Neutrality 2.0: The Broadband Transition to Transparency

Justin S. Brown
*University of South Florida, justinsbrown@usf.edu*

Andrew W. Bagley
*University of Maryland University College, dbagley@gmail.com*

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Neutrality 2.0: The Broadband Transition to Transparency

Justin S. Brown* & Andrew W. Bagley†

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* Justin S. Brown is an assistant professor in the Zimmerman School of Advertising and Mass Communication, where he teaches courses in telecommunications and media law. He holds a Doctor of Philosophy in Mass Communications and a Master of Arts in Telecommunications Studies from the Pennsylvania State University and a Bachelor of Science in Journalism from the University of Oregon.

† Andrew Bagley is privacy counsel at Crowdstrike and serves as the director of operations for the Secure Domain Foundation. He is also an adjunct professor in the cybersecurity policy program at the University of Maryland University College. Mr. Bagley earned his Juris Doctor from the University of Miami. He holds a Master of Arts in Mass Communication Law, Bachelor of Science in Public Relations, and Bachelor of Arts in Political Science from the University of Florida. The views expressed herein reflect those of the author alone and do not represent the views of any employer or client.
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INTRODUCTION

Increasingly for many Americans, broadband Internet access is a fundamental aspect to remain interconnected and participate in everyday life.1 Many citizens have shifted their own communication and mediated environments and practices to an online world to engage socially, economically, politically, and culturally. There are

also a growing number of individuals who depend heavily on high-speed Internet service anywhere, anytime, whether through a tablet, desktop computer, SmartTV, video game console, or streaming media player via a local area network, Wi-Fi hotspot, 4G wireless, DSL, cable modem, or fiber-to-the-home. Arguably, one may suggest that the mass media landscape and its related industry structures, revenue, and distribution models are in a period of tremendous flux because of the Internet’s end-to-end design and ability to foster competition, innovation through digital distribution of over-the-top content, and services that typically retain or improve the quality of existing offerings at a fraction of the price.

While this outpouring of change allows for an expansion of voices in the marketplace, including user-generated content and social media, such a shift is predicated on viable high-speed Internet access being not only available to as many citizens as possible, but also first and last mile providers who provide quality connections without egregious network management practices that may block or drop specific services or content or even discriminate by favoring specific popular Internet sites over others with exclusive rates for higher speeds of service.

Although there have been very few blatant network management abuses reported, imagine for an instant Comcast or any other cable operator’s dilemma with competing video content through edge providers like Netflix or Hulu that detract viewers from traditional television viewing and advertising. Comcast has relied heavily throughout the years upon revenue from subscribers paying for cable television services and increased its physical distribution plan with fiber to further increase channel capacity to compete with direct broadcast satellite, offer more robust Internet connections, and enter the local telephone business.

But today, that bundle of services is facing stiff competition as consumers cut the cord and drop their landline service and multi-channel video program distributor (“MVPD”) subscriptions. To help abate some of these concerns and compete with emergent over-the-top video services and new facilities-based entrants like Verizon’s FIOS, Comcast rebranded its cable TV service and launched XFINITY TV to provide both on-demand set-top box
and online content. Arguably, it is not in Comcast’s best interests to cannibalize its current video subscription revenues and simply watch its broadband subscribers migrate to over-the-top services for competing video content.

As this past year’s debate has highlighted, there is a fear that fixed and mobile broadband Internet access providers may begin to peel back on their practices of openness at any given time without strong network neutrality provisions such as those recently put into place and those overturned in the past. A provider like Comcast is both horizontally and vertically integrated in the types of services and content it owns and may in effect use the first- and last-mile broadband leverage to help retain and even grow revenue flows. After all, in most markets, there are typically two facilities-based competitors for fixed broadband Internet access, especially when seeking a 25 Mbps connection. As a result, a broadband duopoly scenario leaves a tremendous amount of power and discretion with the two Internet access providers in how they manage their network. Perhaps even more profound is the occurrence of a company like Verizon that provides its own MVPD service as well as fixed and mobile high-speed Internet. While there are four large wireless broadband providers in the country that provide cellphone service, there is only one facilities-based provider, Verizon, that provides consumers with the potential bundle of both fixed and wireless broadband Internet access and MVPD service.

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To help clarify these issues, in 2010 the Federal Communications Commission established the “Open Internet Rules” for broadband providers, calling for three network-management principles centered on antiblocking, non-discrimination, and transparency requirements.6 Recently, in Verizon v. FCC, the D.C. Circuit Court of Appeals vacated the antiblocking and non-discriminatory provisions but left the transparency requirements intact for both fixed and wireless broadband providers.7 Likewise, the FCC recently issued its 2015 Open Internet order that reiterated and enhanced the previously upheld transparency rules.8

Moving forward, transparency requirements are therefore a central focus within the FCC’s approach to foster an open Internet and appear integral to the future broadband ecosystem. Even though broadband providers publish and distribute terms of service conditions to obtain user consent and avoid legal liability, only recently have they been required by law to disclose how they manage the network and report important consumer quality-of-service information like speed and latency. Through legal research and analysis, this Article reviews the shift toward transparency and disclosure as part of the solution to the network neutrality debate by asking the following research question: How do the FCC’s suggested transparency requirements, as set forth thus far in the Open Internet Rules, apply to broadband Internet access providers?

Part I of this Article discusses the regulation and judicial review behind the network neutrality debate. Part II reviews the FCC’s transition to transparency as detailed in the Open Internet Rules, focusing specifically on what fixed and mobile broadband providers may disclose to comply with the provisions and avoid potential sanctions. To further help illustrate how the transparency rules apply, Part III examines Verizon’s terms of service conditions to measure to how its fixed and mobile broadband Internet access services comply with the FCC’s suggested disclosure practices. Lastly, Part IV provides an appraisal of the FCC’s transparency ef-

6 See Preserving the Open Internet, 25 FCC Rcd. 17,905, ¶ 1 (2010).
forts—which have thus far withstood legal challenge—as a solution in network neutrality policy and offers suggestions regarding further disclosure of meaningful information to consumers.

I. REGULATION & JUDICIAL REVIEW INVOLVING NETWORK NEUTRALITY

Network neutrality is an ongoing debate concerning the degree to which Internet Service Providers (“ISPs”) may exercise control over their own network, including their ability to route traffic efficiently and charge different prices for faster service. With its roots in broadband open-access policy and the Computer Inquiries, the issue stemmed from fears a post-Brand X environment where ISPs who are deemed to provide “information services” are largely left unregulated even though their core product involves a “telecommunications component,” one which would by past regulatory standards seemingly invoke some type of common-carrier burden that would otherwise ensure that providers would not discriminate among similarly situated users or content.

A primary reason that the debate exists is that Congress has largely left this question unanswered within the Communications Act of 1934, as amended by the Telecommunications Act of

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10 For legal analysis of the open access debate, see Justin Brown, Fostering the Public’s End-to-End: A Policy Initiative for Separating Broadband Transport from Content, 8 COMM. L. & POL’Y 146–99 (2003); Mark A. Lemley & Lawrence Lessig, Open Access to Cable Modems, 22 WHITTIER L. REV. 3 (2000); Harold Feld, Whose Line is It Anyway—The First Amendment and Cable Open Access, 8 COMM.LAW CONSPECTUS 23 (2000); James B. Speta, Handicapping the Race for the Last Mile: A Critique of Open Access Rules for Broadband Platforms, 17 YALE J. ON REG. 40–91 (2000).


Even though the Telecommunications Act of 1996 leveled the playing field between phone and cable operators offering one another’s services, it did little in answering how ISPs should be classified and regulated, especially in a broadband environment that features digital subscriber lines, cable modems, and more recently, fiber to the curb or home as well as mobile, including 4G LTE services. Furthermore, as broadband speeds and utility rise, concerns mount over how so-called edge and over-the-top (“OTT”) providers like Netflix, Hulu, YouTube and Pandora may be treated. With the exception of YouTube via Google, these providers do not own the first and last mile access to the Internet, ostensibly relying upon broadband ISPs to carry their traffic to reach their customers.

A. The FCC’s Network Management Principles

As a result of initial fears of what may happen in an unregulated information services environment, the FCC crafted an Internet Policy Statement in 2005 that called for “neutral” behavior among ISPs. Specifically, the FCC adopted four principles, asserting that consumers are entitled: (1) “to access the lawful Internet content of their choice”; (2) “to run applications and use services of their choice, subject to the needs of law enforcement”; (3) “to connect their choice of legal devices that do not harm the network”; and (4) “to competition among network providers, application and service providers, and content providers.”

