commercially reasonable" legal standard the Commission used in the data roaming context and the court upheld in *Cellco*.²³¹
- 111. Today, we tentatively conclude that the Commission should adopt a revised rule that, consistent with the court's decision, may permit broadband providers to engage in individualized

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\$30,000 were more than twice as likely as those with incomes of \$50,000 or more to do so (40% versus 17%).
Aaron Smith, Smartphones as an Internet Appliance, Pew Research Internet Project (July 2011),
http://www.pewinternet.org/
2011/07/11/smartphones-as-an-internet-appliance/.

²²⁹ Kevin Fitchard, *Comcast is Turning Homes Into Public Wi-Fi Hotspots*, Bloomberg Businessweek (June 11, 2013), http://www.businessweek.com/articles/2013-06-11/comcast-is-turning-homes-into-public-wi-fi-hotspots (describing Comcast's wireless gateway that transmits two signals with each functioning as a separate network where the household that owns or rents the router can access the first network, and any Comcast broadband customer can access the second network).

²³⁰ See New America Foundation & Open Technology Institute Comments at 10-11 (contending that the Commission should apply the same openness provisions to both fixed and mobile broadband networks and that consumers should have the same right to use the Internet whether their device is "connected over WiFi to a wired LAN, or moments later, connected over a wireless carrier's network"); see also NCTA Comments at 8-10 (arguing that applying different rules to fixed and mobile creates marketplace distortions that may hamper cross-platform broadband competition).

²³¹ Verizon, 740 F.3d at 655; see also Cellco, 700 F.3d 534.

practices, while prohibiting those broadband provider practices that threaten to harm Internet openness. Our proposed approach contains three essential elements: (1) an enforceable legal standard of conduct barring broadband provider practices that threaten to undermine Internet openness, providing certainty to network providers, end users, and edge providers alike, (2) clearly established factors that give additional guidance on the kind of conduct that is likely to violate the enforceable legal standard, and (3) encouragement of individualized negotiation and, if necessary, a mechanism to allow the Commission to evaluate challenged practices on a case-by-case basis, thereby providing flexibility in assessing whether a particular practice comports with the legal standard. We seek comment below on the design and justification of this rule.

112. Alternatively, we also seek comment on whether the Commission should adopt an alternative legal standard to govern broadband providers' practices. How can we ensure that our proposed rule sufficiently protects against harms to the open Internet? How would the rule we propose today change if the Commission were to rely on Title II (or other sources of legal authority) to adopt rules to protect and promote Internet openness?²³² We seek comment on how the goal of the proposed rule—to prevent those broadband provider practices that limit Internet openness—could best be achieved.

1. The 2010 No Unreasonable Discrimination Rule

- 113. 2010 Open Internet Order. The Commission adopted a no unreasonable discrimination rule to prevent fixed broadband providers from engaging in harmful conduct when transmitting lawful network traffic over a consumer's broadband Internet access service. The antidiscrimination rule prohibited fixed broadband providers from unreasonably discriminating against network traffic subject to reasonable network management. Unlike the transparency and no-blocking rules the Commission adopted in 2010, the no unreasonable discrimination rule did not apply to mobile broadband Internet access service providers.
- 114. *D.C. Circuit Opinion in Verizon v. FCC.* The D.C. Circuit vacated the antidiscrimination rule because it found that the rule improperly relegated fixed broadband providers to common carrier status.²³⁶ This violated the statutory ban on common carrier treatment of information service providers because the Commission had classified broadband providers "not as providers of 'telecommunications services' but instead as providers of 'information services." ²³⁷ The court disagreed with the

²³² See infra Section III.F.

²³³ Open Internet Order, 25 FCC Rcd at 17944, para. 68. The rule stated, "A person engaged in the provision of fixed broadband Internet access service, insofar as such person is so engaged, shall not unreasonably discriminate in transmitting lawful network traffic over a consumer's broadband Internet access service. Reasonable network management shall not constitute unreasonable discrimination." *Id.*

²³⁴ *Id.* The broad purpose of the "no unreasonable discrimination" rule was "to encourage competition and remove impediments to infrastructure investment while protecting consumer choice, free expression, end-user control, and the ability to innovate without permission." *Id.* at 17949, para. 78; *see also id.* at 17909-25, 17927-31, 17951-57, paras. 13-34, 38-42, 80-92.

²³⁵ Id. at 17958, para. 96.

²³⁶ Verizon, 740 F.3d at 655-56; see also id. at 656-57 (differentiating the antidiscrimination provision at issue in the Open Internet Order from other Commission rules that survived common carrier challenges because unlike the rule at issue in Southwestern Cable, which was "limited to remedying a specific perceived evil," the rule here "is not so limited, as the compelled carriage obligation applies in all circumstances and with respect to all edge providers").

²³⁷ *Id.* at 650; see also id. at 631 ("[T]he Commission classified other types of broadband providers, such as DSL and wireless, which includes those offering broadband Internet service for cellular telephones, as information service providers exempt from Title II's common carrier requirements.") (citing *Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities*, 20 FCC Rcd 14853, 14862, para. 12 (2005); *Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks*, 22 FCC Rcd 5901, 5901-02, para.1 (2007); *United Power Line Council's Petition for Declaratory Ruling Regarding the Classification of*

Commission's interpretation to the contrary, finding that by compelling fixed broadband providers to serve all edge providers who provided content, services, and applications over the Internet without unreasonable discrimination, the rule compelled those providers to hold themselves out "to serve the public indiscriminately"—thus treating them as common carriers. 239

115. In making its determination, the court relied on its previous decision in *Cellco*, where it upheld the Commission's data roaming requirements against a common carrier challenge. The court suggested that had the Commission shown that the "no unreasonable discrimination" standard adopted in the *Open Internet Order* differed from the "nondiscrimination" standard applicable to common carriers, the rule might have withstood judicial review similar to the data roaming rule at issue in *Cellco*. This is because the rule in *Cellco* "expressly permit[ted] providers to adapt roaming agreements to 'individualized circumstances without having to hold themselves out to serve all comers indiscriminately on the same or standardized terms." The court went on to suggest that, unlike the data roaming rules at issue in *Cellco*, which listed specific factors to consider in a case-by-case determination of whether a data roaming provider's conduct and offerings were commercially reasonable based on the totality of the circumstances. The *Open Internet Order* did not attempt to "ensure that [the] reasonableness standard

²⁴³ Data Roaming Order, 26 FCC Rcd at 5452-53, para. 86. In determining whether negotiations were commercially reasonable, the Commission stated it would consider the following factors: "whether the host provider has responded to the request for negotiation; whether it has engaged in a persistent pattern of stonewalling behavior, and the length of time since the initial request; whether the terms and conditions offered by the host provider are so unreasonable as to be tantamount to a refusal to offer a data roaming arrangement; whether the parties have any roaming arrangements with each other, including roaming for interconnected services such as voice, and the terms of such arrangements; whether the providers involved have had previous data roaming arrangements with similar terms; the level of competitive harm in a given market and the benefits to consumers; the extent and nature of providers' build-out; significant economic factors, such as whether building another network in the geographic area may be economically infeasible or unrealistic, and the impact of any 'head-start' advantages; whether the requesting provider is seeking data roaming for an area where it is already providing facilities-based service; the impact of the terms and conditions on the incentives for either provider to invest in facilities and coverage, services, and service quality; whether there are other options for securing a data roaming arrangement in the areas subject to negotiations

(continued...)

²³⁸ *Verizon*, 740 F.3d at 652-56 (rejecting the Commission's premise that broadband providers did not serve as "carriers" for edge providers).

²³⁹ *Id.* at 655-56.

²⁴⁰ Cellco, 700 F.3d 534. The Cellco court turned aside a facial challenge to the data roaming rules, while reminding the Commission that it could consider "as applied" challenges if the Commission were to apply its rules in a manner that, in fact, relegated network providers to common carrier status. *Id.* at 548-49. We remain cognizant of the Court's admonition in that circumstance, and in this one.

²⁴¹ Verizon, 740 F.3d at 656. The court held that the Commission had forfeited the argument, made in footnote 251 of the Open Internet Order, that the antidiscrimination rule did not constitute per se common carriage because the Open Internet rules permitted broadband providers to engage in "reasonable network management," because the Commission had failed to raise the argument in its appellate brief. Id. However, the court went on to explain that the argument would have failed, in any event, because there was no basis on which to distinguish it from the "just and reasonable" legal standard that applies to common carriers. Id.

²⁴² *Id.* at 652 (citing *Cellco*, 700 F.3d at 548) (some internal quotations removed). The data roaming rule specifically states that "providers may negotiate the terms of their roaming arrangements on an individualized basis." In other words, providers may offer data roaming arrangements on commercially reasonable terms and conditions tailored to individualized circumstances without having to hold themselves out to serve all comers indiscriminately on the same or standardized terms. *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services*, WT Docket No. 05-265, Second Report and Order, 26 FCC Rcd 5411, 5433, para. 45 (2011) (*Data Roaming Order*).

remains flexible."²⁴⁴ The D.C. Circuit suggested that a rule preventing certain types of conduct by broadband providers might be acceptable, given the manner in which the Commission has classified broadband providers, if the Commission articulated a discrete, flexible standard that prohibited practices that could reasonably be understood to harm Internet openness, while allowing individualized broadband provider practices, akin to the "commercially reasonable" standard adopted by the Commission in the data roaming context.²⁴⁵

2. Proposed Elements of an Enforceable Legal Rule

a. Prohibiting Only Commercially Unreasonable Practices

- standard. Accordingly, we tentatively conclude that the Commission should adopt a rule requiring broadband providers to use "commercially reasonable" practices in the provision of broadband Internet access service. Our proposed approach is both more focused and more flexible than the vacated 2010 non-discrimination rule. It would prohibit as commercially unreasonable those broadband providers' practices that, based on the totality of the circumstances, threaten to harm Internet openness and all that it protects. At the same time, it could permit broadband providers to serve customers and carry traffic on an individually negotiated basis, "without having to hold themselves out to serve all comers indiscriminately on the same or standardized terms," so long as such conduct is commercially reasonable. The D.C. Circuit explained that such an approach distinguished the data roaming rules at issue in *Cellco* from common carrier obligations. We seek general comment on this approach, and more targeted comment below.
- 117. With respect to this approach in general, we tentatively conclude that it should operate separately from the no-blocking rule that we also propose to adopt. In other words, the presence or absence of the no-blocking rule would have no impact on the presence or absence of the "commercially reasonable" standard, and vice versa. This would mean that conduct acceptable under the no-blocking rule would still be subject to independent examination under the "commercially reasonable" standard. We seek comment on this approach.
- 118. The core purpose of the legal standard that we wish to adopt, whether the "commercially reasonable" standard or another legal formulation, is to effectively employ the authority that the *Verizon* court held was within the Commission's power under section 706. In essence, the court upheld the Commission's judgment that (1) section 706 grants substantive power to the Commission to take actions, including removing barriers to infrastructure investment and promoting competition in

and whether alternative data roaming partners are available; events or circumstances beyond either provider's control that impact either the provision of data roaming or the need for data roaming in the proposed area(s) of coverage; the propagation characteristics of the spectrum licensed to the providers; whether a host provider's decision not to offer a data roaming arrangement is reasonably based on the fact that the providers are not technologically compatible; whether a host provider's decision not to enter into a roaming arrangement is reasonably based on the fact that roaming is not technically feasible for the service for which it is requested; whether a host provider's decision not to enter into a roaming arrangement is reasonably based on the fact that changes to the host network necessary to accommodate the request are not economically reasonable; whether a host provider's decision not to make a roaming arrangement effective was reasonably based on the fact that the requesting provider's provision of mobile data service to its own subscribers has not been done with a generation of wireless technology comparable to the technology on which the requesting provider seeks to roam; other special or extenuating circumstances." *Id.*

²⁴⁴ Verizon, 740 F.3d at 657.

²⁴⁵ *Id*.

²⁴⁶ *Id.* at 652 (quoting *Cellco*, 700 F.3d at 548) (internal quotations removed).

²⁴⁷ *Id.* at 652.

telecommunications markets, that will promote the deployment of broadband networks; (2) the Commission was within its authority to conclude that the "virtuous circle" can be adversely impacted by broadband network practices that, over the long term, depress end user demand, which then threatens broadband deployment; and (3) threats to the open Internet, such as limitations on users to access the content of their choice or speak their views freely, are therefore within the authority of the Commission to curb. In selecting a legal standard, the Commission not only wishes to avoid subjecting broadband networks to common carriage *per se*, it also wishes to choose a legal standard whose valid adoption renders unnecessary the adjudication of any question other than whether the adopted legal standard has been violated. This is the distinction between the authority to adopt a standard and its subsequent application.²⁴⁸

- 119. Are there alternative legal standards, whether in analogous contexts or otherwise identified by commenters, that the Commission should consider? Is there an existing standard that would serve a similar purpose to what we propose here and that would prevent the harms to Internet openness?²⁴⁹ If so, how, and if not, what would any differences be? Could the Commission modify its approach to "reasonable network management" in ways that would establish a more flexible legal standard that would not constitute common carriage *per se*? Commenters advocating alternative legal standards should explain why they are preferable, both in terms of the substantive requirements of the alternative standard (such as how they would address providers' conduct, offerings, and practices) and its implementation (such as whether and how it may permit individualized decision-making), and how they would protect an open Internet. And, as to the "commercially reasonable" standard or any other, we seek comment on whether there are sources of law or practice the Commission should rely upon in explaining the meaning and application of that standard.
- 120. We also seek comment on how a rule requiring broadband providers to engage in commercially reasonable practices with respect to delivery of traffic to and from end users should apply in circumstances in which no individualized negotiation occurs between the edge provider and the broadband provider. To cite just a few of many possible examples, consider a start-up VoIP service, a politically oriented website with an audience of fewer than 100 unique visitors per day, a social networking application narrowly focused on a particular demographic, or peer-to-peer communications among individuals. Not all of those actors may seek to enter into a contract with a broadband provider; they may simply wish to reach its subscribers. We seek comment on the impact of this difference on the selection and/or application of the general legal standard.

²⁴⁸ It is axiomatic that an as-applied challenge to a rule would invalidate an application of the rule, but the rule itself may otherwise remain broadly applicable. *See Brockett v. Spokane Arcades, Inc.*, 472 U.S. 491, 504 (1985). Thus, assuming the rule is facially sustained by a reviewing court, the Commission would not be required to re-litigate its underlying determination that adoption of the rule will promote deployment. 47 U.S.C. § 1302(b). Because the commercially reasonable practices rule requires a determination that an entity did not act in a commercially reasonable manner, the inquiry is, then, not whether the Commission has authority to adopt the regulation, but whether the Commission may enforce the regulation in a particular set of circumstances. *See Colo. Right to Life Comm., Inc. v. Coffman*, 498 F.3d 1137, 1146 (10th Cir. 2007) (holding that an as-applied challenge is limited to testing "the application of [a regulation] to the facts of a plaintiff's concrete case"). For example, the D.C. Circuit determined that the Commission's data roaming rule—the legal standard adopted—was facially valid and within the Commission's authority, but that the application of that standard could still be subject to subsequent challenge. *See Cellco*, 700 F.3d at 548.

²⁴⁹ For example, Section 628(b) of the Communications Act prohibits cable operators and certain programming vendors from engaging in "unfair methods of competition or unfair or deceptive acts or practices, the purpose or effect of which is to hinder significantly or to prevent any multichannel video programming distributor from providing satellite cable programming or satellite broadcast programming to subscribers or consumers." 47 U.S.C. § 548(b). The Commission has established processes for making case-by-case determinations of whether certain practices are "unfair" under section 628(b) of the Act. *See* 47 C.F.R. § 76.1003.

Commission should adopt a different rule to govern broadband providers' practices to protect and promote Internet openness. As mentioned above, a number of parties have expressed concerns about the effect of pay-for-priority agreements on Internet openness. How can the Commission ensure that the rule it adopts sufficiently protects against harms to the open Internet, including broadband providers' incentives to disadvantage edge providers or classes of edge providers in ways that would harm Internet openness? Should the Commission adopt a rule that prohibits unreasonable discrimination and, if so, what legal authority and theories should we rely upon to do so? If the Commission ultimately adopts a Title II approach, how should the Commission define the rule in light of the requirements under sections 201 and 202 of the Act?²⁵¹

b. Factors to Guide Application of the General Legal Standard

- 122. Similar to the Commission's approach in the data roaming context, we propose to identify factors the Commission can use to administer the proposed commercially reasonable practices standard. These pre-defined factors would provide guidance to encourage commercially reasonable individualized practices and, if disputes arise, provide the basis for the Commission to evaluate whether, taking into account the totality of the circumstances on a case-by-case basis as discussed below, a particular practice satisfies the enforceable legal standard.
- 123. We seek comment on this approach and what factors the Commission should adopt to ensure commercially reasonable practices that will protect and promote Internet openness. We discuss below several categories of factors, noting that there is considerable overlap between these categories, and that they are not mutually exclusive. As with the data roaming rule, we tentatively conclude that a review of the totality of the circumstances should be preserved through the creation of a "catch all" factor

²⁵⁰ See, e.g., Letter from Emily Sheketoff, ALA, Prudence Adler, ARL, and Diana Obligner, EDUCAUSE, to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket No. 14-28, at 2 (filed Feb. 13, 2014) ("Prioritized delivery to end users, if allowed, will favor those content, application and service providers who can pay for it. Paid prioritization and other forms of preferential access will significantly disadvantage libraries. education, and other non-profit institutions." (emphasis omitted)); Future of Music Coalition Comments at 2-3 (expressing concern about "a future where the Internet becomes a pay-to-play environment where only those with the deepest pockets can guarantee delivery of their content"); Letter from Barbara van Schewick, Professor of Law, Stanford Law School to Tom Wheeler, Chairman, Federal Communications Commission, GN Docket No. 14-28, Attach. A at 5-6 (filed Apr. 25, 2014) (noting the potential for access fees to "significantly increase the costs of offering applications, content and services, which would fundamentally change the environment for innovation and free speech on the Internet" as well as create "two classes of speakers—those who can pay to receive better treatment (e.g., large, established companies or wealthy individuals) and those who cannot afford to do so—often individuals and groups with unpopular or new viewpoints, like activists and artists"); Free Press Comments at 6 ("A world in which broadband providers charge for priority access to their customers, and discriminate freely against any content, service or application they see fit to disfavor, is not a world the Commission should entertain creating."); Letter from Sarah Morris, Senior Policy Council, New America Foundation, to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket No. 14-28, at 1 (filed May 2, 2014) (expressing "deep concern" that "the draft rules would be insufficient to protect consumers from discrimination").

²⁵¹ See 47 U.S.C. § 201(b) (prohibiting unjust or unreasonable "charges, practices, [or] classifications); *id.* at § 202(a) (prohibiting "unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities or services").

²⁵² Data Roaming Order, 26 FCC Rcd at 5452-53, para. 86. As discussed above, in invalidating the 2010 no unreasonable discrimination rule as common carriage per se, the D.C. Circuit distinguished it from the commercially reasonable, factor-based approach adopted by the Commission in its Data Roaming Order and upheld by the court in Cellco. We recognize that there are significant differences between the open Internet and the data roaming contexts, including a broader range of open Internet practices at issue and a greater diversity of parties affected by such practices. Thus, while we look to our data roaming approach for guidance, we propose to develop factors specific to the open Internet context.

designed to ensure that rules can be applied evenly and fairly in response to changing circumstances and that all users have an Internet experience that affords them access to a minimum level of service sufficient to protect and promote an open Internet. Further, we seek comment on providers' experiences with the "commercially reasonable" practices standard in the data roaming context, and on how such experiences might inform our thinking as we develop the "commercially reasonable" practices standard for the open Internet.

- 124. *Impact on Present and Future Competition*. The Commission has previously observed that unfair competitive advantages can jeopardize innovation on the edge and impair otherwise lawful delivery of products and services. For that reason, we seek comment on how we should construct factors in applying the commercially reasonable legal standard to assess the impact of broadband provider practices on present and future competition. We understand this competition inquiry to extend beyond an application of antitrust principles to include, for example, the predicted impact of practices on future competition.
- 125. To what extent should such competition-oriented factors focus on market structure and the extent of competition in a given market? For example, should we consider factors that the Commission has used in case-by-case adjudications under section 628(b) of the Act, which proscribes certain "unfair methods of competition" by cable operators and certain programming vendors?²⁵⁴ Are

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²⁵³ Open Internet Order, 25 FCC Rcd at 17909-25, 17927-31, paras. 13-34, 38-42.

²⁵⁴ Under section 628(b) of the Act, the Commission has held that determining whether challenged conduct is "unfair" requires "balancing the anticompetitive harms of the challenged conduct against the procompetitive benefits." 47 U.S.C. § 548(b). To find a violation under section 628(b) of the Act, the Commission must make two independent judgments. First, the Commission must determine that the defendant has engaged in unfair methods of competition or unfair or deceptive acts or practices. If the Commission finds unfair acts or practices, then the Commission must determine that the unfair acts or practices had the purpose or effect of hindering significantly or preventing a multichannel video programming distributor (MVPD) from providing satellite cable programming to subscribers or consumers. See, e.g., Dakota Telecom Inc. v. CBS Broadcasting, File No. 5381-P, Memorandum Opinion and Order, 14 FCC Rcd 10500 (Cable Services Bur. 1999). The Commission has determined that specific practices are likely to be prohibited under section 628(b). For example, the Commission established a rebuttable presumption that an MVPD's withholding of a terrestrially delivered Regional Sports Network (RSN) from another MVPD creates the harm targeted by section 628(b), based in part on the finding that such programming is "very likely to be both non-replicable and highly valued by consumers." Review of the Commission's Program Access Rules and Examination of Programming Tying Arrangements, MB Docket No. 07-198, First Report and Order, 25 FCC Rcd 746, 782, para. 52 (2010), aff'd in part, Cablevision Sys. Corp. v. FCC, 649 F.3d 695, 703 (D.C. Cir. 2011). Under this presumption, the Commission found that MSG/Cablevision's withholding of HD versions of the Madison Square Garden RSN from Verizon was "unfair" and created the harm targeted by section 628(b). See Verizon Tel. Companies & Verizon Servs. Corp. v. Madison Square Garden, L.P. and Cablevision Systems Corp., File No. CSR-8185-P, Order, 26 FCC Rcd 13145, 13160-77, paras. 18-41 (Media Bur. 2011), aff'd, Verizon Tel. Companies & Verizon Servs. Corp. v. Madison Square Garden, L.P. and Cablevision Systems Corp, File No. CSR-8185-P, Memorandum Opinion and Order, 26 FCC Rcd 15849, 15852-53, para. 8 (2011) ("Determining whether challenged conduct is 'unfair' requires balancing the anticompetitive harms of the challenged conduct against the procompetitive benefits."); see also AT&T Servs., Inc. & S. New England Tel. Co. d/b/a AT&T Connecticut v. Madison Square Garden, L.P. and Cablevision Systems Corp, File No. CSR-8185-P, Order, 26 FCC Rcd 13206, 13222-40, paras.19-42 (Media Bur. 2011) (finding that withholding of the HD versions of the MSG and MSG+ RSNs from AT&T was an "unfair act"), aff'd, AT&T Servs., Inc. & S. New England Tel. Co. d/b/a AT&T Connecticut v. Madison Square Garden, L.P. and Cablevision Systems Corp., File No. CSR-8185-P, Memorandum Opinion and Order, 26 FCC Rcd 15849 (2011). The Commission has also prohibited exclusive arrangements for delivering cable television service to multiple dwelling unit (MDU) properties, given that "[e]xclusivity clauses that run in favor of cable operators typically are a complete bar to entry into MDUs by fiber-deploying LECs such as Verizon, AT&T, and Qwest, as well as [private cable operators]." Exclusive Service Contracts for Provision of Video Services in Multiple Dwelling Units and Other Real Estate Developments, MB Docket No. 07-51, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 20235, 20240 para. 9 (2007), aff'd, Nat'l Cable & (continued...)

there other competition-oriented standards in other contexts (including those outside of telecommunications) that we should look to for guidance?

- 126. We propose that the competitive factors should also examine the extent of an entity's vertical integration and/or its relationships with affiliated entities. For example, broadband providers sometimes offer an affiliated streaming video service over their broadband network in competition with many other third-party broadband and edge providers' services. How can we ensure that competition is not harmed in such situations? We note that the no-blocking rule as applied to mobile Internet access service specifically prohibits broadband providers from blocking "applications that compete with the provider's voice or video telephony services." And the Commission looked to a similar restriction to address harms raised by the Comcast-NBCU transaction. In light of such concerns, we propose to adopt a rebuttable presumption that a broadband provider's exclusive (or effectively exclusive) arrangement prioritizing service to an affiliate would be commercially unreasonable. We seek comment on this proposal.
- 127. More generally, we seek comment on the use of rebuttable presumptions as a tool to focus attention on the likely impacts of particular practices. What source or law, either within the Communications Act or in other statutes, would help us craft the creation and use of rebuttable presumptions?²⁵⁸ Are there particular rebuttable presumptions that should be used, for example, dealing with some or all forms of exclusive contracts, or particularized degradation of services?
- 128. How can the Commission ensure that parties are acting in a commercially reasonable manner without foreclosing the creation of pro-competitive opportunities through certain forms of price discrimination or exclusivity agreements? Should we develop factors modeled in part after those that the Commission uses in determining whether an exclusive contract between a vertically integrated cable operator and cable-programming vendor would serve the public interest?²⁵⁹ Should the Commission adopt a rebuttable presumption that broadband provider conduct that forecloses rivals (of the provider or its affiliates) from the competing marketplace is commercially unreasonable?

²⁵⁵ For example, Comcast is a co-owner of the online video website Hulu.com. *See* About, Hulu.com, http://www.hulu.com/about (last visited Apr. 10, 2014); *see also Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. For Consent to Assign Licenses and Transfer Control of Licensees*, MB Docket No. 10-56, Memorandum Opinion and Order, 26 FCC Rcd 4238, 4268, para. 78 (2011) ("We conclude that Comcast-NBCU will have the incentive and ability to discriminate against, thwart the development of, or otherwise take anticompetitive actions against [online video distributors (OVDs)].").

²⁵⁶ See supra Section III.D.4.

²⁵⁷ See Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. For Consent to Assign Licenses and Transfer Control of Licensees, MB Docket No. 10-56, Memorandum Opinion and Order, 26 FCC Rcd 4238, 4275, para. 94 (2011) ("[N]either Comcast nor Comcast-NBCU shall prioritize affiliated Internet content over unaffiliated Internet content.").

²⁵⁸ U.S. Dept. of Justice and Federal Trade Commission, Horizontal Merger Guidelines § 5.3 (2010), http://www.justice.gov/atr/public/guidelines/hmg-2010.html#5c.

²⁵⁹ See 47 C.F.R. § 76.1002(c)(4). In determining whether a cable operator may enter into an exclusive contract with certain types of affiliated programming vendors, the Commission considers the following factors regarding the effect of the exclusive contract on the distribution of video programming in areas served by the cable operator: (i) the effect on the development of competition in local and national multichannel video programming distribution markets; (ii) the effect on competition from multichannel video programming distribution technologies other than cable; (iii) the effect on the attraction of capital investment in the production and distribution of new satellite-delivered cable programming; (iv) the effect on diversity of programming in the multichannel video programming distribution market; and (v) the duration of the exclusive contract. *Id*.

- 129. *Impact on Consumers*. In addition to the competitive factors, the Commission proposes to adopt factors to examine the extent to which broadband providers' practices could harm consumers. In the *Open Internet Order*, the Commission looked to, among other things, the extent of transparency and end-user control in assessing whether a practice is unreasonably discriminatory.²⁶⁰ We believe these factors would likewise be relevant to assessing whether a practice is commercially reasonable. What continued role does the existing or enhanced transparency rule have in ensuring that consumers are receiving correct information from broadband providers and not being misled?
- 130. We believe that consumers of broadband access service should have the ability to exercise meaningful choices. How can we factor consumer choice into our analysis of what is commercially reasonable? Should the Commission look for guidance to section 628 of the Act, which makes it unlawful for cable operators and their affiliated satellite cable programming vendors to engage in "unfair or deceptive acts or practices" with certain purposes and effects?²⁶¹
- 131. *Impact on Speech and Civic Engagement*. The open Internet serves as a critical platform for speech and civic engagement. As noted above, the ability of citizens and content providers to use this open platform to communicate with one another and express their views to a wide audience at very low costs drives further Internet use, consumer demand, and broadband investment and deployment. We therefore propose to adopt a factor or factors in applying the commercially reasonable standard that assess the impact of broadband provider practices on free exercise of speech and civic engagement.
- characteristics associated with broadband providers' practices. In the *Data Roaming Order*, for example, the Commission looked to the technical characteristics of the service at issue, including the technical feasibility of a requested service as well as the technical compatibility of providers' networks.²⁶³ We seek comment on how the Commission should consider such technical characteristics in assessing whether a broadband provider's practice is commercially reasonable. The application of the legal standard to satellite Internet access service presents one example. How should the Commission account for the technical differences between satellite and terrestrial broadband services when examining commercially reasonable behavior for satellite broadband providers?
- 133. "Good Faith" Negotiation. The Commission has imposed good faith negotiation requirements in a variety of contexts. For example, the Commission explicitly requires television broadcasters and multichannel video programming distributors (MVPDs) to negotiate retransmission consent agreements in good faith. The Commission also mandated good faith negotiations for dealings between certain spectrum licensees. Would adopting a similar framework for evaluating negotiations

²⁶⁰ Open Internet Order, 25 FCC Rcd at 17944, para. 70 (explaining that "[d]ifferential treatment of traffic is more likely to be reasonable the more transparent to the end user that treatment is").

²⁶¹ 47 U.S.C. § 548(b).

²⁶² See supra Section III.A.1; Open Internet Order, 25 FCC Rcd at 17912-15, paras. 15-18.

²⁶³ Data Roaming Order, 26 FCC Rcd at 5452-53, para. 86.

²⁶⁴ See, e.g., Implementation of Section 207 of the Satellite Home Viewer Extension and Reauthorization Act of 2004 Reciprocal Bargaining Obligation, MB Docket No. 05-89, Report and Order, 20 FCC Rcd 10339, 10340-41, 10345-46, paras. 3-4, 6, 15 (2005); Implementation of Section 207 of the Satellite Home Viewer Extension and Reauthorization Act of 2004 Reciprocal Bargaining Obligation, MB Docket No. 05-89, Notice of Proposed Rulemaking, 20 FCC Rcd 5448, paras. 3-4 (2005); Implementation of the Satellite Home Viewer Improvement Act of 1999; Retransmission Consent Issues: Good Faith Negotiation and Exclusivity, CS Docket No. 99-363, First Report and Order, 15 FCC Rcd 5445 (2000); Amendment of the Commission's Rules Related to Retransmission Consent, MB Docket No. 10-71, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 3351 (2014) (2014 Retransmission Order).

²⁶⁵ See, e.g., Gemini International, Inc. and Sprint Nextel, WT Docket No. 02-55, Memorandum Opinion and Order, 22 FCC Rcd 6651, 6655-56, paras. 15-16 (2007); Petition for Declaratory Ruling Concerning the Requirement of (continued...)

between parties in the open Internet context serve the public interest, convenience, and necessity? How should such a "good faith" test be applied where parties do not seek to enter into contractual relationships with each other?

- 134. *Industry Practices*. How, if at all, should the fact that conduct is an industry practice impact the application of the "commercially reasonable" rule? What should be treated as an "industry practice"? For example, should that term be limited to express standards adopted by standards-setting organizations or similar entities? If so, should the make-up or processes used by such a standards-setting organization be considered? If not, how should the existence of an "industry practice" be effectively established for purposes of the application of the "commercially reasonable" rule, and how should the Commission best evaluate potential harms to competition arising from coordinated conduct in a market with a limited number of participants?²⁶⁶
- 135. Other Factors. We seek comment on any additional factors the Commission should consider in assessing whether a particular practice or set of practices by a broadband provider is commercially reasonable, given the importance of preventing harms to an open Internet. Are there other factors that the Commission adopted in the *Data Roaming Order* that we should incorporate here?²⁶⁷ How can the Commission best include a factor to capture special or extenuating circumstances to ensure that it can take into account the totality of the circumstances, particularly given the rapid evolution of the Internet marketplace and technology?

c. Case-by-Case Evaluations for Commercial Reasonableness

136. As discussed, ²⁶⁸ we tentatively conclude that we will adopt a case-by-case approach, considering the totality of the circumstances, when analyzing whether conduct satisfies the proposed commercially reasonable legal standard, or another legal standard ultimately adopted. We believe that, in conjunction with the factors listed above, this approach will provide the advantage of certainty and guidance to broadband providers and edge providers—particularly smaller entities that might lack experience dealing with broadband providers—while also allowing parties flexibility in their individualized dealings. We seek comment on whether there is another avenue or mechanism we should use when evaluating commercial reasonableness.

3. Potential Conduct That Is *Per Se* Commercially Unreasonable

137. In *Southwestern Cable*, the Supreme Court concluded that a Commission requirement that cable systems carry local broadcast signals did not constitute common carriage even though the Commission's rule applied to all cable systems in defined circumstances. As the Supreme Court later noted, that holding "was limited to remedying a specific perceived evil [that] did not amount to a duty to hold out facilities indifferently for public use." In *Verizon*, the D.C. Circuit likewise explained that the *Southwestern Cable* regulation "imposed no obligation on cable operators to hold their facilities open to the public generally, but only to certain broadcasters if and when cable operators acted in ways that might harm those broadcasters." Thus, consistent with Supreme Court precedent and the *Verizon* decision, the Commission may be able to identify specific practices that do not satisfy the commercially reasonable

²⁶⁶ See infra para. 176; Open Internet Order, 25 FCC Rcd at 17946, para. 74.

²⁶⁷ See supra n.243.

²⁶⁸ See supra para. 61; see also infra Section III.H.

²⁶⁹ FCC v. Midwest Video Corp., 440 U.S. 689, 706 n.16 (1979).

²⁷⁰ *Verizon*, 740 F.3d at 656.

legal standard. For example, we note that the data roaming rule upheld by the D.C. Circuit's *Cellco* decision states that "[c]onduct that unreasonably restrains trade . . . is not commercially reasonable." Similarly, the Commission recently concluded that certain joint activities between certain television stations, which are not regulated as common carriers, in the negotiation of retransmission consent fees are a *per se* violation of the requirement of "good faith" negotiation. Are there any practices that, consistent with the *Verizon* court's reasoning, could be viewed as *per se* commercially unreasonable?

Internet Order to impose flat bans on pay-for-priority service.²⁷³ We seek comment on these suggestions, including whether all pay-for-priority practices, or some of them, could be treated as *per se* violations of the commercially reasonable standard or under any other standard based on any source of legal authority.²⁷⁴ We emphasize that section 706 could not be used to reach some conduct under this judicially recognized approach to circumvent the principle that the proposed rules will not, in any circumstances, constitute common carriage *per se*. If the Commission were to ultimately rely on a source of authority other than section 706 to adopt a legal standard for broadband provider practices, such as Title II, we seek comment on whether and, if so, how we should prohibit all, or some, pay-for-priority arrangements, consistent with our authority, to protect and promote Internet openness.

4. Potential Safe Harbors

- 139. Similar to the approach of identifying practices *ex ante* that would not satisfy the commercially reasonable legal standard, the Commission may be able to identify specific services that would be treated separately from the application of the commercially reasonable legal standard. We seek comment on this approach and how the services below should be considered under such an approach.
- 140. Application to Mobile Broadband. The Commission chose not to apply its no unreasonable discrimination rule to mobile broadband providers in 2010 based on considerations including the rapidly evolving nature of mobile technologies, the increased amount of consumer choice in mobile broadband services, and operational constraints that put greater pressure on the concept of reasonable network management for mobile broadband services. We have tentatively concluded that we will continue that approach in the proposed rules. Alternatively, should the Commission account for different characteristics of mobile service as a factor in its application of the commercially reasonable standard, subject to mobile providers' reasonable network management? How would maintaining our previous approach for mobile broadband affect end users across different demographic groups, including end users who rely solely on mobile broadband for Internet access?
- 141. *Non-exclusive*, *non-affiliated agreements*. AT&T has suggested that the Commission exclude from its review of particular practices any agreement between a broadband provider and an edge provider if the agreement is not exclusive and if the edge provider is not an affiliate of the broadband provider. AT&T explains that subjecting broadband providers to case-by-case scrutiny in such cases "would unnecessarily impede efficient and pro-consumer arms-length commercial dealings." We seek

²⁷¹ Data Roaming Order, 26 FCC Rcd at 5433, para. 45.

²⁷² See generally 2014 Retransmission Order, 29 FCC Rcd 3351.

²⁷³ See Adam Clark Estes, WSJ: The FCC's New Net Neutrality Rules Will OK Pay-to-Play, Gizmodo.com (Apr. 23, 2014), http://gizmodo.com/wsj-the-fccs-new-net-neutrality-rules-will-ok-pay-to-p-1566738354.

²⁷⁴ See supra Section III.E.3.

²⁷⁵ See Open Internet Order, 25 FCC Rcd at 17956-59, paras. 93-98.

²⁷⁶ See supra para. 62.

²⁷⁷ See supra n.228.

²⁷⁸ AT&T Comments at 3. AT&T further explains that this is because, in these situations, the "ISP is neither favoring its own content, applications, or services nor providing a service on an exclusive basis." *Id.* at 12.

comment on whether this approach should be adopted to limit the scope of the commercially reasonable standard and whether it could be made consistent with the protections afforded by the rule.

F. Legal Authority

142. In this Notice, we propose to adopt rules to protect and promote the open Internet. For the reasons set forth below, we believe we have ample authority to do so.²⁷⁹ We propose that the Commission exercise its authority under section 706, consistent with the D.C. Circuit's opinion in *Verizon v. FCC*, to adopt our proposed rules. We also seek comment on the nature and the extent of the Commission's authority to adopt open Internet rules relying on Title II, and other possible sources of authority, including Title III. Additionally, we seek comment on the Commission's authority under any of the legal theories discussed below to address any transition or implementation issues associated with any open Internet rules adopted in this proceeding, such as the effect on existing agreements.²⁸⁰

1. Section 706

143. We seek comment on our authority under section 706.²⁸¹ We interpret sections 706(a) and (b) as independent and overlapping grants of authority that give the Commission the flexibility to encourage deployment of broadband Internet access service through a variety of regulatory methods, including removal of barriers to infrastructure investment and promoting competition in the telecommunications market, and, in the case of section 706(b), giving the Commission the authority to act swiftly when it makes a negative finding of adequate deployment.²⁸² The rules we propose today would be authorized by sections 706(a) and (b) because they would "encourage the deployment" of advanced telecommunications capability by promoting competition in the telecommunications market and removing barriers to infrastructure investment.²⁸³ We also seek comment on the relevant differences between

²⁷⁹ For an in-depth description of the factual basis for the adoption of rules, *see supra* Sections III.A-E.

When implementing requirements in other contexts the Commission has, for example, addressed the impact on preexisting agreements. See, e.g., Promotion of Competitive Networks in Local Telecommunications Markets, WT Docket No. 99-217, Report and Order, 23 FCC Rcd 5385, 5387-91, paras. 8-13 (2008) (prohibiting carriers from entering into contracts that would make them the exclusive provider of telecommunications services in residential multiple tenant environments and that carriers may not enforce existing exclusivity contracts); Exclusive Service Contracts for Provision of Video Services in Multiple Dwelling Units and Other Real Estate Developments, MB Docket No. 07-51, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 20235 (2007) (prohibiting the enforcement of existing exclusivity clauses and the execution of new ones by cable operators and others subject section 628 in the context of multiple dwelling units (MDUs) and other real estate developments); see also, e.g., Amendment of the Commission's Rules Related to Retransmission Consent, MB Docket No. 10-71, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 3351, 3391, para. 66 (2014) (seeking comment on "how elimination of the exclusivity rules would affect existing exclusivity contracts and broadcasters' ability to enforce those contracts").

²⁸¹ Section 706 of the Telecommunications Act of 1996, Pub. L. No. 104-104, § 706, 110 Stat. 56, 153 (1996) (*1996 Act*), as amended in relevant part by the Broadband Data Improvement Act (BDIA), Pub. L. No. 110-385, 122 Stat. 4096 (2008), is now codified in Title 47, Chapter 12 of the United States Code. *See* 47 U.S.C. § 1301 *et seq*.

²⁸² Verizon, 740 F.3d at 637 ("The question, then, is this: Does the Commission's current understanding of section 706(a) as a grant of regulatory authority represent a reasonable interpretation of an ambiguous statute? We believe it does."); *id.* at 641 ("Contrary to Verizon's arguments, we believe the Commission has reasonably interpreted section 706(b) to empower it to take steps to accelerate broadband deployment if and when it determines that such deployment is not reasonable and timely."); *Open Internet Order*, 25 FCC Rcd at 17968-72, paras. 117-23 (articulating a theory of authority under section 706(a)-(b)); Public Knowledge and Common Cause Comments at 27-28.

²⁸³ See supra Sections III.C.2; III.D.2; III.E.2.

sections 706(a) and (b) and how, if at all, those differences should impact our exercise of authority here ²⁸⁴

- 144. To the extent that we rely on our authority under section 706(b), we seek comment on how we should treat the existence of and the findings in the Commission's Broadband Progress Reports for the purposes of this proceeding. Could and should the Commission incorporate findings that satisfy section 706(b) in this proceeding? Finally, we seek comment on the extent to which the disparity between metropolitan areas and rural deployment of broadband or within metropolitan areas should impact our conclusions as to whether advanced telecommunications capability is being reasonably and timely deployed.
- 145. We also seek comment on how to construe the specific terms and definitions in section 706. For example, "advanced telecommunications capability" is defined "without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology." It is clear that broadband Internet access service is such "advanced telecommunications capability," but we also seek comment on what other broadband-enabled services may fall within the definition of "advanced telecommunications capability." Should the Commission interpret the term "advanced telecommunications capability" to require that certain practices accompany a broadband provider's deployment to ensure that end users receive "high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications?" In addition, we note that Congress did not define "deployment." We believe Congress intended this term to be construed broadly, and thus, consistent with precedent, we have interpreted it to include the extension of networks as well as the extension of the capabilities and capacities of those networks.

There are significant differences between the authorities granted in each provision. For example, while both section 706(a) and (b) permit the Commission to enact measures that promote competition in the telecommunications market, section 706(b) permits the Commission to act by promoting competition in the "telecommunications market" while section 706(a) limits the Commission to promoting competition in the "local telecommunications market." Also, while section 706(a) gives the Commission general authority to encourage the deployment of broadband regardless of findings under section 706(b), section 706(b) gives the Commission authority to take "immediate action." *Compare* 47 U.S.C. § 1302(a) ("The Commission . . . shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans . . . by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment."), with 47 U.S.C. § 1302(b) ("If the Commission[] determin[es] [that advanced telecommunications capability is not being deployed to all Americans in a reasonable and timely fashion], it shall take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market.").

²⁸⁵ 47 U.S.C. § 1302(d)(1).