The Commission justified these provisions as within its powers of ancillary jurisdiction under Title I of the Communications Act and necessary to help promote broadband deployment and advanced telecommunications capability as specified in Section 706.

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18 Id. at 14,988.
19 See id. at 14,987.
Moreover, the provisions help install and encourage an open, vibrant, competitive, and interconnected Internet that is grounded in Section 230(b).\textsuperscript{20} The FCC made clear that these principles are “subject to reasonable network management” practices and did not constitute official rules.\textsuperscript{21}

\textbf{B. Comcast v. FCC}

In 2007, the Associated Press alleged Comcast was blocking peer-to-peer (“P2P”) applications on its network.\textsuperscript{22} Specifically, Comcast was interfering with users trying to upload and share Gnutella and BitTorrent files.\textsuperscript{23} Free Press filed a complaint against Comcast\textsuperscript{24} and a petition with the FCC\textsuperscript{25} requesting that the Commission declare that such application degradation and blocking fall outside of acceptable network management practices as set forth in the Internet Policy Statement.

Upon receiving public comment on the petition and conducting its own investigation, the FCC found that Comcast did degrade P2P applications and had in effect prevented consumers from accessing lawful applications of their choice, thus violating the Internet Policy Statement.\textsuperscript{26} One primary reason the FCC found fault with Comcast’s approach was that it failed to fully disclose its network management practices.\textsuperscript{27} Because Comcast had already agreed to stop its specific management methods relevant to P2P applications, the FCC issued neither a fine nor a cease and desist order. Rather, the FCC required Comcast to become more transparent by clearly establishing and publicly disclosing its network management practices and developing a plan to incorporate non-

\begin{thebibliography}{9}
\bibitem{20} See id.
\bibitem{21} See id. at 14,988 n.15.
\bibitem{23} \textit{Id.} These programs are typically used to exchange music and video files, often to avoid paying for copyrighted works. At the time of the findings in 2007, it was estimated that P2P applications accounted for 50 to 90 percent of overall Internet traffic. \textit{Id.}
\bibitem{25} \textit{Id.}
\bibitem{26} \textit{Id.}
\bibitem{27} \textit{Id.}
\end{thebibliography}
discriminatory network methods within thirty days. After Comcast complied and filed its network management practices, the Commission took issue with how Comcast treats its own and competitors’ Voice over Internet Protocol (“VoIP”) phone services, including why these voice services should not be treated as telecommunications services within Title II of the Communications Act.

Even though Comcast abated the questionable network management practices involving P2P applications and argued that its VoIP services fall outside the scope of telecommunications services, it nevertheless appealed the FCC’s decision to the D.C. Circuit Court of Appeals. Upon review, the court ruled the FCC failed to establish how its ancillary jurisdiction was connected to a clear statutory provision and vacated the FCC’s Comcast order.

By applying the American Library Association v. FCC test for ancillary jurisdiction, the court examined whether Title I applies to network practices among Cable ISPs as well as whether these regulations are “reasonably ancillary to the Commission’s effective performance of its statutorily mandated responsibilities.” While finding Title I general jurisdiction applied, the court nevertheless found the FCC’s Internet Policy Statement did not amount to “statutorily mandated responsibilities” set forth in the Communications Act. In fact, the court articulated that mere reliance on policy statements found in the Communications Act to justify regulation would provide too much latitude beyond powers delegated by Congress.

Because the FCC failed to establish its authority, the court did not visit whether it acted appropriately in determining Comcast’s P2P network management practices had violated its Internet Policy

28 Id.
30 Comcast v. FCC, 600 F.3d 642 (D.C. Cir. 2010).
31 Id. at 661.
32 406 F.3d 689 (D.C. Cir. 2005).
33 Comcast, 600 F.3d at 646–47.
34 Id. at 652.
35 See id. at 661.
Statement. Some scholars have suggested that, because the Commission did not seek public comments, the Internet Policy Statement would be unenforceable under the Administrative Procedures Act. Nevertheless, the court suggested that Section 706 of the Communications Act may grant the FCC reasonable ancillary jurisdiction to cover cable Internet services network management practices, in effect leaving the door open for future regulatory attempts.

C. The FCC’s Open Internet Order

While written with the goal of remediying the ancillary jurisdiction question at issue in Comcast, the FCC’s Open Internet Rules establish several network neutrality provisions concerning transparency, no blocking, and no unreasonable discrimination practices for both fixed and wireless broadband Internet access providers:

1. **Transparency:** All broadband providers “shall publicly disclose accurate information regarding network management practices, performance and commercial terms of [their] broadband Internet access services sufficient for consumers to make informed choices regarding the use of such service and for content, application, service and device providers to develop, market and maintain their Internet offerings.”

2. **No Blocking:** Fixed broadband providers “shall not block lawful content, applications, services or non-harmful devices, subject to reasonable network management.” Mobile broadband providers “shall not block consumers from accessing lawful websites . . . nor block applications that compete with the provider’s voice or video telephony services, subject to reasonable network management.”

3. **No Unreasonable Discrimination:** All broadband providers “shall not unreasonably discriminate in transmitting lawful net-

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37 See Comcast, 600 F.3d at 658–59.
38 Preserving the Open Internet, 25 FCC Rcd. 17,905, 17,906 (2010).
39 Id. at 17,992, ¶ 8.3.
40 Id. at ¶ 8.5.
41 Id.
work traffic over a consumer’s broadband Internet access service.”

The FCC defines a network management practice as reasonable “if it is appropriate and tailored to achieving a legitimate network management purpose” factoring in both network technology and architecture. The Commission also claims that “transparency and end-user control are touchstones of reasonableness.”

The FCC believes it possesses proper regulatory and ancillary jurisdiction powers under the broad mandate of Section 706 because the Open Internet Rules promote the deployment of “advanced telecommunications capability,” including Internet access, and further promote local competition and infrastructure investment. Under this section, the FCC generates annual reports on the availability of advanced telecommunications capability and may take swift action if needed to accelerate its development. In addition, the Commission contends the rules may also be supported through ancillary jurisdiction under Title II, Title III, and Title VI, and that the transparency provision may be supported by the need to supply annual reports to Congress and “obtain ‘full and complete information’ from common carriers and their affiliates.”

Furthermore, the FCC refuted claims that the transparency, no blocking, and no unreasonable discrimination practices violated either the First or Fifth Amendment. The Commission claims broadband providers’ First Amendment speaker rights are not violated because the rules themselves do not target specific messages or viewpoints and are therefore content-neutral under intermediate

\[\text{\small 42 Id. at 17,992, 17,993, § 8.7.}\]
\[\text{\small 43 Id. at 17,993, § 8.11.}\]
\[\text{\small 44 Id. at 17,908, ¶ 6.}\]
\[\text{\small 45 Id. at 17,971, ¶ 122.}\]
\[\text{\small 46 Id. at 17,972, ¶ 123.}\]
\[\text{\small 47 Id. at 17,972–74, ¶¶ 125–26.}\]
\[\text{\small 48 Id. at 17,975, 17,978–80, ¶ 128, 133–35.}\]
\[\text{\small 49 Id. at 17,975–79, ¶¶ 129–32.}\]
\[\text{\small 50 Id. at 17,980–81, ¶ 136.}\]
\[\text{\small 51 Id. at 17,981, ¶ 137 (quoting 47 U.S.C. § 218 (2012)).}\]
\[\text{\small 52 See id. at 17,982–86.}\]
The Open Internet Rules simply address the transmission service provided by broadband Internet access providers and, as a result, these carriers should be viewed merely as conduits for speech. The Fifth Amendment is not at issue because the Open Internet Rules do not amount to a taking of property but simply require broadband Internet access providers to be transparent and refrain from blocking or unreasonable discrimination when the “voluntarily” carry traffic.

D. Verizon v. FCC

The D.C. Circuit vacated and remanded the anti-discrimination and anti-blocking rules but upheld the transparency requirements. The court found difficulty in the fact that the FCC had reversed its own course in favoring rules that called for common-carrier provisions because these were in opposition to the information services classification agreed upon by the Commission in previous rulemaking and subsequent litigation. According to the court, this existing regulatory action negated the possibility of common-carrier provisions like the anti-blocking and anti-discrimination rules because the FCC failed to find broadband service providers as telecommunication service providers. The Communications Act has not been amended to clearly define broadband providers and delegate a particular regulatory classification. Accordingly, broadband providers remain information service providers, free from Title II’s common-carrier requirements and may even engage in blocking or discrimination.