²⁸⁶ See Open Internet Order, 25 FCC Rcd at 17968, para. 117 (""[A]dvanced telecommunications capability," as defined in the statute, includes broadband Internet access."); National Broadband Plan for our Future, GN Docket No. 09-51, Notice of Inquiry, 24 FCC Rcd 4342, 4390, Appx. para. 14 (2009) (stating that "advanced telecommunications capability" includes broadband Internet access); Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, CC Docket No. 98-146, Report, 14 FCC Rcd 2398, 2400, paras. 1, 20 (1999) (stating that section 706 addresses "the deployment of broadband capability"). Even when broadband Internet access is provided as an "information service" rather than a "telecommunications service," see Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs., 545 U.S. 967, 977-78 (2005), it involves "telecommunications." 47 U.S.C. § 153(24).

²⁸⁷ See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, GN Docket No. 11-121, (continued...)

- 146. In section 230(b) of the Communications Act, Congress also set forth statutory "polic[ies] of the United States": to "promote the continued development of the Internet," to promote "technologies which maximize user control over what information is received" over the Internet, and to "preserve the vibrant and competitive free market *that presently exists for the Internet*, unfettered by Federal or State regulation." We continue to believe the Commission's interpretation of section 706 is bolstered by these congressional policies. We seek comment on how the Commission should read section 230(b) in exercising its section 706 authority.
- 147. We also seek comment generally on how the court's decision in *Verizon v. FCC* should inform our exercise of legal authority.²⁹⁰ The D.C. Circuit upheld the Commission's interpretation of its authority under section 706,²⁹¹ concluding that the factual predicate that the Commission had laid justifying its regulations was reasonable and that such a factual predicate was reasonably linked to the Commission's exercise of authority.²⁹² However, because the court determined that the Commission's no-blocking and anti-discrimination rules impermissibly regulated broadband providers as common carriers, the court vacated those rules, and remanded for further proceedings consistent with the opinion.²⁹³ We seek comment generally on how the court's *Verizon* decision should impact our exercise of authority here.²⁹⁴ Are there principles raised in Judge Silberman's separate opinion concurring in part and dissenting in part that are relevant to our exercise of authority as to the new rules proposed, or upon which we otherwise seek comment, here?

2. Title II

148. We seek comment on whether the Commission should rely on its authority under Title II of the Communications Act, ²⁹⁵ including both (1) whether we should revisit the Commission's classification of broadband Internet access service as an information service and (2) whether we should

²⁸⁸ 47 U.S.C. §§ 230(b)(1), (3) (emphasis added).

²⁸⁹ See Open Internet Order, 25 FCC Rcd at 17967, para. 116.

²⁹⁰ See Public Knowledge and Common Cause Comments at 27-28 (discussing the Commission's broad authority under section 706 pursuant to *Verizon v. FCC*). But see generally Full Service Network Comments (arguing that the D.C. Circuit's decision was fatally flawed for a number of reasons).

²⁹¹ Verizon, 740 F.3d at 635 ("[S]ection 706 of the 1996 Telecommunications Act... furnishes the Commission with the requisite affirmative authority to adopt [open Internet] regulations.").

²⁹² *Id.* at 644 ("[T]he Commission's prediction that the *Open Internet Order* regulations will encourage broadband deployment is, in our view, both rational and supported by substantial evidence. . . . [T]he Commission has more than adequately supported and explained its conclusion that edge-provider innovation leads to the expansion and improvement of broadband infrastructure."). *But see id.* at 665 (Silberman J., concurring in part and dissenting in part) ("[T]he Commission's failure to conduct a market power analysis is fatal to its attempt to regulate, because it means that there is inadequate evidence to support the lynchpin of the Commission's economic theory.").

²⁹³ *Id.* at 659 ("[A]lthough we reject Verizon's challenge to the *Open Internet Order*'s disclosure rules, we vacate both the anti-discrimination and the anti-blocking rules.").

²⁹⁴ See generally id.

²⁹⁵ See, e.g., Cogent Comments at 2 (the Commission should use Title II authority); Voices for Internet Freedom Comments at 1 (same); Vonage Comments at 2 (Title II authority and authority under section 706 are complementary); Public Knowledge and Common Cause Comments at 15-18 (section 706 is insufficient to adopt strong open Internet rules, but Title II gives the Commission requisite authority). But see, e.g., American Action Forum Comments at 9 (the Commission should take Title II reclassification off the table).

separately identify and classify as a telecommunications service a service that "broadband providers... furnish to edge providers."²⁹⁶ For either of these possibilities, we seek comment on whether and how the Commission should exercise its authority under section 10 (or section 332(c)(1) for mobile services) to forbear from specific obligations under the Act and Commission rules that would flow from the classification of a service as telecommunications service.

of decisions beginning in 2002, the Commission has classified broadband Internet access service offered over cable modem, ²⁹⁷ DSL and other wireline facilities, ²⁹⁸ wireless facilities, ²⁹⁹ and power lines ³⁰⁰ as an information service, which is not subject to Title II and cannot be regulated as common carrier service. ³⁰¹ In 2010, following the D.C. Circuit's *Comcast* decision, the Commission issued a Notice of Inquiry (*2010 NOI*) that, among other things, asked whether the Commission should revisit these decisions and classify a telecommunications component service of wired broadband Internet access service as a "telecommunications service." ³⁰² The Commission also asked whether it should similarly alter its approach to wireless broadband Internet access service, noting that section 332 requires that wireless services that meet the definition of "commercial mobile service" ³⁰³ be regulated as common carriers

²⁹⁶ Verizon, 740 F.3d at 656.

²⁹⁷ See 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 FCC Rcd 4798, 4824, para. 41 (2002) (Cable Modem Declaratory Ruling), aff'd sub nom. Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs., 545 U.S. 967 (2005).

²⁹⁸ Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities et al., CC Docket Nos. 02-33, 01-337, 95-20, 98-10, WC Docket Nos. 04-242, 05-271, Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 14853, 14863-65, 14909-12, paras. 14-17, 103-06 (2005).

²⁹⁹ Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks, WT Docket No. 07-53, Declaratory Ruling, 22 FCC Rcd 5901, 5909-10, 5912-14, paras. 19-26, 29-33 (2007).

³⁰⁰ United Power Line Council's Petition for Declaratory Ruling Regarding the Classification of Broadband over Power Line Internet Access Service as an Information Service, WC Docket No. 06-10, Memorandum Opinion and Order, 21 FCC Rcd 13281 (2006).

³⁰¹ 47 U.S.C. § 153(24) ("The term 'information service' means the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service."); 47 U.S.C. § 153(50) ("The term 'telecommunications' means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received."); 47 U.S.C. § 153(53) ("The term 'telecommunications service' means the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used."); 47 U.S.C. § 153(51) ("A telecommunications carrier shall be treated as a common carrier under this chapter only to the extent that it is engaged in providing telecommunications services").

³⁰² Framework for Broadband Internet Service, GN Docket No. 10-127, Notice of Inquiry, 25 FCC Rcd 7866 (2010) (2010 NOI). Specifically, the Commission sought comment on whether to classify as a telecommunications service "Internet connectivity," which it defined as "the functions that 'enable [end users] to transmit data communications to and from the rest of the Internet." Id. at 7894, para. 64. The docket opened by the 2010 NOI remains open. To ensure that it remains current, we hereby direct the Wireline Competition Bureau to issue a public notice to refresh the record in that proceeding including the inquiries contained herein.

³⁰³ Commercial mobile service is defined "as any mobile service (as defined in section 153 of this title) that is provided for profit and makes interconnected service available (A) to the public or (B) to such classes of eligible users as to be effectively available to a substantial portion of the public, as specified by regulation by the Commission." 47 U.S.C. § 332(d)(1). The Commission has defined "commercial mobile radio service" or "CMRS" (continued...)

under Title II.³⁰⁴ In response, the Commission received substantial comments on these issues. We now seek further and updated comment on whether the Commission should revisit its prior classification decisions and apply Title II to broadband Internet access service (or components thereof). How would such a reclassification approach serve our goal to protect and promote Internet openness? What would be the legal bases and theories for particular open Internet rules adopted pursuant to such an approach? Would reclassification and applying Title II for the purpose of protecting and promoting Internet openness impact the Commission's overall policy goals and, if so, how?

- 150. What factors should the Commission keep in mind as it considers whether to revisit its prior decisions? Have there been changes to the broadband marketplace that should lead us to reconsider our prior classification decisions? To what extent is any telecommunications component of that service integrated with applications and other offerings, such that they are "inextricably intertwined" with the underlying connectivity service? Is broadband Internet access service (or any telecommunications component thereof) held out "for a fee directly to the public, or to such classes of users as to be effectively available directly to the public?" If not, should the Commission compel the offering of such functionality on a common carrier basis even if not offered as such? For mobile broadband Internet access service, does that service fit within the definition of "commercial mobile service"? We also note that on May 14, 2014, Representative Henry Waxman, Ranking Member of the Committee on Energy and Commerce of the U.S. House of Representatives, sent a letter to Chairman Wheeler proposing an approach to protecting the open Internet whereby the Commission would proceed under section 706 but use Title II as a "backstop authority." We seek comment on the viability of that approach.
- 151. *Title II—Classification of the Broadband Providers' Service to Edge Providers*. Separate from the reclassification of "broadband Internet access service," we seek comment on how the Commission should consider broadband providers' service to edge providers and whether that service (or some portion of it) is subject to Title II regulation. As mentioned above, in *Verizon*, the D.C. Circuit stated that "broadband providers furnish a service to edge providers, thus undoubtedly functioning as

³⁰⁴ 2010 NOI, 25 FCC Rcd at 7907-09, paras. 101-05.

³⁰⁵ *Brand X*, 545 U.S. at 978.

³⁰⁶ 47 U.S.C. § 153(46). A key feature of whether a provider is engaged in common carriage is if it "make[s] capacity available to the public indifferently"; it can also be compelled to offer service on a common carrier basis if "the public interest requires common carrier operation of the proposed facility." *Cable & Wireless PLC*, File No. SCL-96-005, Memorandum Opinion and Order, 12 FCC Rcd 8516, 8522, paras. 14-15 (1997); *see also U.S. Telecom Ass'n v. FCC*, 295 F.3d 1326, 1329 (D.C. Cir. 2002) ("[C]ommon carrier status turns on: (1) whether the carrier 'holds himself out to serve indifferently all potential users'; and (2) whether the carrier allows 'customers to transmit intelligence of their own design and choosing." (citation omitted)); *Virgin Islands Tel. Co. v. FCC*, 198 F.3d 921 (D.C. Cir. 1999); *Nat'l Ass'n of Regulatory Utility Comm'rs v. FCC*, 533 F.2d 601, 608-09 (D.C. Cir. 1976); *Nat'l Ass'n of Regulatory Utility Comm'rs v. FCC*, 525 F.2d 630, 642 (D.C. Cir. 1976). Whether a provider has made a common carriage offering "must be determined on a case-by-case basis." *Bright House Networks, LLC*, *et al. v. Verizon California, Inc., et al.*, File No. EB-08-MD-002, Memorandum Opinion and Order, 23 FCC Rcd 10704, 10717-19, paras. 37-40 (2008) (finding that carriers offered common carriage service despite lacking a tariff, website posting, or any other advertisement, because providers self-certified themselves as common carriers, entered into publicly available interconnection agreements, and obtained state certificates of public convenience and necessity), *aff'd sub nom. Verizon Cal., Inc. v. FCC*, 555 F.3d 270, 275-76 (D.C. Cir. 2009).

³⁰⁷ See 47 U.S.C. § 332; 47 C.F.R. § 20.3.

³⁰⁸ Letter from Rep. Henry Waxman, Ranking Member, Committee on Energy and Commerce, to Thomas Wheeler, Chairman, Federal Communications Commission at 2 (May 14, 2014), http://democrats.energycommerce.house.gov/sites/default/files/documents/Wheeler-Title-II-Backup-Option-2014-5-14.pdf.

edge providers' 'carriers.'"³⁰⁹ We understand such service to include the flow of Internet traffic on the broadband providers' own network, and not how it gets to the broadband providers' networks. The Commission in the *Open Internet Order* understood the 2010 rules to regulate "broadband Internet access service," which the Commission classified as an information service. That service, however, is by definition a "mass-market retail service" providing the capability to send and receive data from "all Internet end points."³¹⁰ Does the "service" contemplated by the court between broadband providers and edge providers fit that definition? We seek comment on whether and, if so how, the Commission should separately identify and classify a broadband service that is furnished by broadband providers' to edge providers in order to protect and promote Internet openness.

- Some have made proposals suggesting that the Commission could apply Title II to such 152 services to achieve our open Internet objectives. For example, on May 5, 2014, Mozilla filed a petition requesting that the Commission (1) recognize remote delivery services in terminating access networks; (2) classify these services as "telecommunications services" under Title II of the Act; and (3) forbear from any "inapplicable or undesirable provisions of Title II" for such services. 311 Mozilla states that, unlike the end-user facing broadband services the Commission has classified as information services, the Commission has not classified the service that broadband Internet providers to remote endpoints, particularly to entities not in privity with the broadband provider. These services, Mozilla argues, can and should be classified as telecommunications services, subject to whatever Title II regulations the Commission deems appropriate.³¹³ Similarly, academics from Columbia University have submitted an alternate proposal to classify Internet-facing services that a broadband provider offers.³¹⁴ This theory would split broadband Internet access service into two components: first, the subscriber's "request [for] data from a third-party provider; and second, the content provider's response to the subscriber."³¹⁵ The proposal would classify the latter "sender-side" traffic, sent in response to a broadband provider's customer's request as a telecommunications service, subject to Title II. 316 According to the proposal, this is a stand-alone offer of telecommunications—transmission between points specified by the end-user. 317 We seek comment on these proposals and other suggestions for how the Commission could identify and classify such services and apply Title II to achieve our goals of protecting and promoting Internet openness.
- 153. *Title II—Forbearance*. If the Commission were to reclassify broadband Internet access service as described above or classify a separate broadband service provided to edge providers as a "telecommunications service," such a service would then be subject to all of the requirements of the Act and Commission rules that would flow from the classification of a service as a telecommunications service or common carrier service. Should the Commission take such an approach, we seek comment on the extent to which forbearance from certain provisions of the Act or our rules would be justified in order

³⁰⁹ *Verizon*, 740 F.3d at 653.

³¹⁰ See 47 C.F.R. § 8.11(a).

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, GN Docket Nos. 09-91, 14-28, WC Docket No. 07-52, at ii, 10-13 (filed May 5, 2014) (Mozilla Petition).

³¹² *Id.* at 6-9.

³¹³ *Id.* at 10-13.

³¹⁴ Letter from Tim Wu and Tejas Narechania, Columbia University to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket No. 14-28 (filed Apr. 14, 2014) (Wu & Narechania *Ex Parte* Letter).

³¹⁵ *Id.*, Attach. at 13.

³¹⁶ *Id.*, Attach. at 13-14.

³¹⁷ *Id.* Attach. at 15; 47 U.S.C. § 153(50).

to strike the right balance between minimizing the regulatory burden on providers and ensuring that the public interest is served.³¹⁸ For mobile broadband services, we seek comment on whether and how the Commission should apply section 332(c)(1) in addition to section 10 forbearance.³¹⁹

- 154. In the *2010 NOI*, the Commission contemplated that, if it were to classify the Internet connectivity component of broadband Internet access service, it would forbear from applying all but a handful of core statutory provisions—sections 201, 202, 208, and 254—to the service.³²⁰ In addition, the Commission identified sections 222 and 255 as provisions that could be excluded from forbearance, noting that they have "attracted longstanding and broad support in the broadband context."³²¹ We received considerable comment in that proceeding and seek further and updated comment.³²² Commenters should list and explain which provisions should be exempt from forbearance and which should receive it in order to protect and promote Internet openness. Commenters should also detail which services should receive forbearance, list the provisions from which they believe the Commission should forbear, and provide justification for the forbearance. Commenters should also define the relevant geographic and product markets in which the services or providers should receive forbearance.
- 155. For mobile broadband services, we also seek comment on the extent to which forbearance should apply, if the Commission were to classify mobile broadband Internet access service as a CMRS service subject to Title II. The *2010 NOI* also asked whether the Commission could and should apply section 332(c)(1) as well as section 10 in its forbearance analysis for mobile services. We received considerable comment in that proceeding and seek further and updated comment here.

3. Other Sources of Authority

156. *Title III.* We further seek comment on the Commission's authority to adopt open Internet rules for mobile broadband services under Title III of the Communications Act. The Supreme Court has found that Title III endows the Commission with "expansive powers" and a "comprehensive mandate to

³¹⁸ Section 10 of the Communications Act provides that the Commission shall forbear from applying a provision of the Act or the Commission's rules to a telecommunications carrier or telecommunications service (or a class thereof) if: (1) enforcement of that provision is not necessary to ensure just, reasonable, and non-discriminatory practices; (2) enforcement is not necessary to protect consumers; and (3) forbearance is consistent with the public interest. 47 U.S.C. § 160(a). "In making the determination under subsection (a)(3) [that forbearance is in the public interest,] the Commission shall consider whether forbearance from enforcing the provision or regulation will promote competitive market conditions, including the extent to which such forbearance will enhance competition among providers of telecommunications services. If the Commission determines that such forbearance will promote competition among providers of telecommunications services, that determination may be the basis for a Commission finding that forbearance is in the public interest." 47 U.S.C. § 160(b).

³¹⁹ 47 U.S.C. § 332(c)(1). Under that provision, the Commission may render provisions other than section 201, 202, or 208 inapplicable "only if the Commission determines that—(i) enforcement of such provision is not necessary in order to ensure that the charges, practices, classifications, or regulations for or in connection with that service are just and reasonable and are not unjustly or unreasonably discriminatory; (ii) enforcement of such provision is not necessary for the protection of consumers; and (iii) specifying such provision is consistent with the public interest."

³²⁰ 2010 NOI, 25 FCC Rcd at 7895, para. 68.

³²¹ *Id*.

³²² See Letter from Robert Quinn, AT&T to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket No. 14-28 at 1 (filed May 14, 2014) (stating that "forbearance would *not* address the many serious implications of reclassification") (emphasis in original).

³²³ 2010 NOI, 25 FCC Rcd at 7909, para. 104.

'encourage the larger and more effective use of radio in the public interest." Section 303 of the Act, in particular, authorizes the Commission to exercise its authority as "the public interest, convenience, and necessity requires" to "[p]rescribe the nature of the service to be rendered by each class of licensed stations and each station within any class," and to establish obligations, not inconsistent with law, as may be necessary to carry out the provisions of the Act. The further directs the Commission to "generally encourage the larger and more effective use of radio in the public interest." Likewise, section 316 of the Act authorizes the Commission to adopt "new conditions on existing licensees" when taking such action will "promote the public interest, convenience, and necessity." The Commission may exercise this authority on a license-by-license basis or through a rulemaking, the affected licenses were awarded at auction. The action will "promote the public interest on through a rulemaking, the affected licenses were awarded at auction.

- 157. We find that these provisions provide authority for the Commission to adopt open Internet rules for mobile broadband service providers. Particularly, we find that it is within our authority to "prescribe the nature of the service to be rendered by each class of licensed stations and each station within any class," consistent with what the "public interest, convenience, and necessity requires" to apply open Internet rules to mobile broadband service providers. We seek comment on this interpretation of our Title III authority.
- 158. Other Sources of Authority. We seek comment on other sources of authority that the Commission may utilize to underpin the adoption of these rules. For example, the *Open Internet Order* delineated a number of arguments for authority under a variety of statutory provisions.³³¹ We also seek comment on the theory that the Commission may underpin open Internet rules by using its discretion to define the scope of common carriage.³³² In addition, we seek comment on the Commission's authority to adopt rules under the World Trade Organization's Basic Agreement on Trade in Telecommunications.³³³ We seek comment on the efficacy of those, and other justifications for the rules we propose adopting here.

4. Constitutional Considerations

159. Finally we seek comment on other legal limitations and barriers to adoption of the rules we propose today, including First Amendment and Due Process considerations. In the *Open Internet Order*, the Commission concluded that "broadband providers typically are best described not as 'speakers,' but rather as conduits for speech," and that the open Internet rules therefore did not implicate

³²⁴ CNBC v. United States, 319 U.S. 190 (1943) (quoting 47 U.S.C. § 303(g)); see also Cellco, 700 F.3d at 542 (upholding the Commission's authority to require licensees to offer data roaming arrangements on commercially reasonable terms and conditions).

³²⁵ 47 U.S.C. § 303(b), (r).

³²⁶ 47 U.S.C. § 303(g).

³²⁷ 47 U.S.C. § 316.

³²⁸ See WBEN Inc. v. United States, 396 F.2d 601, 618 (2d Cir. 1968).

³²⁹ See 47 U.S.C. § 309(j)(6); Celtronix Telemetry v. FCC, 272 F.3d 585 (D.C. Cir. 2001).

³³⁰ 47 U.S.C. § 303(b).

The Commission alternatively relied on a variety of provisions under Titles I, II, III, and VI as authority for adopting the rules. *See Open Internet Order*, 25 FCC Rcd at 17972-81, paras. 124-137.

³³² See Public Knowledge and Common Cause Comments 22-27.

³³³ See generally Jennifer A. Manner and Alejandro Hernandez, An Overlooked Basis of Jurisdiction for Net Neutrality: The World Trade Organization Agreement on Basic Telecommunications Services, 22 CommLaw Conspectus 60 (2014).

broadband providers' First Amendment rights.³³⁴ The Commission also found that even if the rules "did implicate expressive activity, they would not violate the First Amendment", because they would advance an important government interest—"ensur[ing] the public's access to a multiplicity of information sources and maximiz[ing] the Internet's potential to further the public interest"—without burdening "substantially more speech than is necessary." We seek comment on these findings. We do not anticipate constitutional, statutory, or other legal barriers to adopting the rules we propose today, but we nonetheless seek comment on these matters. Are there modifications we could make to the proposals we make today that would avoid constitutional questions?

G. Other Laws and Considerations

160. The *Open Internet Order* provided that the open Internet rules did not alter broadband providers' rights or obligations with respect to other laws or safety and security considerations.³³⁷ The Commission further established that the rules did not prohibit broadband providers from making reasonable efforts to address transfers of unlawful content and unlawful transfers of content.³³⁸ We tentatively conclude that this continues to be the correct approach in light of the rules proposed in today's Notice. We therefore propose to retain these regulations without modification. We seek comment on this tentative conclusion.

H. Enforcement and Dispute Resolution

1. Background

1.41 of the Commission's rules and promulgated a set of formal complaint rules.³³⁹ The formal complaint rules give the Commission flexibility to shift the burden of proof or production where appropriate and to structure and streamline the process to the extent possible.³⁴⁰ Due to the technical nature of potential disputes, however, the *Open Internet Order* stressed the importance of direct negotiations and consultation with independent technical bodies in hope that parties would be able to resolve disputes before availing themselves of the complaint processes.³⁴¹ Thus, the policy of the Commission has been to encourage the filing of informal, rather than formal, complaints, and thus it was not surprising that the Commission did not receive any formal complaints following the adoption of the *Open Internet Order*. As noted above, the Commission has received many informal complaints from consumers alleging violations of the *Open Internet Order*. In addition, the Commission takes notice of public commentary and events, which may lead the Enforcement Bureau to initiate its own investigation. We seek comment on the efficiency and functionality of the complaint processes adopted in, and used pursuant to, the *Open Internet Order*

2. Designing an Effective Enforcement Process

162. The *Verizon* decision and our earlier data roaming rules provide a blueprint for the creation of a dispute resolution process to govern the rules we propose today to protect and promote the open Internet. Of course, there are significant potential differences between the data roaming and open

³³⁴ Open Internet Order, 25 FCC Rcd at 17982, para. 141.

³³⁵ *Id.* at 17983, para. 145.

³³⁶ *Id.* at 17984, para. 146.

³³⁷ 47 C.F.R. § 8.9; Open Internet Order, 25 FCC Rcd at 17963-64, paras, 108-10.

³³⁸ 47 C.F.R. § 8.9; *Open Internet Order*, 25 FCC Rcd at 17964-65, para. 111.

³³⁹ Open Internet Order, 25 FCC Rcd at 17986-89, paras, 153-59; 47 C.F.R. §§ 8.12-17.

³⁴⁰ Open Internet Order, 25 FCC Rcd at 17988, para. 157.

³⁴¹ See id. at 17986, 17988, paras. 151, 159.

Internet environments. For example, in *Cellco*, the D.C. Circuit considered a circumstance in which an identified party, a wireless carrier, would desire to enter into a business arrangement with another identified party, another wireless carrier. The rule at issue was designed to create circumstances that both incented individualized bargaining and, in specific circumstances, curbed the limits of such negotiation where necessary to serve the public interest. A similar circumstance could arise in the open Internet context, if for example, an app developer wished to enter into a contractual arrangement with a broadband provider. But it is just as possible that the entity that feels aggrieved by an alleged violation of an open Internet rule does not seek a direct contractual relationship with a broadband provider. That could arise, for example, if a website is blocked or if an edge provider feels that it is being harmed by differential treatment afforded by a broadband provider to its own affiliate. For this reason, the dispute resolution mechanism adopted by the Commission to enforce our proposed open Internet rules should be designed to operate between parties that do not necessarily desire to enter into a binding agreement.

- 163. We tentatively conclude that an effective institutional design for the rules proposed in today's Notice must include at least three elements. *First*, there must be a mechanism to provide legal certainty, so that broadband providers, end users and edge providers alike can better plan their activities in light of clear Commission guidance. *Second*, there must be flexibility to consider the totality of the facts in an environment of dynamic innovation. *Third*, there must be effective access to dispute resolutions by end users and edge providers alike. We seek comment on these elements. Are there others that should be considered? Should any be eliminated? What forms of dispute resolution would be the best strategy to implement "data-driven decision-making"?³⁴²
- 164. We believe we have ample legal authority to design an effective enforcement and dispute resolution process, whether the Commission ultimately relies on section 706, Title II, or another source of legal authority. We seek comment on whether and how, if at all, the source of the Commission's legal authority would affect our dispute resolution and enforcement proposals.³⁴³

a. Legal Certainty

The Commission has a responsibility to provide certainty, guidance, and predictability to the marketplace as we protect and promote the open Internet. The most important form of guidance is, of course, the adoption by the Commission of a particular legal standard in the forthcoming rulemaking. As with the "commercially reasonable" standard employed in our data roaming rule, the purpose of such a legal standard is allow broadband providers, end users, and edge providers to measure broadbandprovider conduct against a known rule of law, both prospectively and retroactively. Under the existing rules, formal complaints would also result in Commission orders that would both decide a specific complaint and provide useful guidance on the application of our proposed open Internet rules particularly in those cases where the adjudicated set of facts is representative of a larger industry practice. What other forms of guidance would be helpful? For example, is there value in establishing a businessreview-letter approach similar to that of the Antitrust Division of the Department of Justice, whereby entities concerned about certain practices under the new rules may ask the Commission for a statement of its current enforcement intentions with respect to that conduct and by which the Commission would publish both the request for review and its response?³⁴⁴ If adopted, would it make sense to have such a prospective review process be administered jointly by the Enforcement Bureau and the Office of General Counsel, or should such prospective reviews be considered by the full Commission? Should such guidance be binding or non-binding? How might petitions for declaratory ruling be helpful?

³⁴² Phil Weiser, *Institutional Design*, *FCC Reform and the Hidden Side of the Administrative States*, *Working Paper 09-01* 38 (2009), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1336820.

³⁴³ See supra Section III.F.

³⁴⁴ See 28 C.F.R. § 50.6; Dep't. of Justice, *Pilot Program Announced to Expedite Business Review Process* (1992), http://www.justice.gov/atr/public/busreview/201659a.pdf.

- Non-Binding Staff Opinions. Are there other mechanisms by which the Commission can 166 provide guidance before broadband providers initiate practices that are within the scope of the open Internet rules? For example, the Commission could designate certain staff to offer parties non-binding views on the likelihood that a particular practice by a broadband provider is commercially reasonable or commercially unreasonable (assuming that were the applicable legal standard ultimately adopted). The Commission has some experience with this non-binding, advisory approach to interpretation of its rules.³⁴⁵ While this type of informal guidance from staff is not binding, it may provide parties with helpful information as they consider whether and how to resolve a dispute privately and outside of the complaint process. Should we establish a similar process for helping parties anticipate issues or resolve disputes that might arise under our proposed open Internet rules? If so, should the non-binding guidance be made public in any way, or should it provide a confidential basis for early consultation? We emphasize that these sorts of non-binding processes would always be in addition to, and not in lieu of, the right of parties to seek binding determinations from the Commission through the formal or informal complaint process, declaratory rulings, or other mechanisms we adopt to resolve disputes and allegations of violations of our open Internet rules.
- 167. *Enforcement Advisories*. Another type of guidance can come in the form of enforcement advisories. For example, the Enforcement Bureau and the Office of General Counsel issued an enforcement advisory in 2011, providing additional insight into the application of the transparency rule.³⁴⁶ Is it helpful to have these bureaus issue such advisories periodically where issues of potential general application come to, or are brought to, their attention? Should such enforcement advisories be considered binding policy of the Commission, or merely a recitation of staff views?

b. Flexibility

168. Our process for promoting and protecting Internet openness through the rules we propose today must be flexible enough to account for the totality of circumstances, including Internet evolution and innovation from all sources over time. In the *Open Internet Order*, the Commission stated that it would make certain determinations on a case-by-case basis.³⁴⁷ The Commission also stated in the *Data Roaming Order* that it would determine whether the terms and conditions of a proffered data roaming arrangement were commercially reasonable on a case-by-case basis, taking into consideration the totality of the circumstances.³⁴⁸ Based on the Commission's precedent in using this decision-making process, we tentatively conclude that we will adopt a similar case-by-case analysis and consider the totality of the circumstances to consider alleged violations of our proposed open Internet rules. Such an approach would, for example, allow the Commission to consider any sources of innovation when analyzing whether conduct meets the legal standard ultimately adopted by the Commission. Moreover, this approach helps to ensure that, as new circumstances exist, the Commission and interested parties will be advantaged by a culture of learning that, drawing on the strengths of common-law reasoning, reflects the experiences of the present, as well as the logic of the past.³⁴⁹ We seek comment on whether the

³⁴⁵ See Federal Communications Commission, Market Disputes Resolution Division, http://www.fcc.gov/encyclopedia/market-disputes-resolution-division (last visited Apr. 24, 2014).

³⁴⁶ FCC Enforcement Bureau and Office of General Counsel Issue Advisory Guidance for Compliance with Open Internet Transparency Rule, GN Docket No. 09-191, WC Docket No. 07-52, Public Notice, 26 FCC Rcd 9411 (Enforcement Bur./Office Gen. Counsel 2011).

³⁴⁷ See supra para. 61.

³⁴⁸ Data Roaming Order, 26 FCC Rcd at 5432, para, 42.

³⁴⁹ See, e.g., Oliver Wendell Holmes, Jr., The Common Law at 1 (1881): "The life of the law has not been logic: it has been experience. The felt necessities of the time, the prevalent moral and political theories, intuitions of public policy, avowed or unconscious, even the prejudices which judges share with their fellow-men, have had a good deal more to do than the syllogism in determining the rules by which men should be governed. The law embodies the story of a nation's development through many centuries, and it cannot be dealt with as if it contained only the

combination of a certain legal standard and a case-by-case approach provides the best means of both providing guidance and cabining administrative discretion, while ensuring that a system of dispute resolution is both focused on facts and founded on the strengths of common-law reasoning.

169. Fact Finding Processes. In implementing either an informal or formal complaint process, how should the Commission structure its fact-finding processes? What level of evidence should be required in order to bring a claim? Are there other circumstances where initial pleading standards or burdens of production should be either higher or lower? In general, what is the showing required for the burden of production shift from the party bringing the claim to the other party in a dispute? Should interim relief be available? Should the process permit parties to seek expedited treatment of claims and, if so, under what circumstances?

c. Effective Access to Dispute Resolution

- 170. To be effective in protecting and promoting Internet openness, the process for enforcing the rules we propose today must be accessible to a diverse array of affected parties. As noted above, the Open Internet Order contemplated informal and formal complaints but did not include any alternative mechanisms for either providing guidance beforehand or resolution in the wake of a challenge to an existing practice. But, as also noted above, the rules proposed in today's Notice will operate in an environment in which a complaining party may not have sought, or may not even want, to enter into a contractual arrangement with a broadband provider. Moreover, the ability of edge providers to effectively access a dispute resolution is important to the administrative effectiveness of any legal regime that the Commission might adopt. To what extent should the structure of edge provider market segments impact the kind of regime that the Commission adopts? For example, although 17 broadband access providers accounted for about 93 percent of U.S. retail subscribers in 2013, 350 near the end of that year there were almost 900 app developers that each served more than one million active users globally. ³⁵¹ And app developers as a group may be quite a bit smaller than broadband providers; one estimate in 2013 calculated that 65 percent of app developers garner less than \$35,000 per year. Moreover, individuals are themselves quite capable of serving as edge providers, for example aspiring musicians who upload videos to sites such as YouTube.³⁵³
- 171. How can a dispute resolution system be best structured to account for individuals and small businesses that may not have the same legal resources and effective access to the Commission as broadband providers? We propose to create an ombudsperson whose duty will be to act as a watchdog to protect and promote the interests of edge providers, especially smaller entities. Should initial pleading or procedural requirements be adopted that make access to Commission processes by individuals or small businesses less cumbersome?

³⁵⁰ Jeff Baumgartner, *Top U.S. MSO's & Telcos Added 2.6M Broadband Subs in 2013*, Multichannel News (Mar. 17, 2014), http://www.multichannel.com/news/technology/top-us-msos-telcos-added-26m-broadband-subs-2013/325549.

³⁵¹ Tony Danova, *There Are Almost 900 Different App Developers That Have Over 1 Million Active Users*, Business Insider (Nov. 11, 2013), http://www.businessinsider.com/there-are-almost-900-different-app-developers-that-have-over-1-million-active-users-2013-11.

³⁵² Scott Austin, *The Surprising Numbers Behind Apps*, Wall Street Journal Digits Blog (Mar. 11, 2013), http://blogs.wsj.com/digits/2013/03/11/the-surprising-numbers-behind-apps/.

³⁵³ Leigh Goessl, *How Musicians Can Use the Internet to Increase Exposure*, Entertainment: Scene 360 (Jan. 1, 2014), http://www.entertainmentscene360.com/index.php/how-musicians-can-use-the-internet-to-increase-exposure-31667/.

3. Complaint Processes, Enforcement, and Additional Forms of Dispute Resolution

- 172. Complaint Processes. We tentatively conclude that the same three means by which the Commission focused on potential open Internet violations after the adoption of the Open Internet Order, namely self-initiated investigation, informal complaints, and formal complaints, should be used as well to enforce any new open Internet rules. We seek comment on this tentative conclusion. Are there ways we can improve our informal complaint process to make it easier to access and more effective, especially for consumers and small businesses with limited resources? For example, should the Commission create a separate Open Internet complaint category for consumers filing informal complaints under the open Internet rules? Should the Commission permit individuals to report possible noncompliance with our Open Internet rules anonymously or take other steps to protect the identity of individuals who may be concerned about retaliation for raising concerns?
- 173. *Enforcement*. We tentatively conclude that enforcement of the transparency rule and any enhanced transparency rule that is adopted in this proceeding should proceed under the same dispute mechanisms that will apply to the proposed no-blocking rule and the legal standard for provider practices ultimately adopted by the Commission. We also tentatively conclude that violations of the rules would be subject to forfeiture penalties, as appropriate, under the Act. We seek comment on these tentative conclusions.
- 174. Additional Forms of Dispute Resolution—Alternative Dispute Resolution. In addition to the Commission processes noted above to provide guidance, flexibility, and access, we seek comment on whether additional dispute resolutions should be adopted. Should we adopt measures to require or encourage disputes over the legality of broadband provider practices to be resolved through alternative dispute resolution processes, such as arbitration? Would such an approach be sufficiently accessible to smaller edge providers, or would a different dispute resolution process be more appropriate? Are there any legal considerations, limitations, or concerns that the Commission should consider with adopting an alternative dispute resolution procedure, including arbitration or mediation by a third party?³⁵⁴ We note that under our informal dispute resolution procedures, Commission staff can mediate disputes if parties voluntarily request such a process. During such mediations, for instance, the staff may ask parties to submit their best offers to facilitate negotiations. We also can adopt specific rules to determine appropriate remedies and rapid resolution of formal complaints, including a requirement that parties provide their best and final offers to help Commission staff determine an appropriate remedy if a violation of the rule is found.³⁵⁵ We seek comment on the benefits and costs of such an approach in this context.
- 175. Additional Forms of Dispute Resolution—Multistakeholder Processes. We also seek comment on whether a multistakeholder approach to the enforcement of our proposed open Internet rules would work in this context, in whole or in part. For example, should the Commission provide an initial forum for discussion and thereafter encourage stakeholders, should they so choose, to independently develop standards that they consider to meet the governing legal standards? Such standards might then be shared with the Commission for consideration, or the stakeholders might publicize their proposed standards and encourage industry to use them as best practices. If the Commission employed a model similar to that of NTIA's multistakeholder privacy process, are there lessons we can learn from that

³⁵⁴ For example, under the Alternative Dispute Resolution Act, an agency "may not require any person to consent to arbitration as a condition of entering into a contract or obtaining a benefit." 5 U.S.C. § 575(a)(3). We note, however, that this restriction does not prevent the Commission from requiring parties to submit to third-party arbitration so long as the arbitration is subject to *de novo* review by the Commission. *See, e.g., Comcast Corp.*, *Petition for Declaratory Ruling that The America Channel is not a Regional Sports Network*, File No. CSR-7108, Order, 22 FCC Rcd 17938, 17948, para. 4, n.13 (2007).

³⁵⁵ In the *Data Roaming Order*, the Commission reserved the right to require both parties to provide their best and final offers to help Commission staff determine an appropriate remedy if a violation of the rule was found. *Data Roaming Order*, 26 FCC Rcd 5411, 5450-51, paras. 79, 83.

experience?³⁵⁶ How can a multistakeholder process best further the goals of providing guidance, flexibility, and access?

176. Additional Forms of Dispute Resolution—Technical Advisory Groups. We also seek comment on whether and how the Commission should incorporate the expertise of technical advisory groups into a new open Internet framework in a manner that could serve the goals of providing guidance, flexibility and access. For example, should we invite the Open Internet Advisory Committee (OIAC), the Broadband Internet Technical Advisory Group (BITAG), the Internet Engineering Task Force (IETF), or the North American Network Operators Group (NANOG) to recommend to the Commission or public more generally industry best practices or other codes of conduct that would either serve as presumptive safe harbors and/or help determine whether a broadband provider is in compliance with our open Internet rules? Or, rather than asking industry groups and other interested parties to play a role ex ante, should the Commission instead ask them generally, or specific groups in particular, to weigh in on specific disputes once they are brought to the Commission's attention? We seek comment generally on how the inclusion of advisory groups might strengthen the open Internet framework and reduce the burdens of compliance. Similarly, we seek comment on the potential value of allowing providers to opt into voluntary codes of conduct or other suggested best practices that may serve as presumptive safe harbors.

IV. PROCEDURAL MATTERS

A. Paperwork Reduction Act Analysis

177. This document contains proposed new information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

B. Initial Regulatory Flexibility Analysis

178. As required by the Regulatory Flexibility Act of 1980 (RFA),³⁵⁹ the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) for this Notice of Proposed Rulemaking, of the possible significant economic impact on small entities of the policies and rules addressed in this document. The IRFA is set forth in Appendix B. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments

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³⁵⁶ For example, the Department of Commerce directed the NTIA to convene multistakeholder processes to develop legally enforceable codes of conduct specifying how consumer data privacy rules should apply in specific business contexts. NTIA's role in the privacy multistakeholder process is to "help the parties reach clarity on what their positions are and whether there are options for compromise toward consensus, rather than substituting [the NTIA's] own judgment." The White House, *Consumer Data Privacy in a Networked World: A Framework for Protecting Privacy and Promoting Innovation in the Global Digital Economy* 23-26, 27 (Feb. 2012), http://www.whitehouse.gov/sites/default/files/privacy-final.pdf.

³⁵⁷ Open Internet Order, 25 FCC Rcd at 17989, para. 162. The Open Internet Advisory Committee is an inclusive and transparent body comprised of a balanced group including consumer advocates; Internet engineering experts; content, application, and service providers; network equipment and end-user-device manufacturers and suppliers; investors; broadband service providers; and other parties the Commission may deem appropriate. The Committee aids the Commission in tracking developments with respect to the freedom and openness of the Internet, including technical standards and issues relating to mobile broadband and specialized services. The Committee reports to the Commission and make recommendations it deems appropriate concerning the open Internet framework. *Id.*

³⁵⁸ 2013 OIAC Annual Report at 39-46 (AT&T Face Time Case Study).

³⁵⁹ See 5 U.S.C. § 603.

on the Notice indicated on the first page of this document. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this Notice of Proposed Rulemaking, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).³⁶⁰

C. Comment Filing Procedures

- 179. Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).
 - Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://fjallfoss.fcc.gov/ecfs2/.
 - Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of *before* entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.
- 180. People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

D. Ex Parte Rules

181. This proceeding shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules. 161 Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to

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³⁶⁰ See 5 U.S.C. § 603(a).

³⁶¹ 47 C.F.R. §§ 1.1200 et seq.

such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

E. Contact Person

182. For further information about this rulemaking proceeding, please contact Kristine Fargotstein, Competition Policy Division, Wireline Competition Bureau, at (202) 418-2774.

V. ORDERING CLAUSES

- 183. Accordingly, IT IS ORDERED, pursuant to sections 1, 2, 4(i)-(j), 303 and 316 of the Communications Act of 1934, as amended, and section 706 of the Telecommunications Act of 1996, as amended, 47 U.S.C. §§ 151, 152, 154(i)-(j), 303, 316, 1302, that this Notice of Proposed Rulemaking IS ADOPTED.
- 184. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch Secretary

APPENDIX A

Proposed Rules

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

PART 8 – PROTECTING AND PROMOTING THE OPEN INTERNET

Sec.

- 8.1 Purpose.
- 8.3 Transparency.
- 8.5 No Blocking.
- 8.7 No Commercially Unreasonable Practices.
- 8.9 Other Laws and Considerations.
- 8.11 Definitions.

AUTHORITY: 47 U.S.C. §§ 151, 152, 154(i)-(j), 303, 316, 1302

§ 8.1 Purpose.

The purpose of this Part is to protect and promote the Internet as an open platform enabling consumer choice, freedom of expression, end-user control, competition, and the freedom to innovate without permission, and thereby to encourage the deployment of advanced telecommunications capability and remove barriers to infrastructure investment.

§ 8.3 Transparency.

- (a) A person engaged in the provision of broadband Internet access service shall publicly disclose accurate information regarding the network management practices, performance, and commercial terms of its broadband Internet access services, in a manner tailored (i) for end users to make informed choices regarding use of such services, (ii) for edge providers to develop, market, and maintain Internet offerings, and (iii) for the Commission and members of the public to understand how such person complies with the requirements described in sections 8.5 and 8.7 of this chapter.
- (b) In making the disclosures required by this section, a person engaged in the provision of broadband Internet access service shall include meaningful information regarding the source, timing, speed, packet loss, and duration of congestion.
- (c) In making the disclosures required by this section, a person engaged in the provision of broadband Internet access service shall publicly disclose in a timely manner to end users, edge providers, and the Commission when they make changes to their network practices as well as any instances of blocking, throttling, and pay-for-priority arrangements, or the parameters of default or "best effort" service as distinct from any priority service.