In Verizon, the court even addressed how broadband ISPs have to treat edge providers under the no-blocking and discrimination

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53 Id. at 17,983–85, ¶¶ 145–46. The rules serve an important governmental interest unrelated to the suppression of free expression and do not burden more speech than necessary. The governmental interests include “preserving an open Internet to encourage competition and remove impediments to infrastructure investment while enabling consumer choice, end-user control, free expression and the freedom to innovate without permission . . . ensure the public’s access to a multiplicity of information sources and maximize the Internet’s potential to serve the public’s interest.” Id. at 17,984, ¶ 146.

54 Id. at 17,982–84, ¶¶ 141, 145.

55 Id. at 17,985, ¶ 149.


57 Id. at 624.

58 Id. at 644–53.
provisions of the Open Internet Rules.\textsuperscript{59} Using the analogy of \textit{Midwest Video II}, the court suggested that the rules force broadband providers to in effect be common carriers of content because they must “serve all edge providers without unreasonable discrimination” and “hold themselves out to serve the public indiscriminately.”\textsuperscript{60} With the local access channel regulations at issue in \textit{FCC v. Midwest Video II},\textsuperscript{61} third parties providing programming may have forced carriage of their content and displaced the cable operator’s editorial discretion and control.\textsuperscript{62} The Supreme Court found that these local access requirements made cable operators de facto common carriers.\textsuperscript{63} Likewise, according to the D.C. Circuit, prior to the Open Internet Rules, broadband providers were able to refuse to carry edge provider content by blocking or discriminating if they had exercised such an option, but the anti-blocking and anti-discriminatory provisions in effect take away these rights\textsuperscript{64} and compel carriage to all edge providers in all circumstances.\textsuperscript{65}

In upholding the transparency provisions, the court suggested that the disclosure rules do not amount to common carrier obligations.\textsuperscript{66} Even though Verizon contended that the disclosure rules should fail if the anti-discrimination and anti-blocking rules were vacated, the court agreed with the FCC that the rules function separately and would have been adopted on their own.\textsuperscript{67} Accordingly, this decision breathed life into the FCC’s efforts to provide consumers with more information about their Internet experience.

\textbf{E. Protecting and Promoting the Open Internet NPRM}

To respond to the jurisdictional and common carriage questions raised in \textit{Verizon v. FCC}, the Commission drafted new proposed rules in May 2014 in its effort to further clarify and modify

\textsuperscript{59} \textit{Id.} at 656.
\textsuperscript{60} \textit{Id.} (internal citation omitted).
\textsuperscript{61} 440 U.S. 689 (1979).
\textsuperscript{62} \textit{See Verizon,} 740 F.3d at 654–56.
\textsuperscript{63} \textit{Id.}
\textsuperscript{64} \textit{Id.} at 653.
\textsuperscript{65} \textit{Id.} at 653–54.
\textsuperscript{66} \textit{Id.} at 654.
\textsuperscript{67} \textit{Id.} at 659.
its network neutrality policy in the Open Internet Order. The Commission suggested that the Verizon decision did not dismiss the ability to regulate broadband Internet service under Section 706. Though the rules were unofficial, for both fixed and mobile broadband the FCC proposed to enhance the transparency rules, retain the no-blocking provisions under a revised rationale, and change the non-discrimination measure to no commercially unreasonable practices.

The FCC reverts back to the exact language for the different no-blocking provisions that apply to fixed and mobile broadband as set forth in its Open Internet Order. In keeping these no-blocking rules, the Commission clarified that broadband providers may negotiate “individualized, differentiated arrangements with similarly-situated edge providers” as long as they are commercially reasonable and “do not degrade lawful content or service to below a minimum level of access.” The Commission states that the no-blocking rule establishes a minimum service as a threshold that all broadband providers must meet, and such a result will “ensure that all users have access to an Internet experience that is sufficiently robust, fast and effectively usable,” including all end users and edge providers, even those who don’t enter into separate negotiated agreements for faster service.

In modifying the non-discriminatory rules to no commercially unreasonable practices, the FCC suggests broadband providers engage in commercially reasonable activities and prohibit unreasonable “practices that, based on the totality of the circumstances, threaten to harm Internet openness and all that it protects.” As long as the conduct is commercially reasonable, such a rule allows broadband providers to reach individual terms and agreements to carry traffic with different end users and edge providers without having these same conditions apply to all customers indiscriminate-

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68 Protecting and Promoting the Open Internet, 79 Fed. Reg. 37,448 (July 1, 2014) (to be codified at 47 C.F.R. pt. 8).
69 Id. at 37,455, ¶ 55.
70 See id. at 37,449, ¶ 10.
71 Id. at 37,460, ¶ 89.
72 Id.
73 Id. at 37,461, ¶ 98.
74 Id. at 37,464, ¶ 116.
The Commission “tentatively conclude[s]” that this rule should be distinct from the no-blocking rule, thereby allowing separate review of these standards if questionable blocking or commercially unreasonable practices occur. The FCC also clarifies that reasonable network management shall not constitute a commercially unreasonable practice.

Collectively, the new proposed rules would allow broadband providers to establish what is commonly referred to as “paid prioritization” or “pay for priority” for edge providers who supply popular over-the-top content, including online video distributors like Netflix, Hulu, Amazon, and YouTube. With the exception of Google in some markets, nearly all edge providers and end users do not own the first- and last-mile fixed or mobile broadband network connection that supplies the public with Internet access. With the new FCC suggestions, in effect these edge providers as well as high-traffic social media sites like Facebook and Twitter may negotiate individual arrangements to attain a guaranteed quality and higher speed of service with broadband Internet access providers as long as the arrangements don’t amount to blocking or result in an unreasonable commercial practice. Such paid-peering deals have already taken place prior to the proposed rules, suggesting this trend may result in “toll booths” for Internet content and potentially erode the ability for smaller edge users, startups, or end users with compelling content or services to reach the public because they won’t be able to pay for faster, higher-quality Internet ac-

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75 Id. at 37,464, ¶ 116.
76 See id. ¶ 117.
77 See id.
Instead, smaller edge providers and most end users will have to rely upon the notion under the no-blocking rules that there will be a minimum threshold of service and speed quality for all broadband Internet access providers. In contrast, some commentators believe the paid prioritization trend is an inevitable part of the growth and commercialization of the Internet.

The FCC also suggests strengthening the existing transparency requirements that are in effect for broadband providers. The Commission believes “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.” Although it previously stated that a single disclosure may suffice, the FCC tentatively concludes that three tailored disclosures would be best to meet the different interests and needs of end users, edge providers, and the broader Internet community. For instance, end users require accurate information to make educated purchasing and broadband usage decisions, whereas edge providers may benefit from more technical data and information that may spur the creation of broadband apps and services. Meanwhile, the Internet community at large, including the FCC, is concerned with monitoring reasonable network practices that may impact the openness of the Internet.

Beyond tailoring the disclosures to three different audiences, the FCC suggests requiring broadband Internet access providers to make more information publicly available concerning network practices. First, the FCC proposes the transparency rules should also require broadband Internet access providers to disclose “meaningful information regarding source timing speed packet loss and dur-

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82 Protecting and Promoting the Open Internet, 79 Fed. Reg. 37,448-01, ¶ 66 (July 1, 2014) (to be codified at 47 C.F.R. pt. 8).

83 Id. at 37,457, ¶ 68.

84 Id. at 37,456–57, ¶ 66.
tation of congestion.”85 In addition, disclosure should happen in a timely fashion to parties whenever broadband providers “make changes to network practices as well as blocking, throttling and pay for priority arrangements or parameters of default or ‘best effort’ service as distinct from any priority service.”86

The FCC also requested comments on a range of issues related to its proposed refinements to the network neutrality rules, including proper regulatory authority under Section 706 or Title II, Title III (mobile), the new rule, definition and impact of “no commercially unreasonable practices,” how edge provider carriage of traffic should be defined and whether it should be classified as a separate service,87 and further details concerning the enhancement of the transparency provisions. In addition, the proposed rules added definitions involving what constitutes block,88 edge provider,89 and end users90 but left the terms of what constitutes fixed, mobile, and broadband Internet access services as well as reasonable network management unchanged.