§ 8.5 No Blocking.

A person engaged in the provision of fixed broadband Internet access service, insofar as such person is so engaged, shall not block lawful content, applications, services, or non-harmful devices, subject to reasonable network management.

A person engaged in the provision of mobile broadband Internet access service, insofar as such person is so engaged, shall not block consumers from accessing lawful websites, subject to reasonable network

management; nor shall such person block applications that compete with the provider's voice or video telephony services, subject to reasonable network management.

§ 8.7 No Commercially Unreasonable Practices.

A person engaged in the provision of fixed broadband Internet access service, insofar as such person is so engaged, shall not engage in commercially unreasonable practices. Reasonable network management shall not constitute a commercially unreasonable practice.

§ 8.9 Other Laws and Considerations.

Nothing in this part supersedes any obligation or authorization a provider of broadband Internet access service may have to address the needs of emergency communications or law enforcement, public safety, or national security authorities, consistent with or as permitted by applicable law, or limits the provider's ability to do so.

Nothing in this part prohibits reasonable efforts by a provider of broadband Internet access service to address copyright infringement or other unlawful activity.

§ 8.11 Definitions.

- (a) <u>Block</u>. The failure of a broadband Internet access service to provide an edge provider with a minimum level of access that is sufficiently robust, fast, and dynamic for effective use by end users and edge providers.
- (b) <u>Broadband Internet access service</u>. A mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints, including any capabilities that are incidental to and enable the operation of the communications service, but excluding dial-up Internet access service. This term also encompasses any service that the Commission finds to be providing a functional equivalent of the service described in the previous sentence, or that is used to evade the protections set forth in this Part.
- (c) <u>Edge Provider</u>. Any individual or entity that provides any content, application, or service over the Internet, and any individual or entity that provides a device used for accessing any content, application, or service over the Internet.
- (d) End User. Any individual or entity that uses a broadband Internet access service.
- (e) <u>Fixed broadband Internet access service</u>. A broadband Internet access service that serves end users primarily at fixed endpoints using stationary equipment. Fixed broadband Internet access service includes fixed wireless services (including fixed unlicensed wireless services), and fixed satellite services.
- (f) <u>Mobile broadband Internet access service</u>. A broadband Internet access service that serves end users primarily using mobile stations.
- (g) <u>Reasonable network management</u>. A network management practice is reasonable if it is appropriate and tailored to achieving a legitimate network management purpose, taking into account the particular network architecture and technology of the broadband Internet access service.

APPENDIX B

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities from the policies and rules proposed in this Notice of Proposed Rulemaking (Notice). The Commission requests written public comment on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Notice provided on the first page of the Notice. The Commission will send a copy of the Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the Notice and IRFA (or summaries thereof) will be published in the Federal Register.

A. Need for, and Objectives of, the Proposed Rules

- With this Notice, the Commission is directly responding to the remand by the U.S. Court of Appeals for the D.C. Circuit in Verizon v. FCC of portions of the Commission's 2010 Open Internet *Order* and proposing enforceable rules to protect and promote the open Internet.⁴ The Notice seeks comment on a variety of issues relating to the Commission's stated objective of protecting and promoting an open Internet. The Internet's openness promotes innovation, investment, competition, free expression and other national broadband goals. It is also critical to the Internet's ability to serve as a platform for speech and civic engagement and can help close the digital divide by facilitating the development of diverse content, applications, and services. The Commission has specifically found that the Internet's openness enables a "virtuous circle of innovation in which new uses of the network—including new content, applications, services, and devices—lead to increased end-user demand for broadband, which drives network improvements, which in turn lead to further innovative network uses." However, as the Commission has previously found, broadband providers have both the incentive and ability to limit Internet openness. As discussed in the Notice, the Commission is seeking comment on proposed open Internet rules that will protect against the harms identified in the 2010 Open Internet Order, while fostering all sources of innovation on the collection of networks known as the Internet.⁶ The Notice asks for comment in a variety of specific areas and sets forth proposals in the following six key areas: scope of the proposed rules, enhancement of the existing transparency rule, a no-blocking rule, an enforceable rule designed to protect the open Internet that is not per se common carriage, the best source of legal authority for protection of Internet openness and an enforcement and dispute resolution process.
- 3. First, the Notice proposes to retain the same definitions and scope as the 2010 rules. The Notice seeks comment, however, on whether the Commission should change the scope of the proposed rules as applied to the following: specifically identified services, enterprise services, Internet traffic exchange, specialized services, and mobile services. The Notice also proposes to interpret "reasonable network management" under the same framework adopted in the 2010 *Open Internet Order* and seeks comment on developing the scope of "reasonable network management" on a case-by-case basis under the proposed rules.

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-12, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² See 5 U.S.C. § 603(a).

³ *Id*.

⁴ See Notice Section III; Verizon v. FCC, 740 F.3d 623 (D.C. Cir. 2014).

⁵ Open Internet Order, 25 FCC Rcd at 17910-11, para. 14.

⁶ See Notice Section III. A.

- 4. Second, the Notice proposes enhancements to the Commission's existing transparency rule, which was upheld by the D.C. Circuit. The Notice seeks comment on whether disclosures of broadband providers' network management practices, performance, and terms and conditions that are specifically tailored to the needs of affected parties would better ensure that consumers, edge providers, and the Internet community at large have the information they need to understand the services they are receiving and to monitor practices that could undermine the open Internet than the existing rule The Notice seeks comment on the burdens of enhanced transparency on broadband providers and specifically asks if there are ways to minimize these potential costs and burdens.
- 5. Third, the Notice proposes adopting the text of the no-blocking rule from the 2010 *Open Internet Order*, with a revised rationale, in order to ensure that all end users and edge providers can enjoy the use of robust, fast and dynamic Internet access. To address the ongoing concerns with the harmful effects that blocking of Internet traffic would have on Internet openness and to competition in adjacent markets, the Notice seeks comment on a draft no-blocking rule that would allow individualized bargaining above a minimum level of access to a broadband provider's subscribers, which the D.C. Circuit suggested would be permissible and take the rule out of the realm of common carriage regulation. The Notice proposes a variety of ways to establish a minimum level of access under the proposed no-blocking rule and seeks comment on those interpretations. Alternatively, the Notice seeks comment on whether the Commission should adopt a no-blocking rule that either itself prohibits broadband providers from entering into priority agreements with edge providers or acts in combination with a separate rule prohibiting such conduct. Additionally, consistent with the 2010 *Open Internet Order*, the Notice proposes to apply the proposed no-blocking rule differently to mobile broadband providers than to fixed broadband providers and seeks comment on that approach.
- Fourth, where conduct would otherwise be permissible under the no-blocking rule, the Notice proposes a separate rule that requires broadband providers to adhere to an enforceable legal standard of commercially reasonable practices. The Notice tentatively concludes that the Commission should adopt a revised rule that, consistent with the court's decision, may permit broadband providers to engage in individualized practices, while prohibiting those broadband provider practices that threaten to harm Internet openness. The Commission's proposed approach contains three essential elements: (1) an enforceable legal standard of conduct barring broadband provider practices that threaten to undermine Internet openness, providing certainty to network providers, end users, and edge providers alike, (2) clearly established factors that give additional guidance on the kind of conduct that is likely to violate the enforceable legal standard, and (3) encouragement of individualized negotiation and, if necessary, a mechanism to allow the Commission to evaluate challenged practices on a case-by-case basis, thereby providing flexibility in assessing whether a particular practice comports with the legal standard. The Notice proposes that the concept of reasonable network management would be treated separately from the application of the commercially reasonable practices legal standard and seeks comment on this approach. The Notice asks how harm can best be identified and prohibited and whether certain practices, like paid prioritization, should be barred altogether. The Notice also seeks comment on whether the Commission should consider current technical characteristics, industry practices, and the impact on consumers, among other factors, when evaluating commercially reasonable practices.
- 7. Fifth, the Notice proposes to rely on section 706 of the Telecommunications Act of 1996 as the source of authority for the proposed rules. It seeks comment, however, on the best source of authority for protecting Internet openness, whether section 706, Title II of the Communications Act of 1934, as amended, and/or other sources of legal authority such as Title III of the Communications Act for wireless services. With respect to the prospect of proceeding under Title II, the Notice seeks comment on whether and how the Commission should exercise its authority under section 10 of the Act—or section 332(c)(1) for mobile services—to forbear from specific Title II obligations that would flow from the classification of a service as telecommunications service.
- 8. Sixth, the Notice proposes a multi-faceted dispute resolution process to provide effective access for end users, edge providers, and broadband network providers alike and the creation of an ombudsperson to act as a watchdog to represent the interests of consumers, start-ups and small

businesses. The Notice seeks comment on the level of flexibility needed for such approaches and, specifically, how the Commission can ensure that the process is accessible by end users and edge providers, including small entities. The Notice also proposes that should the Commission ultimately adopt one of the proposed dispute mechanisms, then enforcement of the existing transparency rule and any enhancements to that rule would proceed under the same manner as enforcement of the Commission's other proposed open Internet rules if adopted.

B. Legal Basis

9. The legal basis for any action that may be taken pursuant to the Notice is contained in sections 1, 2, 4(i)-(j), 303, and 316, of the Communications Act of 1934, as amended, and section 706 of the Telecommunications Act of 1996, as amended, 47 U.S.C. §§ 151, 152, 154(i)-(j), 303, 316, 1302,

C. Description and Estimate of the Number of Small Entities to Which the Rules Would Apply

10. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.⁷ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small-business concern" under the Small Business Act.⁹ A small-business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.¹⁰

1. Total Small Entities

11. Our proposed action, if implemented, may, over time, affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three comprehensive, statutory small entity size standards. First, nationwide, there are a total of approximately 28.2 million small businesses, according to the SBA. In addition, a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field." Nationwide, as of 2007, there were approximately 1,621,315 small organizations. Finally, the term "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand." Census Bureau data for 2007 indicate that there were 89,476 local governmental jurisdictions in the United States. We

⁷ See 5 U.S.C. § 603(b)(3).

⁸ See 5 U.S.C. § 601(6).

⁹ See 5 U.S.C. § 601(3) (incorporating by reference the definition of "small-business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

¹⁰ See 15 U.S.C. § 632.

¹¹ See 5 U.S.C. 88 601(3)-(6).

¹² See SBA, Office of Advocacy, "Frequently Asked Questions," http://www.sba.gov/sites/default/files/FAQ_March_2014_0.pdf (last accessed Apr. 28, 2014).

¹³ 5 U.S.C. § 601(4).

¹⁴ Indep. Sector, The New Nonprofit Almanac and Desk Reference (2010).

¹⁵ 5 U.S.C. § 601(5).

¹⁶ U.S. Census Bureau, Statistical Abstract of the United States: 2012, Section 8, page 267, tbl. 429, https://www.census.gov/compendia/statab/2012/tables/12s0429.pdf/ (data cited therein are from 2007).

estimate that, of this total, as many as 88,761 entities may qualify as "small governmental jurisdictions." Thus, we estimate that most governmental jurisdictions are small.

2. Internet Access Service Providers

- 12. The actions proposed in the Notice would apply to broadband Internet access service providers. The 2011 Economic Census places these firms, whose services might include Voice over Internet Protocol (VoIP), in either of two categories, depending on whether the service is provided over the provider's own telecommunications facilities (e.g., cable and DSL ISPs), or over client-supplied telecommunications connections (e.g., dial-up ISPs). The former are within the category of Wired Telecommunications Carriers, which has an SBA small business size standard of 1,500 or fewer employees. These are also labeled "broadband." The latter are within the category of All Other Telecommunications, which has a size standard of annual receipts of \$25 million or less. These are labeled non-broadband. The most current Economic Census data for Wired Telecommunications Carriers are 2011 data, and the most current Economic Census data for All Other Telecommunications are 2007 data, which are detailed specifically for ISPs within the categories above. For the first category, the data show that 3,372 firms operated for the entire year, of which 2,037 had nine or fewer employees. For the second category, the data show that 1,274 firms operated for the entire year. Of those, 1,252 had annual receipts below \$25 million per year. Consequently, we estimate that the majority of ISP firms are small entities.
- 13. The ISP industry has changed since these definitions were introduced in 2007. The data cited above may therefore include entities that no longer provide Internet access service and may exclude entities that now provide such service. To ensure that this IRFA describes the universe of small entities that our action might affect, we discuss in turn several different types of entities that might be providing Internet access service. We note that, although we have no specific information on the number of small entities that provide broadband Internet access service over unlicensed spectrum, we include these entities in our Initial Regulatory Flexibility Analysis.

¹⁷ The 2007 U.S. Census data for small governmental organizations are not presented based on the size of the population in each such organization. There were 89,476 local governmental organizations in 2007. If we assume that county, municipal, township, and school district organizations are more likely than larger governmental organizations to have populations of 50,000 or less, the total of these organizations is 52,095. As a basis of estimating how many of these 89,476 local government organizations were small, in 2011, we note that there were a total of 715 cities and towns (incorporated places and minor civil divisions) with populations over 50,000. City and Town Totals Vintage: 2011 – U.S. Census Bureau, http://www.census.gov/popest/data/cities/totals/2011/index.html. If we subtract the 715 cities and towns that meet or exceed the 50,000 population threshold, we conclude that approximately 88,761 are small. U.S. Census Bureau, Statistical Abstract of the United States: 2012, Section 8, page 267, tbl. 429, https://www.census.gov/compendia/statab/2012/tables/12s0429.pdf/ (data cited therein are from 2007).

¹⁸ U.S. Census Bureau, 2012 NAICS Definitions, "517110 Wired Telecommunications Carriers," http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517110&search=2012%20NAICS%20Search

¹⁹ 13 C.F.R. § 121.201, NAICS code 517110.

²⁰ U.S. Census Bureau, 2012 NAICS Definitions, "517919 All Other Telecommunications,", http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517919&search=2012%20NAICS%20Search.

²¹ 13 C.F.R. § 121.201. NAICS code 517919.

²² U.S. Census Bureau, 2011 Economic Census, Subject Series: Information, "Establishment and Firm Size," NAICS code 5171103 (released Dec. 2013), http://www2.census.gov/econ/susb/data/2011/us 6digitnaics 2011.xls.

²³ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, "Establishment and Firm Size," NAICS code 5179191 (released Nov. 19, 2010) (receipts size).

3. Wireline Providers

- 14. *Incumbent Local Exchange Carriers (Incumbent LECs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁴ According to Commission data,²⁵ 1,307 carriers reported that they were incumbent local exchange service providers.²⁶ Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees.²⁷ Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by our proposed action.
- 15. Competitive Local Exchange Carriers (Competitive LECs), Competitive Access Providers (CAPs), Shared-Tenant Service Providers, and Other Local Service Providers. Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, 1,442 carriers reported that they were engaged in the provision of either competitive local exchange services or competitive access provider services. Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees. In addition, 17 carriers have reported that they are Shared-Tenant Service Providers, and all 17 are estimated to have 1,500 or fewer employees. In addition, 72 carriers have reported that they are Other Local Service Providers. Of the 72, seventy have 1,500 or fewer employees and two have more than 1,500 employees. Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, Shared-Tenant Service Providers, and other local service providers are small entities that may be affected by our proposed action.
- 16. We have included small incumbent LECs in this present RFA analysis. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation." The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope. We have therefore included small incumbent LECs in this RFA analysis, although we emphasize

²⁴ 13 C.F.R. § 121.201, NAICS code 517110.

²⁵ Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division, *Trends in Telephone Service*, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*).

²⁶ See Trends in Telephone Service at tbl. 5.3.

²⁷ See id.

²⁸ 13 C.F.R. § 121.201, NAICS code 517110.

²⁹ See Trends in Telephone Service at tbl.5.3.

³⁰ See id.

³¹ See id.

³² See id.

³³ See id.

³⁴ 5 U.S.C. § 601(3).

³⁵ Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, Federal Communications Commission (filed May 27, 1999). The Small Business Act contains a definition of "small business concern," which the RFA incorporates into its own definition of "small business." 15 U.S.C. § 632(a); 5 (continued...)

that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

- 17. *Interexchange Carriers*. Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³⁶ According to Commission data,³⁷ 359 carriers have reported that they are engaged in the provision of interexchange service. Of these, an estimated 317 have 1,500 or fewer employees and 42 have more than 1,500 employees. Consequently, the Commission estimates that the majority of IXCs are small entities that may be affected by our proposed action.
- 18. Operator Service Providers (OSPs). Neither the Commission nor the SBA has developed a small business size standard specifically for operator service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³⁸ According to Commission data, 33 carriers have reported that they are engaged in the provision of operator services. Of these, an estimated 31 have 1,500 or fewer employees and two have more than 1,500 employees.³⁹ Consequently, the Commission estimates that the majority of OSPs are small entities that may be affected by our proposed action.

4. Wireless Providers – Fixed and Mobile

- 19. The broadband Internet access service provider category covered by this Notice may cover multiple wireless firms and categories of regulated wireless services. Thus, to the extent the wireless services listed below are used by wireless firms for broadband Internet access services, the proposed actions may have an impact on those small businesses as set forth above and further below. In addition, for those services subject to auctions, we note that, as a general matter, the number of winning bidders that claim to qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments and transfers or reportable eligibility events, unjust enrichment issues are implicated.
- 20. Wireless Telecommunications Carriers (except Satellite). Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category. Prior to 2007, such firms were within the now-superseded categories of "Paging" and "Cellular and Other Wireless Telecommunications." Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.⁴² For the category of Wireless Telecommunications

³⁶ 13 C.F.R. § 121.201, NAICS code 517110.

³⁷ Trends in Telephone Service, tbl. 5.3.

³⁸ 13 C.F.R. § 121.201, NAICS code 517110.

³⁹ Trends in Telephone Service, tbl. 5.3.

⁴⁰ U.S. Census Bureau, 2012 NAICS Definitions, "517210 Wireless Telecommunications Categories (Except Satellite)"; http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517210&search=2012%20NAICS%20Search.

⁴¹ U.S. Census Bureau, 2002 NAICS Definitions, "517211 Paging"; http://www.census.gov/epcd/naics02/def/NDEF517.HTM.; U.S. Census Bureau, 2002 NAICS Definitions, "517212 Cellular and Other Wireless Telecommunications"; http://www.census.gov/epcd/naics02/def/NDEF517.HTM.

⁴² 13 C.F.R. § 121.201, NAICS code 517210 (2012 NAICS). The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

Carriers (except Satellite), data for 2011 show that there were 784 firms operating that year.⁴³ Of these 784 firms, an estimated 749 have 500 or fewer employees and 35 have more than 500 employees. Since all firms with fewer than 1,500 employees are considered small, given the total employment in the sector, we estimate that the vast majority of wireless firms are small.

- 21. Wireless Communications Services. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined "small business" for the wireless communications services (WCS) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of \$15 million for each of the three preceding years. The SBA has approved these definitions. The Commission auctioned geographic area licenses in the WCS service in 1997. In the auction, seven bidders won 31 licenses that qualified as very small business entities, and one bidder won one license that qualified as a small business entity.
- 22. *1670–1675 MHz Services*. This service can be used for fixed and mobile uses, except aeronautical mobile.⁴⁶ An auction for one license in the 1670–1675 MHz band was conducted in 2003. One license was awarded. The winning bidder was not a small entity.
- 23. Wireless Telephony. Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. As noted, the SBA has developed a small business size standard for Wireless Telecommunications Carriers (except Satellite).⁴⁷ Under the SBA small business size standard, a business is small if it has 1,500 or fewer employees.⁴⁸ According to Commission data, 413 carriers reported that they were engaged in wireless telephony.⁴⁹ Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.⁵⁰ Therefore, a little less than one third of these entities can be considered small.
- 24. Broadband Personal Communications Service. The broadband personal communications services (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission initially defined a "small business" for C- and F-Block licenses as an entity that has average gross revenues of \$40 million or less in the three previous calendar years.⁵¹ For F-Block licenses, an additional small business size standard for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross

⁴⁹ *Trends in Telephone Service*, tbl. 5.3.

⁴³ U.S. Census Bureau, 2011 Economic Census, Subject Series: Information, "Establishment and Firm Size," NAICS code 517210 (released Dec. 2013) (employment size). http://www2.census.gov/econ/susb/data/2011/us 6digitnaics 2011.xls

⁴⁴ Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service (WCS), GN Docket No. 96-228, Report and Order, 12 FCC Rcd 10785, 10879, para. 194 (1997).

⁴⁵ See Letter from Aida Alvarez, Administrator, SBA, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission (filed Dec. 2, 1998) (Alvarez Letter 1998).

⁴⁶ 47 C.F.R. § 2.106; see generally 47 C.F.R. §§ 27.1-27.70.

⁴⁷ 13 C.F.R. § 121.201, NAICS code 517210.

⁴⁸ *Id*.

⁵⁰ Id

⁵¹ See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap; Amendment of the Commission's Cellular/PCS Cross-Ownership Rule; WT Docket No. 96-59, GN Docket No. 90-314, Report and Order, 11 FCC Rcd 7824, 7850-52, paras. 57-60 (1996) (PCS Report and Order); see also 47 C.F.R. § 24.720(b).

revenues of not more than \$15 million for the preceding three calendar years.⁵² These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.⁵³ No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that claimed small business status in the first two C-Block auctions. A total of 93 bidders that claimed small business status won approximately 40 percent of the 1,479 licenses in the first auction for the D, E, and F Blocks.⁵⁴ On April 15, 1999, the Commission completed the reauction of 347 C-, D-, E-, and F-Block licenses in Auction No. 22.⁵⁵ Of the 57 winning bidders in that auction, 48 claimed small business status and won 277 licenses.

- 25. On January 26, 2001, the Commission completed the auction of 422 C and F Block Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in that auction, 29 claimed small business status. Status Sta
- 26. Specialized Mobile Radio Licenses. The Commission awards "small entity" bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years. The Commission awards "very small entity" bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years. The SBA has approved these small

⁵² See PCS Report and Order, 11 FCC Rcd at 7852, para. 60.