F. 2015 Open Internet Order

To help validate its justification and approach to an open Internet and instill network neutrality provisions,91 the FCC reclassified broadband Internet access service92 as a telecommunications ser-

85 Id.; see also id. at 37,479–83 (discussing the proposed rules).
86 Id. at 37,458, ¶ 78.
87 Id. at 37,455, ¶ 55.
88 Id. at 37,480, § 8.11(a) (“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.”).
89 Id. § 8.11(c) (“Any individual or entity that provides any content, application, or service over the Internet, and any individual or entity that provides a device for accessing any content, application, or service over the Internet.”).
90 Id. at 37,480, § 8.11(d) (defining “end users” as “[a]ny individual or entity that uses a broadband Internet access service”).
91 2015 Open Internet Order, supra note 8, ¶¶ 1–4.
92 Broadband Internet access service is a mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all of 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
vice, applying common carrier, Title II classification to both fixed and wireless providers.\textsuperscript{93} This particular determination represents a significant shift from previous regulatory classifications that treated broadband Internet access service as an “information service.”\textsuperscript{94} Even though the FCC adopted the telecommunications service classification, its approach is nevertheless “common carrier light” as evidenced by its exercise of forbearance authority for twenty seven different Title II provisions,\textsuperscript{95} including no tariffing (rate regulation).\textsuperscript{96} The Commission also utilized advanced telecommunications capability under Section 706 to help bolster its common carrier-light approach\textsuperscript{97} as well as Title III regulatory jurisdiction to buttress its telecommunications service classification of wireless Internet access service.\textsuperscript{98}

Within these foundations, the FCC issued several main network neutrality provisions, retaining the no-blocking provisions on “lawful content applications, services or non-harm devices,”\textsuperscript{99} and prohibiting the practice of “throttling,”\textsuperscript{100} subject to “reasonable network management.”\textsuperscript{101} To abate concerns raised by edge providers that some traffic may receive special high-speed lanes,\textsuperscript{102} the equivalent of the service described in the previous sentence, or that is used to evade the protections set forth in this part.

\textit{Id.} \S 25.
\textsuperscript{93} \textit{Id.} \S\S 27, 283–84.
\textsuperscript{94} \textit{Id.} \S 43 (“The facts in the market today are very different from the facts that supported the Commission’s 2002 decision to treat cable broadband service as an information service and its subsequent application to fixed and mobile broadband services.”).
\textsuperscript{95} \textit{Id.} \S 5, 493.
\textsuperscript{96} \textit{Id.} \S\S 41–42, 497–505.
\textsuperscript{97} \textit{Id.} \S\S 275–82.
\textsuperscript{98} \textit{Id.} \S\S 285–88.
\textsuperscript{99} \textit{Id.} \S 15.
\textsuperscript{100} \textit{Id.} \S 16 (Throttling is defined as “impair or degrade lawful Internet traffic on the basis of Internet content, application, or service, or use of a non-harmful device.”).
\textsuperscript{101} \textit{Id.} \S\S 32,215 (“A network management practice is a practice that has a primarily technical network management justification, but does not include other business practices. A network management practice is reasonable if it is primarily used for and tailored to achieving a legitimate network management purpose, taking into account the particular network architecture and technology of the broadband Internet access service.”).
\textsuperscript{102} \textit{Id.} \S\S 20, 80.
FCC also barred the practice of “paid prioritization.” Instead of restricting commercially unreasonable practices, the FCC created a new rule that prohibits ISPs from unreasonably interfering with or disadvantaging consumers’ ability “to reach Internet content, services and applications of their choosing” as well as edge providers’ access to Internet consumers. These provisions will be applied to make determinations on whether to allow so-called sponsored data plans by ISPs and data caps that meter and tier the amount of downloading.

In addition to outlawing blocking, throttling, and paid prioritization, the FCC also further enhanced its existing transparency provisions contained in the Open Internet Rules for end users and edge providers. Broadband providers are now required to disclose promotional rates, all fees and/or surcharges and include specific information on all data caps or allowances in their terms of service. In addition, to help end users be better informed, broadband providers must include packet loss as a measure of network performance. Customers must also be notified when a network practice may be likely to significantly impact their use of broadband Internet access. With respect to the format and nature of required disclosure to consumers, the FCC declined to require separate disclosures for end users and edge providers but established a “safe harbor” process for broadband providers to help aid in the effective presentation of required information.

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103 Id. ¶ 18 (“‘Paid prioritization’ refers to the management of a broadband provider’s network to directly or indirectly favor some traffic over other traffic, including through the use of techniques such as traffic shaping, prioritization, resource reservation, or other forms of preferential traffic management, either (a) in exchange for consideration (monetary or otherwise) from a third party or (b) to benefit an affiliated entity.”).

104 Id. ¶ 135.

105 Id.

106 Id. ¶¶ 151, 152.

107 Id. ¶ 153.

108 Id. ¶ 24.

109 Id. ¶ 24, 161.

110 Id. ¶ 24, 166.

111 Id. ¶ 24, 169.

112 Id. ¶ 177.

113 Id. ¶¶ 24, 179–81.
II. TRANSPARENCY AS NETWORK NEUTRALITY POLICY

Systems of law, policy, and government are based on the availability of information. One may simply not understand, debate, maintain, or enforce the law—regardless of whether it is statutory, common, constitutional, or executive—if the public does not have the ability to access it, know what conduct or actions are acceptable, or know what sanctions may be rendered. But beyond understanding the law and its sanctions, transparency is typically conceptualized as information that the public, including the press and its tools under the fourth estate, may access to effectively monitor government in a democracy and hold it accountable. Within states and federally, “sunshine” and freedom-of-information laws and processes exist to make as many meetings and information open as possible. Regulatory agencies like the FCC have to follow these provisions and also publicly announce steps involved within the rulemaking process within the Administrative Procedure Act, including initial and reply comments to foster disclosure and fairness when enacting official rule changes. The White House and President Obama’s Memorandum on Transparency and Open Government, part of its Open Government Directive, suggests that “openness will strengthen our democracy and promote efficiency and effectiveness in Government,” asserting that transparency can also lead to greater civic participation and better policy decisions.

But an often forgotten area of transparency lies in instances where the government, acting on behalf of the public, requires pri-

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vate actors to disclose information.\textsuperscript{120} Within the regulation of private actors, transparency plays an important role in incentivizing good behavior, promoting informed decision-making from consumers, and preventing corruption. For industry stakeholders, this method of regulation is much less cumbersome than laws mandating specific conduct and behavior and may be used to help promote market safeguards. Within various sectors of the economy, disclosure of information by private companies to the public is nothing new and provides an important vehicle for accountability. Regulatory transparency and disclosure laws exist, for instance, for publicly traded companies; financial, banking, trading, and lending institutions; cyber breaches; higher education institutions receiving public grants; and food and pharmaceutical industries.\textsuperscript{121} Because of the increased importance of fixed and wireless broadband connectivity, it is within this vein that the FCC’s network neutrality disclosure rules were created, in effect, to not only understand the network management practices of broadband Internet access providers but also foster further growth in the deployment of advanced telecommunications capability.

Several scholars have addressed the role of transparency as an important policy remedy to address network neutrality. Before the recent policy developments in the US, Europe approached network neutrality primarily from a transparency perspective under the new EU Regulatory Framework for Telecommunications, whereby regulators rely upon making consumers more aware of the network management practices of their network operators and place emphasis on quality of service measures.\textsuperscript{122} Using experimental economic research, Sluijs, Schuett, and Henze suggest information disclosed regarding broadband quality leads to a higher total surplus and consumer surplus.\textsuperscript{123}

\begin{itemize}
\item[\textsuperscript{120}] Such a process has been referred to as “audited self-regulation.” See Douglas C. Mitchell, \textit{Federal Agency Use of Audited Self-Regulation as a Regulatory Technique}, 47 \textit{ADMIN. L. REV.} 171, 176 (1995).
\item[\textsuperscript{121}] See generally David Weil et al., \textit{The Effectiveness of Regulatory Disclosure Policies}, 25 J. OF POL’Y ANALYSIS & MGMT. 155 (2006).
\item[\textsuperscript{122}] See Jasper P. Sluijs et al., \textit{Transparency Regulation in Broadband Markets: Lessons from Experimental Research}, 35 \textit{TELECOMM. POL’Y} 592, 592–94 (2011).
\item[\textsuperscript{123}] \textit{Id.} at 600.
\end{itemize}
In arguing that the FCC has authority to enforce disclosure requirements, Amanda Leese suggests the network neutrality disclosure rules impact market competition and user behavior broadly, and are distinct from the content-based network management practices of non-discrimination and no-blocking yet nevertheless remain vital for such provisions to function cohesively. Larry Downes suggests the transparency rule’s standard rooted in information “sufficient” for consumers to make “informed choices” may be too broad and result in information overload for most consumers. As the FCC suggests, to help abate these concerns, network neutrality disclosure policy may have to rely upon third parties to help monitor and evaluate broadband network management practices.