⁵³ See Alvarez Letter 1998.

⁵⁴ See Broadband PCS, D, E and F Block Auction Closes, Public Notice, Doc. No. 89838 (rel. Jan. 14, 1997).

⁵⁵ See C, D, E, and F Block Broadband PCS Auction Closes, Public Notice, 14 FCC Rcd 6688 (WTB 1999). Before Auction No. 22, the Commission established a very small standard for the C Block to match the standard used for F Block. Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licensees, WT Docket No. 97-82, Fourth Report and Order, 13 FCC Rcd 15743, 15768, para. 46 (1998).

⁵⁶ See C and F Block Broadband PCS Auction Closes; Winning Bidders Announced, Public Notice, 16 FCC Rcd 2339 (2001).

⁵⁷ See Broadband PCS Spectrum Auction Closes; Winning Bidders Announced for Auction No. 58, Public Notice, 20 FCC Rcd 3703 (2005).

⁵⁸ See Auction of Broadband PCS Spectrum Licenses Closes; Winning Bidders Announced for Auction No. 71, Public Notice, 22 FCC Rcd 9247 (2007).

⁵⁹ *Id*.

⁶⁰ See Auction of AWS-1 and Broadband PCS Licenses Closes; Winning Bidders Announced for Auction 78, Public Notice, 23 FCC Rcd 12749 (WTB 2008).

⁶¹ *Id*.

⁶² 47 C.F.R. § 90.814(b)(1).

⁶³ *Id*.

business size standards for the 900 MHz Service. The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction began on December 5, 1995, and closed on April 15, 1996. Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200 channels began on October 28, 1997, and was completed on December 8, 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band. A second auction for the 800 MHz band was held on January 10, 2002 and closed on January 17, 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.

- 27. The auction of the 1,053 800 MHz SMR geographic area licenses for the General Category channels began on August 16, 2000, and was completed on September 1, 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band and qualified as small businesses under the \$15 million size standard.⁶⁷ In an auction completed on December 5, 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were awarded.⁶⁸ Of the 22 winning bidders, 19 claimed small business status and won 129 licenses. Thus, combining all four auctions, 41 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small businesses.
- 28. In addition, there are numerous incumbent site-by-site SMR licenses and licensees with extended implementation authorizations in the 800 and 900 MHz bands. We do not know how many firms provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. In addition, we do not know how many of these firms have 1,500 or fewer employees, which is the SBA-determined size standard.⁶⁹ We assume, for purposes of this analysis, that all of the remaining extended implementation authorizations are held by small entities, as defined by the SBA.
- 29. Lower 700 MHz Band Licenses. The Commission previously adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits. The Commission defined a "small business" as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years. A "very small business" is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years. Additionally, the lower 700 MHz Service had a third category of small

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⁶⁴ See Letter from Aida Alvarez, Administrator, SBA, to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission (filed Aug. 10, 1999) (*Alvarez Letter 1999*).

⁶⁵ See Correction to Public Notice DA 96-586 "FCC Announces Winning Bidders in the Auction of 1020 Licenses to Provide 900 MHz SMR in Major Trading Areas," Public Notice, 18 FCC Rcd 18367 (WTB 1996).

⁶⁶ See Multi-Radio Service Auction Closes, Public Notice, 17 FCC Rcd 1446 (WTB 2002).

⁶⁷ See 800 MHz Specialized Mobile Radio (SMR) Service General Category (851–854 MHz) and Upper Band (861–865 MHz) Auction Closes; Winning Bidders Announced, Public Notice, 15 FCC Rcd 17162 (2000).

⁶⁸ See 800 MHz SMR Service Lower 80 Channels Auction Closes; Winning Bidders Announced, Public Notice, 16 FCC Rcd 1736 (2000).

⁶⁹ See generally 13 C.F.R. § 121.201. NAICS code 517210.

⁷⁰ See Reallocation and Service Rules for the 698–746 MHz Spectrum Band (Television Channels 52–59), GN Docket No. 01-74, Report and Order, 17 FCC Rcd 1022 (2002) (Channels 52–59 Report and Order).

⁷¹ See id. at 1087-88, para. 172.

⁷² See id.

business status for Metropolitan/Rural Service Area (MSA/RSA) licenses—"entrepreneur"—which is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.⁷³ The SBA approved these small size standards.⁷⁴ An auction of 740 licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six Economic Area Groupings (EAGs)) commenced on August 27, 2002, and closed on September 18, 2002. Of the 740 licenses available for auction, 484 licenses were won by 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won a total of 329 licenses.⁷⁵ A second auction commenced on May 28, 2003, closed on June 13, 2003, and included 256 licenses: 5 EAG licenses and 476 Cellular Market Area licenses.⁷⁶ Seventeen winning bidders claimed small or very small business status and won 60 licenses, and nine winning bidders claimed entrepreneur status and won 154 licenses.⁷⁷ On July 26, 2005, the Commission completed an auction of 5 licenses in the Lower 700 MHz band (Auction No. 60). There were three winning bidders for five licenses. All three winning bidders claimed small business status.

- 30. In 2007, the Commission reexamined its rules governing the 700 MHz band in the 700 MHz Second Report and Order. An auction of 700 MHz licenses commenced January 24, 2008 and closed on March 18, 2008, which included, 176 Economic Area licenses in the A Block, 734 Cellular Market Area licenses in the B Block, and 176 EA licenses in the E Block. Twenty winning bidders, claiming small business status (those with attributable average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years) won 49 licenses. Thirty three winning bidders claiming very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years) won 325 licenses.
- 31. *Upper 700 MHz Band Licenses*. In the *700 MHz Second Report and Order*, the Commission revised its rules regarding Upper 700 MHz licenses. On January 24, 2008, the Commission commenced Auction 73 in which several licenses in the Upper 700 MHz band were available for licensing: 12 Regional Economic Area Grouping licenses in the C Block, and one nationwide license in the D Block. The auction concluded on March 18, 2008, with 3 winning bidders claiming very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years) and winning five licenses.

⁷³ See id., at 1088, para. 173.

⁷⁴ See Alvarez Letter 1999.

⁷⁵ See Lower 700 MHz Band Auction Closes, Public Notice, 17 FCC Rcd 17272 (WTB 2002).

⁷⁶ See id.

⁷⁷ See id.

⁷⁸ Service Rules for the 698–746, 747–762 and 777–792 MHz Band; Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems; Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones; Biennial Regulatory Review—Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services; Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission's Rules; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010; Declaratory Ruling on Reporting Requirement under Commission's Part 1 Anti-Collusion Rule, WT Docket Nos. 07-166, 06-169, 06-150, 03-264, 96-86, PS Docket No. 06-229, CC Docket No. 94-102, Second Report and Order, 22 FCC Rcd 15289, 15359 n. 434 (2007) (700 MHz Second Report and Order).

⁷⁹ See Auction of 700 MHz Band Licenses Closes, Public Notice, 23 FCC Rcd 4572 (WTB 2008).

⁸⁰ 700 MHz Second Report and Order, 22 FCC Rcd 15289.

⁸¹ See Auction of 700 MHz Band Licenses Closes, Public Notice, 23 FCC Rcd 4572 (WTB 2008).

- 32. 700 MHz Guard Band Licensees. In 2000, in the 700 MHz Guard Band Order, the Commission adopted size standards for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments. A small business in this service is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years. Additionally, a very small business is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years. BA approval of these definitions is not required. An auction of 52 Major Economic Area licenses commenced on September 6, 2000, and closed on September 21, 2000. Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001, and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.
- 33. *Air-Ground Radiotelephone Service*. The Commission has previously used the SBA's small business size standard applicable to Wireless Telecommunications Carriers (except Satellite), i.e., an entity employing no more than 1,500 persons.⁸⁸ There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and under that definition, we estimate that almost all of them qualify as small entities under the SBA definition. For purposes of assigning Air-Ground Radiotelephone Service licenses through competitive bidding, the Commission has defined "small business" as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$40 million.⁸⁹ A "very small business" is defined as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$15 million.⁹⁰ These definitions were approved by the SBA.⁹¹ In May 2006, the Commission completed an auction of nationwide commercial Air-Ground Radiotelephone Service licenses in the 800 MHz band (Auction No. 65). On June 2, 2006, the auction closed with two winning

⁸² See Service Rules for the 746–764 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, Second Report and Order, 15 FCC Rcd 5299 (2000) (746–764 MHz Band Second Report and Order).

⁸³ See id. at 5343, para. 108.

⁸⁴ See id.

⁸⁵ See id. at 5343, para. 108 n.246 (for the 746–764 MHz and 776–794 MHz bands, the Commission is exempt from 15 U.S.C. § 632, which requires Federal agencies to obtain SBA approval before adopting small business size standards).

⁸⁶ See 700 MHz Guard Bands Auction Closes: Winning Bidders Announced, Public Notice, 15 FCC Rcd 18026 (WTB 2000).

⁸⁷ See 700 MHz Guard Bands Auction Closes: Winning Bidders Announced, Public Notice, 16 FCC Rcd 4590 (WTB 2001).

⁸⁸ 13 C.F.R. § 121.201, NAICS codes 517210.

⁸⁹ Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services, Biennial Regulatory Review—Amendment of Parts 1, 22, and 90 of the Commission's Rules, Amendment of Parts 1 and 22 of the Commission's Rules to Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service, WT Docket Nos. 03-103, 05-42, Order on Reconsideration and Report and Order, 20 FCC Rcd 19663, paras. 28-42 (2005).

⁹⁰ Id.

⁹¹ See Letter from Hector V. Barreto, Administrator, SBA, to Gary D. Michaels, Deputy Chief, Auctions and Spectrum Access Division, Wireless Telecommunications Bureau, Federal Communications Commission (filed Sept. 19, 2005).

bidders winning two Air-Ground Radiotelephone Services licenses. Neither of the winning bidders claimed small business status.

- 34. AWS Services (1710–1755 MHz and 2110–2155 MHz bands (AWS-1); 1915–1920 MHz, 1995–2000 MHz, 2020–2025 MHz and 2175–2180 MHz bands (AWS-2); 2155–2175 MHz band (AWS-3)). For the AWS-1 bands, 92 the Commission has defined a "small business" as an entity with average annual gross revenues for the preceding three years not exceeding \$40 million, and a "very small business" as an entity with average annual gross revenues for the preceding three years not exceeding \$15 million. For AWS-2 and AWS-3, although we do not know for certain which entities are likely to apply for these frequencies, we note that the AWS-1 bands are comparable to those used for cellular service and personal communications service. The Commission has not yet adopted size standards for the AWS-2 or AWS-3 bands but proposes to treat both AWS-2 and AWS-3 similarly to broadband PCS service and AWS-1 service due to the comparable capital requirements and other factors, such as issues involved in relocating incumbents and developing markets, technologies, and services. 93
- 35. 3650–3700 MHz band. In March 2005, the Commission released a Report and Order and Memorandum Opinion and Order that provides for nationwide, non-exclusive licensing of terrestrial operations, utilizing contention-based technologies, in the 3650 MHz band (i.e., 3650–3700 MHz). As of April 2010, more than 1270 licenses have been granted and more than 7433 sites have been registered. The Commission has not developed a definition of small entities applicable to 3650–3700 MHz band nationwide, non-exclusive licensees. However, we estimate that the majority of these licensees are Internet Access Service Providers (ISPs) and that most of those licensees are small businesses.
- 36. Fixed Microwave Services. Microwave services include common carrier, ⁹⁴ private-operational fixed, ⁹⁵ and broadcast auxiliary radio services. ⁹⁶ They also include the Local Multipoint Distribution Service (LMDS), ⁹⁷ the Digital Electronic Message Service (DEMS), ⁹⁸ and the 24 GHz Service, ⁹⁹ where licensees can choose between common carrier and non-common carrier status. ¹⁰⁰ At present, there are approximately 36,708 common carrier fixed licensees and 59,291 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. There are approximately 135 LMDS licensees, three DEMS licensees, and three 24 GHz licensees. The

⁹² The service is defined in section 90.1301 et seq. of the Commission's Rules, 47 C.F.R. § 90.1301 et seq.

⁹³ See Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, Report and Order, 18 FCC Rcd 25162, Appx. B (2003), modified by Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, Order on Reconsideration, 20 FCC Rcd 14058, Appx. C (2005); Service Rules for Advanced Wireless Services in the 1915–1920 MHz, 1995–2000 MHz, 2020–2025 MHz and 2175–2180 MHz Bands; Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket Nos. 04-356, 02-353, Notice of Proposed Rulemaking, 19 FCC Rcd 19263, Appx. B (2005); Service Rules for Advanced Wireless Services in the 2155–2175 MHz Band, WT Docket No. 07-195, Notice of Proposed Rulemaking, 22 FCC Rcd 17035, Appx. (2007).

⁹⁴ See 47 C.F.R. Part 101, Subparts C and I.

⁹⁵ See 47 C.F.R. Part 101, Subparts C and H.

⁹⁶ Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission's Rules. *See* 47 C.F.R. Part 74. Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

⁹⁷ See 47 C.F.R. Part 101, Subpart L.

⁹⁸ See 47 C.F.R. Part 101, Subpart G.

⁹⁹ See id.

¹⁰⁰ See 47 C.F.R. §§ 101.533, 101.1017.

Commission has not yet defined a small business with respect to microwave services. For purposes of the IRFA, we will use the SBA's definition applicable to Wireless Telecommunications Carriers (except satellite)—i.e., an entity with no more than 1,500 persons.¹⁰¹ Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.¹⁰² For the category of Wireless Telecommunications Carriers (except Satellite), data for 2011 show that there were 784 firms operating that year.¹⁰³ While the Census Bureau has not released data on the establishments broken down by number of employees, we note that the Census Bureau lists total employment for all firms in that sector at 245,875.¹⁰⁴ Since all firms with fewer than 1,500 employees are considered small, given the total employment in the sector, we estimate that the vast majority of firms using microwave services are small. We note that the number of firms does not necessarily track the number of licensees. We estimate that virtually all of the Fixed Microwave licensees (excluding broadcast auxiliary licensees) would qualify as small entities under the SBA definition.

- 37. Broadband Radio Service and Educational Broadband Service. Broadband Radio Service systems, previously referred to as Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS) systems, and "wireless cable," transmit video programming to subscribers and provide two-way high speed data operations using the microwave frequencies of the Broadband Radio Service (BRS) and Educational Broadband Service (EBS) (previously referred to as the Instructional Television Fixed Service (ITFS)). In connection with the 1996 BRS auction, the Commission established a small business size standard as an entity that had annual average gross revenues of no more than \$40 million in the previous three calendar years. 106 The BRS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs). Of the 67 auction winners, 61 met the definition of a small business. BRS also includes licensees of stations authorized prior to the auction. At this time, we estimate that of the 61 small business BRS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent BRS licensees that are considered small entities. 107 After adding the number of small business auction licensees to the number of incumbent licensees not already counted, we find that there are currently approximately 440 BRS licensees that are defined as small businesses under either the SBA or the Commission's rules.
- 38. In 2009, the Commission conducted Auction 86, the sale of 78 licenses in the BRS areas. The Commission offered three levels of bidding credits: (i) a bidder with attributed average

^{101 13} C.F.R. § 121.201, NAICS code 517210.

¹⁰² 13 C.F.R. § 121.201, NAICS code 517210 (2007 NAICS). The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

¹⁰³ U.S. Census Bureau, 2011 Economic Census, Subject Series: Information, "Establishment and Firm Size," NAICS code 517210 (released Dec. 2013) (employment size). http://www2.census.gov/econ/susb/data/2011/us 6digitnaics 2011.xls

¹⁰⁴ *Id*.

¹⁰⁵ Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act—Competitive Bidding, MM Docket No. 94-131, PP Docket No. 93-253, Report and Order, 10 FCC Rcd 9589, 9593, para. 7 (1995).

¹⁰⁶ 47 C.F.R. § 21.961(b)(1).

¹⁰⁷ 47 U.S.C. § 309(j). Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA's small business size standard of 1500 or fewer employees.

¹⁰⁸ Auction of Broadband Radio Service (BRS) Licenses, Scheduled for October 27, 2009, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 86, AU Docket No. 09-56, *Public Notice*, 24 FCC Rcd 8277 (2009).

annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years (small business) received a 15 percent discount on its winning bid; (ii) a bidder with attributed average annual gross revenues that exceed \$3 million and do not exceed \$15 million for the preceding three years (very small business) received a 25 percent discount on its winning bid; and (iii) a bidder with attributed average annual gross revenues that do not exceed \$3 million for the preceding three years (entrepreneur) received a 35 percent discount on its winning bid. Auction 86 concluded in 2009 with the sale of 61 licenses. Of the ten winning bidders, two bidders that claimed small business status won 4 licenses; one bidder that claimed very small business status won three licenses; and two bidders that claimed entrepreneur status won six licenses.

In addition, the SBA's Cable Television Distribution Services small business size standard is applicable to EBS. There are presently 2,436 EBS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in this analysis as small entities.¹¹¹ Thus, we estimate that at least 2,336 licensees are small businesses. Since 2007, Cable Television Distribution Services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies." The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. To gauge small business prevalence for these cable services we must, however, use the most current census data that are based on the previous category of Cable and Other Program Distribution and its associated size standard; that size standard was: all such firms having \$13.5 million or less in annual receipts. 113 According to Census Bureau data for 2007, there were a total of 996 firms in this category that operated for the entire year. 114 Of this total, 948 firms had annual receipts of under \$10 million, and 48 firms had receipts of \$10 million or more but less than \$25 million. Thus, the majority of these firms can be considered small.

5. Satellite Service Providers

40. *Satellite Telecommunications Providers*. Two economic census categories address the satellite industry. The first category has a small business size standard of \$30 million or less in average annual receipts, under SBA rules. The second has a size standard of \$30 million or less in annual receipts. It is a size standard of \$30 million or less in annual receipts.

¹⁰⁹ *Id.* at 8296 para. 73.

¹¹⁰ Auction of Broadband Radio Service Licenses Closes, Winning Bidders Announced for Auction 86, Down Payments Due November 23, 2009, Final Payments Due December 8, 2009, Ten-Day Petition to Deny Period, *Public Notice*, 24 FCC Red 13572 (2009).

¹¹¹ The term "small entity" within SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on EBS licensees.

¹¹² U.S. Census Bureau, 2012 NAICS Definitions, "517110 Wired Telecommunications Carriers," (partial definition), http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517110&search=2012.

¹¹³ 13 C.F.R. § 121.201, NAICS code 517110.

¹¹⁴ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Receipts by Enterprise Employment Size for the United States: 2007, NAICS code 517510 (released Nov. 19, 2010).

¹¹⁵ *Id*.

¹¹⁶ 13 C.F.R. § 121.201, NAICS Code 517410.

¹¹⁷ 13 C.F.R. § 121.201, NAICS Code 517919.

- 41. The category of Satellite Telecommunications "comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications." For this category, Census Bureau data for 2007 show that there were a total of 570 firms that operated for the entire year. Of this total, 530 firms had annual receipts of under \$30 million, and 40 firms had receipts of over \$30 million. Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities that might be affected by our action.
- 42. The second category of Other Telecommunications comprises, *inter alia*, "establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems." For this category, Census Bureau data for 2007 show that there were a total of 1,274 firms that operated for the entire year. Of this total, 1,252 had annual receipts below \$25 million per year. Consequently, we estimate that the majority of All Other Telecommunications firms are small entities that might be affected by our action.

6. Cable Service Providers

- 43. Because section 706 requires us to monitor the deployment of broadband using any technology, we anticipate that some broadband service providers may not provide telephone service. Accordingly, we describe below other types of firms that may provide broadband services, including cable companies, MDS providers, and utilities, among others.
- 44. *Cable and Other Program Distributors*. Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks.

 Transmission facilities may be based on a single technology or a combination of technologies." The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. To gauge small business prevalence for these cable services we must, however, use current census data that are based on the previous category of Cable and Other Program Distribution and its associated size standard; that size standard was: all such firms having \$13.5 million or less in annual receipts. According to Census Bureau data for 2007, there were a total of 2,048 firms in this category

¹¹⁸ U.S. Census Bureau, 2012 NAICS Definitions, "517410 Satellite Telecommunications," http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517410&search=2012.

¹¹⁹ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, "Establishment and Firm Size," NAICS code 517410 (released Nov. 19, 2010).

¹²⁰ Id.

¹²¹ U.S. Census Bureau, 2012 NAICS Definitions, "517919 All Other Telecommunications," http://www.census.gov/cgi-bin/sssd/naicsrch?code=517919&search=2012.

¹²² U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, "Establishment and Firm Size," NAICS code 517410 (released Nov. 19, 2010).

¹²³ *Id*.

¹²⁴ U.S. Census Bureau, 2012 NAICS Definitions, "517110 Wired Telecommunications Carriers," (partial definition), http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517110&search=2012.

¹²⁵ 13 C.F.R. § 121.201, NAICS code 517110.

that operated for the entire year. ¹²⁶ Of this total, 1,393 firms had annual receipts of under \$10 million, and 655 firms had receipts of \$10 million or more. ¹²⁷ Thus, the majority of these firms can be considered small.

- 45. *Cable Companies and Systems*. The Commission has also developed its own small business size standards, for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers, nationwide. Industry data shows that there were 1,141 cable companies at the end of June 2012. Of this total, all but ten cable operators nationwide are small under this size standard. In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers. Current Commission records show 4,945 cable systems nationwide. Of this total, 4,380 cable systems have less than 20,000 subscribers, and 565 systems have 20,000 or more subscribers, based on the same records. Thus, under this standard, we estimate that most cable systems are small entities.
- 46. *Cable System Operators*. The Communications Act of 1934, as amended, also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."¹³³ The Commission has determined that an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate.¹³⁴ Based on available data, we find that all but ten incumbent cable operators are small entities under this size standard.¹³⁵ We note that

¹²⁶ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, "Establishment and Firm Size," NAICS code 517110 (released Nov. 19, 2010).