In a similar vein, Elizabeth Austin Bonner suggests that the rules may provide consumers too much information without the literacy to understand such technical information. As an alternative, the FCC may pursue simplified disclosures to consumers and a more intricate and technically detailed set of network management practices to over-the-top content and service providers. Nevertheless, Bonner praises the disclosure efforts for their ability to foster greater broadband services competition and performance, increase citizen participation in policymaking, and shift costs away from regulators to industry while requiring less precision than other measures.

Adam Candeub and John McCartney are critical of the network neutrality disclosure provisions’ assumptions regarding consumers. Because most consumers do not have a competitive choice among broadband providers, any information disclosed will not be

127 See id. at 197–202.
128 Id. at 182.
very useful to foster greater market competition or performance.\textsuperscript{130} In addition, most typical consumers will lack the technical acumen to understand traffic management practices.\textsuperscript{131} Furthermore, there are concerns over what content should be disclosed to help consumers. “Effective disclosure must actually aid consumers (or market intermediaries) in assessing the value of the product,”\textsuperscript{132} but finding the quality or value of Internet access presents several questions regarding adjacent networks, traffic policies of their peers, and how different types of traffic are handled by network management practices. Alternatively, Candeub and McCartney propose that network transparency should focus on internal traffic management practices to assess quality of service as well external interconnection relationships with ISPs.\textsuperscript{133} Furthermore, they recommend that disclosures be written to an “Internet Vanguard” audience that possesses the technical competency to understand network management practices.\textsuperscript{134}

There are also some policy advocates who are wary of network neutrality rules in general because of the costs they extract to broadband providers, including the transparency provisions. Congresswoman Marsha Blackburn (R–TN) and FCC Commissioner Michael O’Rielly believe a thorough cost-benefit analysis of the transparency requirements is necessary to help measure consumer benefit, quantify costs, and abate concerns over regulatory overreach.\textsuperscript{135}

One central purpose behind the Open Internet Rules is to promote competition “throughout the Internet ecosystem.”\textsuperscript{136} The Commission suggests five reasons why disclosure of network management practices supports competition “as well as innovation,

\textsuperscript{130} See id. at 229.
\textsuperscript{131} See id. at 234.
\textsuperscript{132} See id.
\textsuperscript{133} See id. at 241.
\textsuperscript{134} See id.
\textsuperscript{136} Preserving the Open Internet, 25 FCC Rcd. 17,905, 17,951 n.252 (2010).
investment, end-user choice and broadband adoption.”137 First, consumers are able to “make informed choices regarding the purchase and use of broadband service.”138 Second, disclosure will build more confidence among broadband users and should lead to greater broadband adoption and investment.139 Third, the transparency rules provide startups and edge providers information that contributes to “innovation, investment and competition.”140 Fourth, disclosure helps put pressure on broadband providers to abide by their disclosed practices while allowing the Internet community to monitor their conduct.141 Lastly, disclosure provides the necessary tools and information to the FCC to review, report, and enforce the transparency rules.142

To some extent, disclosure practices are not entirely new to the FCC and the telecommunications industry. The FCC, for instance, has subjected common carriers to extensive filing requirements to disclose information143 and requires MVPDs, Internet access providers, and wireless carriers to report annual subscription and revenue data. Broadcast television licensees are also required to disclose on a quarterly basis how they fulfill their requirements to air programming designed to meet children’s “educational and informational needs.”144 As a condition of their license, all broadcast stations are also required to maintain and make available a public inspection file upon request that serves to disclose to the public how they fulfill their public interest obligations.145 Likewise, as a result of the Telecommunications Act of 1996 and the v-chip, the

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137 Id. at 17,937–38, ¶ 55.
138 Id. at 17,936, ¶ 53.
139 See id.
140 See id.
141 See id. at 17,937.
142 See id.
broadcast industry discloses its own television ratings system to consumers.\textsuperscript{146}

Cass Sunstein argues that so-called “information disclosure” to consumers is a more efficient and less expensive response to address market failure than command-and-control regulation that dictates specific conduct by firms.\textsuperscript{147} In addition, increasing information to consumers—as opposed to direct forms of behavioral regulation—tends to minimize any First Amendment concerns that may be raised by telecommunications firms\textsuperscript{148} and provides greater regulatory flexibility.\textsuperscript{149} Furthermore, as a form of regulation, information disclosure helps foster deliberative democracy, specifically the ability for citizens to serve as watchdog to monitor private as well as public action and potentially call for change.\textsuperscript{150} As Sunstein suggests, “information disclosure works best when market pressures, or political pressures, are likely to result in significant costs for those whose performance is poor.”\textsuperscript{151}

Gerald Faulhaber contends transparency is important in the broadband context so consumers may understand their relationship with ISPs.\textsuperscript{152} Even without any network neutrality provisions, broadband ISPs should publicly disclose their offerings and be transparent with consumers because “markets can only work well if both producers and consumers are well-informed about the terms and conditions of transactions,”\textsuperscript{153} or they run the risk of market failure under information asymmetry. Faulhaber suggests four principles of transparency that may be used for policy analysis:

\begin{itemize}
  \item Cass R. Sunstein, Television and the Public Interest, 88 CALIF. L. REV. 499, 534 (2000).
  \item Id. at 533.
  \item Id. at 534.
  \item Id. at 534–35.
  \item Id. at 537.
  \item Id.
\end{itemize}
• “Disclose all information (and only such information) that a reasonable customer needs to make an informed purchase decision”\textsuperscript{154}
• “[E]asy access to the disclosed information”\textsuperscript{155}
• “Clarity and simplicity of disclosed information”\textsuperscript{156}
• “Verifiability of disclosed information”\textsuperscript{157}

An additional element of enforcement may be added to the above aspects of disclosure.\textsuperscript{158} The implementation of these principles is difficult in the broadband ISP industry where there are many variables that affect measures like speed, visibility, and ease of access to terms of service agreements. This stems in part from the challenge of keeping network management practices simple, broadband ISPs’ business relationships with other ISPs, application and network providers and security concerns over malware.\textsuperscript{159}

Tracing the rise of disclosure rules within the network neutrality debate, Carp, Kulkarni, and Schmidt are skeptical of transparency efforts as a tool for public policy.\textsuperscript{160} They suggest transparency and disclosure are frequently used interchangeably by the FCC in its Open Internet Rules, whereby “disclosure is a tool to produce transparency, transparency simply requires disclosure. That pairing is simplistic and inadequate. The disclosure of information does not ensure that the provision of broadband services is transparent.”\textsuperscript{161}

In fact, they warn against the disturbing trend of “nondisclosing disclosures” whereby terms or notices appear to be perfectly legal but are manipulated to obscure meaning.\textsuperscript{162} To guard

\textsuperscript{154} Id. at 742.
\textsuperscript{155} Id. at 743.
\textsuperscript{156} Id. at 744.
\textsuperscript{157} Id. at 745.
\textsuperscript{158} Id. at 747 n.10.
\textsuperscript{159} Id. at 750–53.
\textsuperscript{161} Id.
\textsuperscript{162} Id.
against these outcomes, they suggest the Commission closely monitor ISPs’ terms of service agreements.\textsuperscript{163}

In addition, Fung, Graham, and Weil’s model for transparency is suggested because it focuses on an “action cycle” between the disclosures (firms) and users as primary actors.\textsuperscript{164} Under this model, the mere pressure of disclosing information as well as users monitoring and exercising consumer choices likely enhances disclosing firms’ practices.\textsuperscript{165} Despite these incentives, enforcement is nevertheless an important part of transparency policy.\textsuperscript{166}

Today, disclosure is common practice through terms of service agreements when a subscriber signs up for telephone, cable, or wireless services.\textsuperscript{167} These terms of service or terms of use agreements are by their very nature an attempted exercise in transparency by private companies who are providing contractual language that details their conduct, and through the consent process when someone agrees to the terms, they typically alleviate themselves from any specific liability or regulatory enforcement. But what is new is the nature by which terms of service agreements play an increasingly important role in just about every facet of online life and, in the case of broadband Internet access service, may now fall in the hands of regulatory agencies like the FCC to monitor. Furthermore, transparency takes on an additional layer when a regulatory agency like the FCC requests a specific range of information be disclosed to consumers and will fine providers who fail to comply with the rules.

\textit{A. Transparency Provisions of the Open Internet Rules}

Transparency rules are the only safeguards that have thus survived judicial review far by which the public and the FCC may ensure that broadband Internet access providers are adequately abiding by their self-disclosed network management practices. While

\textsuperscript{163} Id. at 59.

\textsuperscript{164} Id. at 61 (citing Fung et al., \textit{Full Disclosure: The Perils and Promise of Transparency} (2007)).

\textsuperscript{165} Carp, \textit{supra} note 160, at 61.

\textsuperscript{166} Id. at 62.

the 2015 Open Internet Order enhanced the transparency requirements, the 2010 Open Internet Rules remain in full force with only slight modifications. For both fixed and mobile broadband providers, complying with the transparency rules “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.” Outside of these exceptions, the rules themselves provide a wide degree of latitude concerning the extent of information broadband providers have to disclose through their terms of service agreements and other policies.

Through the Office of General Counsel (“OGC”) Transparency Compliance Public Notice, the FCC detailed five areas related to meeting the transparency rules as set forth in the 2010 Open Internet Rules: (1) point-of-sale disclosures; (2) service descriptions; (3) security; (4) the tailoring of disclosures to content, applications, service, and device providers; and (5) extent of required disclosures. Each of these areas is detailed below.

1. Point-of-Sale Disclosures

The FCC’s Enforcement Bureau and OGC issued basic suggestions on how consumers must be afforded the opportunity to see terms of service agreements at the “point-of-sale” that include network management practices, performance characteristics, and commercial terms. To meet this portion of the disclosure rules, broadband providers must at the very least either prominently display or provide links to disclosures on a website easily accessible to

168 2015 Open Internet Order, supra note 8, ¶ 24.
169 Id. ¶ 161 (“All of the pieces of information described in paragraphs 56 and 98 of the Open Internet Order have been required as part of current transparency rule, and we will continue to require the information as part of our enhanced rule. The only exception is the requirement to disclose ‘typical frequency of congestion’ which we no longer require since it is superseded by more precise disclosures already required by the rule such as actual performance. Second, the requirement that all disclosures made by a broadband provider be accurate includes the need to maintain the accuracy of these disclosures.”).
172 Id. at 9414.
members of the public, including both new and existing end users and edge providers. This does not mean that such materials have to be in hard copy or require training of sales employees to be familiar with all of the terms and conditions. Broadband providers may comply with this requirement by directing new customers to view disclosures on the web, either orally or in writing, and by keeping the disclosures regularly updated. Nevertheless, brick and mortar outlets are encouraged to provide equipment to view such disclosures to customers.

2. Service Descriptions

With regard to service descriptions, broadband providers must disclose accurate information on network performance for each type of service offered. For fixed broadband, the OGC suggests that a large part of this requirement may be accomplished by disclosing the results of the broadband performance measurement project (“BPMP”) that records key performance metrics, including baseline connection speed as well as latency. Although in its infancy stages, the BPMP will likely play a major role in attaining an accurate measurement of network performance characteristics, as it covers roughly eighty-six percent of all fixed connections. For fixed broadband providers participating in the BPMP, disclosing results from the project will be enough to satisfy the requirement. For instance, providers may elect to report mean upload and download speeds during the busy periods of 7:00–11:00 P.M. Smaller providers not participating in the BPMP may follow the project’s methodology and report results or disclose accurate performance information from internal testing or consumer speed test data.

173 Id.
174 Id.
175 Id.
176 Id.
177 Id.
178 Id. at 9414–15.
179 Id. at 9414.
180 Id.
181 Id.
In terms of reporting mobile network performance measures, the OGC describes how the FCC will provide further guidance once it has an opportunity to review how to best capture and measure data.\textsuperscript{182} Subsequent to the OGC guidelines, the FCC has recently released an app that consumers may download onto their broadband mobile device to measure speed and latency.\textsuperscript{183} Until that is formally recommended as a measurement and disclosure tool, however, mobile broadband providers that attain reliable information may disclose these results, whether captured by themselves or a third party.\textsuperscript{184} Disclosure in the mobile context may mean upload and download speeds or round-trip latency.\textsuperscript{185} Smaller providers without these performance measures may report a typical speed range ("TSR") for each service tier offered accompanied by a statement that these are the best available approximations.\textsuperscript{186}

To help ensure accuracy, both mobile and fixed broadband providers are encouraged to disclose the source and methodology behind their network performance metrics.\textsuperscript{187} In addition, broadband providers are requested to re-evaluate network performance when they have knowledge or have reason to believe there is a material difference between disclosed and actual network performance.\textsuperscript{188}

3. Tailoring of Required Disclosures

The OGC suggests the transparency provisions of the current Open Internet Rules in effect may be met through a single disclosure.\textsuperscript{189} This disclosure may be used to help accurately inform not only consumers but content, application, service, and device providers, including so-called edge providers.\textsuperscript{190} Mobile providers are

\begin{itemize}
  \item \textsuperscript{182} Id.
  \item \textsuperscript{183} Id.
  \item \textsuperscript{184} Id. at 9415.
  \item \textsuperscript{185} Id.
  \item \textsuperscript{186} Id. at 9415–16.
  \item \textsuperscript{187} Id. at 9416.
  \item \textsuperscript{188} Id.
  \item \textsuperscript{189} Id. at 9416–17.
  \item \textsuperscript{190} Id. at 9417 ("We anticipate that broadband providers with consumer disclosures that include sufficiently detailed information regarding network management practices to enable a technologically sophisticated Internet user to understand how such network management practices work, and how they affect consumers' access to and use of

[104x703]
also obligated to provide disclosure of their certification and approval procedures for devices and applications.191

4. Security Measures

The OGC also suggests that providers may utilize their discretion in deciding whether to disclose particular security measures to consumers.192 Nevertheless, effective disclosures should aim to provide information addressing end-user or network security practices. Broadband providers must be mindful that consumers may need to understand security practices to make informed choices for their Internet use. Likewise, content, application, service, and device providers may also require knowledge of security practices to aid in their development. The OGC reminds broadband providers that security measures may in effect impact the end user’s ability to “access the content, applications, services, and devices of his or her choice.”193

5. Extent of Required Disclosures

Perhaps most importantly, the FCC suggested that the extent of the transparency rules may be met by including some or all of the following:

- Network practices (including congestion management, application-specific behavior, device attachment rules and security measures);
- Performance characteristics, including a general description of system performance (speed, latency) and effects of specialized services on available capacity; and
- Commercial terms, including pricing, privacy policies, and redress options.194

Internet offerings, will not need to make separate or additional disclosures for the specific benefit of edge providers.”).

191    Id.
192    See id.
193    Id. at 9418.
The above areas come directly from Paragraphs 56 and 98 of the Open Internet order. The OGC clarifies that disclosure of information contained in these paragraphs will suffice for compliance with the transparency rule. The Commission clearly states that all of the items detailing the extent of the required disclosures are not exhaustive and providers may meet the disclosure requirement in other ways. In providing additional flexibility, the FCC does not expect that providers will disclose all of the suggested items. Likewise, the list in and of itself does not constitute a so-called safe harbor for fulfilling the transparency rules. Upon further examination, each of the above provisions contains several elements as highlighted below.

a) Network Practices

The area of network practices centers on how broadband providers manage their network in ways that may directly impact Internet users. As a result, the FCC suggests broadband providers disclose congestion management, application-specific behavior, device-attachment rules, and security as summarized below:

- Congestion Management: Description of congestion management practices; types of traffic; purposes; effects of practices on end-user experience; criteria used in practices (including triggers and frequency of congestion); usage limits and consequences of exceeding them; and engineering standards.
- Application-Specific Behavior: Whether and why provider blocks or rate-controls specific protocols or protocol ports; modifies protocol fields in ways not proscribed by protocols; or