¹²⁷ *Id*.

¹²⁸ 47 C.F.R. § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of \$100 million or less in annual revenues. *Implementation of Sections of the 1992 Cable Act: Rate Regulation*, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393, 7408 (1995).

¹²⁹ NCTA, Industry Data, Number of Cable Operating Companies (June 2012), http://www.ncta.com/Statistics.aspx (visited Sept. 28, 2012). Depending upon the number of homes and the size of the geographic area served, cable operators use one or more cable systems to provide video service. *See Annual Assessment of the Status of Competition in the Market for Delivery of Video Programming*, MB Docket No. 12-203, Fifteenth Report, 28 FCC Rcd 10496, 10505-06, para. 24 (2013) (15th Annual Competition Report).

¹³⁰ See SNL Kagan, "Top Cable MSOs – 12/12 Q",

http://www.snl.com/InteractiveX/TopCableMSOs.aspx?period=2012Q4&sortcol=subscribersbasic&sortorder=desc. We note that, when applied to an MVPD operator, under this size standard (i.e., 400,000 or fewer subscribers) all but 14 MVPD operators would be considered small. See NCTA, Industry Data, Top 25 Multichannel Video Service Customers (2012), http://www.ncta.com/industry-data. The Commission applied this size standard to MVPD operators in its implementation of the CALM Act. See Implementation of the Commercial Advertisement Loudness Mitigation (CALM) Act, MB Docket No. 11-93, Report and Order, 26 FCC Rcd 17222, 17245-46, para. 37 (2011) (CALM Act Report and Order) (defining a smaller MVPD operator as one serving 400,000 or fewer subscribers nationwide, as of December 31, 2011).

¹³¹ 47 C.F.R. § 76.901(c).

¹³² The number of active, registered cable systems comes from the Commission's Cable Operations and Licensing System (COALS) database on Aug. 28, 2013. A cable system is a physical system integrated to a principal headend.

¹³³ 47 U.S.C. § 543(m)(2); see 47 C.F.R. § 76.901(f) & nn.1-3.

¹³⁴ 47 C.F.R. § 76.901(f); see FCC Announces New Subscriber Count for the Definition of Small Cable Operator, Public Notice, 16 FCC Rcd 2225 (Cable Services Bureau 2001).

¹³⁵ See NCTA, Industry Data, Top 25 Multichannel Video Service Customers (2012), http://www.ncta.com/industry-data.

the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million, and therefore we are unable to estimate more accurately the number of cable system operators that would qualify as small under this size standard.

7. Electric Power Generators, Transmitters, and Distributors

47. Electric Power Generators, Transmitters, and Distributors. The Census Bureau defines an industry group comprised of "establishments, primarily engaged in generating, transmitting, and/or distributing electric power. Establishments in this industry group may perform one or more of the following activities: (1) operate generation facilities that produce electric energy; (2) operate transmission systems that convey the electricity from the generation facility to the distribution system; and (3) operate distribution systems that convey electric power received from the generation facility or the transmission system to the final consumer." The SBA has developed a small business size standard for firms in this category: "A firm is small if, including its affiliates, it is primarily engaged in the generation, transmission, and/or distribution of electric energy for sale and its total electric output for the preceding fiscal year did not exceed 4 million megawatt hours." According to Census Bureau data for 2011, there were 2,419 firms in this category that operated for the entire year. Census data do not track electric output and we have not determined how many of these firms fit the SBA size standard for small, with no more than 4 million megawatt hours of electric output. Consequently, we estimate that 2,419 or fewer firms may be considered small under the SBA small business size standard.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

48. As indicated above, the Notice seeks comment on possible enhancements to the Commission's existing transparency rule that may impose additional reporting, recordkeeping, or other compliance requirements on some small entities. While the Notice tentatively concludes that the Commission should enhance the transparency rule to improve its effectiveness for end users, edge providers, the Internet community, and the Commission, the Notice does not propose specific revisions to the existing transparency rule. As described above, the Notice also seeks comment on a dispute resolution process that would, if adopted, potentially require small entities to respond to complaints or otherwise participate in dispute resolution procedures. One feature of the enforcement mechanism as discussed in the Notice, includes a proposal to establish the role of an ombudsperson who would act as a watchdog to represent the interests of start-ups and other small entities in addition to consumers.

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

49. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include (among others) the following four alternatives:

¹³⁶ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to § 76.901(f) of the Commission's rules. *See* 47 C.F.R. § 76.909(b).

¹³⁷ U.S. Census Bureau, 2002 NAICS Definitions, "2211 Electric Power Generation, Transmission and Distribution," http://www.census.gov/epcd/naics02/def/NDEF221.HTM (last visited Oct. 21, 2009).

¹³⁸ 13 C.F.R. § 121.201, NAICS codes 221111, 221112, 221113, 221119, 221121, 221122, n. 1.

¹³⁹ U.S. Census Bureau, 2011 Economic Census, Subject Series: Information, "Establishment and Firm Size," NAICS codes 221111, 221112, 221113, 221119, 221121, 221122 (released Dec. 2013) (employment size). http://www2.census.gov/econ/susb/data/2011/us_6digitnaics_2011.xls.

¹⁴⁰ See Notice. Section III.

¹⁴¹ See supra para. 7.

- (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities. We expect to consider all of these factors when we have received substantive comment from the public and potentially affected entities.
- 50. The Commission expects to consider the economic impact on small entities, as identified in comments filed in response to the Notice and this IRFA, in reaching its final conclusions and taking action in this proceeding.
- 51. We note, though, that the potential enhancements to the transparency rule, the proposed mechanism for individualized decision-making under the proposed enforceable legal standard of commercially reasonable practices, and various aspects of the proposed dispute resolution process all contemplate a certain amount of flexibility that may be helpful to small entities. For example, the Commission seeks comment on whether there are ways the Commission or industry associations could reduce burdens on broadband providers in complying with the proposed enhanced transparency rule through the use of a voluntary industry standardized glossary, or through the creation of a dashboard that permits easy comparison of the policies, procedures, and prices of various broadband providers throughout the country. We seek comment here on the effect the various proposals described in the Notice, and summarized above, will have on small entities, and on what effect alternative rules would have on those entities. How can the Commission achieve its goal of protecting and promoting an open Internet while also imposing minimal burdens on small entities? What specific steps could the Commission take in this regard?
 - F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules
 - 52. None.

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¹⁴² 5 U.S.C. § 603(c).

STATEMENT OF CHAIRMAN TOM WHEELER

Re: *Protecting and Promoting the Open Internet*, GN Docket No. 14-28.

I strongly support an open, fast and robust Internet. This agency supports an Open Internet. There is ONE Internet. Not a fast internet, not a slow internet; ONE Internet.

The attention being paid to this topic is proof of why the open and free exchange of information must be protected. Thank you to the thousands who have emailed me personally. Thank you to those who felt so strongly about the issue that they camped outside. The Founding Fathers must be looking down and smiling at how the republic they created is practicing the ideals they established.

By releasing this Item today those who have been expressing themselves will now be able to see what we are actually proposing. They have been heard, we look forward to further input, and we say thank you.

Today we take another step in what has been a decade-long effort to preserve and protect the Open Internet. Unfortunately, those previous efforts were blocked twice by court challenges by those who sell Internet connections to consumers. Today this agency moves to surmount that opposition and to stand up for consumers and the Open Internet.

This *Notice of Proposed Rulemaking* starts an important process. Where it ends depends on what we learn during this process. That is why I am grateful for all the attention this topic has received.

We start with the simple, obvious premise: Protecting the Open Internet is important both to consumers and to economic growth. We are dedicated to protecting and preserving an Open Internet.

What we are dealing with today is a proposal, not a final rule. With this *Notice* we are specifically asking for input on different approaches to accomplish the same goal: an Open Internet.

The potential for there to be some kind of "fast lane" available to only a few has many people concerned. Personally, I don't like the idea that the Internet could become divided into "haves" and "have nots." I will work to see that does not happen. In this Item we specifically ask whether and how to prevent the kind of paid prioritization that could result in "fast lanes."

Two weeks ago I told the convention of America's cable broadband providers something that is worth repeating here, "If someone acts to divide the Internet between 'haves' and 'have nots," I told the cable industry, "we will use every power at our disposal to stop it." I will take a backseat to no one that privileging some network users in a manner that squeezes out smaller voices is unacceptable. Today, we have proposed how to stop that from happening, including consideration of the applicability of Title II.

There is only ONE Internet. It must be fast, robust and open. The speed and quality of the connection the consumer purchases must be unaffected by what content he or she is using.

And there has to be a level playing field of opportunity for new ideas. Small companies and startups must be able to effectively reach consumers with innovative products and services and they must be protected against harmful conduct by broadband providers. The prospect of a gatekeeper choosing winners and losers on the Internet is unacceptable.

Let's look at how the Internet works at the retail level. The consumer accesses the Internet using connectivity provided by an Internet Service Provider (ISP). That connectivity should be open and

inviolate; it is the simple purchase of a pathway. I believe it would be commercially unreasonable – and therefore not permitted– for the ISP not to deliver the contracted-for open pathway.

Let's consider specifically what that means. I want to get to rules that work like this:

- If the network operator slowed the speed below that which the consumer bought (for reasons other than reasonable network management), it would be a commercially unreasonable practice and therefore **prohibited**,
- If the network operator blocked access to lawful content, it would violate our no blocking rule and be commercially unreasonable and therefore <u>doubly</u> **prohibited**,
- When content provided by a firm such as Netflix reaches the consumer's network provider it would be commercially unreasonable to charge the content provider to use the bandwidth for which the consumer had already paid and therefore **prohibited**,
- When a consumer buys specified capacity from a network provider he or she is buying open capacity, not capacity the network can prioritize for its own profit purposes. Prioritization that deprives the consumer of what the consumer has paid for would be commercially unreasonable and therefore **prohibited**.

Simply put, when a consumer buys a specified bandwidth, it is commercially unreasonable – and thus a violation of this proposal – to deny them the <u>full</u> connectivity and the <u>full</u> benefits that connection enables.

Also included in this proposal are two new powers for those who use the Internet and for the Commission:

- Expanded transparency will require networks to inform on themselves: The proposal expands the existing transparency rules to require that networks disclose any practices that could change a consumer's or a content provider's relationship with the network. I thus anticipate that, if a network ever planned to take an action that would affect a content provider's access there would be time for the FCC to consider petitions to review such an action.
- Voice for the Average American: Recognizing that Internet entrepreneurs and consumers shouldn't have to hire a lawyer to call the Commission's attention to a grievance, an Ombudsperson would be created within the FCC to receive their complaints and, where warranted, investigate and represent their case.

Separate and apart from this connectivity is the question of interconnection ("peering") between the consumer's network provider and the various networks that deliver to that ISP. That is a different matter that is better addressed separately. Today's proposal is all about what happens on the broadband provider's network and how the consumer's connection to the Internet may not be interfered with or otherwise compromised.

The situation in which this Commission finds itself is inherited from the actions of previous Commissions over the last decade. The D.C. Circuit's ruling in January of this year upheld our determination that we need rules to protect Internet openness, and upheld our authority under Section 706 to adopt such rules, even while it found that portions of the 2010 Open Internet Order were beyond the scope of our authority. In response, I promptly stated that we would reinstate rules that achieve the goals of the 2010 Order using the Section 706-based roadmap laid out by the court. That is what we are proposing today.

Section 706 is one of the two principal methods proposed to accomplish the goals of an Open Internet. Today we are seeking input on both Section 706 and Title II of the Communications Act. **We**

are specifically asking for input as to the benefits of each and why one might be preferable to another. We have established a lengthy comment and reply period sufficient to allow everyone an opportunity to participate.

As a former entrepreneur and venture capitalist, I know the importance of openness first hand. As an entrepreneur, I have had products and services shut out of closed cable networks. As a VC, I invested in companies that wouldn't have been able to innovate if the Internet weren't open. I have hands-on experience with the importance of network openness.

I will not allow the national asset of an Open Internet to be compromised. I understand this issue in my bones. I can show you the scars from when my companies were denied open access in the pre-Internet days.

The consideration we are beginning today is not about <u>whether</u> the Internet must be open, but about <u>how</u> and <u>when</u> we will have rules in place to assure an Open Internet. My preference has been to follow the roadmap laid out by the D.C. Circuit in the belief that it was the fastest and best way to get protections in place. I have also indicated repeatedly that I am open to using Title II.

This rulemaking begins the process by putting forth a proposal, asking important and specific questions, and opening the discussion to all Americans. We look forward to hearing feedback on all these approaches.

STATEMENT OF COMMISSIONER MIGNON L. CLYBURN

Re: *Protecting and Promoting the Open Internet*, GN Docket No. 14-28.

When my mother calls, with public policy concerns, I know there is a problem.

In my 16 years as a public servant, Emily Clyburn has never called me about a substantive issue under consideration. Not during my time serving on the South Carolina Public Service Commission. Not during my tenure here as a Commissioner nor as Acting Chairwoman. Never. But all of that changed on Monday, April 28th.

Please indulge me for a moment. My mother is a very organized, intuitive and intelligent woman. She was a medical librarian and earned a master's degree while she raised three girls. She is smart, thoughtful and engaged. She is a natural researcher. So when **she** picked up the phone to call me about this issue, I knew for sure something was just not right.

She gave voice to three basic questions which, and as of today's date, her message remains on my telephone and in personal memory banks: (1) "what is this net neutrality issue?" (2) "can providers do what they want to do?" and (3) "did it already pass?"

So, like any good daughter with an independent streak, I will directly answer my mother's questions in my own time and in my own way. But her inquiry truly echoes the calls, emails and letters I have received from thousands of consumers, investors, startups, healthcare providers, educators and others across the country who are equally concerned and confused. All of this demonstrates, (no pun intended) how fundamental the Internet has become for all of us.

So, why are we here, and exactly what is net neutrality or Open Internet? First, let me start from a place where I believe most of us can agree that a free and open exchange of ideas is critical to a democratic society. Consumers with the ability to visit whatever website and access any lawful content of their choice, interact with their government, apply for a job, even monitor their household devices. Educators have the capacity to leverage the best digital learning tools for their students. Healthcare providers treating their patients with the latest technologies – all of this occurring without those services or content being discriminated against or blocked.

All content, all "bits," being treated equally. Small startups on a shoestring budget with novel ideas have the ability to reach millions of people and compete on equal footing with those established players and their considerable budgets. Innovation abounds with new applications, technologies and services.

At its core, an open Internet means that **consumers**, not a company, not the government, determine winners and losers. It is the free market at its best. All of this, however, does not nor will it ever, occur organically. Without rules governing a free and open Internet it is possible that companies – fixed and wireless broadband providers – could independently determine whether they want to discriminate or block content, pick favorites, charge higher fees or distort the market.

I have been listening to concerns not just from my mother, but from thousands of consumers and interested parties. Startups that fear, they "won't even get a chance to succeed," if access to consumers is controlled by corporations, rather than a competitive level playing field. Investors who say they will be reticent to commit money to new companies because they are concerned that their new service will not be able to reach consumers in the marketplace because of high costs or differential treatment.

Educators, even where there is a high capacity connection at the school, feel that their students may not be able to take advantage of the best in digital learning if the quality of the content is poor. Healthcare professionals worrying that the images they need to view will load too slowly and that patients will be unable to benefit from the latest technologies and specialized care made possible through remote monitoring. And, I am hearing from everyday people, who say that we need to maintain the openness of the Internet and that this openness enables today's discourse to be viewed by thousands, and offers them the ability to interact directly with policy makers and engage in robust exchanges like we are experiencing today.

In fact, let me say how impressed I was when I spoke with some of you on Maine Street earlier this week. You came to Washington from North Carolina, New York, Pennsylvania, and Virginia at your own expense to affirm just how important this issue is to you. You made it clear that the Internet is a great equalizer in our society and that average consumers should have the same access to the Internet as those with deep pockets.

There are dozens of examples across the globe where we have seen firsthand the dangers to society when people are not allowed to choose. Governments blocking access to content and stifling free speech and public discourse.

Countries, including some in Europe, where providers have congested or degraded content, and apps are being blocked from certain mobile devices. Hints of problems have occurred even here at home, particularly with regard to apps on mobile devices, even though providers in the United State, have been subject to net neutrality principles and rules with the threat of enforcement for over a decade.

So, to Mom and to all of you, this is an issue about promoting our democratic values of free speech, competition, economic growth, and civic engagement.

The second she posed was, can providers just do what they want? The short answer, is yes. As of January we have no rules to prevent discrimination or blocking.

This is actually a significant change because the FCC has had policies in place dating back to 2004, when the Commission under former Chairman, and my friend Michael Powell, unanimously adopted four principles of an open Internet in the Internet Policy Statement. These principles became the rules of the road with the potential for enforcement. Then, in 2010, the Commission formally adopted rules to promote an open Internet by preventing blocking, and unreasonable discrimination.

When the Commission approved these rules, I explained why I would have done some things differently. For instance, I would have applied the same rules to both fixed and mobile broadband; prohibited paid priority agreements; limited any exceptions to the rule; and I am on record as preferring a different legal structure. The 2010 rules reflect a compromise... yes, Mom, I do compromise at times. But in January 2014, the D.C. Circuit disagreed with our legal framework ... so here we are, again.

And I say again, that the court decision means that today we have no unreasonable discrimination or no blocking rules on the books. Nothing prevents providers from acting in small ways that largely may go undetected. And, nothing prevents them from acting in larger ways to discriminate against or even block certain content. To be fair, providers have stated that they intend, for the time being, not to do so and have publicly committed to retain their current policies of openness. But, for me, the issue comes down to whether broadband providers should have the ability to determine, on their own, whether the Internet is free and open OR whether we should have basic and clear rules of the road in place to ensure that this occurs as we have had for the last decade.

And, this may be surprising to some but I have chosen to view the court decision in a positive light for it has given us a unique opportunity to take a fresh look and evaluate our policy in light of the developments that have occurred in the market over the last four years, including the increased use of WiFi, deployment of LTE, faster speeds and connections to homes, schools, libraries, and the increased use of broadband on mobile devices, to name a few. The remand enables us to issue this clarion call to the public where they can once again help us answer that most important question of how to protect and maintain a free and open Internet. That ability officially begins for everyone today.

The third question, and, judging by the headlines and subsequent reactions, my Mother is in good company here, was "has, it, passed?" No, it has not, but let me explain. Some press accounts have reported that the Chairman's initial proposal is what we are voting on, and have conflated proposed rules with, final rules. Neither is accurate.

For those who practice in this space, I ask that you bear with me for a moment. When the Chairman circulates an item, it is indeed a reflection of his vision. My office then evaluates the proposal, listens to any concerns voiced by interested parties, including consumers, then considers whether we have concerns and, if so, what changes we want to request so that we could move to a position of support.

This item was no different. It is true. I too had significant concerns about the initial proposal but after interactions among the staff, my office, and the Chairman's office, this item has changed considerably over the last few weeks and I greatly appreciate the Chairman incorporating my many requests to do so. Though I still may have preferred to make portions of the draft more neutral, what we are voting on today asks about a number of alternatives, which will allow for a well-rounded record to develop, on how best to protect the public interest.

Second, today, we are voting only on proposed rules – not final rules. Again, this item is an official call inviting interested parties to comment, to discuss the pros and cons of various approaches, and to have a robust dialogue about the best path forward. When the Chairman hits the gavel after votes are cast on this item this morning, it will signal the start of 120 unique days of opportunity each of you has in shaping and influencing the direction of one of the world's most incredible platforms. The feedback up until now has been nothing short of astounding but the real call to action begins after this vote is taken. Comments are due on July 15th, and there is ample time to evaluate any of the proposals and provide meaningful feedback.

You have spoken and I am listening. Your power will never be underestimated, and I sincerely hope that your passion continues. As I said to those I met with outside of FCC headquarters, this is your opportunity to formally make your point on the record. You have the ear of the entire FCC. The eyes of the world are on all of us. Use your voice and this platform to continue to be heard.

I will do all that I can independently, and with the Chairman, to identify ways to encourage a more interactive dialogue with all stakeholders whether through town halls, workshops, webinars, or social media because I know with a robust record this Commission will be able move quickly and get to the finish line with the adoption of permanent rules that provide certainty, and which are clear and enforceable.

So, mom, I hope that answers most of your questions and I sincerely hope that you won't feel compelled to ask me any more significant policy questions for another 16 years.

In all seriousness, I want to thank the dedicated staff from the Office of General Counsel, including Jonathan Sallet and Stephanie Weiner, as well as the Wireline Competition and Wireless Telecommunications Bureaus, for their work on this significant item. And I want to especially thank my Wireline Legal Advisor, Rebekah Goodheart, for her expert work on this item.

CONCURRING STATEMENT OF COMMISSIONER JESSICA ROSENWORCEL

Re: *Protecting and Promoting the Open Internet*, GN Docket No. 14-28.

I support an open Internet. But I would have done this differently. Before proceeding, I would have taken time to understand the future. Because the future of the Internet is the future of everything. There is nothing in our commercial and civic lives that will be untouched by its influence or unmoved by its power. I would have taken time for more input. Because I think as public servants we have a duty to acknowledge and respond to the great tide of public commentary that followed in the wake of the Chairman's proposal. Even now, the phone calls continue, the e-mails pour in, and the web itself is ablaze with commentary on how this Commission should proceed.

It's no wonder. Our Internet economy is the envy of the world. We invented it. The broadband below us and the airwaves all around us deliver its collective might to our homes and businesses in communities across the country. The applications economy began here—on our shores. What produced this dynamic engine of entrepreneurship and experimentation is a foundation of openness. Sustaining what has made us innovative, fierce, and creative should not be a choice—it should be an obligation.