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195 See id.
197 Id. at 9412.
198 Id.
199 Preserving the Open Internet, 25 FCC Rcd. 17,905, 17,938 (2010).
200 See id.
inhibits or favors certain applications or classes of applications.\textsuperscript{201}  
- Device Attachment Rules: Any restrictions on types of devices and approval procedures for devices to connect to network.\textsuperscript{202}  
- Security: Practices used to ensure end-user security or security of network, including types of triggering conditions for mechanisms to be invoked.\textsuperscript{203}  

b) Performance Characteristics  
To help end users ascertain the quality of the network, the FCC suggests\textsuperscript{204} broadband providers may detail the following performance characteristics that elaborate on broadband Internet access service and any specialized services that may be offered:  
- Service Description: General description of service, including technology, expected and actual access speed and latency; suitability of service for real-time applications.\textsuperscript{205}  
- Impact of Specialized Services: What, if any, are offered to end users, and whether and how any specialized services may affect last-mile capacity available for and the performance of broadband Internet access service.\textsuperscript{206}  

c) Commercial Terms  
To set a standard in many terms of use agreements, the FCC suggests broadband providers be forthcoming about the commercial terms to help consumers make informed decisions concerning broadband Internet access service, including the following:

\textsuperscript{201} See id.  
\textsuperscript{202} See id. at 17,938–39.  
\textsuperscript{203} See id. at 17,939.  
\textsuperscript{204} See id.  
\textsuperscript{205} See id.  
\textsuperscript{206} See id.
• Pricing: Monthly prices; usage-based fees; fees for early termination; fees for additional network services.\textsuperscript{207}

• Privacy Policies: Whether network management practices entail inspection of network traffic; whether traffic information is stored, provided to third parties, or used by the carrier for non-network management purposes.\textsuperscript{208}

• Redress Options: Practices for resolving end-user and edge provider complaints and questions.\textsuperscript{209}

d) Mobile

The FCC suggests that all of the above transparency provisions regarding network practices, performance characteristics, and commercial terms also apply to mobile Internet access providers.\textsuperscript{210} Mobile providers should also consider their current disclosure obligations if they are a licensee of the upper 700 MHz block spectrum allocation.\textsuperscript{211} In addition, the FCC suggests mobile providers disclose the process for third-party device and application certification,\textsuperscript{212} as well as information regarding denials to access the network or failures to approve particular devices or applications.\textsuperscript{213}

6. Enforcement

The Commission may exercise enforcement if broadband providers fail to comply with the transparency rules through adjudication on a case-by-case basis, including the issuance of monetary penalties.\textsuperscript{214} Parties who are affected by transparency rule violations, including end users and edge providers, are encouraged to

\textsuperscript{207} See id.

\textsuperscript{208} See id.

\textsuperscript{209} Id.

\textsuperscript{210} Id. at 17,959, ¶ 98.

\textsuperscript{211} Id.

\textsuperscript{212} Id.

\textsuperscript{213} Id.

\textsuperscript{214} See FCC Enforcement Advisory, Open Internet Transparency Rule: Broadband Providers Must Disclose Accurate Information to Protect Consumers, 29 FCC Rcd. 8,606, 8,607 (2014).
file informal complaints on the Commission’s website free of filing fees under Section 1.41 of FCC rules. In addition, any person may also file a formal complaint that specifies how the rules have been violated and contains supporting facts “sufficient to establish a prima facie case.” One example of a formal open Internet complaint being filed comes from the non-profit Public Knowledge, which claims that wireless broadband Internet access providers AT&T, Sprint, T-Mobile, and Verizon have failed to adequately disclose network practices concerning throttling.

Although providers are allowed much discretion on what may be included to comply, whatever is disclosed should be accurate. As stated in a 2014 enforcement advisory, the FCC believes that “accuracy is the bedrock of the Transparency Rule” to allow consumers to be informed about the purchase of their broadband Internet access service and give edge providers the necessary information to further innovate and compete. Accuracy must take place “wherever statements regarding network management practices, performance, and commercial terms appear—in mailings, the sides of buses, on website banner ads, or in retail stores.” If a provider makes a false or misleading claim of its service performance, it would “not defend itself against a Transparency Rule violation by pointing to an ‘accurate’ official disclosure in some other public place.”

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216 Id.
217 Id.
220 Id.
221 Id.
III. Compliance with Transparency & Open Internet Rules

To aid in describing how the FCC’s transparency provisions apply to broadband providers, this Part reviews the various components of Verizon’s terms-of-service agreements for both fixed and mobile broadband. The legal analysis presented below mirrors the various categories and descriptors the FCC has suggested in the Open Internet Rules as discussed above in Part II. Because they require different facilities and transactions, the review of Verizon’s terms of service as a fixed and wireless broadband Internet access provider are handled separately below.

A. Verizon’s Fixed Broadband Disclosure

1. Network Practices

Verizon’s Network Management Guide, available on its website, provides information for consumers regarding the company’s wired broadband network practices. The Guide is structured according to the Open Internet Rules’ criteria and covers congestion management, application-specific behavior, device-attachment rules, security, and the effect of specialized services.

For congestion management, Verizon notes that it “does not affirmatively manage congestion on the network through mechanisms such as real-time throttling, blocking, or dropping of specific end user traffic.” Moreover, Verizon does not impose data usage limits. With regard to application-specific behavior, Verizon does not “inhibit or favor certain applications or classes of applications of traffic on [its] Internet access service,” except when performing security-related functions such as blocking non-Verizon


\[223\] Id.

\[224\] Id.

\[225\] Id.

\[226\] Id.
domain email from being sent from Port 25\textsuperscript{227} and scanning Verizon email messages for spam.\textsuperscript{228}

Verizon’s device-attachment rules permit users to “attach any lawful device to the network as long as it does not harm the network or the provision of Internet access service”\textsuperscript{229} and provide information regarding fee-based technical support to help users install third-party devices.\textsuperscript{230} The security section identifies as triggers for account suspension any violations of its acceptable use policy or terms of service in addition to any activity that “threatens to undermine the integrity or normal operation of our networks or services, or the security of our networks or our customers.”\textsuperscript{231}

2. Performance Characteristics

In addition to network practices, the Guide also provides some performance characteristic information and links to others.\textsuperscript{232} Verizon provides a general overview of its broadband technology, informing users that factors such as telephone line wiring might affect performance.\textsuperscript{233} In its discussion of specialized services, the Guide warns that Verizon FiOS network speeds “may be reduced temporarily during times of significant utilization of FiOS TV video on demand service in a particular area or due to other unusual events such as a network outage or failure”\textsuperscript{234} or if a user is watching multiple FiOS TV streams simultaneously.\textsuperscript{235} Verizon also includes a link to speed test results from the FCC’s BPMP report for its FiOS\textsuperscript{236} and DSL\textsuperscript{237} services.

\begin{flushleft}
\textsuperscript{227} Port 25 is the virtual pathway through which most email messages are sent. See Chris Wilson, \textit{The Spam Superhighway}, \textit{Slate} (July 1, 2008), http://www.slate.com/articles/news_and_politics/explainer/2008/07/the_spam_superhighway.html.
\textsuperscript{228} \textit{Verizon Online Network Management Guide for Broadband Internet Access Services}, supra note 222.
\textsuperscript{229} \textit{Id.}
\textsuperscript{230} \textit{Id.}
\textsuperscript{231} \textit{Id.}
\textsuperscript{232} \textit{Id.}
\textsuperscript{233} \textit{Id.}
\textsuperscript{234} \textit{Id.}
\textsuperscript{235} \textit{Id.}
\end{flushleft}
3. Commercial Terms

Verizon’s website offers wired and wireless Internet pricing information as called for by the Open Internet Rules. Both wired and wireless services are subject to Verizon’s privacy policy, which includes information regarding the company’s extensive data collection and aggregated data sharing schemes.

B. Verizon’s Mobile Broadband Disclosure

Verizon addresses its network practices, performance characteristics, and commercial terms for wireless broadband services on its website in a Q&A scheme that deviates from its aforementioned wired broadband policies.

1. Network Practices

Unlike its fixed broadband terms of service that address network practices, Verizon does not follow the FCC’s suggested format to include application-specific behavior, device-attachment rules, and security. In addressing congestion management, Verizon warns that for wireless customers who fall “within the top 5% of Verizon Wireless data users,” the company “may reduce the customer’s data throughput speeds when the customer is connected to a cell site experiencing high demand for the remainder of the customer’s then current and immediately following billing cycle.” The company also engages in content-neutral network op-

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241 See id.

242 Id.

243 Id.
timization to compress and deliver data efficiently to customers’ mobile devices.244

While Verizon does not discriminate against lawful Internet traffic, it does block “malicious or other adverse, network-impacting traffic”245 and specific IP addresses known to be responsible for spam or cyber threats based on Verizon’s and third-party analysis.246

2. Performance Characteristics

Verizon explains its performance by detailing the bandwidth speed range within which each of its wireless networks operates and notes potential limiting factors.247 Verizon also provides information about its coverage and testing methodology,248 but does not include any mention of the FCC’s suggested inclusion of specialized services.

3. Commercial Terms

Verizon offers the same type of information regarding its wireless pricing as it does for its wired customers.249

4. Additional Mobile Information

Verizon only permits its customers to use Verizon-certified devices on its network, although the company is agnostic as to where the device is purchased.250 As suggested in the Open Internet Rules, Verizon’s website showcases the means by which third-party devices and applications can be certified for Verizon’s networks.251 The “Open Development Device Certification Process”

244 Id.
245 Id.
246 Id.
247 Id.
248 Important Information About Verizon Wireless Broadband Internet Access Services, supra note 240.
249 See High Speed Internet, supra note 238; see also 4G LTE Internet Installed, supra note 238.
250 Important Information About Verizon Wireless Broadband Internet Access Services, supra note 238.
manual describes the standards and processes required for third-party device certification,\textsuperscript{252} and the “4G LTE ‘Open Access’ Application Guidelines” provide information on application requirements.\textsuperscript{253} However, Verizon’s website does not provide specific information regarding its denial of network access to particular devices or services.

C. Verizon’s Compliance with Transparency Rules

With the exception of some missing information for mobile, Verizon is readily disclosing its network practices, performance characteristics, and commercial terms that have been suggested by the FCC, and therefore appears to be complying with the transparency provisions of the Open Internet Rules.\textsuperscript{254} It should also be noted that Verizon is attempting to use a single disclosure to meet the various needs of end users, edge providers, and the larger Internet community to comply with the existing rules.\textsuperscript{255} In a similar vein, outside of the speed and latency measures, there is no current measuring stick other than informal and formal complaints to verify the accuracy of the disclosed information.

Although not germane to Verizon specifically, the FCC recently raised a number of complaints regarding end-user transparency in its recent Open Internet NPRM.\textsuperscript{256} This list includes questions about whether the information supplied by broadband providers is in fact accurate, claims that consumers believe their speed falls short of advertised speeds, claims that consumers were charged in excess of advertised rates including fees and charges beyond basic rates, slow or congested service complaints, not understanding ex-
cessive use and termination policies, and confusion on how data caps are calculated.  

IV. DISCUSSION & RECOMMENDATIONS FOR TRANSPARENCY AS NETWORK NEUTRALITY 2.0

Thus far, the only successful, legally standing policy for network neutrality in the U.S. resides in the transparency rules. Regardless of whether the 2015 Open Internet Order’s reclassification of broadband Internet access service and prohibitions against blocking, paid prioritization and throttling survive judicial review, the disclosure provisions of the Open Internet Rules are likely to sustain and play a vital role moving forward in how we govern and stay informed with respect to the first and last mile of broadband connectivity. The network neutrality transparency rules provide a potential safeguard to the fact that most consumers do not have a great array of choices when it comes to their broadband ISP, especially in the fixed context. To the extent the FCC forces the hand of broadband providers to disclose how they manage their network, the transparency rules should be applauded as a regulatory strategy that aims to help inform consumers, edge providers, and the broader Internet community.

But as this Article demonstrates, the transparency rules do not solve everything; rather, they simply provide us with what otherwise may not have been disclosed information in standard, pre-Open Internet Rules terms of use or service agreements. Even the mere suggestions of what to include in the agreements leave the broadband providers with a great deal of latitude because the

257 Id.
FCC’s list is admittedly not exhaustive, nor must everything on the list be disclosed.

Terms of use agreements and their disclosure play an increasingly important role for social media sites, broadband providers, and mobile applications, as they typically confer a bundle of rights and legal provisions to providers and users. These arrangements generally take the form of non-negotiated contracts of adhesion as so-called “click-wrap” agreements, which define providers’ relationships with their users. In practice, these terms of use agreements leave no room for negotiation and are more or less a take-it-or-leave-it offering to the consumer by the broadband Internet access provider. Depending on locality and whether it is fixed or mobile connectivity, a consumer may have to merely accept these provisions, including network management practices that are disclosed under the Open Internet Rules because there is simply no choice among broadband providers in a specific geographic area.

The dependency on terms of service as a form of primary disclosure to comply with the transparency rules relies on an important assumption and critique of so-called click-wrap agreements. Most individuals rarely read the varied terms of service that they consent to prior to obtaining service. Furthermore, often individuals lack the literacy in understanding all of the legal and technical jargon of conditions that specify rights and liability. Lastly, terms of use are non-negotiable from the standpoint of the provider and do not provide much in the way of participation from consumers other than to refuse consent or litigate the provider for breach of contract.

To help alleviate some of these concerns, the transparency rules do provide a participatory mechanism to the FCC through the informal complaint process. But more efforts should be done to help improve outreach and consumer education in this area through various guides with suggested topics such as understanding terms of use, navigating network management practices and what it means for you, and factors in choosing a fixed or wireless broadband Internet access provider. In addition, to make some of the more fundamental consumer concerns more prominent, the

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FCC should consider adopting many of the recommendations of the Open Internet Label Study Transparency Working Group,\textsuperscript{260} suggesting a simplified practice be made available to consumers as an option to full disclosure or terms of use transparency. A broadband provider “nutrition label” as suggested by the New America Foundation would mostly emphasize speed, price and usage restrictions.\textsuperscript{261} Likewise, as several scholars have commented,\textsuperscript{262} the Commission should be mindful of providing too much technical language to consumers and instead, as suggested by the Internet NPRM, make sure to provide tailored disclosures to edge and over-the-top providers that provide the necessary technical elements to allow further innovation of services.\textsuperscript{263}

There are also problems associated with the Commission’s efforts in transparency concerning accuracy and self-disclosure. Outside of speed and latency that is mostly measured by the BPMP for fixed and its new mobile apps for wireless, the FCC relies upon broadband providers’ self-reporting of accurate information to comply with the disclosure rules. There is no accountability unless there are either informal or formal complaints filed.\textsuperscript{264} Nor is it clear what the definition of “accurate” specifically entails and whether it may truly extend, as the FCC’s advisory suggested, legally to a false (or not completely accurate) claim made in an advertisement about a broadband feature.\textsuperscript{265} Transparency works best when disclosure of information provided to the public is accurate as well as easily understood, monitored, and enforced.\textsuperscript{266}

Lastly, the transparency rules do foster the sharing of information that may lead to greater advanced telecommunications capability and promote local competition in Section 706, especially if


\textsuperscript{262} See Bonner, supra note 126; Candeub & McCartney, supra note 129.

\textsuperscript{263} Protecting and Promoting the Open Internet, 29 FCC Rcd. 5,561, 5,586, ¶ 68 (2014).


\textsuperscript{265} FCC Enforcement Advisory, supra note 214, at 8,606, 8,607.

\textsuperscript{266} See supra text accompanying notes 126–30.
disclosure addresses end users, edge providers, and the larger Internet community. The clear disclosure of network management practices and quality of service measures in broadband Internet access providers’ terms of use agreements provides important information to consumers to make informed choices about their selection of their high-speed provider and expectations in terms of what they may experience as a subscriber. Furthermore, disclosure also allows edge providers to better understand how their particular data traffic may be managed and prioritized by broadband providers and whether they need to adapt their own protocols to provide a more seamless experience for their users. This disclosure to edge providers will further foster greater innovation and ensure availability of a competitive array of advanced telecommunications capability services that are available to consumers vis-à-vis their local broadband Internet access provider.

While disclosure and transparency provisions should be essential components of the FCC’s approach to network neutrality going forward, questions nevertheless remain about the confounding nature of terms of use and service agreements throughout various aspects of the Internet. Although it may not fall under the direct auspices of Section 706, greater consideration of how privacy, security, and copyright provisions exist within the broadband providers’ terms of use agreements is warranted, as many end users rely on this connection as their vital link to the rest of the Internet ecosystem. This is especially the case if the prohibitions against blocking, paid prioritization and throttling eventually are not mandated. Regardless, transparency is important in an environment in which terms of use and service agreements continue to take on additional importance because of the ever-increasing growth in user-generated content, smartphone applications, and social media engagement and the corresponding legal and ethical concerns regarding personal privacy, anonymity, data use, and copyright. Ultimately, many Americans are concerned about Internet blocking and discrimination even if they do not agree on how to regulate it.267 This

will make transparency and access to relevant information an increasingly important factor to further the development of advanced telecommunications capability in the years to come, including the use of broadband services and applications.