As we proceed, we are also obligated to protect what has made the Internet the most dynamic platform for free speech ever invented. It is our modern town square. It is our printing press. It is our shared platform for opportunity. Online we are sovereign—we can choose, create, and consume content unimpeded by the preferences of our broadband providers. Sustaining this freedom is essential.

As we proceed, we also must keep front of mind the principles of fairness and protection from discrimination that have informed every proceeding involving the Internet that has been before this agency. These are the essential values in our communications laws. They are the ones we have honored in the past; they must guide us in the future. So going forward we must honor transparency, ban blocking, and prevent unreasonable discrimination. We cannot have a two-tiered Internet, with fast lanes that speed the traffic of the privileged and leave the rest of us lagging behind.

So I support network neutrality. But I believe the process that got us to this rulemaking today is flawed. I would have preferred a delay. I think we moved too fast to be fair. So I concur. But I want to acknowledge that the Chairman has made significant adjustments to the text of the rulemaking we adopt today. He has expanded its scope and put all options on the table. Our effort now covers law and policy, Section 706 and Title II.

If past is prologue, the future of this proceeding, the future of network neutrality, and the future of the Internet is still being written. I am hopeful that we can write it together—and I am mindful that we must get it right.

DISSENTING STATEMENT OF COMMISSIONER AJIT PAI

Re: *Protecting and Promoting the Open Internet*, GN Docket No. 14-28.

A few years ago, Google's then-CEO, Eric Schmidt, was quoted as saying: "The Internet is the first thing that humanity has built that humanity doesn't understand." If that is so, every American who cares about the future of the Internet should be wary about five unelected officials deciding its fate.

After the U.S. Court of Appeals here in Washington struck down the agency's latest attempt to regulate broadband providers' network management practices, I recommended that the Commission seek guidance from Congress instead of plowing ahead yet again on its own. In my view, recent events have only confirmed the wisdom of that approach.

Let's start by acknowledging the obvious: The Chairman's proposal has sparked a vigorous public debate. But we should not let that debate obscure some important common ground: namely, a bipartisan consensus in favor of a free and open Internet. Indeed, this consensus reaches back at least a decade. In 2004, then-FCC Chairman Michael Powell outlined four principles of Internet freedom: The freedom to access lawful content, the freedom to use applications, the freedom to attach personal devices to the network, and the freedom to obtain service plan information.³ One year later, the FCC unanimously endorsed these principles when it adopted the *Internet Policy Statement*.⁴

Respect for these four Internet freedoms has aided the Internet's tremendous growth over the last decade. It has shielded online competitors from anticompetitive practices. It has fostered long-term investments in broadband infrastructure. It has made the Internet an unprecedented platform for civic engagement, commerce, entertainment, and more. And it has made the United States the epicenter of online innovation. I support the four Internet freedoms, and I am committed to protecting them going forward.

It's not news that people of good faith disagree when it comes to the best way to maintain a free and open Internet—or as I think of it, how best to preserve the four Internet freedoms for consumers. Some would like to regulate broadband providers as utilities under Title II of the Communications Act. This turn to common-carrier regulation would scrap the Clinton-era decision to let the Internet grow and thrive free from price regulation and other obligations applicable to telephone carriers.⁵

There are others—and I am one of them—who believe President Clinton and Congress got it right in the Telecommunications Act of 1996 when they declared the policy of the United States to be "preserv[ing] the vibrant and competitive free market that presently exists for the Internet . . . unfettered

³ Michael K. Powell, Chairman, FCC, Preserving Internet Freedom: Guiding Principles for the Industry (Feb. 8, 2004), *available at* http://go.usa.gov/8CZe.

¹ See Jerome Taylor, Google chief: My fears for Generation Facebook, The Independent (Aug. 18, 2010), available at http://www.independent.co.uk/life-style/gadgets-and-tech/news/google-chief-my-fears-for-generation-facebook-2055390.html.

² Verizon Communications Inc. v. FCC, 740 F. 3d 623 (D.C. Cir. 2014).

⁴ Appropriate Framework for Broadband Access to the Internet over Wireline Facilities; Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services; Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review-Review of Computer III and ONA Safeguards and Requirements; Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities, GN Docket No. 00-185, CC Docket Nos. 02-33, 01-33, 98-10, 95-20, CS Docket No. 02-52, Policy Statement, 20 FCC Rcd 14986 (2005).

⁵ See Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Report to Congress, 13 FCC Rcd 11501 (1998).

by Federal or State regulation." They think that we should recognize the benefits made possible by the regulatory regime that has been in place for most of the last decade. After all, nobody thinks of plain old telephone service or utilities as cutting-edge. But everyone recognizes that the Internet has boundless potential. And that's because government didn't set the bounds early on.

Today's item strikes yet a third approach. It's a lawyerly one that proposes a minimal-level-of-access rule and a not-too-much-discrimination rule. It also allows for paid prioritization under unspecified circumstances. To date, no one outside the building has asked me to support this proposal. It brings to mind a Texas politician's observation that there is nothing in the middle of the road but yellow stripes and dead armadillos.

Nothing less than the future of the Internet depends on how we resolve this disagreement. What we do will imperil or preserve Internet freedom. It will promote or deter broadband deployment to rural consumers and infrastructure investment throughout our nation. It will brighten or hamper the future of innovation both within networks and at their edge. It will determine whether control of the Internet will reside with the U.S. government or the private sector. It will impact whether consumers are connected by smart networks or dumb pipes. And it will advance or undermine American advocacy on the international stage for an Internet free from government control.

A dispute this fundamental is not for us, five unelected individuals, to decide. Instead, it should be resolved by the people's elected representatives, those who choose the direction of government—and those whom the American people can hold accountable for that choice.

I am therefore disappointed that today, rather than turning to Congress, we have chosen to take matters into our own hands. It is all the more disappointing because we have been down this road before. Our prior two attempts to go it alone ended in court defeats. Even with the newfangled tools the FCC will try to pull out of its legal grab-bag, I am skeptical that the third time will be the charm.

For one, I see no legal path for the FCC to prohibit paid prioritization or the development of a two-sided market—which appears to be the *sine qua non* objection by many to the Chairman's proposal. As the NPRM frankly acknowledges, section 706 of the Telecommunications Act "could not be used" for such a ban. And while the NPRM resists saying it outright, neither could Title II. After all, Title II only authorizes the FCC to prohibit "unjust or unreasonable discrimination" and both the Commission and the courts have consistently interpreted that provision to allow carriers to charge different prices for different services. Indeed, I have been unable to find even a single case in which the Commission found it unlawfully discriminatory to offer a different (faster) service to customers at a different (higher) price.

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⁶ 47 U.S.C. § 230(b)(2) (emphasis added).

⁷ Notice of Proposed Rulemaking at para. 138.

⁸ 47 U.S.C. § 202(a).

⁹ See, e.g., Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010; Establishment of Rules and Requirements for Priority Access Service, WT Docket No. 96-86, Second Report and Order, 15 FCC Rcd 16720 (2000) (finding Priority Access Service, a wireless priority service for both governmental and non-government public safety personnel, "prima facie lawful" under section 202); Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Interexchange Carrier Purchases Of Switched Access Services Offered By Competitive Local Exchange Carriers; Petition of US West Communications, Inc. for Forbearance from Regulation as a Dominant Carrier in the Phoenix, Arizona MSA, CC Docket Nos. 96-262, 94-1, 98-157, CCB/CPD File No. 98-63, 14 FCC Rcd 14221 (1999) (granting dominant carriers pricing flexibility or special access services, allowing both higher charges for faster connections as well as individualized pricing and customers discounts); GTE Telephone Operating Companies Tariff F.C.C. No. 1 et al., Transmittal Nos. 900, 102, 519, 621, 9 FCC Rcd 5758 (Common Carrier Bur. 1994) (approving tariffs for Government Emergency Telephone Service(GETS), a prioritized telephone service, and additional charges therefor); see also, e.g., Interstate Commerce Commission v. Baltimore & O.R. Co., 145 U.S. 263, 283–84 (1892) (noting that common carriers are "only bound to give the same terms to all (continued...)

For another, the legal consequences of moving forward with net-neutrality regulation are sure to wreak havoc on the Internet economy, no matter which legal path we take. If we are to take the D.C. Circuit at its word, section 706 grants the FCC virtually unfettered authority to encourage broadband adoption and deployment. So if three members of the FCC think that more Americans would go online if they knew their information would be secure, could we impose cybersecurity and encryption standards on website operators? If three members of the FCC think that more Americans would purchase broadband if edge providers were prohibited from targeted advertising, could we impose Do Not Track regulations? Or if three members of the FCC think that more Americans would use the Internet if there were greater privacy protections, could we follow the European Union and impose right-to-be-forgotten mandates? And because section 706 gives state commissions authority equal to the FCC, every broadband provider, every online innovator, every Internet-enabled entrepreneur may now have to comply with differing regulations in each of the 50 states. Tesla, Uber, Airbnb, and countless others can attest to the welcome that parochial regulators give to disruptive start-ups.

The Internet would fare no better under Title II, and the consequences are likely to be even worse. Reclassification opens the door to actual access charges—tariffed charges that Internet service providers could impose on edge providers, content delivery networks, and transit operators *without their consent*. Indeed, one Title II option on the table would guarantee new Internet tolls by giving broadband ISPs no option other than access charges to recover their regulated costs. ¹² Not only that, but reclassification means a broadband price hike for every consumer in America—not exactly a move that will encourage broadband adoption. ¹³ And alongside tariffed access charges and higher consumer prices, other Title II provisions—ranging from the disclosure of customer information ¹⁴ to mandatory billing disclosures ¹⁵—would apply to broadband providers, edge providers, or really anyone in the Internet economy. And like section 706, Title II puts state regulators on par with the FCC, meaning there may be 50 sets of access charges to be paid, 50 different broadband fees to be assessed, 50 different privacy regimes to be complied with, and 50 different types of mandatory disclosures to be made. As this suggests, a Title II regime hardly lowers the barriers to competitive entry—starting a company doesn't get you free legal services. And it would hardly "provide certainty to all market participants and keep the costs of regulation low," as 150 Internet companies asked us to do last week. ¹⁶

Finally, pursuing net-neutrality regulations under section 706 or Title II places in jeopardy every other goal of this Commission in the communications marketplace. Most obviously, this pursuit injects tremendous regulatory uncertainty into the market, chilling further broadband deployment, ¹⁷ threatening

¹⁰ Verizon v. FCC, 740 F.3d 623, 639–40 (D.C. Cir. 2014).

¹¹ 47 U.S.C. § 1302(a) ("The Commission *and each State commission* with regulatory jurisdiction over telecommunications services shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans" (emphasis added)).

¹² See Notice of Proposed Rulemaking at paras. 151–52.

¹³ See 47 U.S.C. § 254(d) (imposing universal service fees on all telecommunications carriers).

¹⁴ See 47 U.S.C. § 222.

¹⁵ See 47 C.F.R. § 64.2401 (implementing 47 U.S.C. §§ 201(b), 258).

¹⁶ Letter from Amazon et al., to Chairman Wheeler and Commissioners Clyburn, Rosenworcel, Pai, and O'Rielly, GN Docket No. 14-28 (May 7, 2014).

¹⁷ See, e.g., Letter from Robert W. Quinn, Jr., Senior Vice President, AT&T, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-28, at 2–3 (May 9, 2014); Letter from Kathryn A. Zachem, Senior Vice President, Comcast Corporation, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-28, at 1–2 (May 12, 2014); Letter from Rick (continued...)

the \$60 billion a year that private companies invest in their broadband networks, and potentially jeopardizing some of the millions of jobs that depend on such investment.¹⁸ This brave new world will deter new entrants and reduce competition in the broadband market.

This is no academic concern. Even with the cushion of market capitalization equivalent to Comcast, Verizon, and T-Mobile combined, Google has already attested that our legacy regulations led it not to offer phone service as part of Google Fiber. On the other end of the size spectrum, there are thousands of smaller Internet service providers—wireless ISPs (WISPs), small-town cable operators, electric cooperatives, and others—that don't have the means or the margins to withstand a regulatory onslaught. If they go dark, consumers they serve (including my parents, who are WISP subscribers in rural Kansas) will be thrown offline.

On top of all this, undertaking such a "politically corrosive" rulemaking on dubious legal and policy grounds will swamp what should be an independent, expert agency with years of litigation and partisan division. That is not good for broadband deployment, that is not good for consumers, and that is not good for future of the Internet.

For all of these reasons, I respectfully dissent.

* * *

Nevertheless, if we are going to act like our own mini-legislature and plunge the Commission into this morass, we need to use a better process going forward. I agree with my colleague, Commissioner Rosenworcel, that we have rushed headlong into this rulemaking by holding this vote today²¹—and when there is any bipartisan agreement on net neutrality, that's something to pay attention to. We have seen over the past month what happens when the American people feel excluded from the Commission's deliberations. Indeed, on several recent issues, many say that the Commission has spent too much time speaking at the American people and not enough time listening to them.

Going forward, we need to give the American people a full and fair opportunity to participate in this process. And we must ensure that our decisions are based on a robust record.

So what is the way forward? Here's one suggestion. Just as we commissioned a series of economic studies in past media-ownership proceedings,²² we should ask ten distinguished economists from across the country to study the impact of our proposed regulations and alternative approaches on the Internet ecosystem. To ensure that we obtain a wide range of perspectives, let each Commissioner pick two authors. To ensure accuracy, each study should be peer reviewed. And to ensure public oversight,

¹⁸ Letter from Thomas R. Stanton, Chairman & CEO, ADTRAN, et al., to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-28 (May 13, 2014).

¹⁹ Alyson Raletz, *Google Considers But Drops Plans to Include Phone Service, Too*, Kansas City Business Journal (Dec. 4, 2012), *available at* http://www.bizjournals.com/kansascity/blog/2012/12/google-considers-drops-phone-service.html.

²⁰ See Letter from Mitch McConnell, Senate Republican Leader, et al., to the Honorable Thomas Wheeler, Chairman, FCC (May 13, 2014); Letter from John A. Boehner, Speak of the House, to the Honorable Thomas E. Wheeler, Chairman, FCC (May 14, 2014); Letter from Fred Upton, Chairman, U.S. House of Representatives Committee on Energy and Commerce, et al. to the Honorable Thomas E. Wheeler, Chairman, FCC (May 13, 2014).

²¹ See Remarks of Commissioner Jessica Rosenworcel at the Chief Officers of State Library Agencies Meeting (May 7, 2014), available at http://go.usa.gov/84SG; see also Letter from Senators Kelly Ayotte, Deb Fischer, and Dan Coats, to the Honorable Tom Wheeler, Chairman, FCC (May 14, 2014), available at http://go.usa.gov/84Sz.

²² FCC, 10 Research Studies on Media Ownership, http://go.usa.gov/8YSA.

we should host a series of hearings where Commissioners could question the authors of the studies and the authors of those studies could discuss their differences. Surely the future of the Internet is no less important than media ownership.

But we should not limit ourselves to economic studies. We should also engage computer scientists, technologists, and other technical experts to tell us how they see the Internet's infrastructure and consumers' online experience evolving. Their studies too should be subject to peer review and public hearings.

Ultimately, any decisions we make on Internet regulation must be based on sound engineering and an accurate understanding of how networks actually function. They should be informed by the judicious and successful regulatory approach embraced by both Democrats and Republicans in recent years. And they should avoid embroiling everyone, from the FCC to industry to the average American consumer, in yet another years-long legal waiting game.

In short, getting the future of the Internet right is more important than getting this done right now. After all, the Internet was free and open before the FCC's net-neutrality rules took effect in November 2011. And it is still free and open today even though those rules are no longer in force. Going forward, I hope that we will not rush headlong into enacting bad rules. We are not confronted with an immediate crisis that requires immediate action. And if we are going to usurp Congress's role and make fundamental policy choices for the American people, we must do better than the process that led to today's vote.

DISSENTING STATEMENT OF COMMISSIONER MICHAEL O'RIELLY

Re: *Protecting and Promoting the Open Internet,* GN Docket No. 14-28.

It should come as no surprise that I cannot support today's Notice. As I've said before, the premise for imposing net neutrality rules is fundamentally flawed and rests on a faulty foundation of make-believe statutory authority. I have serious concerns that this ill-advised item will create damaging uncertainty and head the Commission down a slippery slope of regulation.

As anticipated, the Notice proposes to ground the net neutrality rules in section 706 of the Telecommunications Act of 1996. I have already expressed my views that Congress never intended section 706 to be an affirmative grant of authority to the Commission to regulate the Internet. At most, it could be used to trigger *deregulation*.

But the Notice doesn't stop there. It seeks comment on ways to construe additional language in section 706 and even suggests using section 230(b) to broaden the scope of the Commission's usurped authority. This is absurd. I was worried enough that the Commission's current reading of section 706 could be used to justify any number of regulatory interventions and could ultimately impact not just broadband providers, but also edge providers. Now that the Commission is trying to cast an even wider net of authority, I fear that other services and providers could become ensnared in the future.

And just in case section 706 proves to be inadequate for this regulatory boundoggle, the Notice explores upending years of precedent and investment by reclassifying broadband Internet access as a Title II service. That is, the Commission examines applying monopoly era telephone rules to modern broadband services solely to impose unnecessary and defective net neutrality regulations. I cannot support such a backward-looking, ends-driven approach—not in a Notice and certainly not in final rules.

While courts can recognize that an agency may *legally* reverse course as long as it adequately explains the reasons for changing its position, I am concerned about the *real world impact* that such a decision could have on the communications industry and the economy as a whole. The current framework has provided a climate of certainty and stability for broadband investment and Internet innovation. Upending that framework could disrupt the tremendous progress that has been made over the last decade. I also worry about the credibility of an agency that consistently fails to meet statutory deadlines to review and eliminate old rules, but is supposedly open to reapplying obsolete provisions.

The Notice suggests that reclassification could be accompanied by substantial forbearance from the Title II requirements. But the need to forbear from a significant number of provisions in Title II proves the point that Title II is an inappropriate framework for today's dynamic technologies. Indeed, Title II includes a host of arcane provisions on topics like interlocking directorates, valuation of carrier property, uniform system of accounts and depreciation charges, telephone operator services, telemessaging service, Bell Operating Company entry into interLATA services, manufacturing of telecommunications equipment and customer premises equipment, and electronic publishing. Even if the Commission granted forbearance from all of the provisions that it has eliminated for incumbent telephone companies—and then some—advocates are ignoring that broadband providers and services would still be subject to a host of unnecessary rules. The idea that the Commission can magically impose or sprinkle just the right amount of Title II on broadband providers is giving the Commission more credit than it ever deserves.

Additionally, before taking any action on any issue, the Commission should have specific and verifiable evidence that there is a market failure. The Notice does not examine the broadband market much less identify any failures. A true and accurate review of the U.S. broadband market—which must

include wireless broadband—would show how dynamic it is. The Notice does acknowledge that innovation and investment have flourished, although it implausibly ascribes those successes to the vacated net neutrality rules.

Moreover, the Notice fails to make the case that there's an actual problem resulting in real harm to consumers. The Notice identifies, at most, two additional examples of alleged harm. And in one instance, the Commission concedes it did not find a violation. The Notice tries to explain away the absence of net neutrality complaints, but the unpersuasive excuses cannot mask a lack of evidence. In a last ditch attempt to find problems, the Notice points to supposed bad conduct occurring outside of the United States without explaining how that is relevant to a very different U.S. broadband market and regulatory structure.

Having come up empty handed, the Notice proceeds to explore hypothetical concerns. At the top of the list is prioritization. But even ardent supporters of net neutrality recognize that some amount of traffic differentiation or "prioritization" must be allowed or even encouraged. Voice must be prioritized over email; video over plain data. Prioritization is not a bad word. It is a necessary component of reasonable network management.

The Notice is particularly skeptical of paid prioritization and contemplates banning some or all such arrangements outright. Yet companies that do business over the Internet, including some of the strongest supporters of net neutrality, routinely pay for a variety of services to ensure the best possible experience for their consumers. They've been doing it for years. And certain arrangements have even been viewed as "good for the Internet." In short, fears that paid prioritization will automatically degrade service for other users, relegating them to a so-called "slow lane," have been disproven by years of experience.

Because there's no evidence of actual harm that could help inform the proposed rules, they are not narrowly tailored but hopelessly vague and unclear. We are left to puzzle over what it means to provide a "minimum level of access" or what constitutes a "commercially unreasonable" practice, especially in the absence of contractual relationships. The Notice suggests that providers could seek non-binding staff guidance or prospective reviews of their practices. But it is very troubling when legitimate companies are put in the position of having to ask the government for its blessing every time they need to make a business decision in order to avoid costly enforcement or litigation. It is even more telling that the Commission is suggesting new layers of enforcement options for which it has no experience. For instance, where are ombudsmen mentioned in the statute and what are they to do exactly?

Finally, to say the cost-benefit "analysis" is woefully inadequate is an understatement. The Notice devotes several pages to a wish list of disclosures, reporting requirements, and certifications that will impose new burdens and carry real costs, but may not even be meaningful to end users. For example, what will the average consumer do with information on packet corruption and jitter? However, there is no attempt to quantify and compare the costs of the proposed new requirements against the supposed benefits—just a single paragraph seeking comment on ways to reduce the burdens. Proposed rules should be accompanied by a fulsome cost-benefit analysis that includes a detailed and extensive review of current law, especially as it applies to other federal agencies that we seek to imitate. The Commission's short-shrift approach to cost-benefit analysis cannot continue, and I intend to spend time improving this important function.

In sum, the proposed net neutrality rules and legal theories will stifle innovation and investment by the private sector, provide no help to consumers, and thrust the Commission into a place it shouldn't be. I respectfully dissent.